D1.2 – Open Culture Lab (renamed: Europeana Labs Website)

The Open Culture Lab (renamed to “Europeana Labs”) is a website developed by the Europeana Creative project, primarily within Work Package 1. The initial version of this website (the alpha release) was delivered on January 23, 2014 at the address http://labs.europeana.eu.

This document provides some of the design and research context to the development of this website.

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http://ec.europa.eu/information_society/activities/ict_psp/

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D1.2 – Open Culture Lab
(renamed: Europeana Labs Website)

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P	**Public**	**×**
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Revisions

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Approval

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Statement of Originality

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both.

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1. Summary of the Open Culture Lab Task

The Open Culture Lab is a website created as the outcome of Europeana Creative task 1.2, which is defined as follows:

Task 1.2 – Build the Online Open Culture Lab (M3–M12)

> The physical co-creation spaces will be backed by an online Open Culture Lab (D1.2) that will bring together the application gallery, technical services, case studies, example code and content for experimentation needed by creative re-use projects. This task represents an initial specification/building phase to establish a compelling framework (MS1), but also an ongoing effort to populate the online Lab environment with the services, case studies, code examples and other resources needed to support real- world applications and services built on cultural heritage (MS11).
>
> This activity does represent part of the dissemination strategy for the Europeana Creative project and will coordinate with WP7, in that the website will be explicitly targeted toward developers of innovative software and services for and by the cultural heritage market. However, as an active element in the toolbox of the lab's service offering, accomplishing this task will require concerted effort on the part of the major design, technical and business partners within Europeana Creative. […]
>
> After the conclusion of the funded project period, ongoing development of this platform will be inherited by the group taking responsibility for the continued service delivery within the Open Lab spaces. This might be the Europeana Foundation, a consortium of interested partners, or a new entity created specifically for the purpose. Taking a decision on the appropriate business and operational model following from the successful Europeana Creative project will be the responsibility of Task 3.3 in WP3.

During the process of developing the website brief, it became clear that a more Europeana-connected name, “Europeana Labs”, would be a better overall brand for the website.

2. Positioning and Branding

The following section sets out the major arguments and considerations for the branding and positioning of the Europeana Labs website, and justifies the change of name from “Open Culture Lab” to “Europeana Labs”.

2.1 Recommendation

Issue: To decide how to position the proposed Europeana Creative Open Culture Lab website within the current and future Europeana core service platform.

Recommendation: Europeana Creative places its Open Culture Lab as integral to the Europeana Core Service Platform. It is the major distribution service for cultural heritage data. As such it is called “Europeana Labs” and compliments and completes the supply/demand chain of Europeana, from the Europeana Unified Ingestion Manager via Europeana.eu. Europeana Professional becomes the information and knowledge management site for the professions directly associated with managing cultural heritage.

Reasoning: Europeana, as a brand, should be synonymous with access to cultural heritage for both the data providers and data users. Its value proposition helps both memory institutions to make their data work in an online world and re-use of this data by creative industries.

Europeana has in place a robust supply chain and a couple of end user services but is without a direct relationship or mechanism to reach the creative industries that wish to use cultural heritage data. Developing this part of the supply/demand workflow is the purpose of Europeana Creative. Therefore the service should be integral to the proposed Europeana Core Service Platform in name and positioning, and be made sustainable as part of its funding.

2.2 Current Europeana Branded Services

Europeana currently has both B2C and B2B services represented by a number of different websites, an app and the Europeana API:

- a destination portal for end users, Europeana.eu;
- themed sites for end users, e.g., Europeana 1914–1918, Europeana 1989, Europeana Fashion and Europeana Food and Drink, which are under development;
- Europeana Open Culture App;
- webspaces for exhibitions (http://exhibitions.europeana.eu/) and a blog (http://blog.europeana.eu/) for end users;
- Europeana API;

- sites for professionals working in digital cultural heritage, such as Europeana Pro (http://pro.europeana.eu) and Europeana Labs (http://labs.europeana.eu).
- To be launched this year, “Open Culture Lab” under Europeana Creative meant for the creative industries to access metadata and content of Europeana content providers and tools and services to create new products and services based on cultural heritage.

2.3 Value Proposition

Europeana has set out its 2015–2020 draft strategy to become a core service platform, enabling access to content and services for others to develop end user facing mechanisms. This platform is to be funded under the Connecting Europe Facility, and places more emphasis on the B2B aspects of the enterprise. This means aggregating, standardising and enriching the data for it to be distributed via other sites and services and used by the creative industries. Europeana, as a core service platform, should be managing both supply and demand of cultural heritage data. Under a forthcoming brand review, Europeana is looking further at how the various websites and services relate to each other and to the Europeana brand with the aim of consolidating and reinforcing the brand.

The following infographic sums up Europeana’s workflow in relation to its positioning and value proposition. Three central arguments support the idea of Europeana being a catalyst for change: support of economic growth, connecting Europe and making Europe’s culture available for everyone.

The first of these arguments relies on developing strong, recognisable relationships with the creative industries to demonstrate the role of Europeana in the value chain in underpinning economic growth. Creative industries are growing fast; they are increasingly important to our economy and need fuel. Europeana provides it. Creative and technology businesses, software developers and app designers are building new and ever more innovative ways of re-using Europeana’s interoperable data which is endorsed by the European Commission.

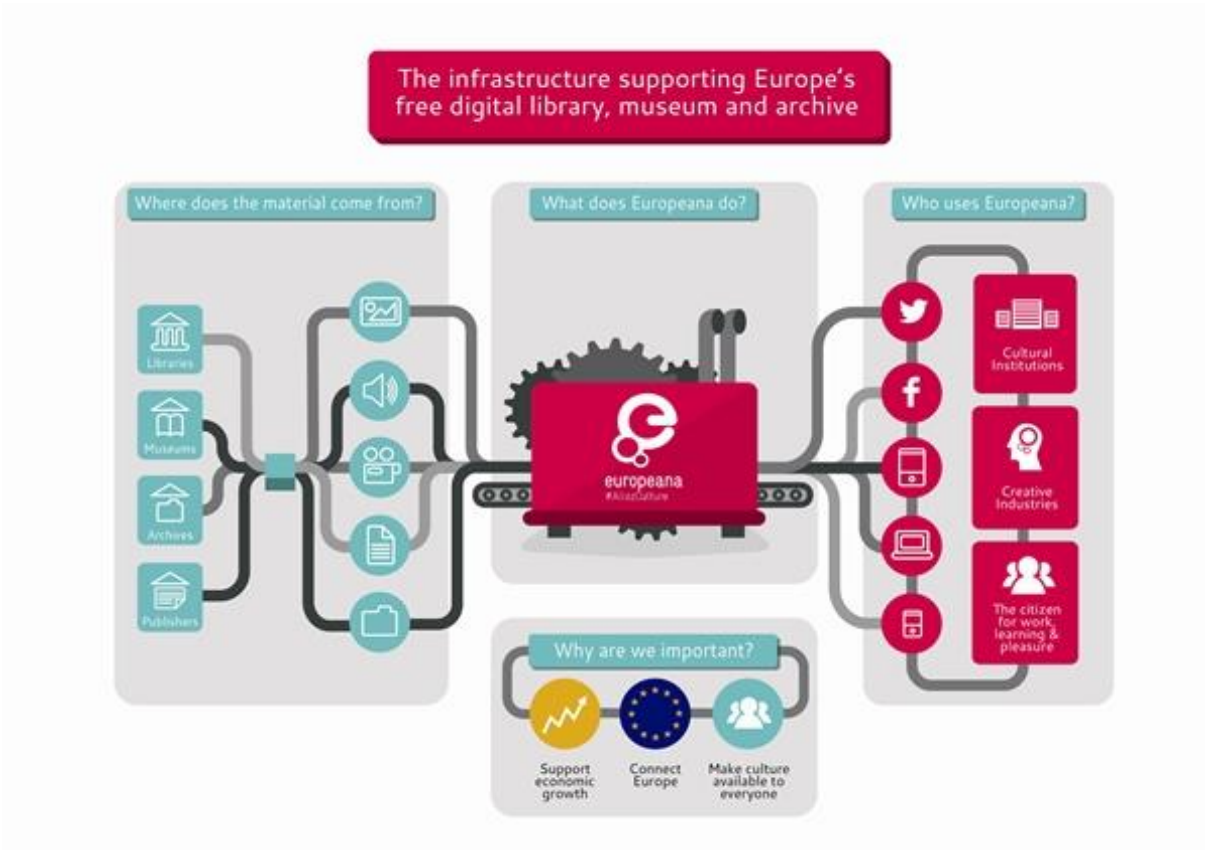


Fig. 1: Europeana's demand and supply chain

Demand and Supply Chain

On the supply side, the aggregation process has been well ordered with over 2,300 contributing organisations. Europeana has a website for end user interaction and is developing other thematic and audience-directed channels. On the demand and distribution side, the Europeana API has started the process of encouraging others to re-use the data in their applications and services, but a fully developed relationship with the creative industries and other potential re-users of cultural heritage content is in its infancy, hence the need for Europeana Creative and a place to access content, data, tools and services, i.e., "Open Culture Lab" / "Europeana Labs".

2.4 Stakeholders in the Open Culture Lab

Europeana Creative consortium, existing labs of Europeana Creative, future lab partners, other lab networks (ENoLL), cultural heritage institutions, Europeana Foundation; European Commission.

Europeana's Stakeholders and Target Audiences

Currently, Europeana has identified four stakeholder groups:

- Political stakeholders
- Professional colleagues in GLAMs
- Creative industries
- End users

1. The first group comprises the politicians and policy makers who have responsibility for Europeana's funding and policy:

- Neelie Kroes, Vice-President of the European Commission with responsibility for the digital agenda;
- her Cabinet;
- her Directorate, DG Connect;
- the European Council, which has representatives from each member state;
- the European Parliament and its Committee on Culture and Education;
- the Ministries responsible for culture, education, telecommunications and digital in each member state;
- the Member States' Expert Group on digital policy, which has a role in Europeana's governance and also acts as an information channel between the Commission and the national ministries.

2. GLAMs are Europeana's content providers. They are also a target audience for services and act as a channel to end users. They include:

- European GLAMs who are Europeana's data and technology providers or part of our member organisation, the Europeana Network.
- The professional associations of GLAMs which comprise the Europeana Foundation's Board.
- Other European GLAMs that are potential providers, project partners or Network members.
- GLAMs and other digital library practitioners beyond Europe who are interested in the policies Europeana advocates and the standards it promotes.

The professional community of archivists, librarians and curators rarely worked together until Europeana emerged; now common standards and practices are increasingly the norm. Recent public debate about Europeana has demonstrated the commitment of the community:

- “Europeana is the large hadron collider for the cultural sector”;
- “the single most important international digital initiative for culture”;
- “a pioneering, innovative and essential project that has had enormous impact in Europe and beyond… we benefit every day from Europeana’s collection, services and technology”.

Europeana provides a set of services to GLAMs, including:

- the Europeana data model – EDM –, the first international, interoperable model suitable for the cataloguing requirements of all the GLAM domains;
- the Europeana data licensing framework;
- the Europeana Pro site as a central resource about European digital projects and policies;
- a cloud storage service that is currently under development;
- a membership group of 800 organisations, the Europeana Network, that is a forum for knowledge exchange and examination of issues around digital practice;
- access to 2,300 providers of metadata and content from the memory institutions.

3. The third target, creative industries, are an audience for data services and content from the GLAMs but they aren’t yet in any real sense stakeholders in Europeana. We aim to increase their stakeholding by involving their professional networks at board level and by providing access to cultural heritage in a form that is usable by them, i.e., “Open Culture Lab”. The aim is to use the core service platform to broker a strategic relationship between the creative industries and the cultural heritage sector.

Europeana is well-placed to run pilots and to act as an incubator for innovation. These pilots can then be developed by creative enterprises or embedded as services by GLAM partners. Five of these pilots are planned as part of the current Europeana Creative project, which is already brokering new relationships between the GLAM sector and the creative industries.

4. End users – the wider European public – are stakeholders insofar as the cultural heritage of Europe is conserved and made accessible in their name. The European Commission set up Europeana to give citizens access to culture. The resulting five million visits a year shows that this is not a mass-market proposition, but forays into audience-facing thematic sites are proving more effective such as Europeana 1914–1918, Europeana 1989 and Europeana Fashion.

Each of these stakeholders want something different out of Europeana and the challenge is to present a coherent positioning of the services so that “users” know where to go to access what.

2.5 Creating a Cohesive Brand and Positioning Strategy for Europeana

Each set of stakeholders wants something different from Europeana. Each set of stakeholders has different needs from the services and data provided by Europeana. The challenge is to create a cohesive whole where Europeana enables access to cultural heritage and the stakeholders get what they need in a form usable to them.

Three of the questions we need to answer in positioning new services or tools in Europeana are:

- What do the stakeholders want from this service, and do these desires fit with Europeana's strategic direction?
- How should this new service connect to other Europeana services in terms of branding and user experience?
- How will this service relate to other similar, but non-cultural-heritage services, such as ENoLL?

Other Views to Be Taken into Account

Political: The Commission wishes the brand to be used and recognised. Making Europeana a household name is probably impossible but making it synonymous with cultural heritage and the first port of call for users (both B2C and B2B) to find trusted, authenticated, rights-enabled, linked cultural heritage data is within Europeana's grasp. Therefore we need consistent branding and strong positioning in the market for the benefits and costs of Europeana to continue to receive support.

Funding: Europeana has very limited funds to create brand, sustainable platforms, etc., so each service should reinforce the brand and be part of the core service platform development. Europeana needs to reinforce branding to be able to use the funds available effectively and to attract funding in future.

Economic: This relates to sustainability beyond the project. Europeana should be able to argue that the services for creative industry use of Europeana fuel must be funded as part of the core service platform. This will ensure sustainability beyond the lifetime of the project, but to do this the services must be seen to be integral to the core service, hence also the need, where possible, to make branding recognisable. We should also exploit the brand that is "established" if it means the right things for a new service, rather than incur more costs creating a new one.

Facilitation: Europeana has been successful as a broker between the cultural heritage institutions and new ways of exposing their content on the web, making it interoperable, IPR-compliant and discoverable. This is the aggregation side of the equation. The strategic imperative is to now make this content re-usable through distribution to communities and members of the creative industries. Building up this relationship with the creative industries is of foremost importance to Europeana over the next twelve months.

Networks: Other networks of labs exist, and members of Europeana Creative are also members of these. Care should be taken to avoid duplication of tools and services and the remit of each network might well benefit from being complementary.

3. Creative Brief

After a series of workshops between project partners across all work packages, a creative brief for the Europeana Labs website was arrived at which defines the overall vision of the website.

Creative Brief – Europeana Labs

Brand: Europeana

Product: Europeana Labs

URL: http://labs.europeana.eu

Date: October 30, 2013

What is the brand proposition?

Europeana Labs is a playground for remixing and using your cultural and scientific heritage. It is both an online space and a network of real-world places for inspiration, innovation and sharing.

As a strapline: the message is “This is your code, this is your heritage, these are your labs – make it, break it, play with it.”

What do we want to achieve?

We want to achieve much higher rates of use of Europeana (Network) metadata and associated content.

What is one key insight?

Documentation done well is inspiration.

- Good documentation of code and APIs has examples and elements of interaction that will have developers up and running in minutes.
- Good documentation of content makes it crystal clear if it’s open for re-use and which kinds of re-use.

Who is our user?

- The developer inspired to or paid to develop based on our API, code and labs hardware.

- The creative industry professional or entrepreneur with a commercial motivation to remix or republish heritage, or to do so at scale.
- The designer-developer or multidisciplinary teams who want to do both of the above.

What do we want people to do?

- We want people to discover and be inspired by our open collections and find them easy to re-use, remix or republish.
- We want people to share the tools, services and code that they create with others.
- If they are so inspired, we would like them to join co-creation and other collaborative activities.

How should we tell them?

Through the Europeana Labs website itself, but also through social channels (notably Twitter and LinkedIn) and through other Europeana sites and products such as the Europeana newsletter, the Europeana Network list and the Europeana Pro blog.

Why would they?

Together we have the authoritative metadata, we have millions of high-quality content objects open for use, and we have labs across Europe with hardware and spaces for collaboration.

4. Requirements Summary

4.1 Background

The Europeana Creative project specifies the creation of an online space, the “Open Culture Lab”. While decisions about the branding of this product remain to be made, for the purposes of this summary the name from the project Description of Work (“Open Culture Lab”) will be used. Building this website and associated tools falls under task 1.2 of Work Package 1, which is led by Europeana Foundation. The task itself is also led by Europeana Foundation, which is also responsible for the website as a formal project deliverable, D1.2.

4.2 Definition of the Open Culture Lab

The Europeana Creative Description of Work defines the website in the description of task 1.2 (see section 1, page 7 in this document). There are further allusions to this platform in various parts of the Description of Work. From page 107, “The Open Culture Lab environment […] provides the base infrastructure for experimentation with Europeana content and services. It will support rapid development of domain-specific applications, which will increase the visibility of the content in different sectors of industry.”

On p. 80: “The online Open Culture Lab will also support the physical labs by bringing together the examples, case studies, software services and content for experimentation in an interactive way. This website should be the single source needed by any creative industry partner or heritage institution hoping to re-use metadata from the Europeana repository for a new project. The Open Culture Lab will include all of the necessary API documentation, working software demonstrations and reference implementations from the Pilot projects that are necessary to support the complete lifecycle of a new product or service leveraging cultural heritage repositories.”

And perhaps the most pithy summary: On p. 85, the Open Labs are collectively described as “[physical and] online spaces to facilitate co-creation and learning”.

4.3 Audience

These various requirements suggest, then, that the audience for the Open Culture Lab is strongly biased toward creative industry as broadly defined, and specifically to those people and organisations who can make use of the metadata and associated cultural and scientific content of the Europeana repository. The working definition of audience for the site has been described internally as “those with the interest and capability to re-use the content, data or code of Europeana”. The over-arching mission of the site is therefore to facilitate this process of

re-use for those with an interest and capability of doing so. If this were written as a single generic mission statement, it could be:

> "The Open Culture Lab connects those with the interest and capability to re-use digitised cultural heritage with the tools and data that they need."

This audience would of necessity include software developers working in various sectors, but also those organisations for whom presentation or analysis of cultural heritage is part of an organisational mission and for which there is technical capacity available.

4.4 Content

Various parts of the Description of Work list specific areas of content for the Open Culture Lab. The following are mentioned by name at various points:

- "application gallery"
- "technical services"
- "case studies"
- "example code"
- "content for experimentation"
- "software services"
- "API documentation"
- "working software demonstrations"
- "reference implementations"

Given its role in the project, however, it would be reasonable to make the assumption that the Open Culture Lab should also include the following content areas, at minimum:

- best practice methodology for co-creation workshops;
- locations and details of the physical labs in the Europeana Open Laboratory Network;
- inventory of services offered by the Labs Network as part of their incubation model;
- related projects and resources.

Many of these areas of content have strong overlaps with existing products or areas of products maintained by Europeana. This was a deliberate choice – the strategy will be to migrate the content and tools needed from their various current platforms and put them in a common place with consistent branding, straightforward maintenance and a community-driven focus. As such, the following areas of existing content will be moved (and adapted) and then redirected:

- The majority of the EuropeanaLabs website (http://europeanalabs.eu/), including the product roadmap, source code repositories and various kinds of technical documentation.
- Much of the “Re-use Data” section of Europeana Professional (http://pro.europeana.eu/web/guest/re-use-data), including “API Services”, “Linked Open Data”, “Case Studies” (of API implementations, hackathon prototypes, LOD and EDM), “Hackathons” and “ThoughtLab” (including its various subtopics).
- The API documentation section of the Search product (http://europeana.eu/portal/api-introduction.html), including sample code and libraries.
- Visualisation of resources such as the “FLOSS inventory” (https://docs.google.com/spreadsheet/ccc?key=0Ag_7rVJwt0CpdFRJOEJxdEk4ZEMxQ01jaDgxQXFSTkE#gid=0) and the “R&D mindmap” (http://pro.europeana.eu/web/network/europeana-tech/-/wiki/Main/Semantic+activities+around+Europeana). Users should be able to browse easily through the resources and find related information (deliverable, source code).

These migrated content areas will make up much of the technical content already defined for the Open Culture Lab, though some of the existing content will necessarily be combined, split, re-written or re-formatted.

Based on this analysis, it seems that much of the content of the Open Culture Lab would be static, in that it would change only slowly over time. However, there would be a large number of potential contributors of content to the website, so this should be taken into consideration. There is also a clear need for some specific API-driven interactive functionality, such as content browsing, and this should be installed in as simple and clean environment as possible to encourage re-use. The dynamic elements of the site (potential blog/news/announcement entries, for example) would seem to be mostly explicitly created, rather than database-generated pages. Technical demonstrators might also require some flexibility on templating, since many demos will not run cleanly (or be attractive and useful) in complex CMS-driven environments.

4.5 Project Resources

Resources to develop and maintain the Open Culture Lab throughout the lifetime of the Europeana Creative project come largely from the project itself in the form of person-months of effort. The following have been allocated by the WP1 Lead toward the accomplishment of the Open Culture Lab task:

Platoniq (4 PMs), EF (8 PMs), ONB (2 PMs), SAT (8 PMs), BL (1 PM), NISV (2 PMs), yarh (2 PMs), AIT (4 PMs), AALTO (1 PM), MfN (0.5 PM), NTUA (4 PMs), KL (1 PM), EUN (1 PM), PLURIO.NET (1 PM), MFG (1 PM), EUROCLIO (0.5 PM), HP (0.5 PM), SEM (0.5 PM), WEBtic (0.5 PM), ONTO (0.5 PM), XZT (0.5 PM), Culture24 (0.5 PM).

There are no subcontracting or other project costs specifically allocated to hosting or other costs associated with the Open Culture Lab. However, Europeana Foundation has € 40,000 of subcontracting budget generally assigned for the project to include the subcontracting of specific expertise. WP1 proposes that some of this money could be profitably used to subcontract the development of responsive web templates to be used as a basis for the site, but this will require further discussion within EF and with the Executive Board. If the selected technical platform has associated costs for hosting or software licencing, these would also be good candidates to be paid from the EF subcontracting budget.

Following the project kick-off, it became clear that there was a potential gap in front-end web development resources for the development of the Open Culture Lab, in that the partner assigned to the development (Spild af Tid) was planning to subcontract this work rather than develop using in-house resources. The decision was taken by the project's Executive Board to transfer six person-months of effort from Spild af Tid (SAT) to partner Semantika (SEM) who has graphic design, front-end and back-end web development expertise in-house and has capacity to take on the work. Accordingly, Semantika is executing the bulk of the Open Culture Lab web development.

4.6 Human Resources

In addition to Sašo Zagoranski of Semantika, who is the web development lead for the Open Culture Lab, the following Europeana Foundation staff have contributed to the design, development, testing and operation of the Open Culture Lab:

- Breandán Knowlton: Product Owner, WP1 Lead and overall project requirements definition and acceptance lead;
- Pavel Kats: Technical Lead (project and EF), technical input from WP2;
- Vassilis Tzouvaras: WP2 Lead and input from technical partners;
- Harry Verwayen: executive sponsor and labs service model input from WP3;
- Beth Daley: editorial/dissemination input from WP7;
- Jill Cousins: strategic input from EF;
- David Haskiya: liaison with other EF web products and standards;
- Dean Birkett: UX design and usability;
- Dasha Moskalenko: knowledge management platforms for EF, content and training requirements;
- Antoine Isaac: R&D input;
- Jacob Lundquist: DevOps and hosting;
- Julia Fallon: IPR – Terms and Conditions.

In addition, other project work packages are represented as follows:

- WP1 (Europeana Open Laboratory) is represented also by Enric Senabre (Platoniq).
- WP3 (Business Model Frameworks) is further represented by Nikki Timmermans (KL).
- WP4 (Pilots) is represented by Lizzy Komen (NISV).
- WP5 (Open Innovation) is represented by Nico Kreinberger (MFG) / Andrew Kitchen (external consultant) / Ana Garcia (ENoLL).
- WP6 (Evaluation) is represented by Nico Kreinberger (MFG).
- WP7 (Dissemination) is represented by Margaret Mulligan (EBN).
- WP8 (Project Management) is represented by Max Kaiser and Katharina Holas (ONB).

5. Research

A series of research activities were carried out to better focus the work of the Europeana Labs development.

5.1 User Research

The results of the user and persona research were presented in a presentation attached as Annex I to this document.

5.2 Benchmarking Research

A research activity was carried out to identify other websites that might provide examples and inspiration for the outcomes needed by the Europeana Labs website. The benchmark results were as follows.

Possible Examples for the Open Labs Component

- British Library Labs: http://labs.bl.uk/
- Bibliothèque Nationale Labs: http://labs.bnf.fr
- Arts Holland Developer: http://dev.artsholland.com/
- Open Living Labs (ENoLL): http://www.openlivinglabs.eu/
- DPLA App Library: http://dp.la/apps
- Open Knowledge Foundation Labs: http://okfnlabs.org/
- Mozilla Webmaker: https://webmaker.org/
- NYPL labs: http://www.nypl.org/collections/labs
- Harvard Library Innovation Lab: http://librarylab.law.harvard.edu
- Data @ CultureHack: http://data.culturehack.org.uk (built on GitHub pages)
- Cooper Hewitt Labs: http://labs.cooperhewitt.org/

Examples of Good Technical Documentation

- Dublin Core specifications: http://dublincore.org/documents/dcmi-terms/
- DM2E EDM specifications using Neologism http://onto.dm2e.eu/schemas/dm2e/1.0/

Examples of Good Colour Combinations for Technical Sites

- http://ethanschoonover.com/solarized

Design Inspiration

- Training-oriented friendliness at http://teamtreehouse.com/.
- Solid documentation, advocacy and showcasing at http://popcornjs.org/.

Other Sources of Inspiration

- http://management.apievangelist.com/building-blocks.html
- http://apievangelist.com/2013/09/02/baseline-for-federal-government-open-data-and-api-portals/
- And an example: http://kinlane.github.io/va-developer/
- https://s3.amazonaws.com/kinlane-productions/whitepapers/API+Evangelist+-+API+101.pdf
- http://management.apievangelist.com/building-blocks.html

Legal Documentation

Generally, people will click the tick next to “I agree to these Terms and Conditions”, without actually reading – a good way to show T&C / privacy policies and the like, would be like CodePen at http://blog.codepen.io/legal/terms-of-service/.

Code Examples

Many sites relating to programming languages have good <code> blocks. This should be something that we need to emulate in the style guide.

- For example: https://stripe.com/docs/connect/getting-started

Looking at the <code>redirect_uri</code> it stands out, and is clear to see that it is a code block.

Another thing on language sites, are things like:

- http://us2.php.net/manual/en/tutorial.firstpage.php

Our users might prefer to have the ability to copy and paste, such as on the site:

- http://deanbirkett.name/making-the-web-accessible-again/

Dean Birkett used Prism: http://prismjs.com/.

If we can also add in the ability to experiment with code, which is something that CodePen (e.g., http://codepen.io/iProgress/pen/xlpzb) does so well, mix that with something like Joyride (http://foundation.zurb.com/docs/components/joyride.html), then we could create a really good interactive help system, which allows the users to follow a guided tutorial, before allowing them to break off and experiment more themselves.

6. Wireframes

Following the development of the requirements and possible benchmarks for the Europeana Labs site, a series of design exercises were conducted to mock up the various areas of content needed. What follows are the sketches for the initial (alpha) release of the website.

It is worth noting that the alpha release of this website in January 2014 will not contain all of these pages, but that they serve as a guide for future development of the site in releases planned for March 2014, July 2014 and January 2015.

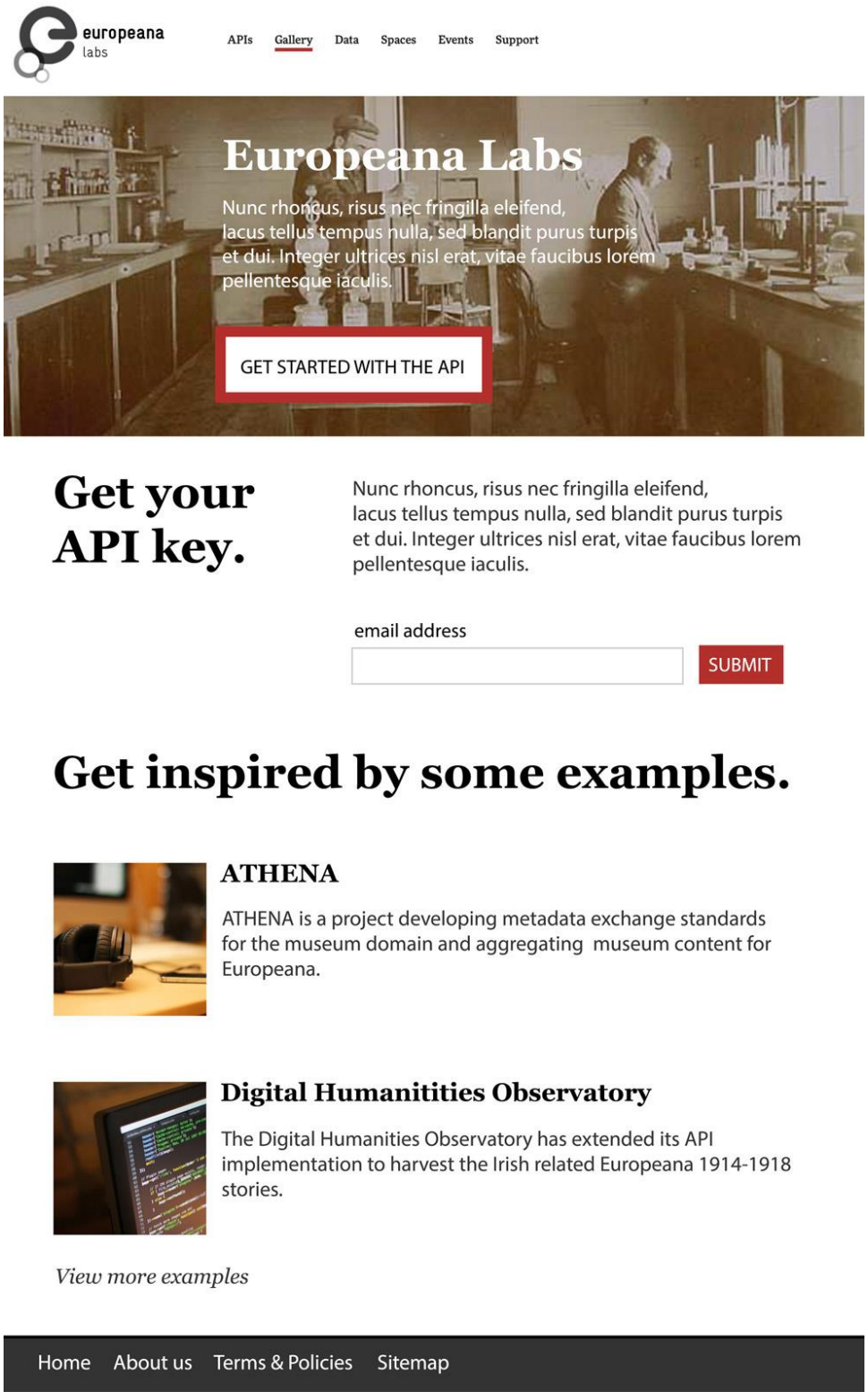


Fig. 2: Europeana Labs home (landing) page

The Europeana Labs home (landing) page shows the key calls to action, including signing up for a Europeana API key and links to featured projects or applications from the gallery. There is also a clear link to the “Get Started” section of the API documentation.

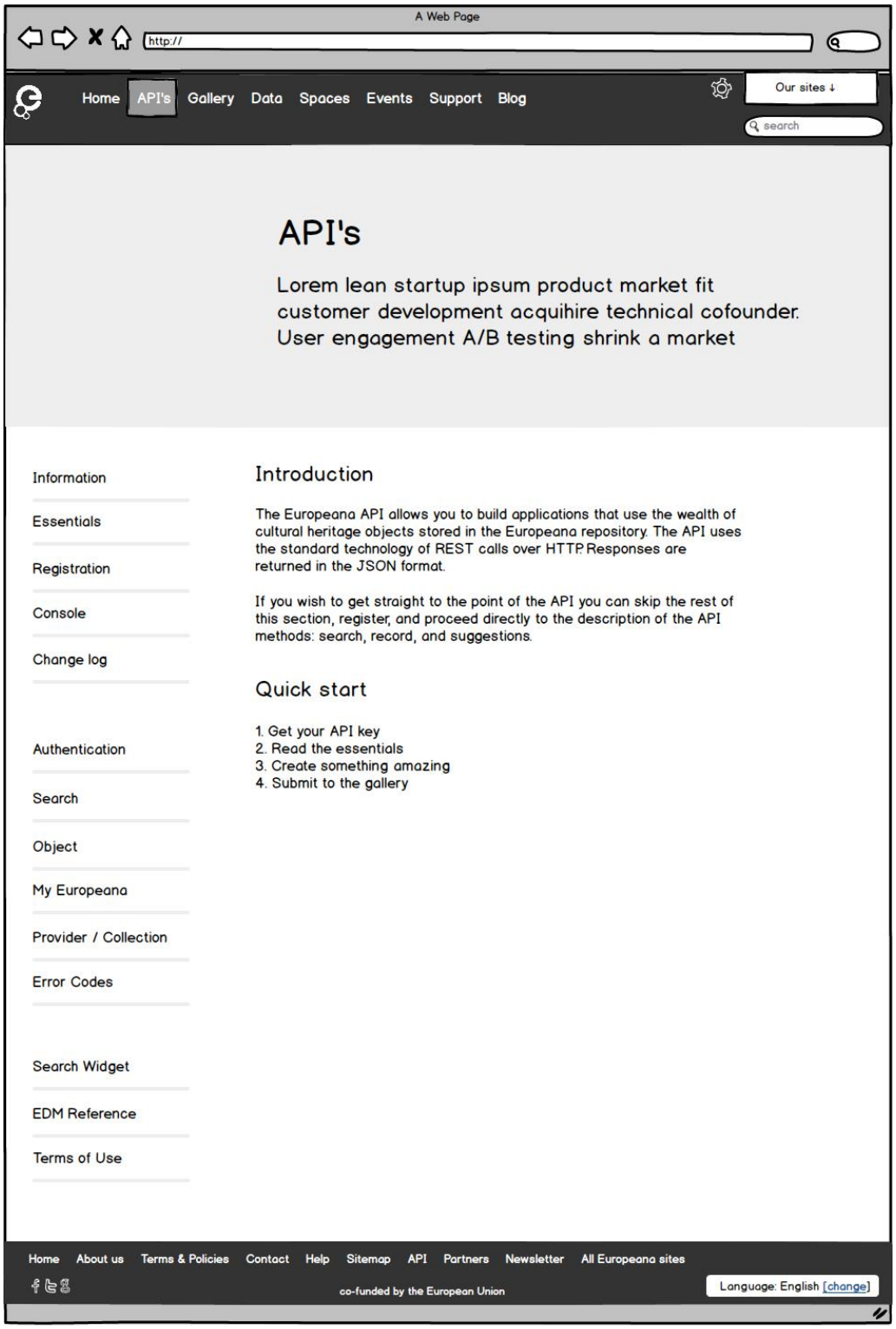


Fig. 3: Europeana Labs API page

The Europeana Labs API page shows the pattern of static text and subnavigation for a section (API) that will have many component parts. The basic concept is to keep text as clear and unadorned as possible, with clear hierarchy and orientation in the typography of the page, with direct access to the various subnavigation sections.

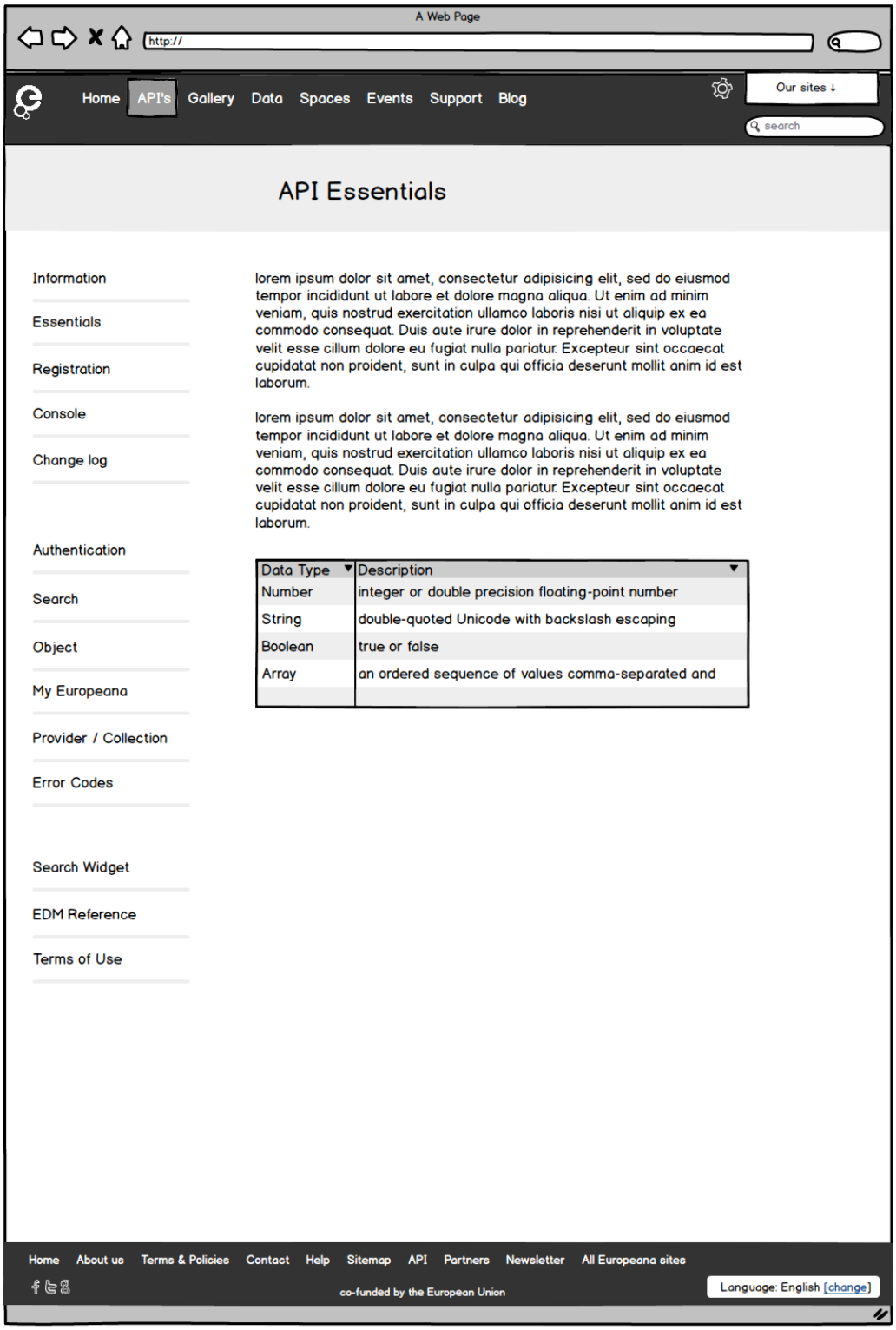


Fig. 4: Europeana Labs API Essentials page

The API Essentials page shows some of the key styling choices for tables, highlighting the ease of use for alternate-coloured lines of text. This wireframe also shows the distinction between the category landing page, with its large header, and the smaller header of an interior page on the site.

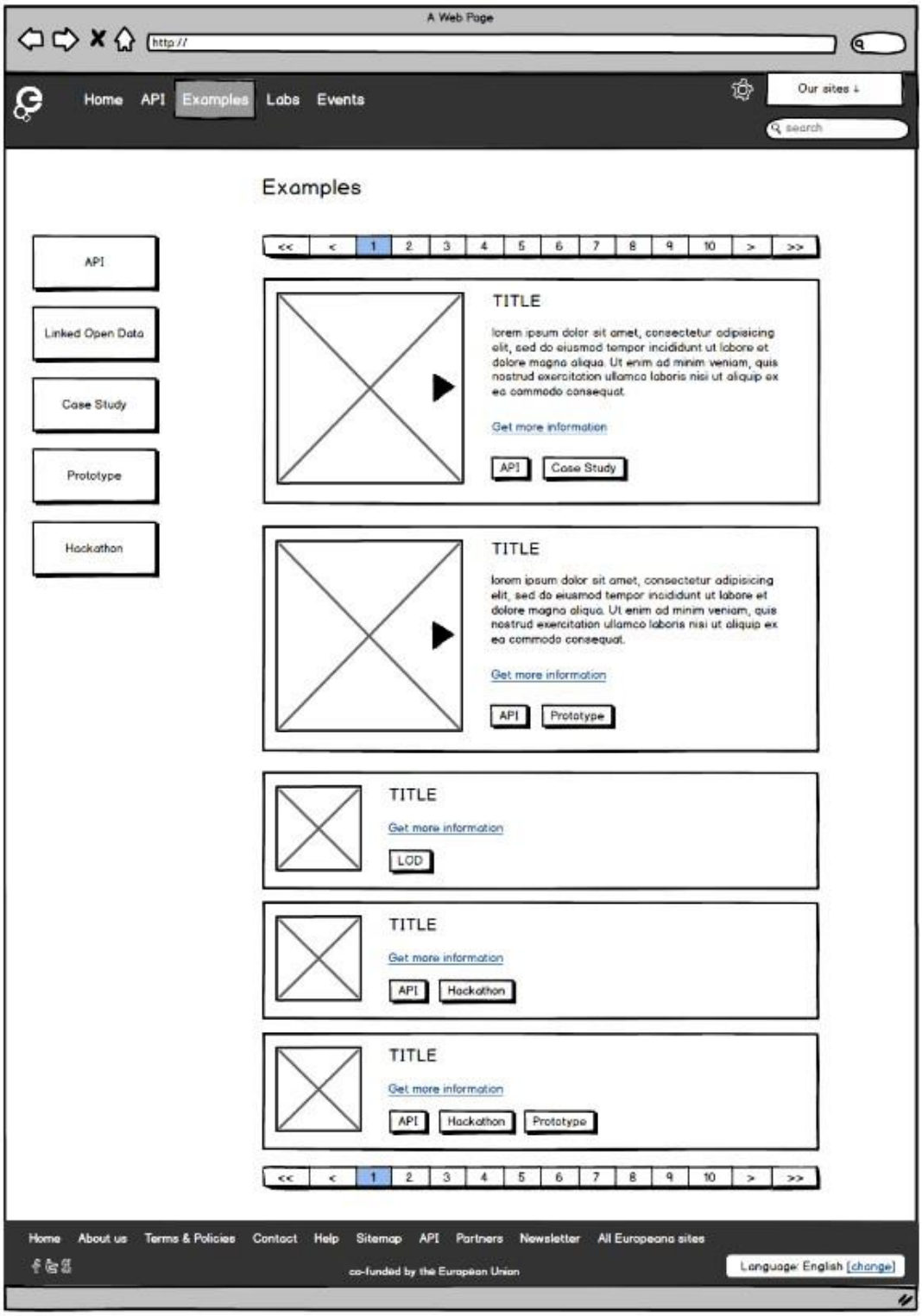


Fig. 5: Europeana Labs Examples page

The Europeana Labs Examples page (subsequently renamed “Application Gallery” or “Gallery”) shows a dynamically generated page, and the first example of the “card” system. Each item in a longer list is designed using a simple “card” to highlight a key image, some brief text with associated tags and actions. Rather than using hierarchical subnavigation for these longer, more dynamic lists, a tagging system is used whereby a long list is quickly filtered based on multiple overlapping assigned tags. This is the pattern used throughout the site for dynamic lists.

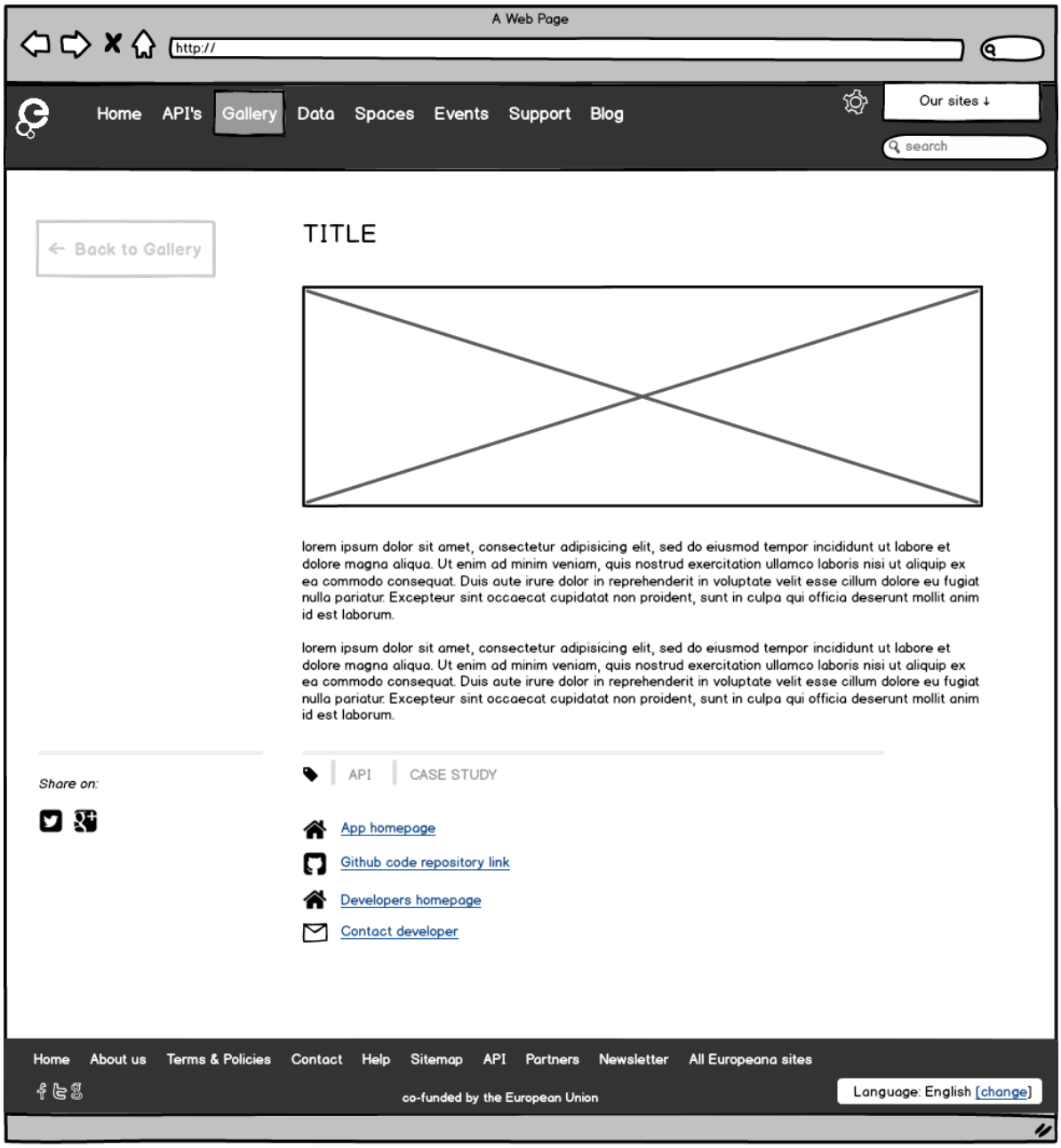


Fig. 6: Europeana Labs interior item page

The interior item page shows the primacy of image content, and a very uncluttered primary text block that can accommodate very long or very short descriptions of the item. Key tags and contact information are broken out separately, using a format that will become standard across the site, and there is a clear link back to the enclosing category section, which should help to orient site visitors who follow a deep link from another webpage or search engine.

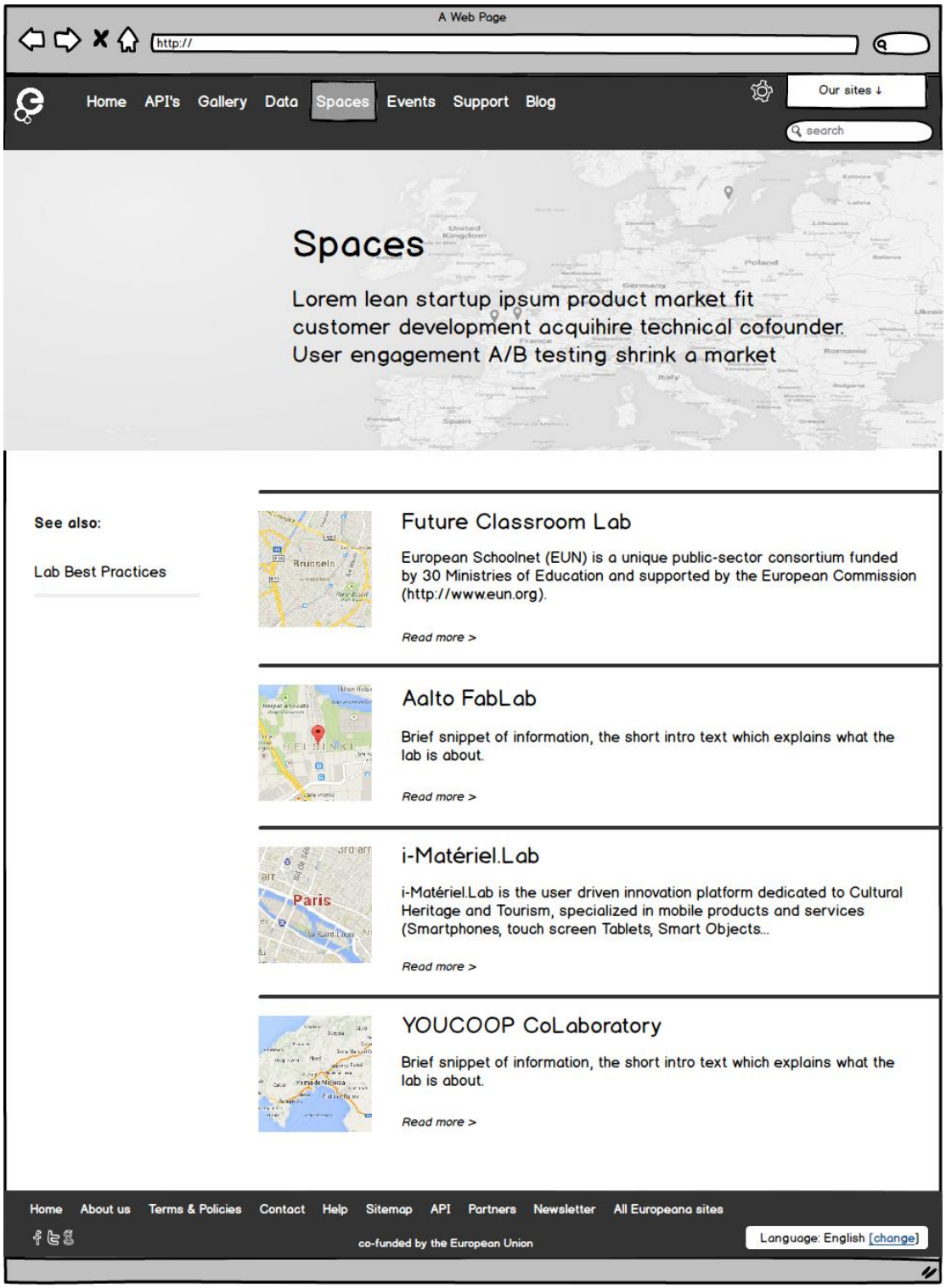


Fig. 7: Europeana Labs Spaces page

The Spaces category page emphasises the geographical nature of the physical “hubs” in the Europeana Labs Network and gives more space to the description and location of each. This model will be compressed to the same “card” model as the Gallery once there are more spaces in the network. These pages will be expanded over time to include more best practice and methodology documentation generated by the Europeana Labs, as initially defined in Europeana Creative Deliverable “D1.1 – Service Design for the Co-Creation Labs”[1].

[1] See http://pro.europeana.eu/documents/1538974/1601973/eCreative_D1.1_EF_v1.0; accessed March 9, 2014.

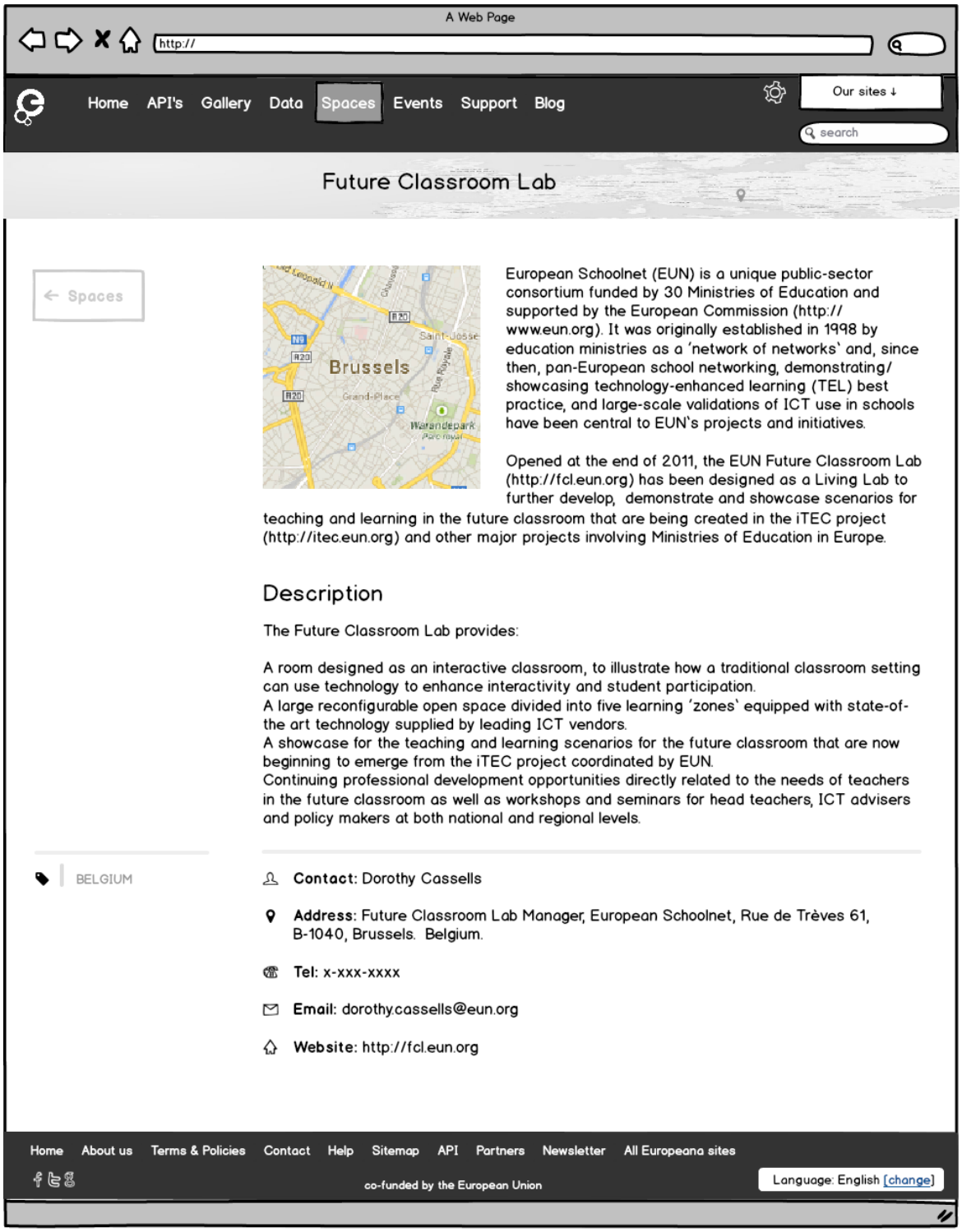


Fig. 8: Europeana Labs Spaces item page

A Europeana Labs Spaces item page gives as much room as necessary to a description of the lab and its services, with an emphasis on simple contact information and linked calls to action. User research reflected that geography was one of the key differentiators for each lab (rather than services), and this emphasis on geography is shown through the prominent positioning of map and location elements.

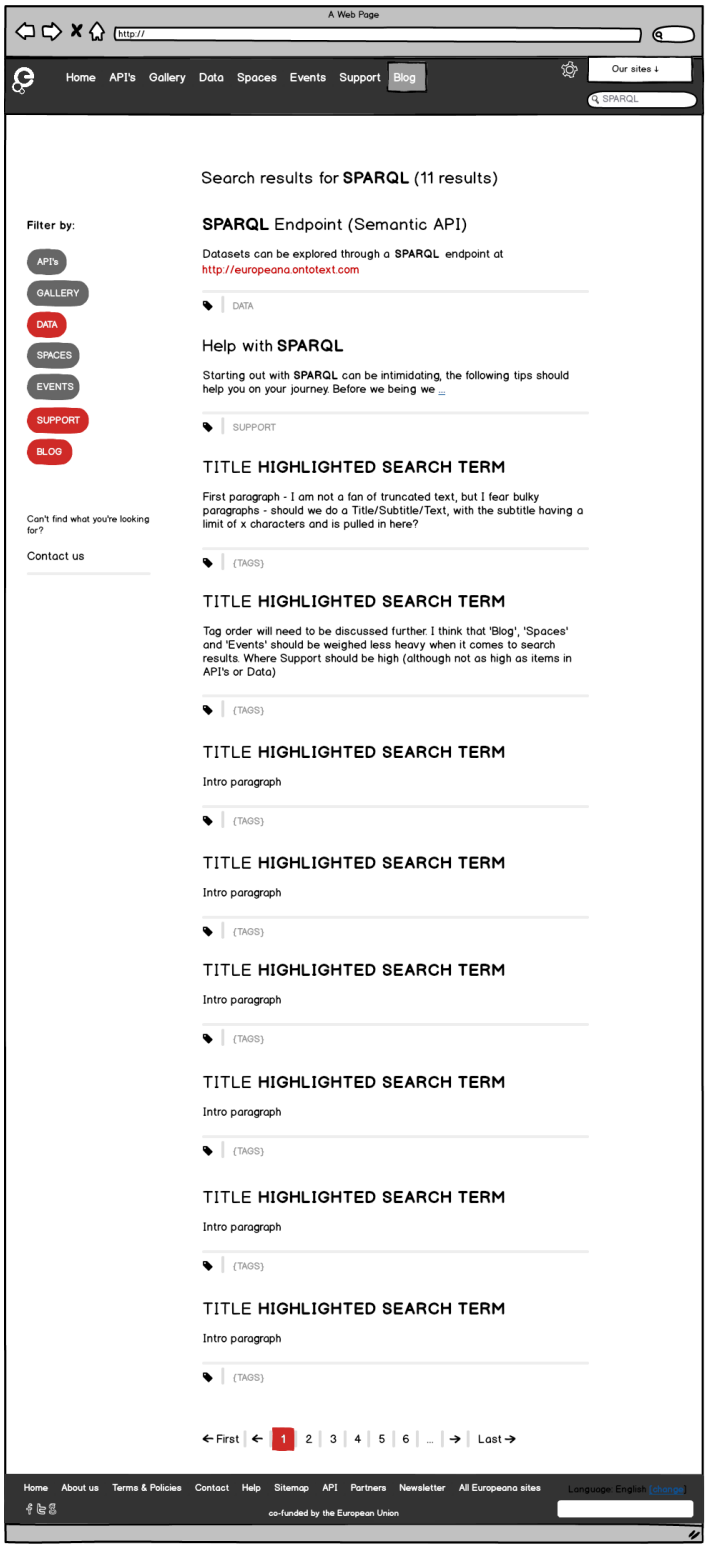


Fig. 9: Europeana Labs search results page

The search results page will use the same “filter-by-tag” navigation pattern to separate the related content from the various sections. Where possible, search results will be presented with both titles (links) and also brief descriptions to better contextualise the results of searches.

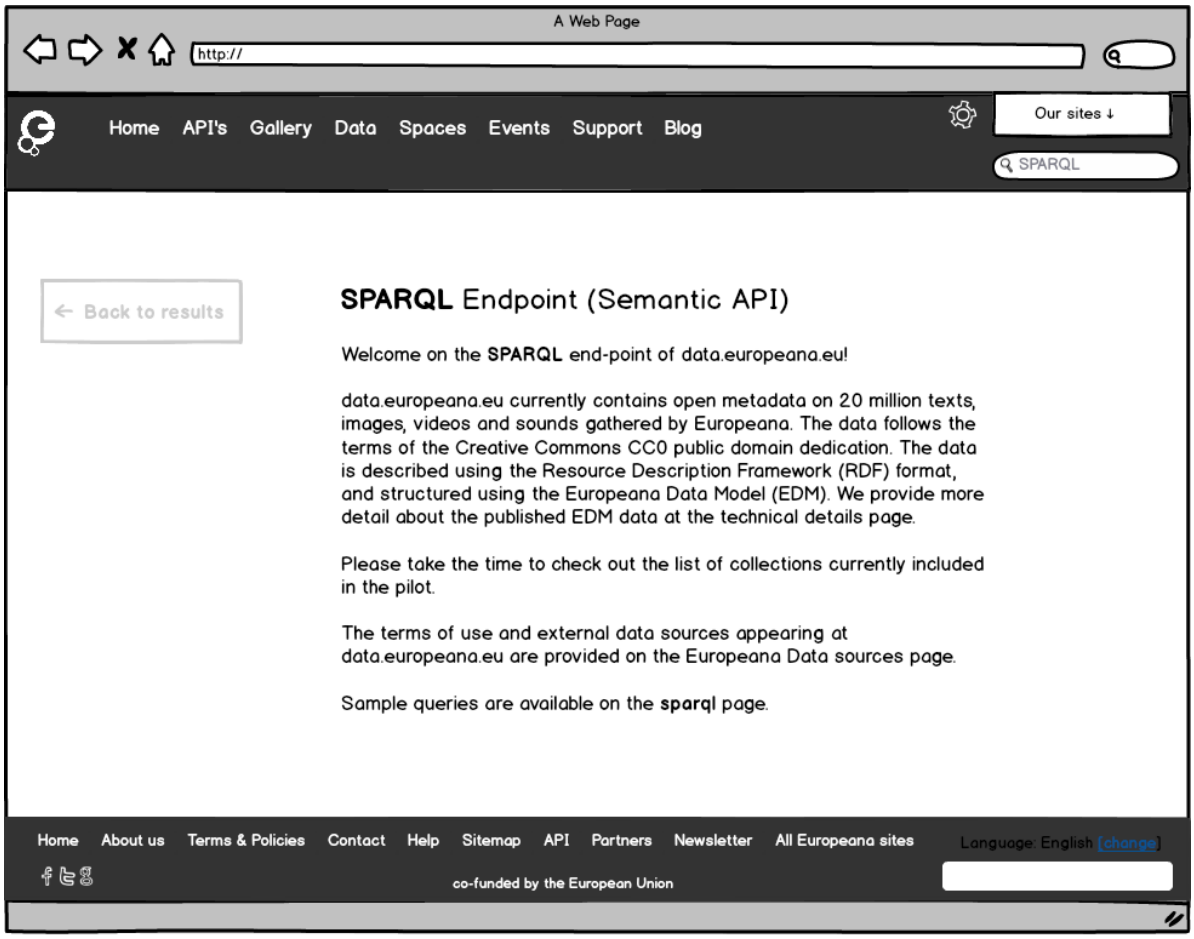


Fig. 10: Europeana Labs search result page

If possible, static search result pages will contain explicit links back to the list of search results.

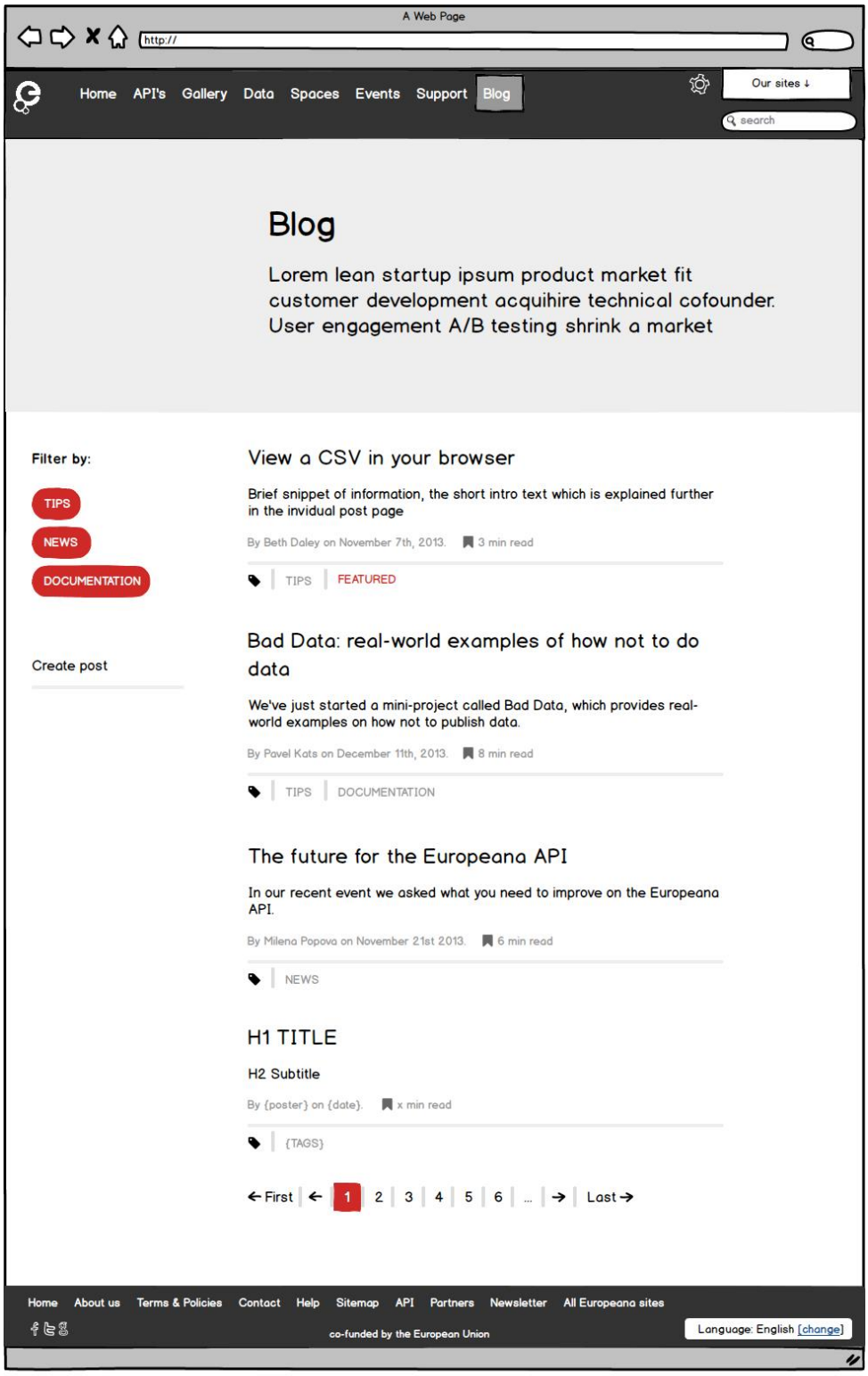


Fig. 11: Europeana Labs Blog section

The Europeana Labs Blog section, when implemented in the beta release, will use the same tagging mechanism to filter the blog posts. Like most weblogs, entries will be presented in reverse chronological order, with an arbitrary set of tags per post. The blog section will be the only section currently designed to explicitly use author attributions, which emphasises the contributory nature of the blog and the desire to distribute blogging responsibilities more widely to people not involved in creating the Europeana Labs site itself.

Fig. 12: Europeana Labs Blog item page

A more realised wireframe for a blog item page demonstrates that imagery will be used in several areas: to serve as a “hero image” for the blog post itself, to illustrate or emphasise other key points within the article, to humanise the author of the item and to demonstrate the hero image of the previous blog entry. Tags and social media shares will be embedded directly in the blog item.

7. Visual Language

Concurrent with the development of the Europeana Labs content and functionality requirements, a common visual language ("style guide") was developed to support the building of visual interface blocks based on a cumulative combination of atoms, molecules, organisms, templates and pages. This framework was developed using the Pattern-Lab.info framework developed by Brad Frost. The results of the pattern lab definition can be seen at http://uc48.net/europeana/.

The use of a common pattern language will help to align the development of Europeana Labs with the other digital products created as part of Europeana core projects, as these concepts and designs will be carried forward directly into the designs of Europeana's other business-to-consumer, business-to-network and business-to-business products. The implementation of this common design pattern language is ongoing.

The reasoning behind the development of the common pattern language can be seen this extract from the influential book, *The Elements of User Experience: User-Centered Design for the Web* by Jesse James Garrett.[2]

> **Internal and External Consistency**
>
> Because of the way Web sites have often been produced—piecemeal, ad hoc, and isolated from other design work going on in the organisation—they have been plagued with problems of consistency in visual design. These problems take two forms:
>
> 1. There are problems of internal consistency, in which different parts of the product reflect different design approaches.
>
> 2. Then there are problems of external consistency, in which the product doesn't reflect the same design approach used in other products from the same organisation.
>
> Good solutions to problems of internal consistency are rooted in an understanding of the skeleton of the site. The key is to identify recurring design elements that appear in different contexts throughout the various interface, navigation, and information design problems in the product. By isolating each design element from those different contexts before designing it, we can more clearly see the small-scale problem we're trying to solve, instead of getting distracted by the larger-scale problems imposed by context. Rather than designing the same element over and over again, we can design it once and use that design throughout the product.
>
> For such an approach to work, we will have to check our work against the different contexts in which that element appears. Maybe a big, round, red STOP button will work fine for the

[2] See Jesse James Garrett, *The Elements of User Experience: User-Centered Design for the Web*, New Riders, Berkeley, CA, 2011.

checkout page, but it might not as visually effective on the crowded product customization page. The best approach is to design each element, try it in various contexts, and then rework the design as needed.

Even though many of the design elements will be created in isolation from each other, they should still work together. A successful design is not merely a collection of small, well-designed objects; rather, the objects should form a system that operates as a cohesive, consistent whole.

Enforcing design consistency across media presents your audience—customers, prospects, shareholders, employees, or casual observers—with a uniform impression of your brand identity. This consistency of brand identity should be present at every level of the visual design of your product, from the navigation elements appearing across every screen to the humble button that appears only once.

Presenting a style on your Web site that's inconsistent with your style in other media doesn't just affect the audience's impression of that product; it affects their impression of your company as a whole. People respond positively to companies with clearly defined identities. Inconsistent visual styles undermine the clarity of your corporate image and leave the audience with the impression that this is a company that hasn't quite figured out who it is.

All of this documentation is, of course, a lot of work, but it happens for good reasons: Over time, the reasons for our decisions fade from memory. The ad-hoc decisions made to address a specific problem in a specific circumstance get all jumbled up with the decisions intended to form the foundation for future design work.

Another reason to document your design system is that people eventually quit their jobs. When they do, they walk away with a wealth of knowledge about how a product gets designed and built on a day-to-day basis. Without a style guide that remains up-to-date with the latest standards and practices, that knowledge is lost. Over time, as people change positions, the whole organisation gradually suffers a sort of amnesia, as the ways things were done and the reasons for those decisions drift away to other parts of the company or back out into the workforce.

The definitive documentation of the design decisions we have made is the **style guide**. This compendium defines every aspect of the visual design, from the largest scale to the smallest. Global standards affecting every part of the product—such as design grids, colour palettes, typography standards, or logo treatment guidelines—are usually the first things to go into a style guide.

The style guide will also include standards specific to a particular section or function of a product. In some cases, the standards documented in the style guide will go all the way down to the level of individual interface and navigation elements. The overall goal of the style guide is to provide enough detail to help people make smart decisions in the future—because most of the thinking has already been done for them.

> Creating a style guide is also helpful in imposing design consistency across a decentralised organisation. If your Web operations consist of a diverse range of independent projects being initiated and worked on by people in offices scattered all over the world, your site is likely to look like a random mishmash of styles an standards. Getting all those people to go along with a unified set of standards can be a lot of work, which is why responsibility for enforcing design style guides often resides higher up in the organisation than you might expect. Having a style guide you can refer to is the single most effective way to get your product looking like a cohesive whole instead of just a jumble of tacked-on pieces.

An example of the use of the new Europeana Style Guide is seen in the following example of a complete page, rendered directly from the Pattern Lab environment using HTML/CSS. These visual patterns were used as a basis for the technical implementation of Europeana Labs.

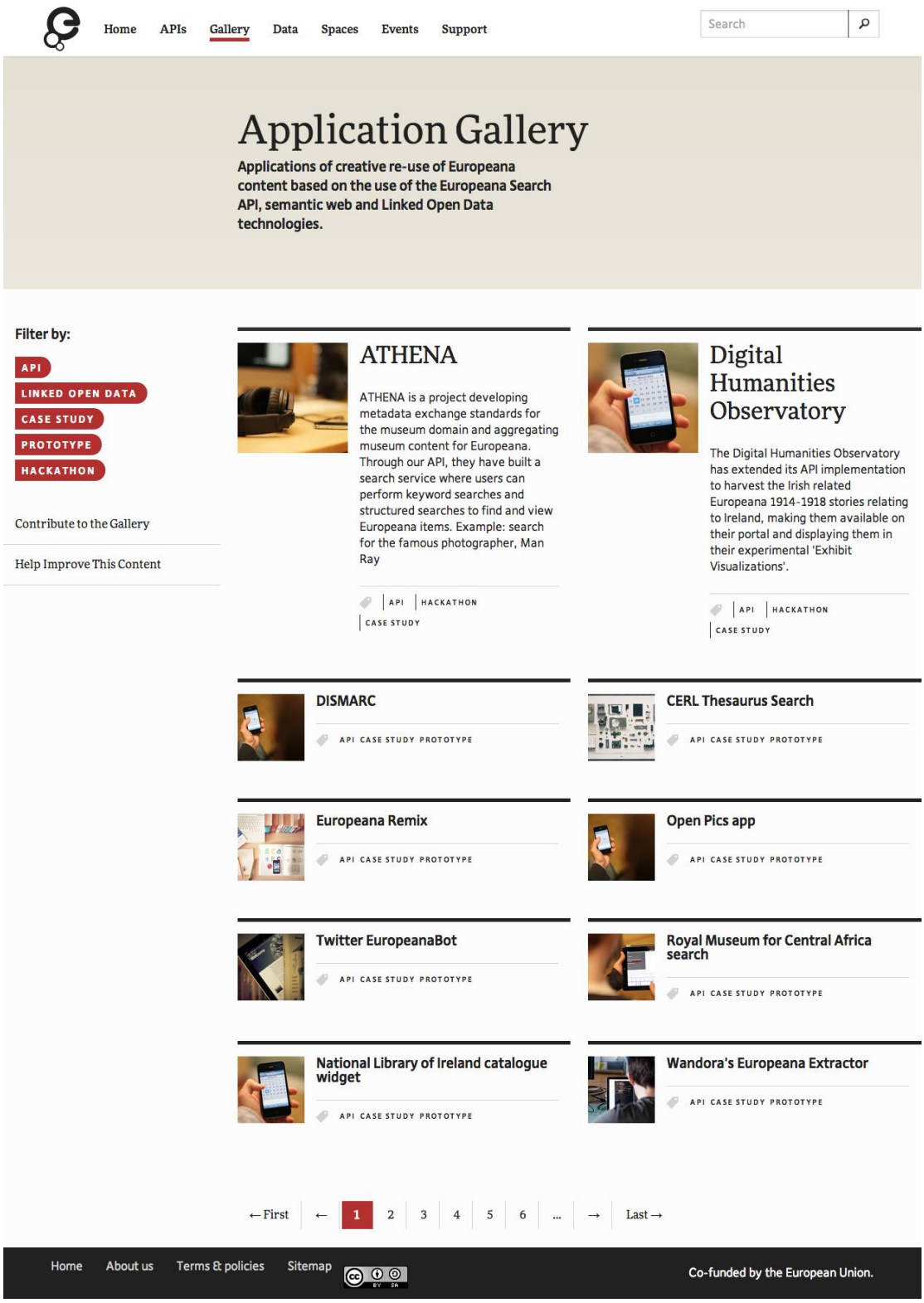


Fig. 13: Europeana Labs Application Gallery page

This example shows the use of colour, typography, grid systems, whitespace common header/footer/navigation elements, link and tag styles, etc. that were developed as part of the larger Europeana Style Guide project.

8. Implementation

The platform consideration was as follows. The project team considered the following platforms to host the Open Culture Lab / Europeana Labs website:

- WordPress (http://wordpress.org). Europeana Foundation uses this already to run http://blog.europeana.eu and is quite familiar with this PHP-based open source CMS. There is also excellent community and plug-in support.
- ExpressionEngine (http://ellislab.com/expressionengine). This is a very designer/developer-friendly PHP-based CMS used in the past by project team members on a number of occasions.
- Liferay (http://www.liferay.com/). Europeana currently uses this platform for document management. It does offer quite a bit of flexibility with presenting content, and it could be used much better than it is currently being used at pro.europeana.eu. Liferay is a large Java-based system, running on Tomcat.
- GitHub (http://pages.github.com/). We explored whether a GitHub-hosted site (using the Jekyll pre-processor http://jekyllrb.com/ and the liquid templating engine http://liquidmarkup.org/) might be a possibility. The idea was inspired by http://project-open-data.github.io/ and the new healthcare.gov, which was developed in part by DevelopmentSeed (http://developmentseed.org/blog/). They have written about how this might work at http://developmentseed.org/blog/2012/07/27/build-cms-free-websites/ and http://developmentseed.org/blog/2013/06/25/healthcare-launches-in-the-open/. The idea is fascinating for a project like Europeana Creative and offers some incredibly interesting opportunities for community engagement. Of course, it also offers some significant challenges and necessary streamlining/simplicity.

After technical exploration and evaluation by WP1 and WP2 partners, the Europeana Labs site was implemented using the Jekyll site generation library, which generates a static website. The site is attached to a public GitHub repository, and the GitHub Pages service is used to automatically regenerate the entire site as changes are committed to the underlying public GitHub repository. The project determined that this “no-CMS” solution provides maximal flexibility and sustainability going forward, as the templates and content are both hosted publicly in their simplest possible form.

An early release of the site had the following screens, fully coded in the Jekyll environment and rendered on the web using GitHub Pages.

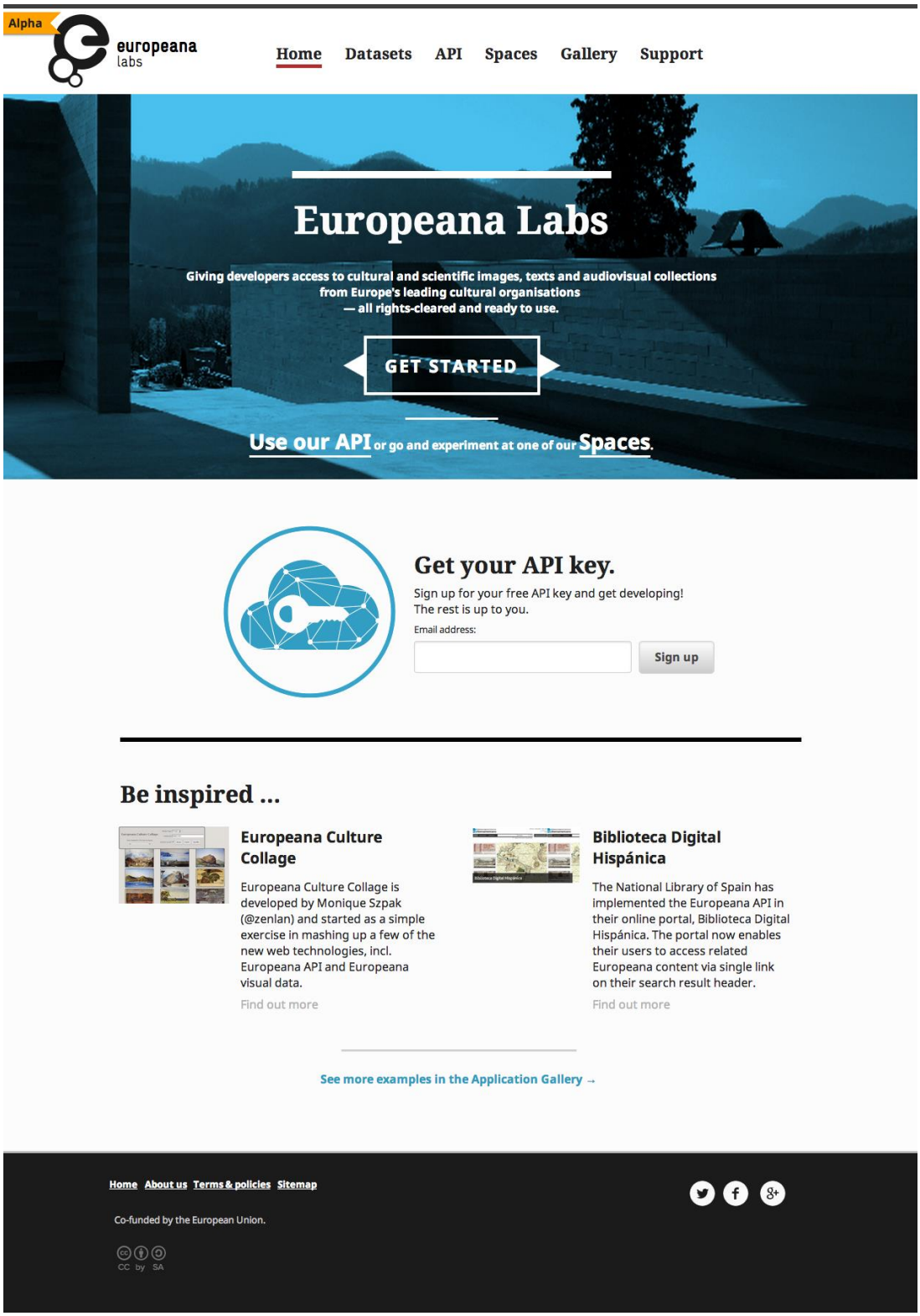


Fig. 14: Europeana Labs home (landing) page

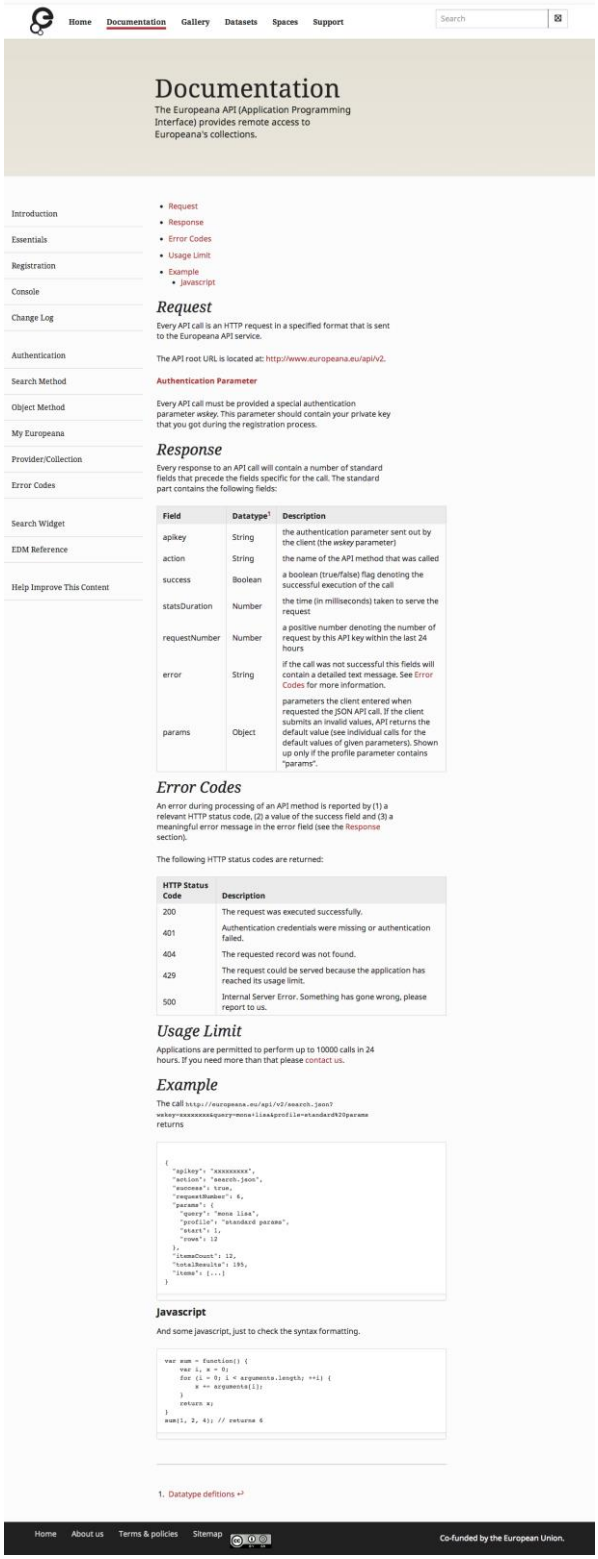


Fig. 15: Europeana Labs Documentation page

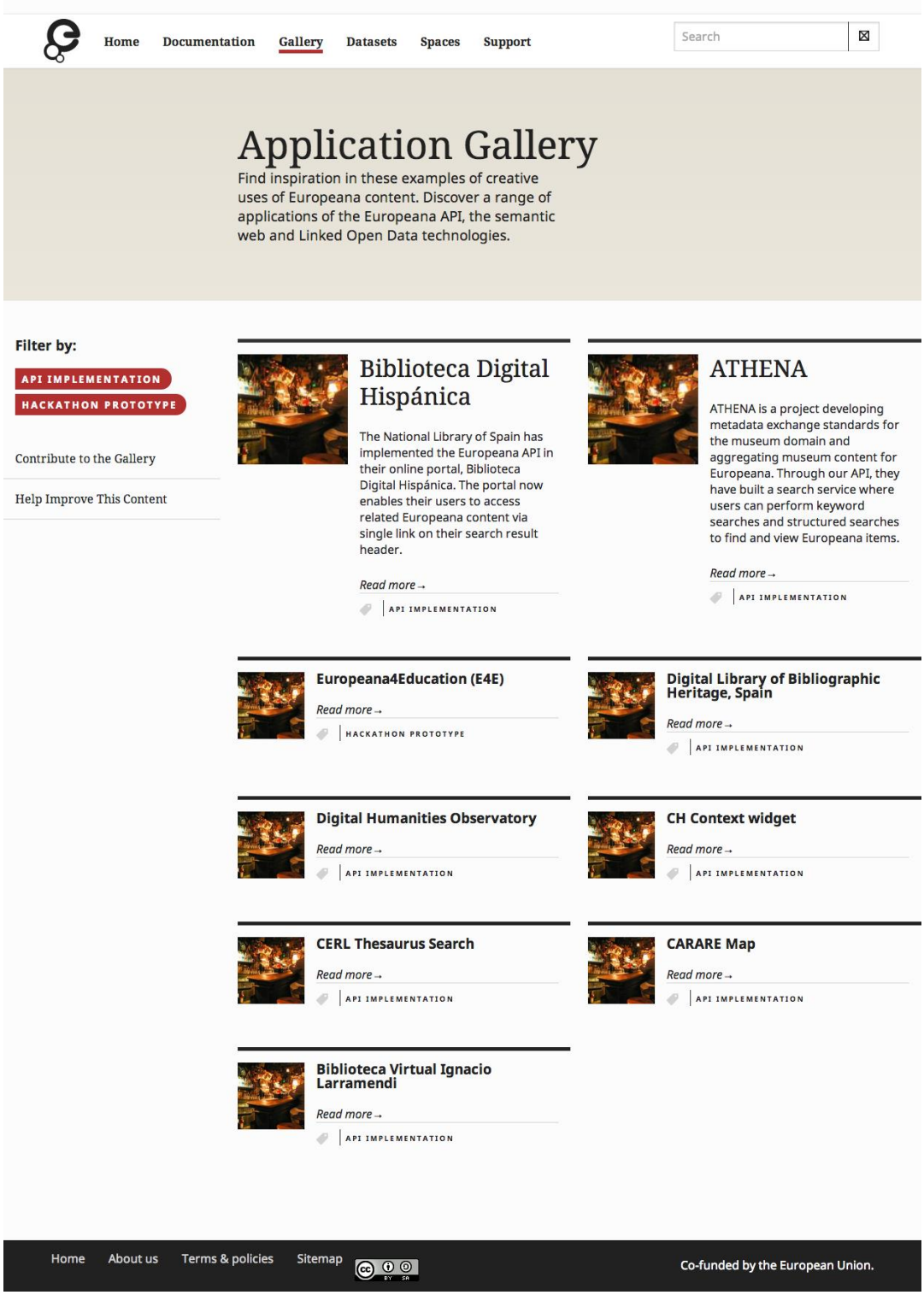


Fig. 16: Europeana Labs Application Gallery page

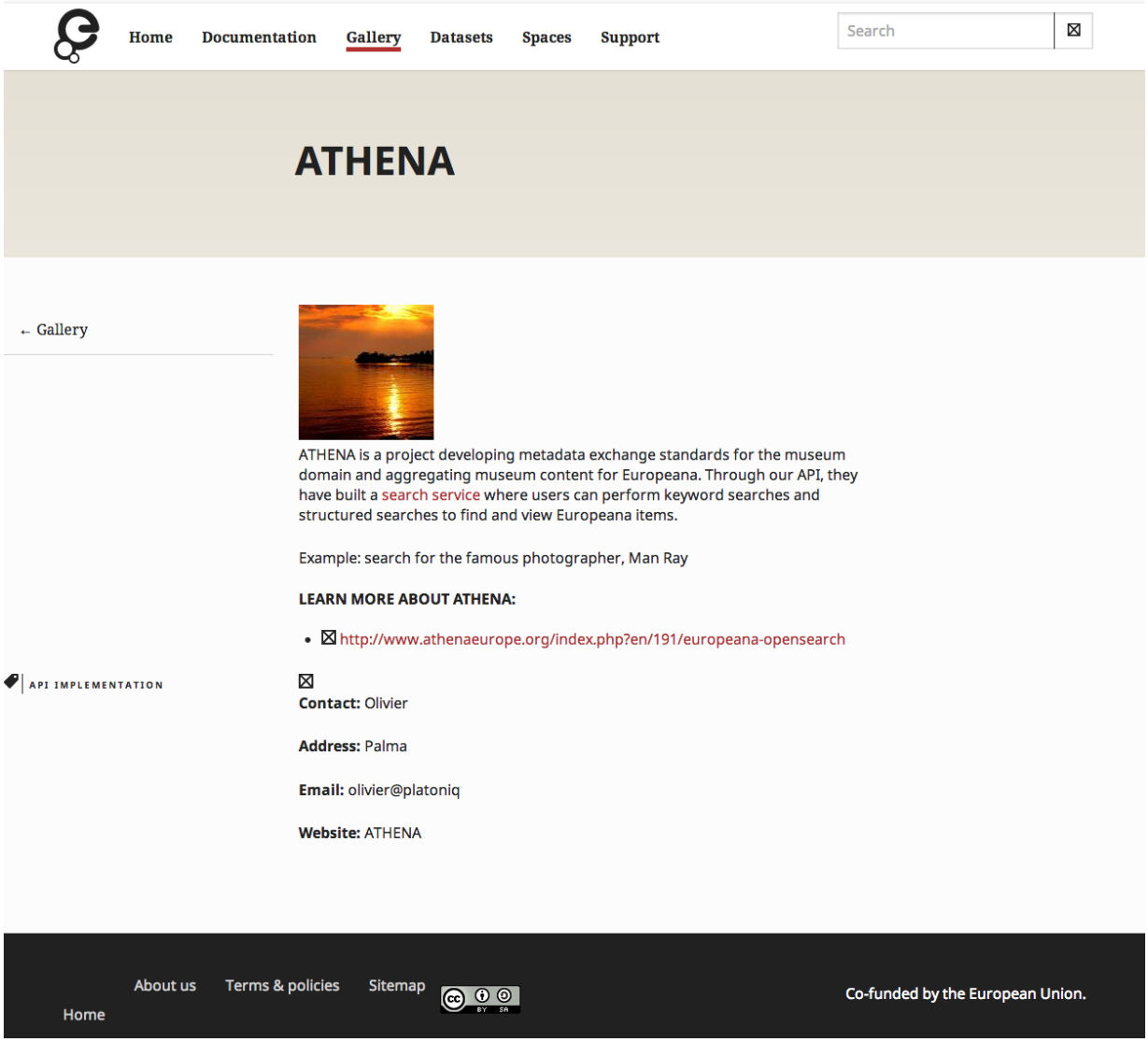


Fig. 17: Europeana Labs Gallery item page

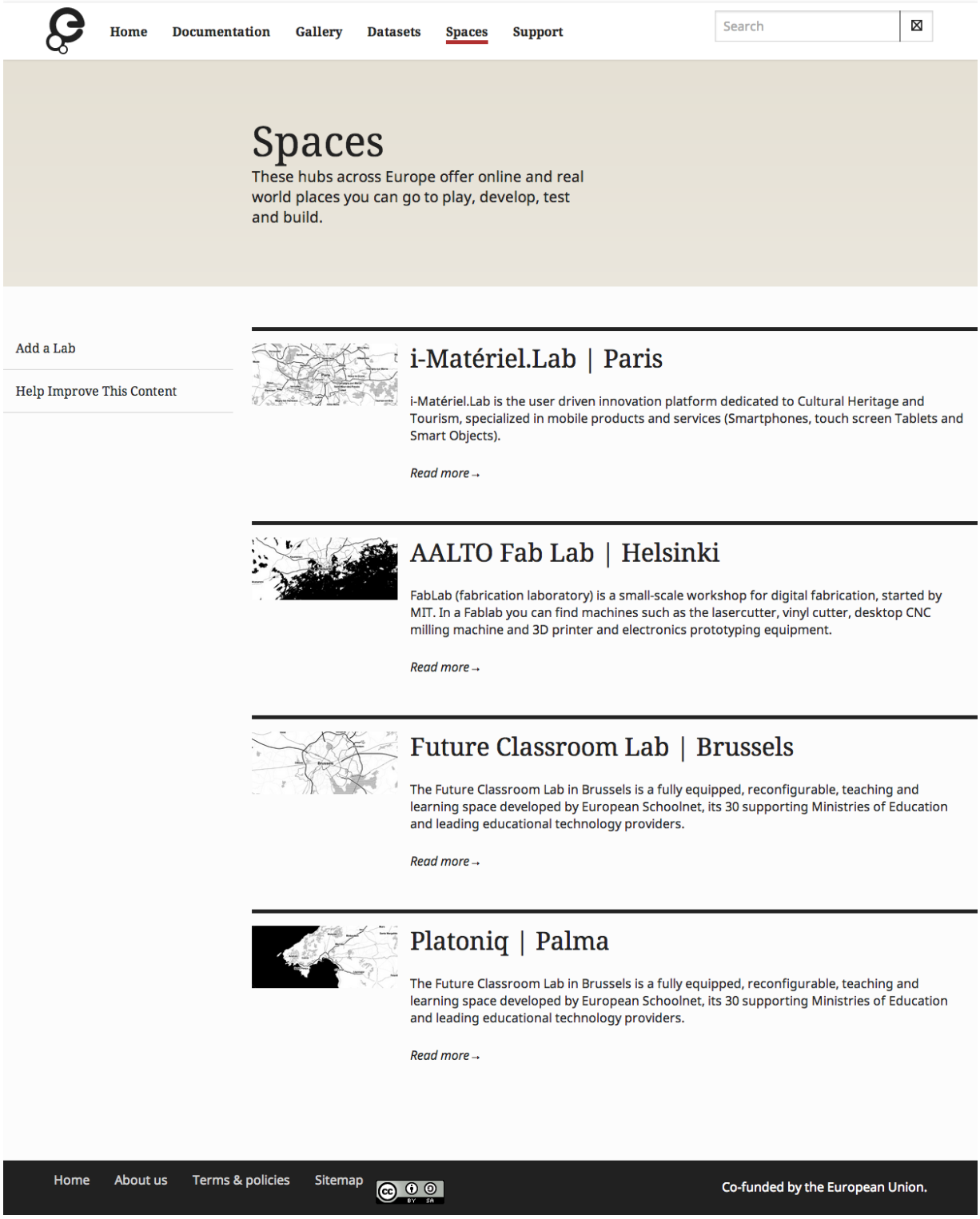


Fig. 18: Europeana Labs Spaces page

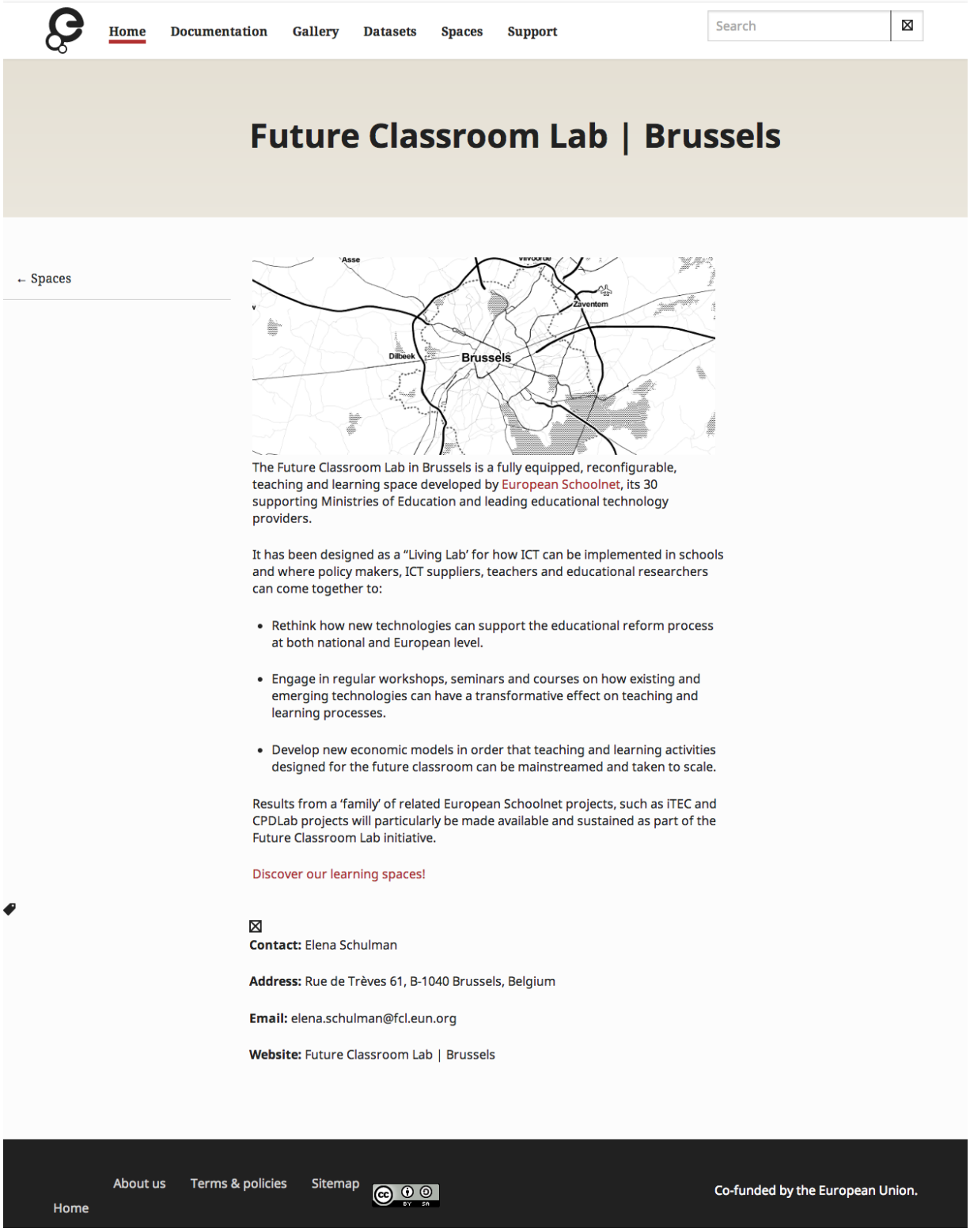


Fig. 19: Europeana Labs Spaces item page

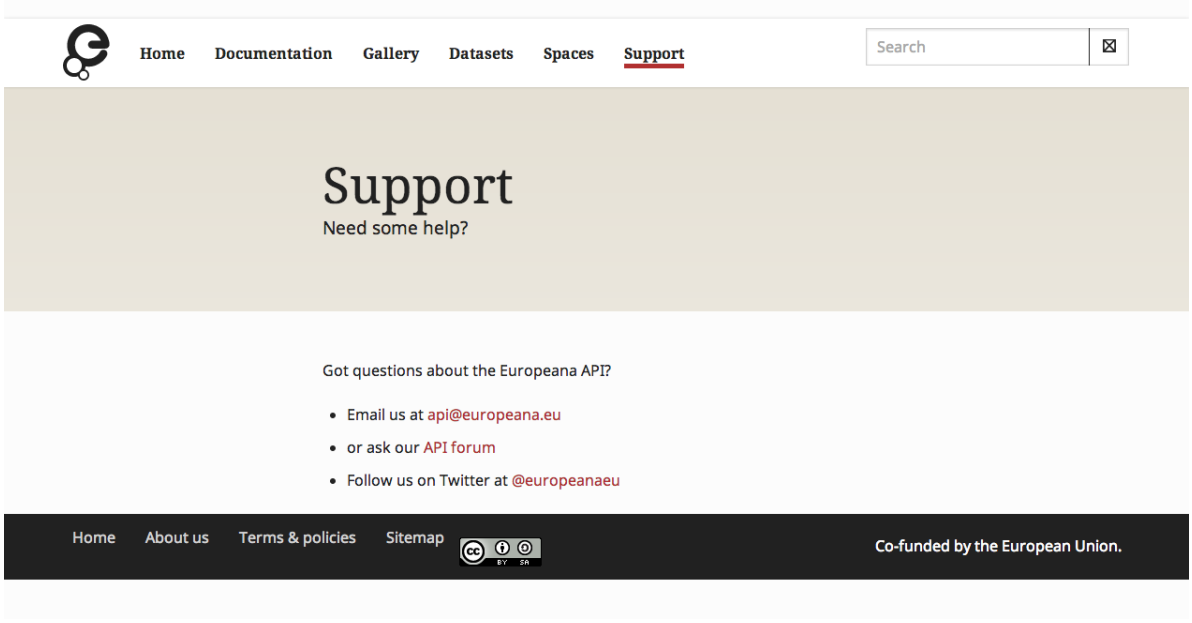


Fig. 20: Europeana Labs Support page

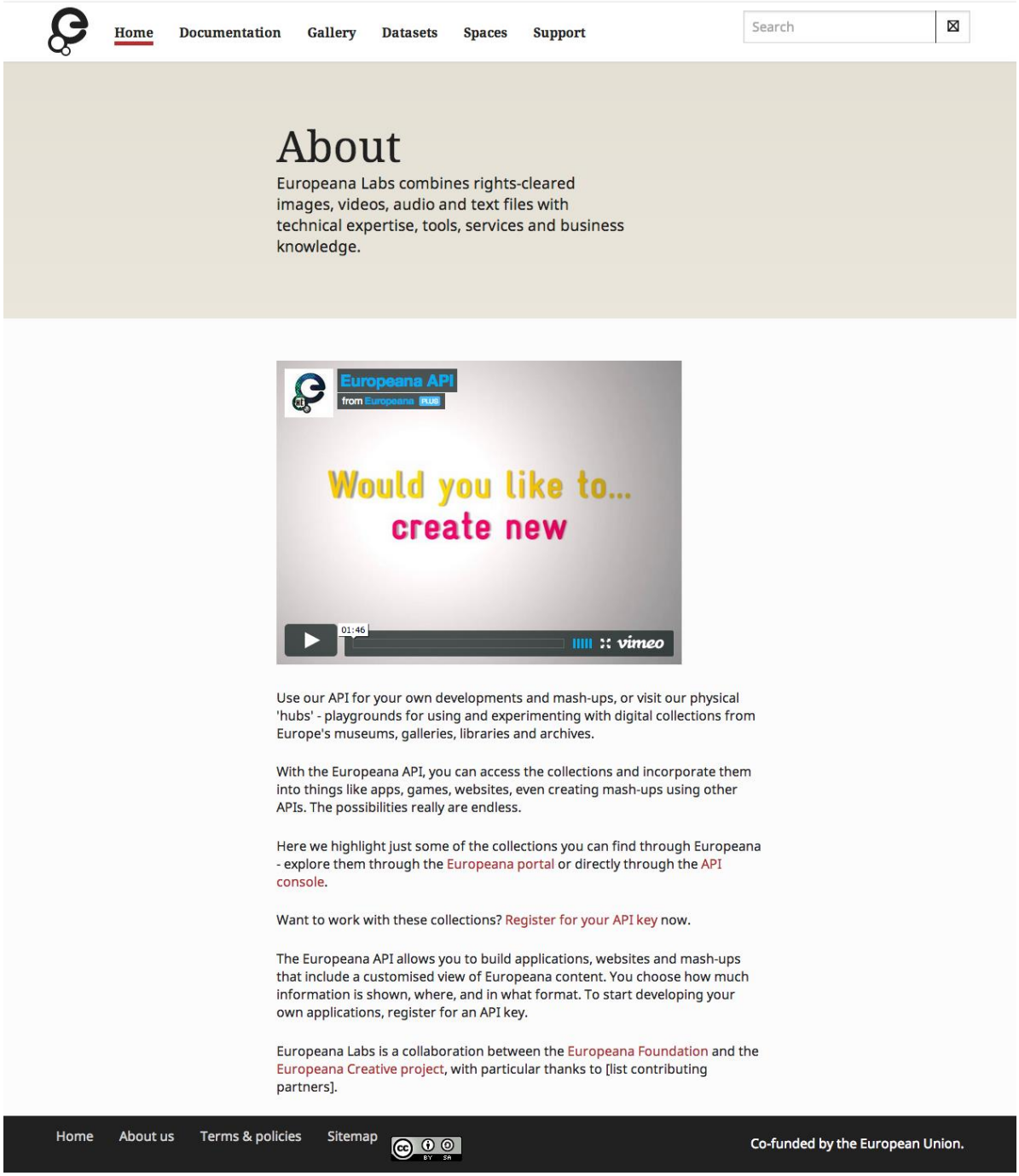


Fig. 21: Europeana Labs About page

9. Governance

During the development workshops for Europeana Labs and with reference to the project governance structure, the following division of responsibilities was agreed for the Europeana Labs project.

9.1 Decision-Makers

The following people have direct decision-making roles on the design and implementation of the Europeana Labs website.

- Europeana – David Haskiya (project lead), Pavel Kats and Dasha Moskalenko
- Semantika – Sašo Zagoranski and Nina Zagoranski
- Platoniq – Enric Senabre and Olivier Schulbaum
- ONB – Max Kaiser and Katharina Holas

9.2 To Be Consulted

The following people are to be consulted for direction and feedback as the Europeana Labs project progresses.

Europeana Creative Leaders

- WP2: NTUA – Vassilis Tzouvaras will make recommendations on the integration of back-end data and transformation services within the Europeana Labs environment, and prepare these services for inclusion.
- WP3: KL – Paul Keller, Nikki Timmermans will make recommendations on the inclusion of the manifestations of the Content Reuse Framework within the Europeana Labs site, and how the website can adequately provide attractive and simple access to such content.
- WP4: NISV – Lizzy Komen will advise on Pilot-related aspects.
- WP5: ENoLL – Ana Garcia, Andrew Kitchen
- WP6: MFG – Nico Kreinberger will make recommendations on the presentation and content of the Events section to best align the Europeana Labs site with the needs of the Challenges for creative industry.
- WP7: EBN – Margaret Mulligan will advise on the content and presentation of the Europeana Labs website as a vehicle for dissemination within the Europeana Creative project.

Labs Represented on the Project

- yarh – Jean-Rémi Deléage: Paris lab (i-Matériel.Lab). (The involvement of yarh has been significantly reduced since the inception of the Europeana Creative project, and it is not clear at this time what involvement the yarh organisation will have in the development of Europeana Labs.)
- AALTO – Kari-Hans Kommonen: Helsinki lab (Aalto Media Factory)
- EUN – Elena Shulman: Brussels lab (Future Classroom Lab)
- Platoniq – Enric Senabre: Barcelona/Palma lab (YOUCOOP CoLaboratory)

Europeana Foundation

- Jill Cousins – Executive Strategy
- Harry Verwayen – Strategic Development
- Antoine Isaac – EuropeanaTech coordination
- Valentine Charles – Data Modelling
- Jon Purday – Corporate Communications
- Susan Muthalaly – Corporate Editorial
- Julia Fallon – IPR & Policy
- Dean Birkett – UX Design

9.3 To Be Informed

The following people are to be informed of progress and to comment as needed.

Project Stakeholders

- WP6: MFG – Nico Kreinberger

Europeana Partner Groups

- EuropeanaTech
- Europeana Network (officers)
- Europeana API users

Other Projects

- Europeana Inside
- Europeana Cloud
- DM2E
- AccessIT+
- LoCloud
- Europeana Space
- Europeana Food and Drink

Outside Organisations

- DPLA
- Trove

9.4 Operational Roles

For the duration of the project, the following operational day-to-day roles have been agreed:

- Scrum Master – Nina Zagoranski
- Product Owner – Breandán Knowlton / David Haskiya
- Technical Development Lead – Sašo Zagoranski
- Creative Direction – Enric Senabre
- (Moderators / editors of content – Beth Daley / Susan Muthalaly and Margaret Mulligan: no PMs allocated for this task)
- Content Inventory – Dasha Moskalenko
- Testing & User Testing – Dean Birkett and Dasha Moskalenko
- Customer Support – Europeana Facilitation team, with content-specific support from each relevant area

10. Future Planning

10.1 Features

The Europeana Labs site continues to evolve, and coming releases will see more complex functionalities and content integrated, as well as a continued iterative improvement of the visual design.

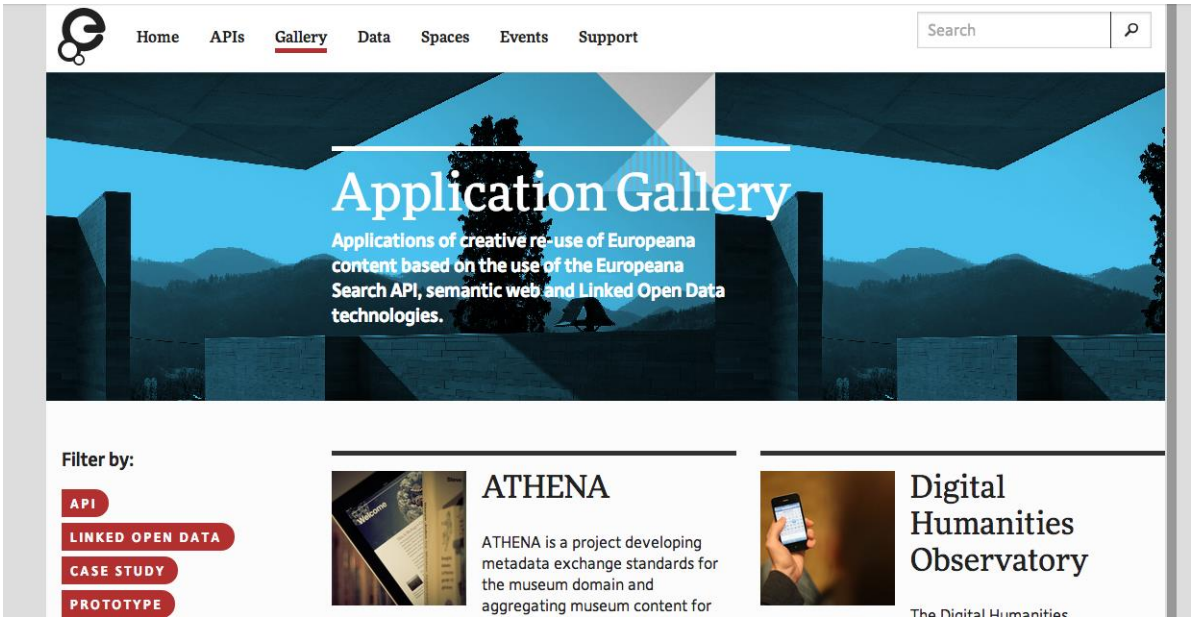


Fig. 22: Europeana Labs Application Gallery

The design will be extended to incorporate more background images relating to the brand developed for the Europeana Creative project. Features such as the following will also be implemented:

- Interactive API console
- Better visualisation of datasets (content repositories)
- More complex contact mechanisms
- Social media connections
- Embedded contact form
- “Edit this page” function to improve the content

- Submit forms for Gallery and Dataset items
- Best practice documentation from labs
- Wizard-based configuration of Europeana Search Widgets
- Examples of SPARQL and other Linked Open Data endpoints

10.2 Release Schedule

The Europeana Labs site has been developed on a phased release schedule, beginning with the private alpha release in January 2014, followed by a public beta in March 2014, a version 1.0 release in July 2014 and the version 2.0 release in January 2015. This schedule has been created to synchronise with the event schedule of the Europeana Creative project, including the provision of front-end and back-end services to be made available to the public Challenge events in each of the five project themes.

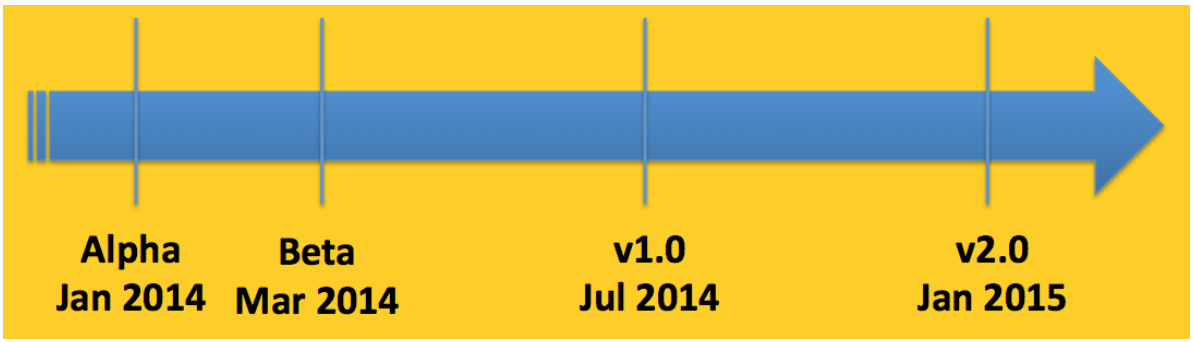


Fig. 23: Europeana Labs website release schedule

Following the cessation of the Europeana Creative project, the Europeana Foundation has agreed to continue to host and maintain the Europeana Labs website as part of their continuing developer outreach and knowledge management activities.

The development roadmap for the site currently looks as follows, though other features may be added or substracted as needed.

Alpha (Static Site) Release (01/2014)

The overall goal of the first website release is to establish the underlying technical and design framework, to create a first draft of the information architecture and to begin to bring together the relevant but scattered documentation and content currently existing on other websites.

- Technical platform in place
- Basic landing page with ability to sign up for Europeana API key

- Basic content for dataset examples
- Existing API documentation copied
- List of Spaces (physical “hubs”) in the Europeana Creative project with basic descriptions
- Partial gallery of applications and client libraries making use of the Europeana API
- Support options listed
- About page describing the site and the Europeana API

Beta Release (03/2014)

The overall goal of the beta release, the first to be widely communicated to the public, is to finish the initial round of technical writing and to begin the process of integrating more interactive tools such as the API Console and community editing.

- Blog section added with some introductory posts
- Events section added with information about the first challenge event
- API QuickStart written
- API Console integrated
- Content built-out (Gallery, Datasets)
- Content Re-use Framework described
- Corresponding areas of Pro, Labs, Remix, Portal have been turned off
- Community editing in place and working
- Design tweaks

v1.0 Release (07/2014)

The 1.0 release should emphasise the variety of routes available to the user to gain access to the collections of Europeana’s partner institutions, including Linked Open Data and other semantic technologies, and bulk data downloads. This should also form the first release that can make intelligent use of the user tagging and collection management capabilities of the My Europeana platform.

- Best practice for projects/labs
- OAI-PMH docs
- SPARQL endpoint
- Search improvements
- Terms & Conditions for humans

- Search Widget Configurator
- My Europeana integration
- More Spaces (from ENoLL, SPECIFI Creative Ring, Europeana Space)

v2.0 Release (01/2015)

The 2.0 release should showcase and highlight the back-end development work accomplished by WP2 of the Europeana Creative project, including online demonstrators and consoles for experimenting with the various data transformation, searching and visualisation services.

- Image-similarity browsing
- Enrichment services (geo, entity)
- Data export packager
- Content Re-use Framework opt-in content downloads
- Statistics dashboard (providers and everyone)
- Resources for entrepreneurs (links to business lounges, etc.)

10.3 Strategic Considerations for Future Planning

General Considerations

The ambition of the Europeana Labs to be “a playground for remixing and using cultural and scientific heritage” is bold and its remit is vast – especially so if Europeana chooses creative industries as its next strategic target market. The website is planned to become the first tangible milestone of this new strategic direction. Consequently, the work done to date reflects a lot of work done in the previously unknown to Europeana and its ecosystem terrain. This is quite an achievement in itself, as this new terrain requires new thinking in terms of value proposition, brand strategy, visual language and technological choices. At the same time, more work is expected to supplement the new direction with more detailed strategy, better differentiation from existing and competing solutions and planning of the technological roadmap.

Project Scope

An assumption underlying the new strategy of approaching creative industries, realised in Europeana Labs, is that current tools and services in the cultural heritage sector are not sufficient for the needs of creative industries, which are the focus of the new direction. This assumption is not stated overtly in the requirements of the website, but is implied in the results of the accompanying user research results. However, these interviews did not make clear what exactly the shortcomings today are: whether it is about technology, content or service. If the

new line of activity, heralded by the Europeana Labs project, is to rectify some of these shortcomings, these should be analysed more to depth and stated more clearly.

Unique Value Proposition

More specifically, it is not clear how the needs and expectations of software developers in creative industries differ from those in the cultural sector (or maybe those in the cultural sector have never been fully satisfied in the first place?). The alpha release of the website puts a strong emphasis on the need for documentation. And indeed, sound documentation is one of the must-dos in today's thriving API scene, but it is surely not the only one. Good APIs excel when they succeed in involving a wide developer community, create shared interest for a common knowledge base, have a steady influx of requirements from the field, maintain constant contact with the user (developer), etc. It should be made more clear what aspects beyond documentation the new platform will take seriously. This will be a challenge for the project's WP1 group in developing outreach to the creative industry community, and also to the WP7 group in devising effective dissemination and outreach sufficient to grow such communities.

The concept of experimentation by re-using and re-mixing content is not yet backed up with concrete functionality – while the website in its current version is a collection of static content. This is especially important given the current technology choice (see below). While the Europeana search portal itself has already been enhanced to better promote experimentation, for example, in the addition of a "re-use facet" within the search interface, the continued evolution of both Europeana Labs and the Europeana search portal itself will need to be mindful of the needs of content users. The development of an integrated Media File Checker in WP2 of the Europeana Creative project will make it more possible to expose digital file resolutions and other useful characteristics of associated media content for re-use purposes.

The quest for easiness, simplicity and clarity, pursued by the website and the branding brief suggests that the project assumes current ways to approach cultural heritage content to be at least cumbersome, if not worse. It is assumed, further, that a part of this perceived complexity is due to complex data models or metadata description standards, adopted in the cultural heritage domain. It is not clear how the website will facilitate bridging the complexity gap when addressing new developer audiences. This will need to be addressed (especially in the description of the Europeana Data Model) by those developing content for the Europeana Labs website.

Labs Network

The importance of the physical aspect of the Europeana Labs network (the "Spaces") is emphasised throughout the work to date. But how specifically the website will support physical activities of the labs (as defined in the project deliverable "D1.1 – Service Design for the Co-Creation Labs") and be, in turn, supported by those activities, is not yet clear. Today the worldwide, thriving start-up scene is characterised by an abundance of accelerators, incubators,

entrepreneur meet-ups, angel clubs and other forms of nourishing and guiding entrepreneurial activity. The Europeana Labs Network and website will find it necessary to develop a clear roadmap differentiating this new network of physical hubs from so many competitors. Standards are very high, as are the expectations of the developer community about any kind of attempts to help entrepreneurs.

Technical Platform Implementation

Choosing the right technology for content-based websites today is as challenging as never. On the one hand, abundance of existing CMS solutions makes it hard to compare the existing options, let alone to thoroughly investigate some of them; on the other hand, requirements towards a content website for developers can go through the roof.

The choice of a no-CMS GitHub Pages solution made by the project is promising because it does away with the worst nightmare of every content project: maintaining the software stack and its operation instead of cultivating the content. This choice is made by many projects today and has a lot of backwind from the industry in the form of supporting solutions, gained expertise, etc. However, this choice comes with a price which has not been assessed so far: no-CMS solutions lacking a customised persistence layer are perfect for standard layouts and basic functionality of a static website but they say nothing about dynamic content. When such a requirement arises, it has to be implemented using a third-party service, available through a standard API. Thus, a preliminary analysis of such needs of the project in the future would have been an appropriate complement to the no-CMS technology choice. This is so especially in the light of the very vague requirement for “content experimentation console”. Another example is the basic website search functionality which is not natively supported by the chosen stack. This should be explored by the WP2 infrastructure group of the Europeana Creative project.

Summary

The alpha version of the Europeana Labs website is the first bold step of Europeana in the direction of serving an entirely new industry sector. The work on the new website and the product in general brought a lot of value as intensive thinking was devoted to distinguishing the right personas, developing the visual language, curating the content and building the new brand. At the same time, much work is still required to flesh out the strategy of the new brand on both conceptual and the technical levels, to better identify unique value propositions, refine and justify technological choices and reduce vagueness about complementary processes such as physical labs activities and content experimentation.

11. Annex I: User Research Results Summary

Europeana Labs

user research

Users interviewed

- 1 Illustrator
- 1 Media artist
- 1 Media artist / developer
- 1 Developer (w/ Europeana knowledge)
- 1 Developer (open data app builder)

When asked if there were any tools or sites that could make the illustrators life better, they said that they had some frustrations with missing tools in Photoshop, we asked how they would go about fixing that…

“I have a friend who is working on [creating a plugin] with me, if I didn’t know anybody I would find programmers via networking or kickstarter.”

–Illustrator

We asked the media artist how he finds the tools, or the people to build the tools…

“I work with a programmer who develops everything in C, I have worked with him for ten years.”

–Media artist

Quotes from developers…

“Whatever I need I just grab and use, I don’t try to reinvent the wheel.”

–Developer #1

“I go with the help, support and tutorials. But mainly I choose whatever is quick, I sometimes do tutorials, but they can take too long.”

–Developer #1

“I never participate in communities, I just read questions and answers.”

–Developer #1

“I never collaborate on code, but with graphics I work with designers. I reach out to them via mail, or Skype.”

–Developer #1

“I find the Apple Cocoa documentation very good.”

–Developer #1

“You have to sometimes be part of the network - when it’s not open, it’s not so good. I don’t like to ‘sign in’ for anything. I don’t want to sign in to read the entries, or documentation.”

–Developer #1

“I like it with graphics, not just plain text. I like the site to be well designed, as I don’t want to be disturbed by bad design. When you are trying to be creative it is disturbing to see bad design.”

–Developer #1

“I usually start with documentation, but if it resembles a short novel then I tend to glance through it and go straight to examples.”

–Developer #2

“I like to dive straight in and start using it to see what I get out of it.”

–Developer #2

“[Documentation should be] nice and concise, good examples, less is more - it’s quality rather than quantity, and it must be kept up to date - that is the most important thing.”

–Developer #2

“Examples are perhaps the first thing that experienced coders will open up - if you get an error, it is not very welcoming.”

–Developer #2

“I have far more users in America, because the DPLA push all of their apps - Europeana bury them on some page that you can’t find.”

–Developer #2

“To see people from Trove, DNZ, DPLA and Europeana, and their partners sharing knowledge, rather than siloed off [would be great].”

–Developer #2

“Europeana should provide a good detailed set of information on how you may and may not use the data - it’s complex, especially if making commercial apps.”

–Developer #2

“The interface needs to be light, and communicate quickly.”

–Developer #3

“It needs to be fast, and the information from a search needs to be made available fast.”

–Developer #3

“We check on all Apple devices, and the main Android devices. We have our own collection of devices.”

–Developer #3

“If an example is given, and it doesn’t work then it is frustrating.”

–Developer #3

“In our market we develop apps very quickly, in 2 months we can do a complete process - we can’t wait 2 weeks for an answer.”

–Developer #3

“It’s not just about providing examples, it is about maintenance.”

–Developer #3

Europeana Labs

comparative analysis

https://docs.google.com/spreadsheet/ccc?key=0AvbkSNgM4Cn3dFNLdk13OXdHRURSNzU0QnN2ZlduOXc&usp=drive_web#gid=0

The goal of comparative analysis is to look at other sites to see what I think they do well, and what I think they could do better. It's also to ensure that we are not missing any opportunities.

The sites I looked at were…

- Biblioteque Nationale Labs
- NYPL Labs
- Mozilla Webmaker
- British Library Labs
- DPLA App Library
- Open Knowledge Foundation Labs
- Open Living Labs
- Artis Holland Developer

ONLY PUBLIC LABS

BnF Bibliothèque nationale de France

ACCUEIL | CONCEPT | ÉVÉNEMENTS | RESSOURCES | INFORMATIONS PRATIQUES | BLOG

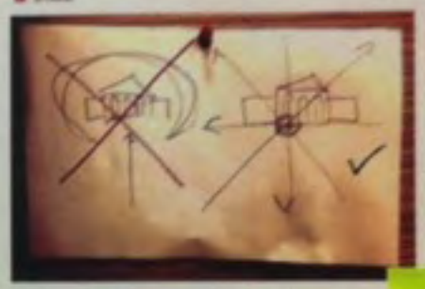
LABO .bnf.fr

concept // événements // ressources // blog

Avec le soutien d'Orange et de Jouve, partenaires fondateurs

JOUVE

NYPL Labs



"...some of the most innovative digital library work anywhere." – Dan Cohen, Executive Director, Digital Public Library of America

"...showing just how much of a force for awesome experimentation a library can be today." – Dan Schaer, Knight-Mozilla OpenNews project, founder of Punk Planet

"...working industriously to bring things that others think impossible to reality." – Donglang Shan, Library of Congress

"It's all part of drawing the public into the library's work." – Jennifer Howard, Chronicle of Higher Education

NYPL LABS...

...is a digital innovation unit doing experiments around library collections and services. Based at NYPL's flagship branch on 42nd Street, Labs operates as an in-house startup, collaborating across the institution to build projects that push the envelope of library practice, engage new audiences, and accelerate the flow of open content, data and code into the digital commons.

Follow: @nypl_labs »

Write: labs@nypl.org »

Recent talks:

- Hacks Hackers NYC: How NYPL Labs Turns Physical Data into Digital Knowledge
- Congress Live: Architecturally Beautiful Experiences with Data

Recent news:

- NYPL Labs receives NEH Digital Humanities Implementation Grant to build open source transcription engine with the citizen science team at Zooniverse
- Recap of our recent Geospatial Hack Days with the Map Division and Friends
- NYPL Labs receives commendation at IMLS Stanford Prize for Innovation in Research Libraries (read judges' comments)
- Labs wins Honorable Use of Archives Award from the Archivists Round Table of Metropolitan New York

Recent publications:

NO INFORMATION ON HOW TO START A PROJECT / FUNDING

British Library Labs

Experiment with our digital collections

App Library

Webmaker

mozilla

Sign in

Explore

Make

Teach

Events

Join us

Start making

We teach the web

We're a global community dedicated to teaching digital skills and web literacy. We explore, tinker and create together to build a web that's open and made by everyone.

CLEAN
MODERN
SITE

EVENTS

You are not a member of this wiki. Join now Dismiss

British Library Labs

Experiment with our digital collections

Search

- Home
- Competition
- Ideas for Labs
- Digital Collections
- Resources and Tools
- Events
- Calendar
- Contact
- News
- About

back to bl.uk

#bl_labs

12 Nov

mahendra_mahey
@mahendra_mahey
@bbcbilit & @Ajprescott u both rock in different ways!Throughly enjoyed your presentations at #bl_labs #ahrc event goo.gl/9gS0mc

Tweet #bl_labs

British Library Labs will help you to do research and development with our incredible digital collections, from 19th century books and archived websites to wildlife sounds and manuscripts. We want to learn how we can support you better by working with you to develop the appropriate resources for digital scholarship.

For more information about Digital Scholarship at the British Library, visit our Digital Scholarship blog.
See our latest work on the Mechanical Curator and read more from Ben O'Steen and James Baker about how it works behind the scenes and the thinking that led to it.

To learn more about how Digital Scholarship is transforming the research landscape join us for our Showcase event, which we are holding in conjunction with the Arts and Humanities Research Council on Monday [illegible] November 2013, 11.45 - 16.00, at the British Library in Central London.

The event will feature:

- A keynote by Professor Andrew Prescott (Head of Digital Humanities, King's College Lo
  How Humanities research is being transformed through Digital Scholarship
- An update on the work of BL Labs
- Showcasing the work of the two 2013 British Library Labs winners, see winning and short
- Presentations from three exciting and new AHRC Digital Transformations projects examining Impact of London Punishments, 1780-1925 (Barry Godfrey), Automated 3D Technology to R Landscape, Site and Artefact Analyses (Randolph Donahue) and Transforming Musicology (T
- Concluding with a presentation from Bill Thompson (Head of Partnership Development BBC)
  Which technologies might transform Digital Scholarship in the next 10 years

For more information, please visit the event page.

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TEXT HEAVY

COMPETITION TO ENCOURAGE USAGE

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About Get Involved For Developers Help Follow Contact Donate Login Sign Up

DPLA DIGITAL PUBLIC LIBRARY OF AMERICA

Home Exhibitions Map Timeline Bookshelf Apps

Search the Library

Share

App Library

The DPLA is a platform that enables new and transformative uses of our digitized cultural heritage. The DPLA's application programming interface (API) and open data can be used by software developers, researchers, and others to create novel environments for learning, tools for discovery, and engaging apps.

Become an App Developer

Library Observatory
metaLAB (at) Harvard

Library Observatory recognizes a unique opportunity the emergence of the DPLA represents: both to imagine new ways of interacting with cultural and scientific resources and to reflect on what collections of such materials mean, what stories they tell.

App Home Page »

Search DPLA and Europeana
Jesús Domínguez

Through the Europeana and DPLA APIs, it's easy to discover sources of information previously unknown or unforeseen and go directly to a digital version of an item.

App Home Page »

StackLife
Harvard Libra

StackLife demonstrates one way a gr
the Digital Public Library of America c
way of browsing its collection, using the
made openly available by the DPLA.

App Home Page »

DPLA Map
Ed Summers

OpenPics
Say Goodnight Software / PJ Gray

An open source iOS application for viewing images from multiple remote sources. Available for iPhone/iPad on the app store, or get the source code on GitHub!

App Home Page »

Culture Collage
Monique Szpak

Culture Collage is a simple tool that lets you search the Digital Public Library of America's image archive and
streaming river of images, just keep
re.

Partners Sustainers

CLEAN, INTEGRATED

SAMPLE CODE

BULK DOWNLOADS

API PAGES HAVE POOR INTERNAL NAVIGATION

okfnlabs.org

join Blog Projects Events About Members Contact

WE MAKE TOOLS AND INSIGHTS USING OPEN DATA, OPEN CONTENT AND OPEN CODE JOIN IN »

The Data Wrangling Blog

Labs newsletter: 14 November, 2013

Neil Ashton 14 November 2013

Labs was bristling with discussion and creation this week, with major improvements to two projects, interesting conversations around a few others, and an awesome new blog post. Data Pipes: lots of improvements Data Pipes is a Labs project that provides a web API for a...

Natural Language Proce

Tarek Amr

This weekend the Google Developer Grou
by a hackathon. During this event, I organ
Python in Natural Language Processing (N
The beauty of NLP...

Labs newsletter: 7 No

Neil Ashton

There was lots of interesting activity around Labs this week, with two launched projects, a new initiative in the works, and an Open Data Maker Night in London. Webshot: online screenshot service webshot.okfnlabs.org, an online service for taking screenshots of websites, is now live, thanks...

Tracking Issues with Data the Simple Way

Rufus Pollock 06 November 2013

Data Issues is a prototype initiative to track "issues" with data using a simple bug tracker —in this case, GitHub Issues. We've all come across "issues" with data, whether it's "data" that turns out to be provided as a PDF, the many ways to badly format...

A Python guide for open data file formats

Anastasios Ventouris 17 October 2013

If you are an open data researcher you will need to handle a lot of different file formats from datasets. Sadly, most of the time, you don't have the opportunity to choose which

ACTIVE BLOG

NO TAGS

HIDDEN SEARCH

If mailing lists are not your thing there are plenty of other ways to get in touch.

Twitter

Follow

School of Data
@SchoolOfData

Nick M Halliday
@nickmhalliday

Tweet to @OKFNLabs

Latest Activity

news about us events all living labs members

European Network of Living Labs

The European Network of Living Labs
– the first step towards a new Innovation System!

Login or Sign up!

news

The Creative Ring at ICT 2013

ICT 2013, the event on digital technologies and ICT organised by the European Commission, took place in Vilnius (Lithuania) from the 6th to the 8th of November 2013. 5.000 people attended the conference and visited the exhibition, including 80 highly-rated international speakers. Around 200 stands and 180 networking sessions were open for the visitors. Almost 4.000 people followed the conference online.

Read more

Towards ICT 2013: Connected Smart Cities and the Future Internet

This session of the ICT 2013 conference will focus on citizen engagement and user-driven open innovation using ICTs. It will bring together the collective experience of more than 20 projects supported through a range of EU programmes which have come together to form the Connected Smart Cities network in partnership with Santander and the European Network of Living Labs (ENoLL).

Read more

the First Competition of InnoMatnet on the Use of Sustainable Materials in Industry

The first competition of InnoMatnet on the use of sustainable materials in industry will be launched on 15 November 2013. The competition is open to young practitioners (architects, engineers, materials designers) based in Europe. The projects may be carried on individuals or in groups, with no restriction on the number of members of the team. The number of projects to be presented by the single participant is unlimited.

Read more

Read more news

living labs

UNCLEAR DOCUMENTATION

EVENTS

elsewhere

Living Labs Open Innovation Community

EC INFSO on Living Labs

AMI@Work on Use Communities

Co-Sides

WCW Communities

APOLLON

Living Lab Knowledge Centre

ARTS HOLLAND developer site

DEVELOP APPLICATIONS WITH OUR API

MAKE YOUR DATA AVAILABLE

BROWSE APPS

about
contact & api keys
developer login

WELCOME TO THE ARTS HOLLAND PLATFORM

Arts Holland is a central collection of open data on Dutch culture and tourism. Whether it's general information on places to visit, or real-time event information, you'll find it here as open data. Yes, that's free to use and free of charge.

CLEAR NAVIGATION

Tourists visit the official Arts Holland website!

BUTTONS UNCLEAR

SAMPLE APPS NOT CLICKABLE

CHECK THE TECH DOCS

LINKED OPEN DATA

The Arts Holland platform is the primary resource for linked open data on tourism and culture in the Netherlands.

REST API

A REST API is available to access the most important parts of the Arts Holland semantic Open Linked Database.

SPARQL ENDPOINT

You can use SPARQL, a query language for RDF data, to query the Linked Open Data from the Arts Holland database.

NEWS

Key takeaways

- Events feature on most sites
- Documentation needs to be clear
- Navigation needs to be understandable
- Good Visual design
- Integrated into main site

Europeana Labs

examples and inspiration

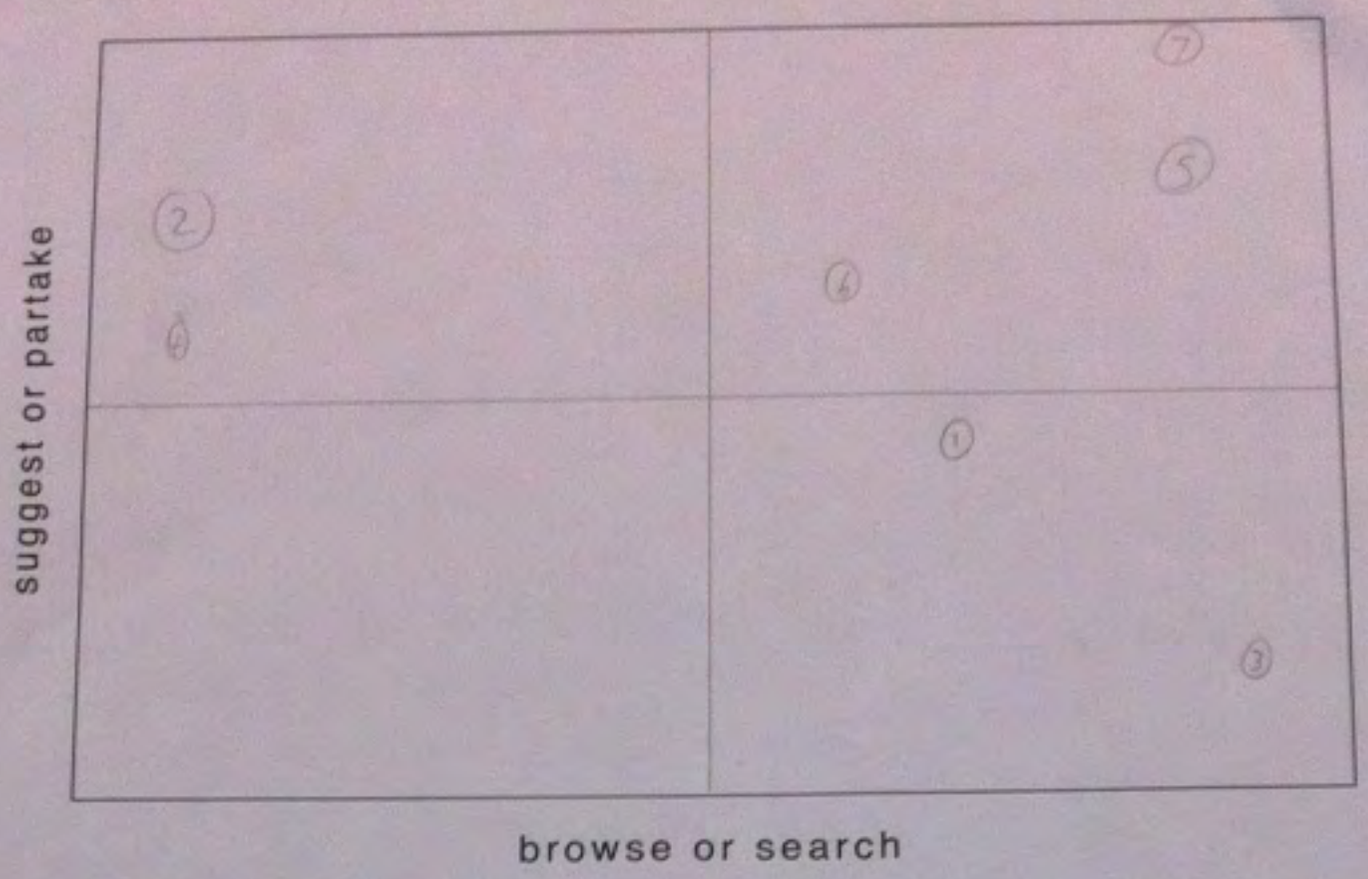
dabblet

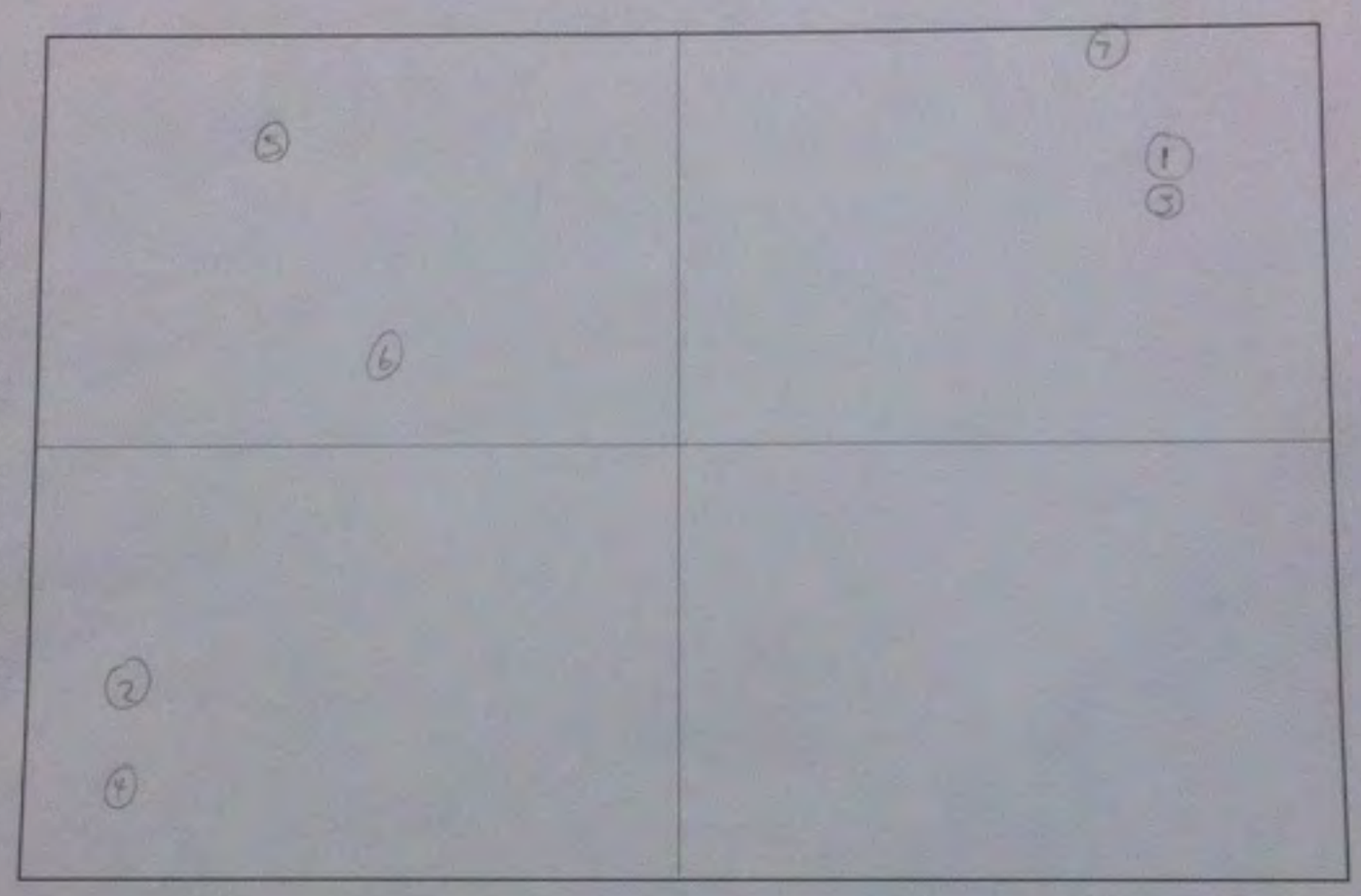
```
/**
 * The first commented line is your dabblet's title
 */

background: #f86;
background: linear-gradient(45deg, #f86, yellow);
min-height: 100%;
```

CODEPEN

Key takeaways

- Instant feedback
- Browse by tags
- Good grid


suggest or partake
browse or search


experience with re-use
programming ability


re-use experience
technical knowledge
willingness to take part
likes to browse
builds apps
uses widgets
for personal use
reputational feedback
commenting
upload own tools

HIGH

IMPORTANCE

LOW

LOW

TECH DIFFICULTY

HARD

API DOCUMENTATION

F/LOSS INVENTORY

HIGH QUALITY DATA

LIST OF TOOLS

UPLOAD CODE

COMMENTS

USAGE ANALYTICS

GRADE SOLUTIONS

?

1

2

3

User interview questions - Europeana Labs - developers

Purpose:

We are asking people in the creative industries what their experiences are with current tools and websites at their disposal, to see what issues (good or bad) that they may have.

Introduction:

Before we get started I want to explain what the questions will be about. I am going to be asking some questions which relate to your field of work, what online tools and resources you use, what you like about these tools and resources, and what you don't like. This will help us to understand what you do, and to see if Europeana can help facilitate the needs of a media artist.

We are interested in your experiences, and what you think. Naturally, nothing you can say here is wrong, and every answer that you give is welcome, and will help us with our work.

If you have any questions for us as we move along, then please feel free to ask them, and we will do our best to answer them. If we are unable to do so, then we will happily forward your questions on to other colleagues.

Before we start, it would also be really useful if you would give permission for us to record the session for research purposes only. This recording will again only be shared with team members, and it will really help us out, as we don't need to take as many notes. Any quotes that we take will be anonymous.

Key questions:

What types of applications or websites do you build?

Who do you build your applications or websites for?

Which API's have you used in the past?

Which of these API's did you find easy to use?

Can you tell me about any struggles that you have had when working with API's?

How do you go about solving the problems you come across when working with API's?

If you're dealing with a big data API how do you narrow down what fields to work with?

Have you ever worked with the Europeana API? If yes, can you tell me what improvements you would like to see.

What is good documentation?

How do you promote your own work?

How do you communicate with other developers in the field?

What tools, sites or methods help you work collaboratively with other developers?

Do you ever visit hacker spaces or maker spaces?

What specialised hardware do you need access to?

User interview questions - Europeana Labs - media artists

Purpose:

We are asking people in the creative industries what their experiences are with current tools and websites at their disposal, to see what issues (good or bad) that they may have.

Introduction:

Before we get started I want to explain what the questions will be about. I am going to be asking some questions which relate to your field of work, what online tools and resources you use, what you like about these tools and resources, and what you don't like. This will help us to understand what you do, and to see if Europeana can help facilitate the needs of a media artist.

We are interested in your experiences, and what you think. Naturally, nothing you can say here is wrong, and every answer that you give is welcome, and will help us with our work.

If you have any questions for us as we move along, then please feel free to ask them, and we will do our best to answer them. If we are unable to do so, then we will happily forward your questions on to other colleagues.

Before we start, I'd like to ask you to fill out this permission form to say that you agree to answer these questions, and you will allow your answers to be passed on to other team members who are working on the Europeana Labs project.

It would also be really useful if you would give permission for us to record the session for research purposes only. This recording will again only be shared with team members, and it will really help us out, as we don't need to take as many notes.

Key questions:

What websites do you visit that relate to your field of work?

You mentioned that you visit (site name), how does this help you with your work?

With regards to (site name), what do you think it does well?

...and what do you think it could do better?

Are there any other tools or websites that you find frustrating to use?

Who are your inspirations who are currently active in the field?

How do you keep up to date with what they are doing?

How do you promote what you are doing?

How do you communicate with other media artists in the field?

We are looking at ways to incorporate the needs of the ‘media artists’ into our Europeana Labs project, what do you think is missing?

Albin / 35/ Developer

"I want sample code and clear API documentation"

Albin is a freelance software developer who has prior experience building education apps for the culture sector. He is currently working on an iOS / Android app which mashes up content from institutions in Finland. The app with be free to download, and marketed with a banner advert on the National Library of Finland website.

Albin has been tasked with making the app engaging and fun to use, looking at creative ways to keep the audience involved and coming back for more.

At the basic level the app needs to show high quality imagery that can be easily shared and downloaded. The app also requires georeferencing to plot the items on a map. Further down the line, Albin is currently brainstorming ideas with his colleagues to see the possibilities of creating a game surrounding the content.

In his personal life Albin can often be found in the early hours of the morning experimenting with code, which he writes about on his own blog, and shares via twitter.

Personal goals

To build apps quickly and easily.
To design compelling and emotional interfaces, with rich content.

Likely use cases

Using the Europeana API to build apps for clients in the cultural heritage sector.

Characteristics

Learns by doing - Does not immediately go to the documentation, prefers to play with sample code.
Does not participate in communities, just reads questions and answers.

Motivations

To grow his own business.
To create compelling apps.

Pain points

Needs clear information on licenses.
Wants quick response from questions.
Dislikes poorly maintained documentation.
API is not as straight forward as other API's

Referrer

Word of mouth

Ideal features / services

Documentation in other languages / More sample data snippets and explanations / Semantic Web Search

Otto / 40 / Senior Project Coordinator

"I want to share our successes with others in the sector"

Otto has been Senior Project Coordinator at Humboldt University for the past 5 years. Although originally from Graz, Austria, he moved to Berlin with his Italian wife ad young child from Pisa, Italy.

Otto has seen his career take some wonderful twists and turns, with a background in development, he now leaves the coding for others, and oversees the implementation of cultural heritage projects, on either websites, or stand alone applications.

He has always had a strong interest in reusable content on the web, and much of his post-doc research was based around this area. Otto already has ties with Europeana.

Personal goals

Run efficient digital heritage projects.

Looking for ideas, reusable code, and content related to cultural heritage.

Likely use cases

Explore mature frameworks, and tools to see what to use in his projects.
Find case studies to see others experiences

Characteristics

Knowledgeable and informed, likes to share his successes.
Does not try to reinvent the wheel
Good networker, has his own contacts to design and develop.

Motivations

Wants to successfully oversee projects, that run on stable environments.
Wants to create reusable snippets that can be shared with others in the sector
Likes to show his successes.

Pain points

Does not want to sign in to read documentation, and needs good documentation
Is disturbed by bad design when being creative
Wants more visibility on the site to show off his work.

Referrer

Europeana Professional

Ideal features / services

Mature support for the tools / Upload and share code / Links to sites where the API is in use / Clear, easy to find documentation / Statistics on usage

Europeana Labs examples content requirements

This document is to show the fields used for the Europeana Labs ‘Examples’ section, the submission process, and admin requirements.

EXAMPLES MAIN PAGE (large screen)

Title : The title of the app / prototype / object
Short description : A short intro text explaining the above
Tags : What tags best suit the above (API / Linked open data / Case study / Prototype / Hackathon / etc.)
Main Image : Image cropped to a square - first image in the carousel
Image(s) : Secondary images cropped to a square (uploader can upload *x* amount)

EXAMPLES INDIVIDUAL PAGE (large screen)

Title : The title of the app / prototype / object
Full description : Full text explaining the above
Tags : What tags best suit the above (API / Linked open data / Case study / Prototype / Hackathon / etc.)
Main Image : Landscape image (to be discussed further - but it could be a centred cutout)
Image(s) : Secondary images (to be discussed further - should they be full landscape that can be inserted into the post by the page creator, or should they be thumbnails that can change the main image block)
Developer name : Company or individual must be entered here (option to add more developers for the required cases)
App Homepage : Link to the app homepage (optional)
Code repository link : Link to the code repository (optional / required?)
Developers Homepage : Link to the developers homepage (option to add more developer homepages for the required cases) - (optional)
Developers Homepage Title : Title of the developers homepage (option to add more developer homepages for the required cases) - (optional)
Developer email : Email of company or individual must be entered here (option to add more emails for the required cases) - (optional)

EXAMPLES MAIN PAGE (small screen)

To be discussed further.

EXAMPLES INDIVIDUAL PAGE (small screen)

To be discussed further.

SUBMISSION FORM

How we submit apps is undecided, however the submission form will require the following fields.

Title : (free text)
Short description : (free text)
Full description : (free text)
Tags : (on / off clickable buttons)
Main Image : (upload button) - image dimensions / size limitations to be shown
Add more images : (upload button) - image dimensions / size limitations to be shown
Developer name : (free text)
Developer email : (input type email) (optional / required?)
Add another developer : (button - which adds fields for **Developer name / Developer email**)
App Homepage : (input type url) (optional)
Code repository link : (input type url) (optional)
Developers Homepage : (input type url) (optional)
Developers Homepage Title : (free text) - (optional)
Event : (drop down)

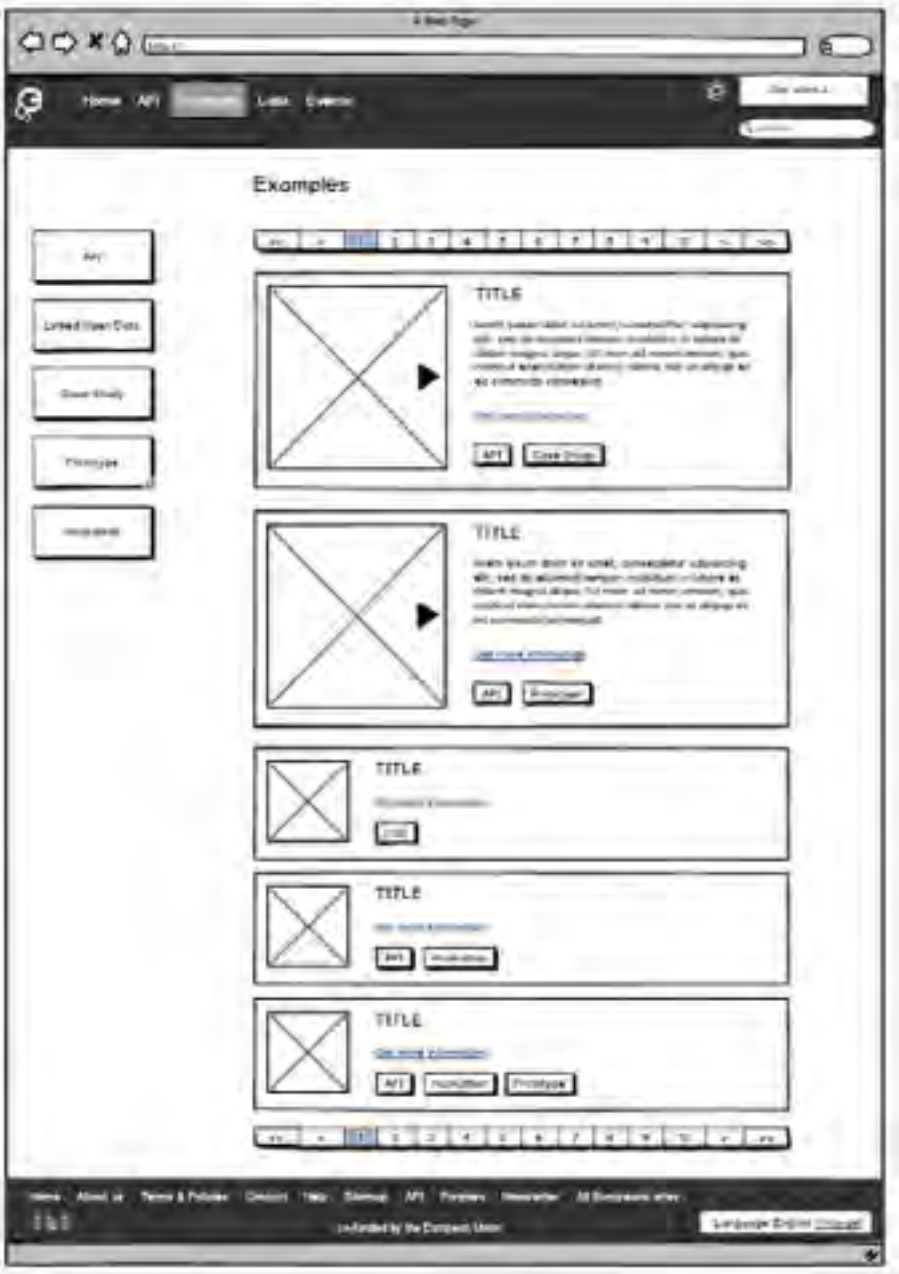
Interaction for uploading images is to be discussed further.
App Homepage Title to be discussed further. Options, could be simple reproducing the Title and wrapping text around it, e.g. “Find out more about **Title**”
Event to be discussed further, this is to select the Event that the prototype came from - in the cases of hackathons, this will allow cross linking between sections.

ADMIN FUNCTIONS

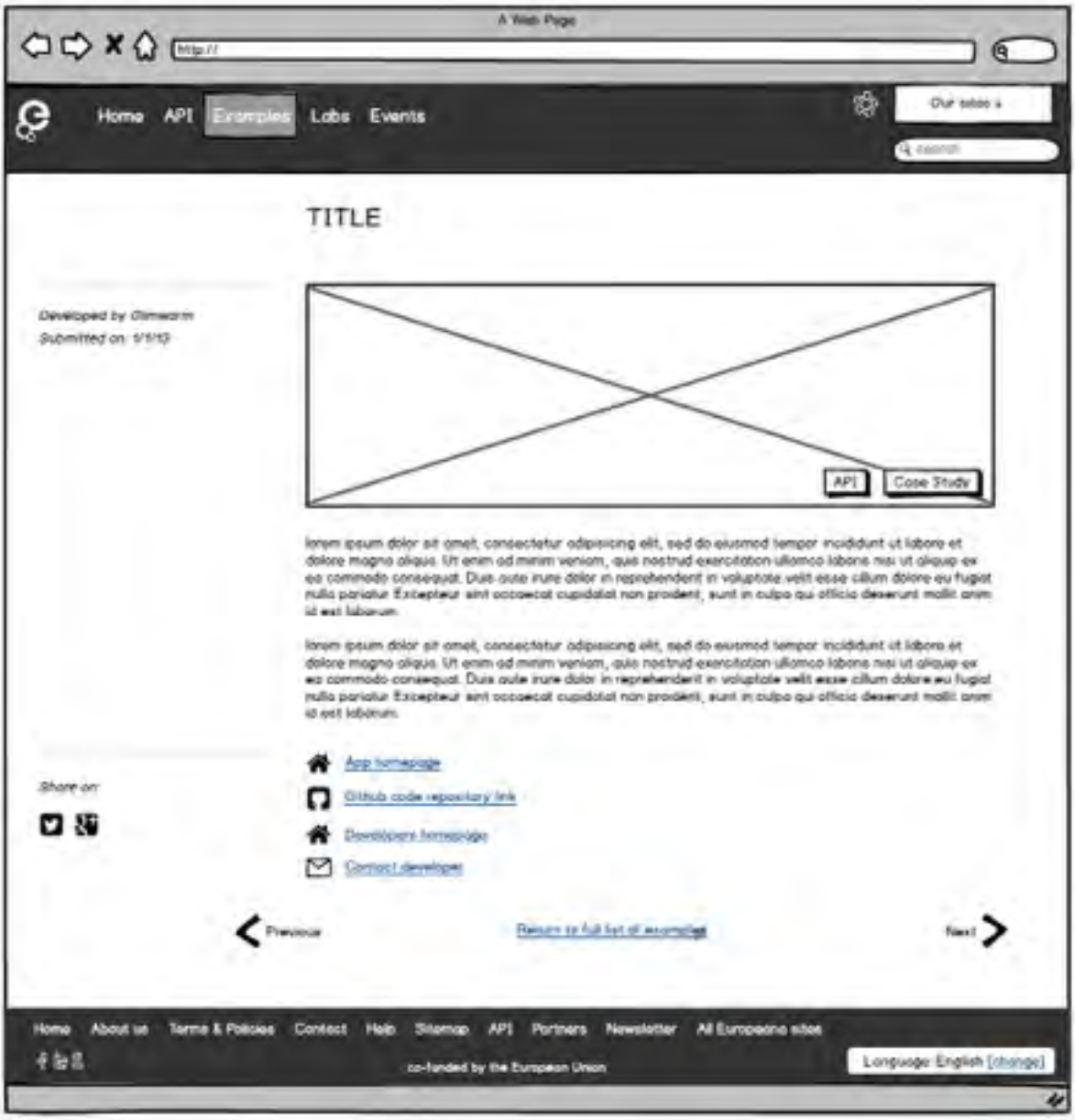
Submission date : Manual override required for historical data, so the admin can change the date of submission.
Featured item : Checkbox to allow a manual ‘bump to the top’ for items that we want to featured. This will override the default behaviour of newest first.

To be discussed further.

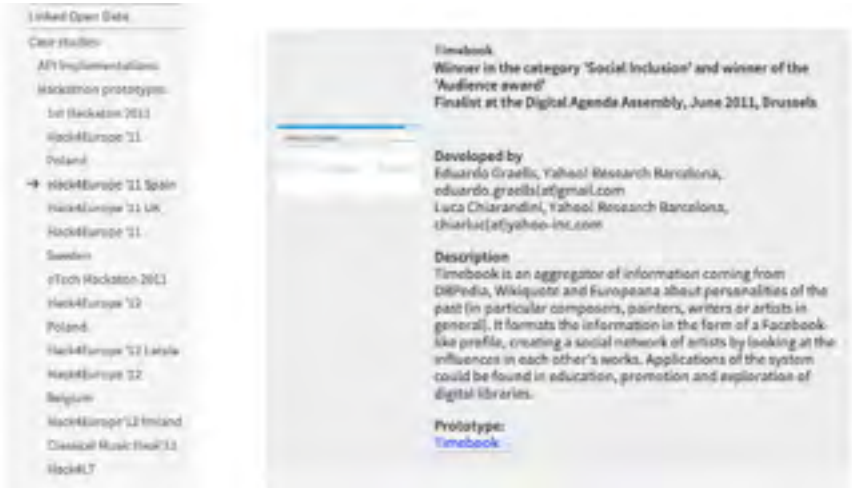
APPENDIX

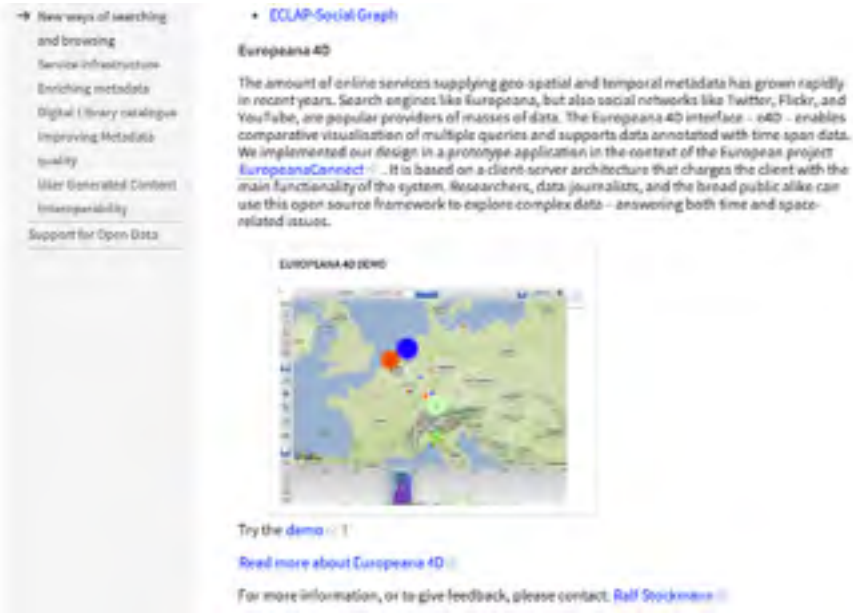


Examples list page



Examples item page





Current API case studies, hackathon prototypes, and thought lab pages on Europeana Professional

Application Gallery

Applications of creative re-use of Europeana content based on the use of the Europeana Search API, semantic web and Linked Open Data technologies.

Filter by:

API
LINKED OPEN DATA
CASE STUDY
PROTOTYPE
HACKATHON

Contribute to the Gallery

Help Improve This Content

ATHENA

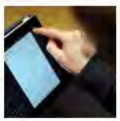
ATHENA is a project developing metadata exchange standards for the museum domain and aggregating museum content for Europeana. Through our API, they have built a search service where users can perform keyword searches and structured searches to find and view Europeana items. Example: search for the famous photographer, Man Ray

API | HACKATHON | CASE STUDY

Digital Humanities Observatory

The Digital Humanities Observatory has extended its API implementation to harvest the Irish related Europeana 1914-1918 stories relating to Ireland, making them available on their portal and displaying them in their experimental 'Exhibit Visualizations'.

API | HACKATHON | CASE STUDY



DISMARC

API CASE STUDY PROTOTYPE

CERL Thesaurus Search

API CASE STUDY PROTOTYPE

Europeana Remix

API CASE STUDY PROTOTYPE

Open Pics app

API CASE STUDY PROTOTYPE