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**Thematic Dashboards**

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Abstract (for dissemination)	<p>This DL reflects on the technical implementation and user testing of the EHRI Dashboard. Building on open-source software, we developed an aggregating web application which allows users to browse or search for information across different EHRI services via a single-entry point. This was made possible using the existing EHRI Data APIs, which had to be adjusted and expanded to address the user requirements of this new web application. Currently in its Alpha version, the EHRI Dashboard allows users to input a search term or phrase into a search field and get presented with related information derived from different EHRI services, as well as with summary statistics of the retrieved results. When applicable, links, previews, maps, and other visualisations of the retrieved results are also displayed. Future work will focus on adding more data sources and enabling user customisation of the EHRI Dashboard.</p> <p>[Max. 150 words]</p>
Management Summary	(required if the deliverable exceeds more than 25 pages) [Max. 500 words]

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## 1 Introduction

In its previous phases, EHRI developed a number of thematic products which extended, visualised and interpreted the content of the Portal, such as the Document Blog, Online Editions, Research Guides, and Online Courses. Task 2 of WP10 (T10.2), which is linked to this deliverable, reviews the employed technology stack and takes steps to better integrate these stand-alone components. Such integration is greatly facilitated when each individual component has been deployed in a flexible and modular way, i.e., when its resources are made interoperable through the use of metadata standards, controlled vocabularies, thesauri and openly accessible APIs. This is the case for many of the EHRI services, including the EHRI Portal, the EHRI Document Blog, and all three currently published EHRI Online Editions, which come with their own openly accessible REST APIs.

While many EHRI tools and resources are shipped with embedded ways of “speaking” to other services, interconnectedness between them is still a work in progress. For example, EHRI has developed widgets that link Document Blog posts and Online Edition documents to Portal records, while the Portal itself also allows users to create links between different services by adding annotations to Portal records. However, users who are interested in searching for Holocaust-related information within EHRI services must visit each EHRI service separately to get an overview of all the data and metadata relevant to their information needs. As EHRI continues to grow in terms of the number and complexity of the services offered and the size of ingested metadata and data, this laborious process is expected to become progressively less manageable. Thus, the EHRI Dashboard described herein is first and foremost designed to offer a solution to this problem. By better integrating stand-alone EHRI services, not only we reduce the time needed for researchers, educators, and members of the public to find information that is relevant to them, but we also increase the visibility of the EHRI services by giving users a “bird’s eye view” of what is available to them besides their usual go-to services.

Specifically, building on open-source software, we developed a web application which allows users to browse or search for information across different EHRI services through a single aggregating entry point. This was made possible using the existing EHRI APIs, which were adjusted and expanded to address the requirements of this new web application. Currently in its Alpha stage, the EHRI Dashboard allows users to input a term or phrase into a search field and get presented with related information derived from different EHRI services, as well as with the summary statistics of the retrieved results, such as item counts per resource. When applicable, links, previews, maps, and other visualisations of the retrieved results are also displayed alongside the list of relevant results. The *Home* page of the EHRI Dashboard serves the threefold purpose of providing access to the search box as well as giving an overview of the main EHRI services and an overview of the resources contained within EHRI’s flagship service, the EHRI Portal. This helps familiarise users who are new to the EHRI ecosystem with its services, so that they are in a better position to interpret the search results of the EHRI Dashboard and use the individual services. The *Dashboard* page is where the user gets directed after entering a search term or by clicking on the dashboard links provided on the homepage.

Inspired by the “generous interfaces” approach (Whitelaw, 2015), the EHRI Dashboard attempts to transcend the narrow boundaries of the search box by providing the option to browse aggregated overviews of the items one might discover through each of its data sources, without the need to provide a search term beforehand. This further helps users familiarise themselves with the EHRI resources, while also mitigating the limitations of keyword search as vividly described by Whitelaw (2015).

In what follows, Section 2 briefly analyses already existing dashboards and how they inspired us in building the EHRI Dashboard; Section 3 serves as a detailed report of the process of designing and developing the Dashboard, the user requirements, the data sources, and the technology stack; in Section 4 we list our recommendations for future work; and Section 5 serves as a conclusion.

## 2 Review of Existing Dashboards

While we could not identify another dashboard that would match exactly the user requirements of the EHRI Dashboard making them directly comparable, the following examples were considered as sources of inspiration during different stages of the design and development of the EHRI Dashboard:

### 2.1 OpenAIRE Research Community Dashboard

Horizon 2020-funded OpenAIRE has presented the [OpenAIRE Research Community Dashboard \(RCD\)](#), through which research communities can generate a gateway which “[...] offers a discovery portal where users can search within the research products relative to their community.” (Baglioni et al., 2019). The research products aggregated by the RCD may include software, datasets, and publications stemming from different data sources but becoming discoverable via a single-entry point. The *Home* page of an RCD may include custom descriptions added by the community manager and counts of the aggregated items per research product category (Figure 1).

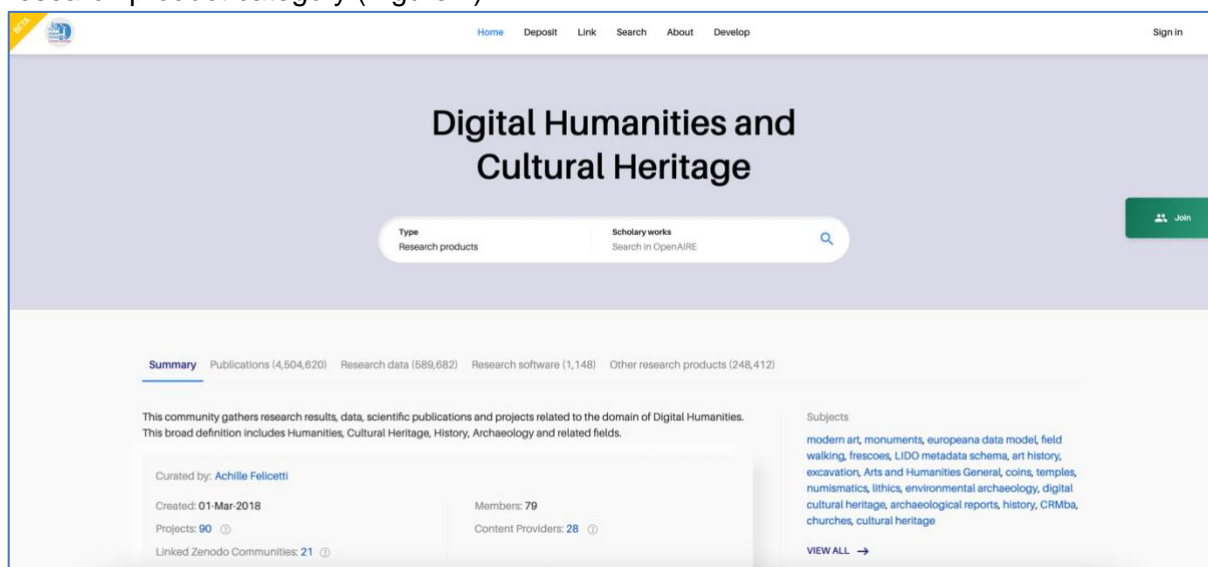


Figure 1 - Screenshot of the Digital Humanities and Cultural Heritage OpenAIRE RCD

On the *Search* page of an RCD, users can search and filter research products, but they are also provided with the opportunity to browse products without entering a search query beforehand (Figure 2).

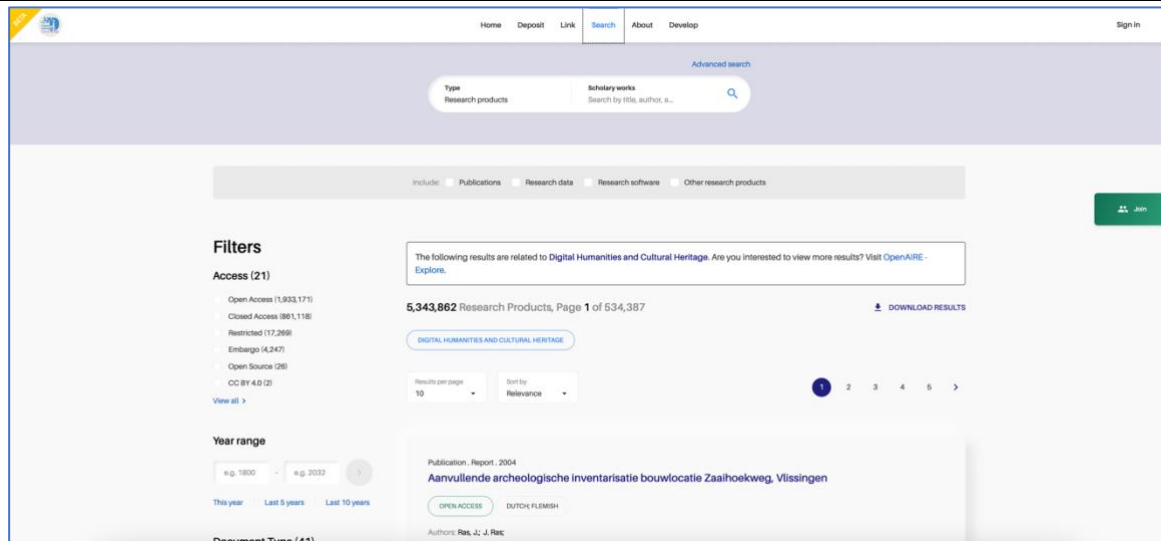


Figure 2 - Screenshot of the Digital Humanities and Cultural Heritage OpenAIRE RCD

Bringing together different data sources and making their contents searchable and discoverable via a single user interface was also relevant in the case of the EHRI Dashboard. Similar to how an RCD works, we wanted to offer users the ability to get a general overview of the data sources available through the EHRI Dashboard and also make their contents browsable even before a search term has been entered.

## 2.2 Visual Search: Metadata Dashboard for Testimonies from the Fortunoff Video Archive for Holocaust Testimonies

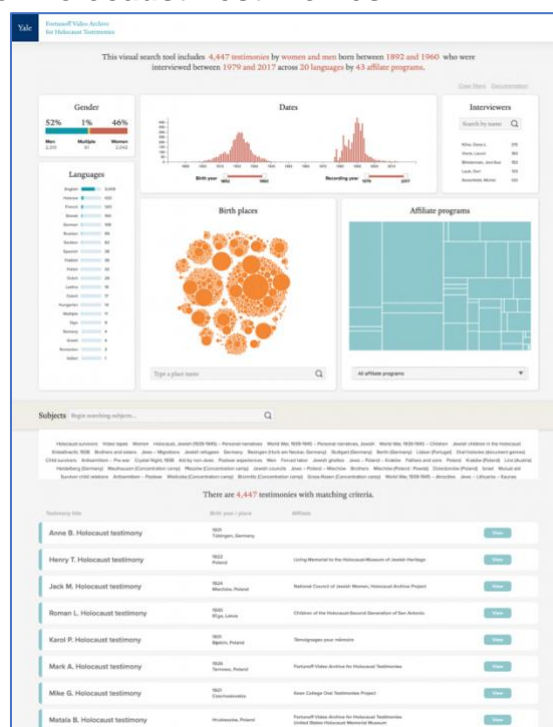


Figure 3 - Fortunoff Video Archive Visual Search Tool

The Fortunoff Video Archive Visual Search Tool (<https://yale-fortunoff.github.io/metadash/>) which was built “[...] to provide a simple overview of the Fortunoff Archive’s collection and enable quick filtering and discovery of relevant testimonies” (Naron & Kara, 2020), was also considered when brainstorming ideas about what directions the EHRI Dashboard could take. Using this dashboard (Figure 3 above), users can navigate the archive’s catalogue by clicking

on different data visualisation elements to filter the results based on aggregated metadata of the testimonies found within the Fortunoff catalogue.

Interestingly, as Naron and Kara (2020) described in their EHRI Document Blog post (<https://blog.ehri-project.eu/2020/09/01/fortunoff-archive-metadata/>), this Visual Search Tool was designed with a goal that is relevant to the challenges faced by the majority of online cultural heritage and archival catalogues including EHRI, namely to make it easier for new users to get an overview of the “shape” of the data contained within them and let users zoom into what they think is most interesting according to their needs. Indeed, users new to a catalogue might not be able to find all the information that could be relevant to their information needs because they are constrained by their lack of knowledge as to what might be included within the catalogue (Naron & Kara, 2020).

### 3 The EHRI Dashboard

#### 3.1 Process

The [EHRI Dashboard](#) is the result of numerous iterations, demonstrations, and meetings between archivists, historians, and technologists within the consortium. Following an iterative design and prototyping methodology (Nielsen, 1993), several live demonstrations of earlier versions of the Dashboard took place during regular WP10 meetings, where partners had the chance to discuss the functionality, features, and visual details of the Dashboard. After each demonstration, feedback was collected and addressed, which led to the next iteration of the Dashboard. The Alpha version presented at the end of this section in more detail is the result of the integration of the constructive feedback and suggestions expressed by two user research focus groups consisting of consortium partners and other EHRI stakeholders during a hands-on WP10 workshop that took place in June 2022 at the EHRI-3 GPM in Amsterdam.

#### 3.2 User Requirements

During the ideation phase, WP10 partners engaged in a brainstorming session organised as part of one of the regular WP meetings. The purpose of that session was to define the user requirements of the EHRI Dashboard, discuss what data sources should be included in the service and with what priority, and what technology stack should be chosen. More brainstorming sessions took place between T10.2 partners to further refine those ideas. These conversations resulted in two different concept ideas.

The rationale of the first idea was that some users, in particular external users as well as consortium members who are new to the EHRI ecosystem, still find it generally hard to take advantage of the full potential of the EHRI tools and resources. This is because the entry points of some EHRI tools and resources are hard to discover because they are “hidden” in sub-pages of the larger platforms that encompass them. Without an exhaustive list of what is on offer, getting familiar with all the EHRI services requires a considerable amount of time. Indeed, a common topic in internal discussions about EHRI is that its services should become more visible. For this reason, T10.2 which, based on its description, would take care to “*review the employed technology stack and take steps to better integrate the individual components*” by developing the EHRI Dashboard was considered as a great opportunity for addressing this challenge.

Consequently, the first concept idea **(1)** required defining groups of potential EHRI Dashboard users, such as researchers, educators, journalists, and matching each group with a list of the EHRI Services they might be interested in. As the user would enter the Dashboard, they would be able to select the user category that best described them and get presented with a list of all relevant EHRI services according to their role, as well as with descriptions of and links to those services (Figure 4 below). According to this design, users would also be able to get an overview



of the EHRI Portal, as EHRI’s flagship product which would be most relevant to the majority of the EHRI Dashboard users (Figure 5 below).

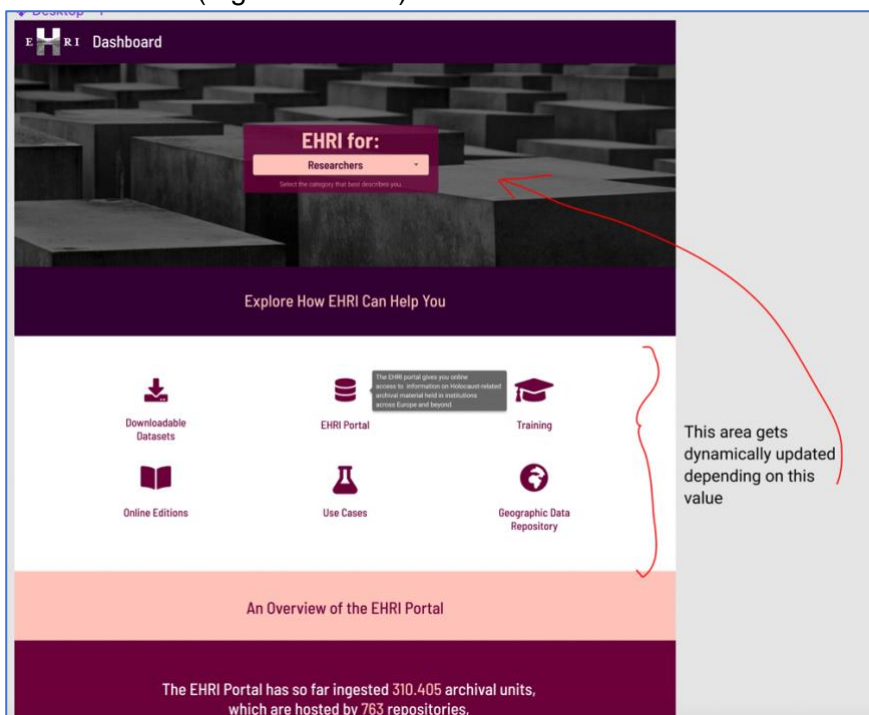


Figure 4 - Screenshot of a mock-up of the first prototype of the EHRI Dashboard related to concept idea (1)

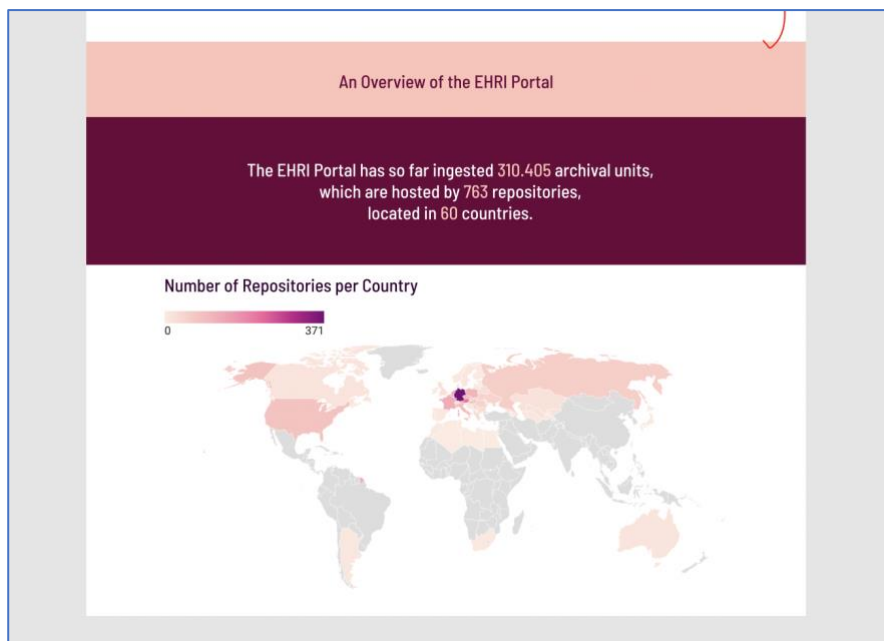


Figure 5 - Screenshot of a mock-up of the first prototype of the EHRI Dashboard related to concept idea (1)

The second concept idea (2) was focused on creating a user interface that would allow users to collect information from different EHRI products around a single concept, such as a camp or ghetto selected from EHRI vocabularies, and present this information under a single digital “roof”, where it would also be possible to add custom text. This second idea was mainly conceived as a tool that would help event organisers who wish to use EHRI material on specific subjects during an event to easily display this material through a single web application and share it with participants (Figures 6, 7, 8 below).



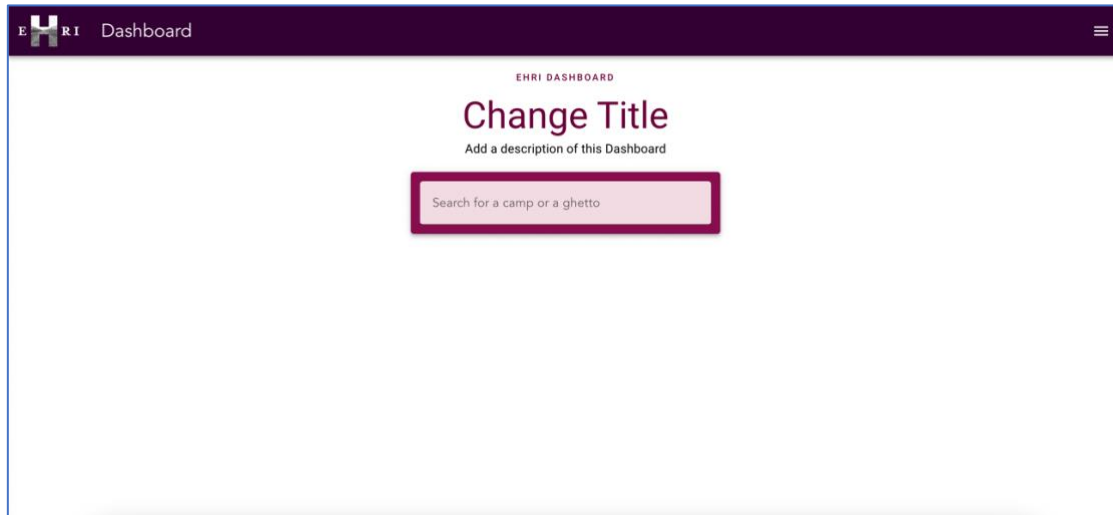


Figure 6 - Screenshot of a working first prototype of the EHRI Dashboard related to concept idea (2)

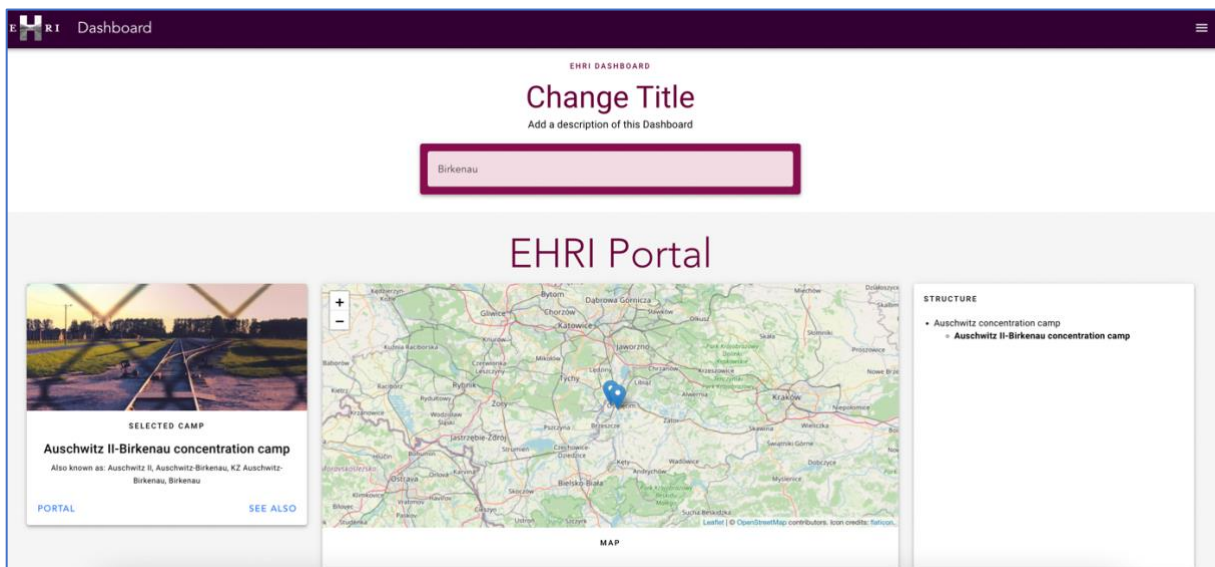


Figure 7 - Screenshot of a working first prototype of the EHRI Dashboard related to concept idea (2)

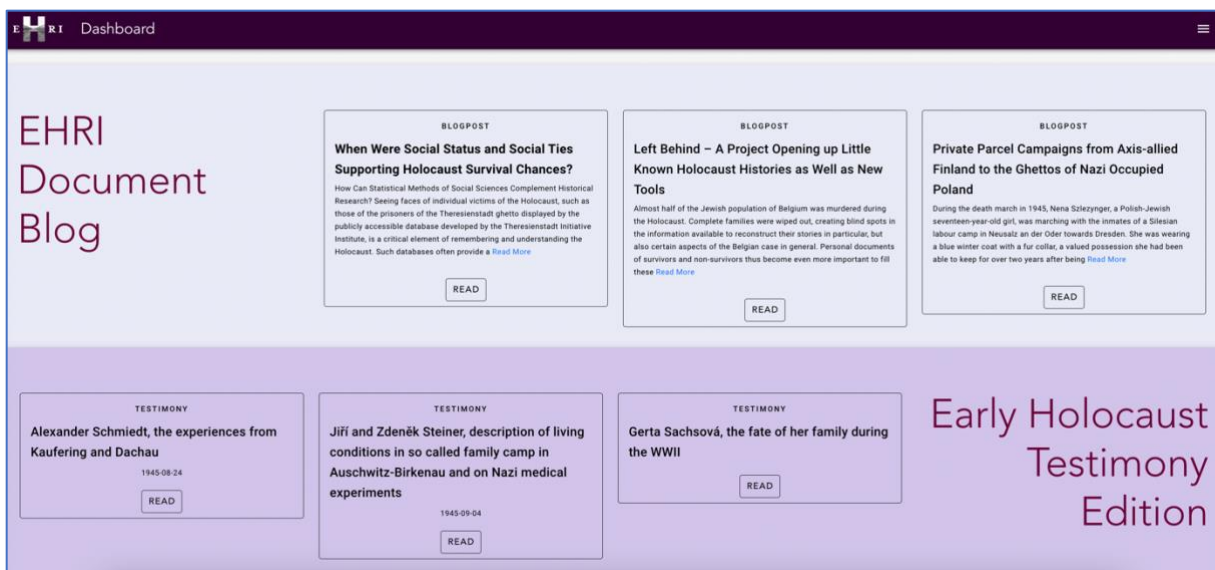


Figure 8 - Screenshot of a working first prototype of the EHRI Dashboard related to concept idea (2)

Following this brainstorming output which resulted in the two distinct approaches, namely **(1)** and **(2)**, as described above, we designed and developed two prototypes for concept testing. A concept testing session took place during another WP10 meeting, where participants were presented with a live demonstration of the two prototypes and were invited to give their feedback.

The idea of making assumptions about user groups and what their interests might be **(1)** was quickly rejected by participants of the meeting. However, the idea to offer a list of all the services and an overview of the Portal which included a heatmap of the Archival Institutions per country was characterised as worthy of further development.

The second concept idea **(2)**, which was focused on specific EHRI concepts, such as terms from EHRI Camps and Ghettos, was considered limiting. Instead, it was suggested that the scope should be expanded at first and reduced only if needed. The suggested interface was determined to be confusing and the feature that would let users add custom texts did not receive a warm response. Moreover, participants expressed the feeling that it should include more data visualisations and statistics for it to be considered as a Dashboard as well as options to filter results. Another remark deemed that images in EHRI interfaces should be avoided and, if included, they should be very carefully selected and, according to EHRI's design style guide, only in black and white colours. However, meeting participants appreciated being offered with a way to search across different EHRI products via a single-entry point and this was something that should be kept in future iterations.

The next iteration (Figures 9 and 10 below) focused on improving the user interface of the Dashboard. While the decision to expand the scope of the search results was already discussed and agreed upon, the next iteration was again fine-tuned around camps and ghettos because T10.2 partners decided to ensure a minimum viable product before adding more features. This iteration addressed the feedback received after the demonstration of the first two concept ideas by first rethinking the user interface of the search results. It introduced more summary statistics and data visualisation elements, which, similar to the *Visual Search Tool* described in Section 2, also functioned as filters. It removed the ability to add custom text and made several improvements on how search results were being displayed. This iteration was deployed online to allow for remote user testing and to be shared during a hands-on workshop with two focus groups which was planned as part of the EHRI-3 GPM in Amsterdam in June 2022.

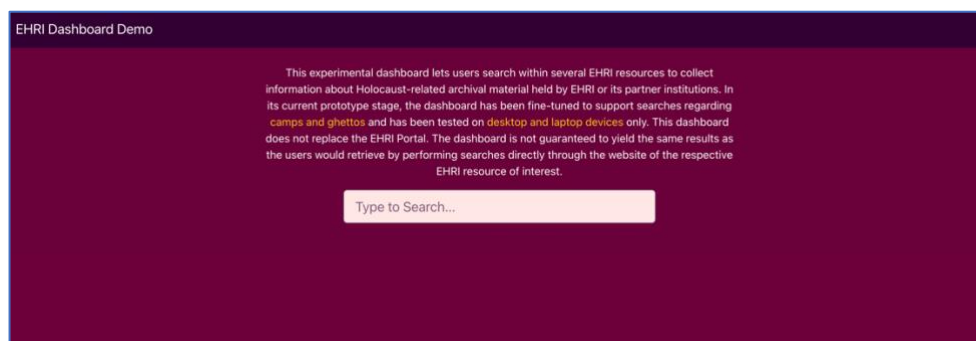


Figure 9 - Screenshot of the second prototype iteration: Initial Search Box View



Figure 10 - Screenshot of the second prototype iteration displaying the results for the query "Birkenau"

Participants of the two focus groups consisted of consortium partners with diverse backgrounds in terms of profession, education, age, digital literacy, experience of the EHRI ecosystem etc. During the workshop, participants of each focus group had the opportunity to test the prototype using their own devices, input search queries of their choice, explore the

results of the dashboard and then participate in a discussion led by a member of the development team from KCL who would collect the feedback, respond to questions, and ask follow-up questions to further clarify the user feedback and requirements.

The workshop was very successful, and the team received constructive feedback from a diverse group of users which resulted in the current iteration of the EHRI Dashboard. Most of the feedback concerned stylistic choices and suggestions to change the phrasing of texts in certain user interfaces components. However, a few points that were raised required more substantial changes to the Dashboard.

For example, some focus group participants requested that, instead of showing a Google-style search box and nothing else as the starting point of the Dashboard (Figure 9 above), a richer initial view should be displayed which should include data visualisations and statistics of the content indexed by the different EHRI resources even before a search term is entered. The data visualisations presented in the second prototype iteration (Figure 10 above) were confusing to most participants, so a different approach had to be followed in the next iteration. Other participants found the filtering parameters arbitrary and suggested different ones that would correspond better to the requirements of historical research. For example, filtering the results of the Diplomatic Reports Online Edition by year was not as useful as being able to filter them by correspondents' names. Another point raised was that the search query should be included as a link parameter, so that links can be shared with others who will get presented with the same information. Finally, some participants suggested more fundamental changes to the way the search is happening within the individual EHRI resources and, consequently, the search results returned by their APIs. However, although this is a very important remark, it exceeds the scope of T10.2 and will not be addressed at this stage.

Unsurprisingly, focus group participants, free to input any search term while testing the Dashboard, stumbled upon several bugs which had not been detected prior to the workshop. Overall, this user testing-focused, hands-on workshop was a very productive experience which resulted in much needed constructive feedback as well as in getting many bugs reported for the development team to address. The ways in which this feedback was integrated into the next (current) iteration of the Dashboard are described in subsection 3.5.

### 3.3 Technology Stack

When work started on T10.2 and especially after the first brainstorming session, WP10 members contemplated the use of tools such as Jupyter Notebooks and Streamlit as the technology stack to be used for this task. However, as Carter et al (2022) observed, while Jupyter Notebooks and other similar products are excellent platforms for developing proof-of-concept prototypes and for testing ideas, “this information display remains rather technical and specialized and will not necessarily be suited to all users in the general public”. Instead, if we want such exploratory tools to be addressed to all users regardless of their digital skills, a more user-friendly interface might be a better option (Carter et al., 2022). Besides, designing a completely custom EHRI Dashboard as a new service instead of building on top of an already existing platform brings us in full control of how items will be displayed on screen, and we can easier ensure the stability of the service since we will be controlling most of its parts. For these reasons, T10.2 partners decided to build a custom web application.

The resulting EHRI Dashboard is a web application built using Vue JS, an open-source JavaScript frontend framework also used in various other EHRI web user interfaces. A small number of third-party JavaScript libraries are additionally employed to handle API calls (Axios), data visualisation (d3, chart.js, and leaflet) and styling (FortAwesome libraries and Bootstrap). Figma was used to design the mock-ups, GitHub was used for version control throughout the development process and Trello for keeping track of how the development of the dashboard

was progressing. Netlify was used as a deployment platform, where the prototypes would be assigned a public URL to be shared within the WP for testing purposes.

### 3.4 Data Sources

The data sources from which the content of the EHRI Dashboard is aggregated include the EHRI Portal, the EHRI Document Blog, and EHRI Online Editions: Early Holocaust Testimony, Diplomatic Reports, and BeGrenzte Flucht (devoted to refugees from Austria to Czechoslovakia). The reason why the integration of these three data sources was prioritised over the integration of others is not only because they comprise some of the most important EHRI resources, but also because they have been deployed in a truly interoperable way, by following metadata standards and providing openly accessible APIs through which their metadata can be retrieved and analysed. Some adjustments and enhancements of each of the APIs still had to be made in order to fulfil all the requirements of the EHRI Dashboard. Specifically, some enhancements dealt with access rights, others concerned exposing more statistical metadata in the response headers and, when it came specifically to the EHRI Portal API, enhancements concerned enabling faceted searches based on more content types than previously available.

### 3.5 Resulting Dashboard

Since not all EHRI resources are yet accessible programmatically via an API and others which were not included in the data sources of this iteration, we decided to add a homepage to the EHRI Dashboard where, apart from the search box through which the Dashboard can get accessed, there is a list which gives a better overview of the different services within the EHRI ecosystem and provides links to as well as descriptions of them (Figure 11 below).

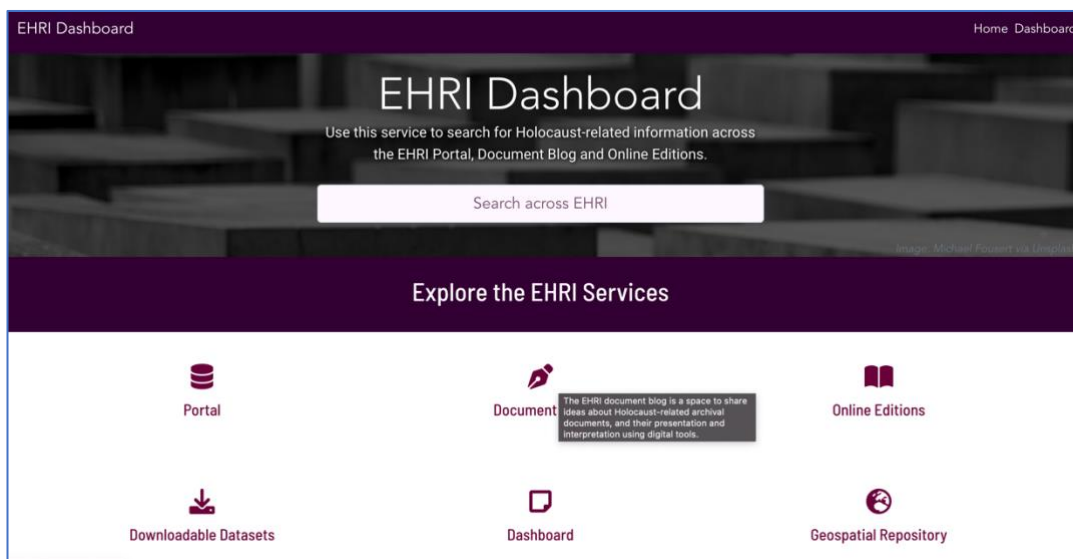


Figure 11 - Screenshot of the homepage of the EHRI Dashboard displaying the list of services.

Additionally, this homepage includes an overview of the EHRI Portal as the main data source of the Dashboard and indeed the flagship service within the EHRI ecosystem (Figure 12 below).



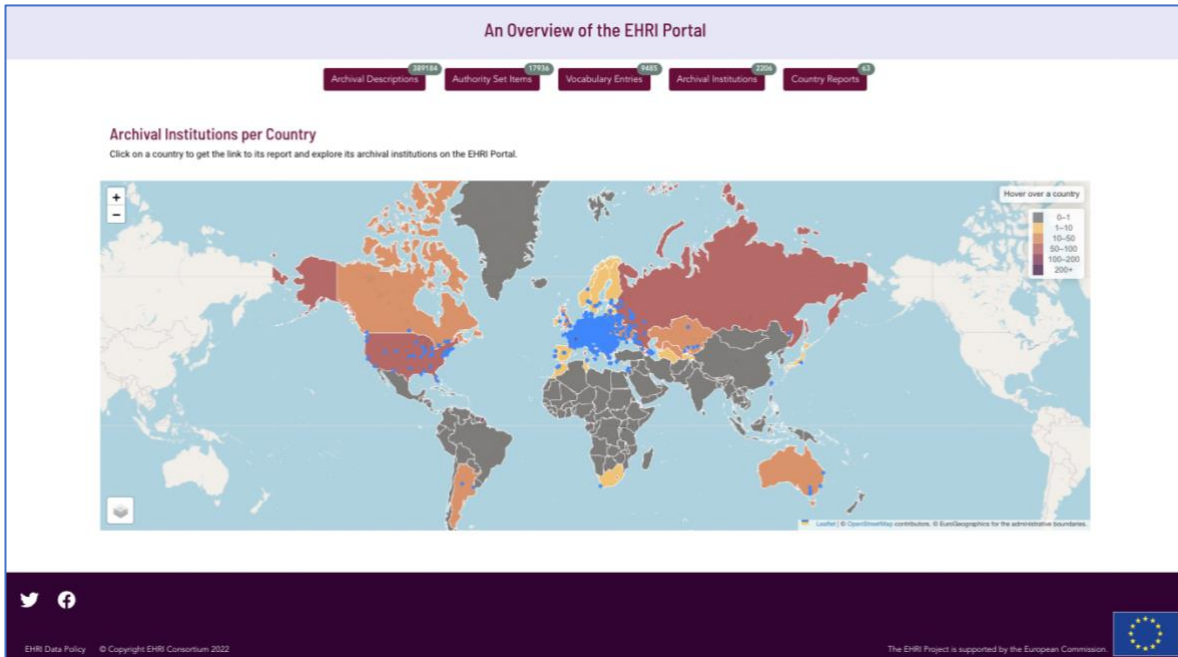


Figure 12 - Screenshot of the homepage of the EHRI Dashboard displaying the overview of the EHRI Portal section

Accessing the EHRI Dashboard through the homepage is possible in two ways; users can either click on the *Dashboard* link or enter a search term through the search box. When the user clicks on the *Dashboard* link, they get directed to the dashboard page, where they can get an overview of the number of items indexed by each of the data sources, as well as a more detailed overview of the main data source of the dashboard, namely the EHRI Portal (Figure 13 below). This dashboard view is also pre-populated with sample metadata of Archival Descriptions indexed by the Portal so that the users can better familiarise themselves with the contents of the Portal.

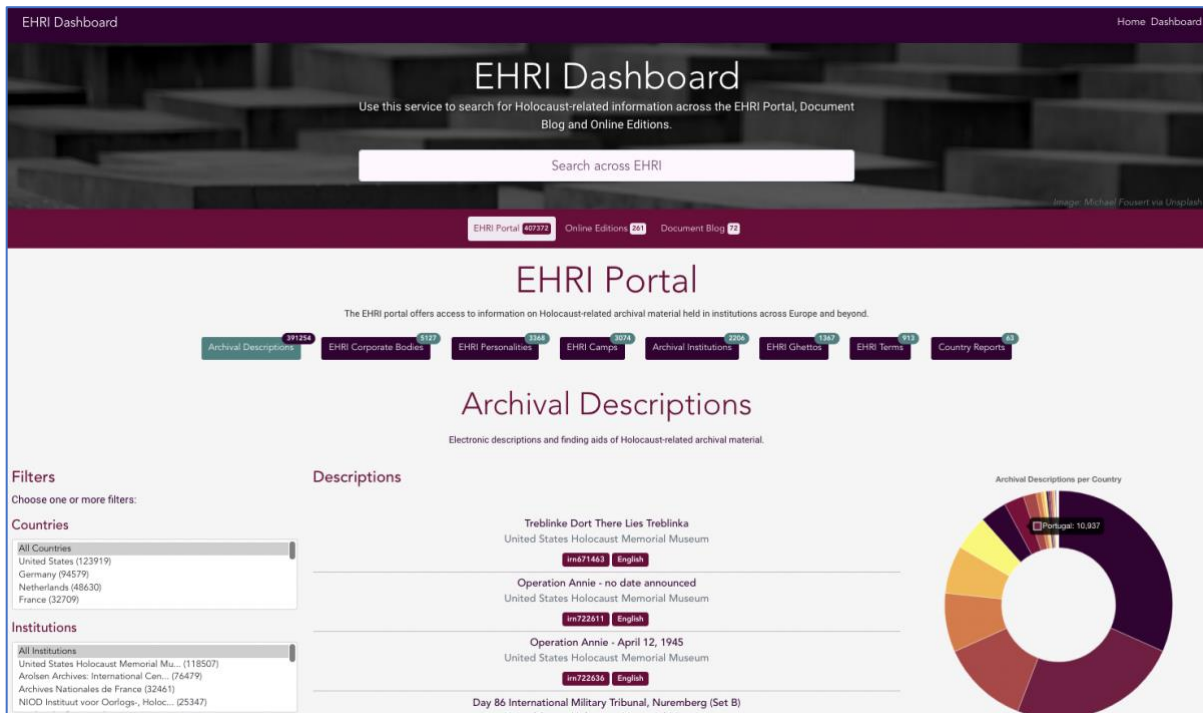


Figure 13 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet. Archival Descriptions UI

On the left-hand side of this view (Figure 13 above), similar to Whitelaw (2015), a panel of facets is provided to filter the results and “zoom” into subsets of them. On the right-hand side, there is a donut chart depicting the distribution of indexed Archival Descriptions per country.

By clicking on one of the buttons indicating the count of items per Portal resource, the user can preview sample items of the indexed items under that resource. A custom interface was created for each different resource depending on the nature of its related metadata, as shown in the figures below (Figures 14, 15, 16, 17, 18, 19, 20, 21).

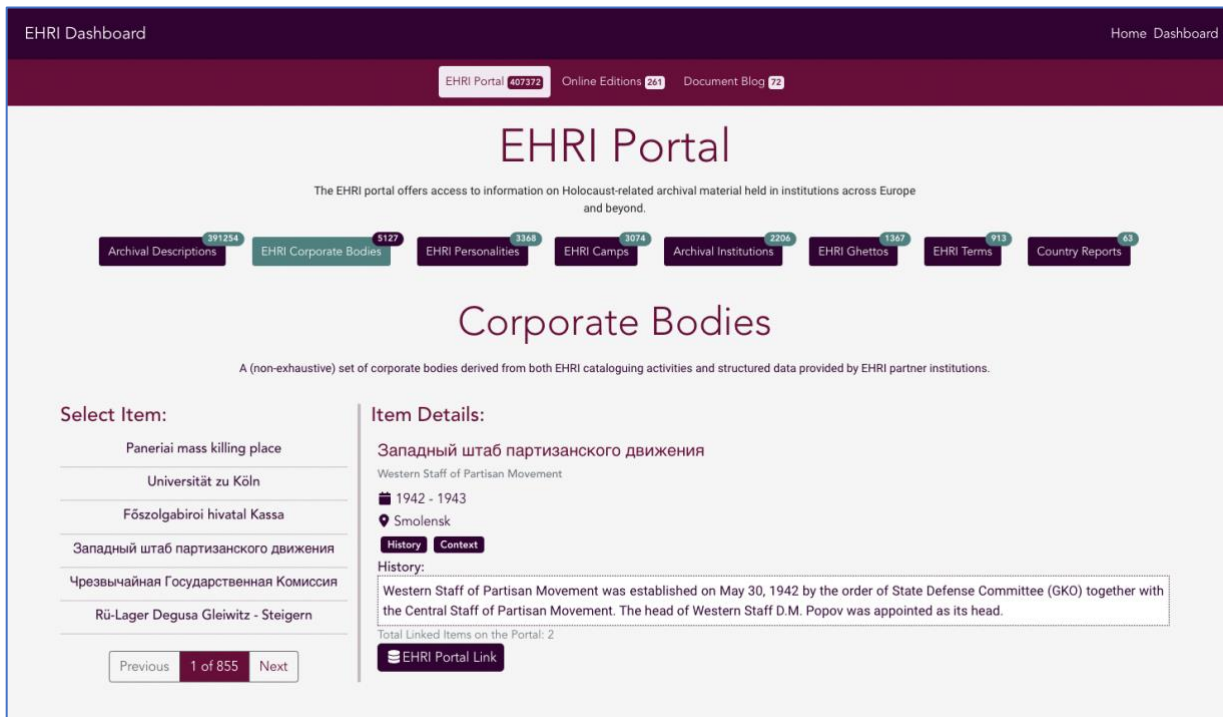


Figure 14 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: Corporate Bodies UI

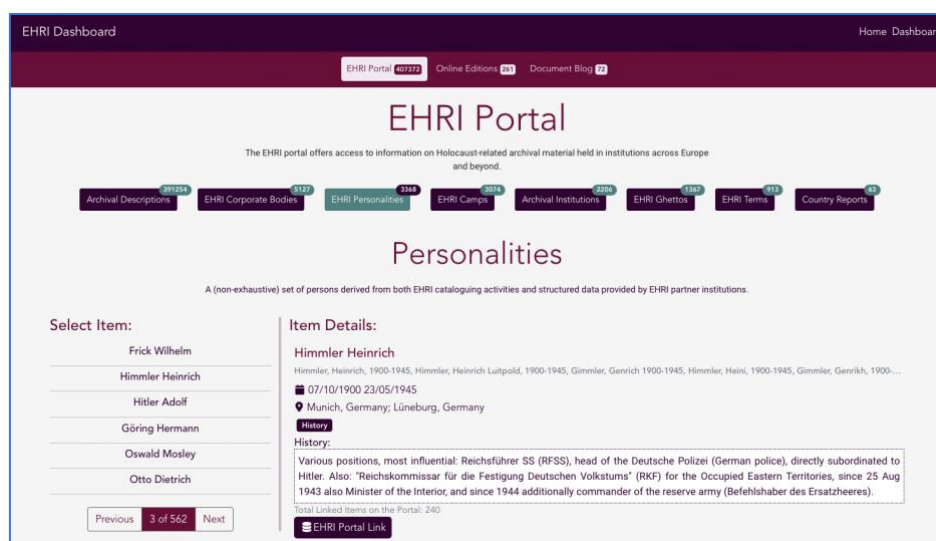


Figure 15 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: EHRI Personalities UI



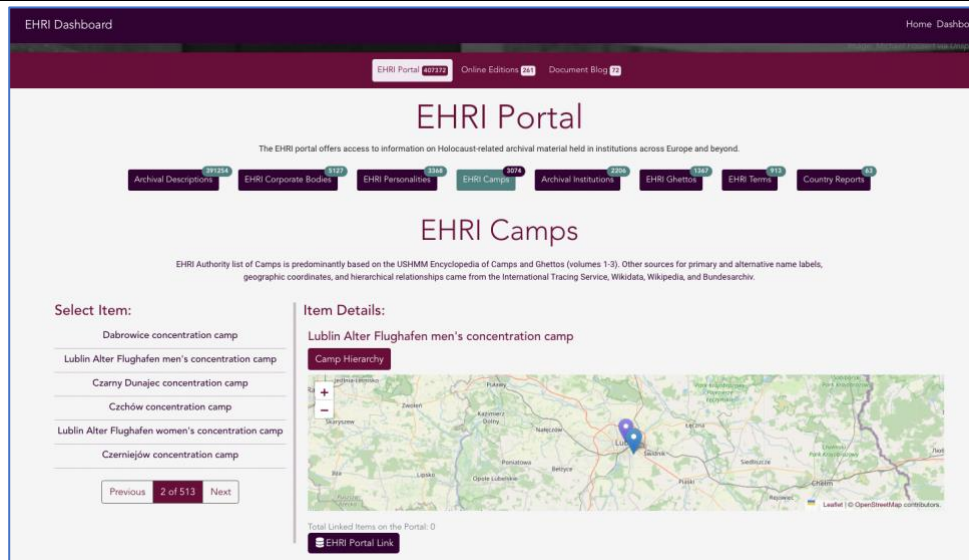


Figure 16 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: EHRI Camps UI

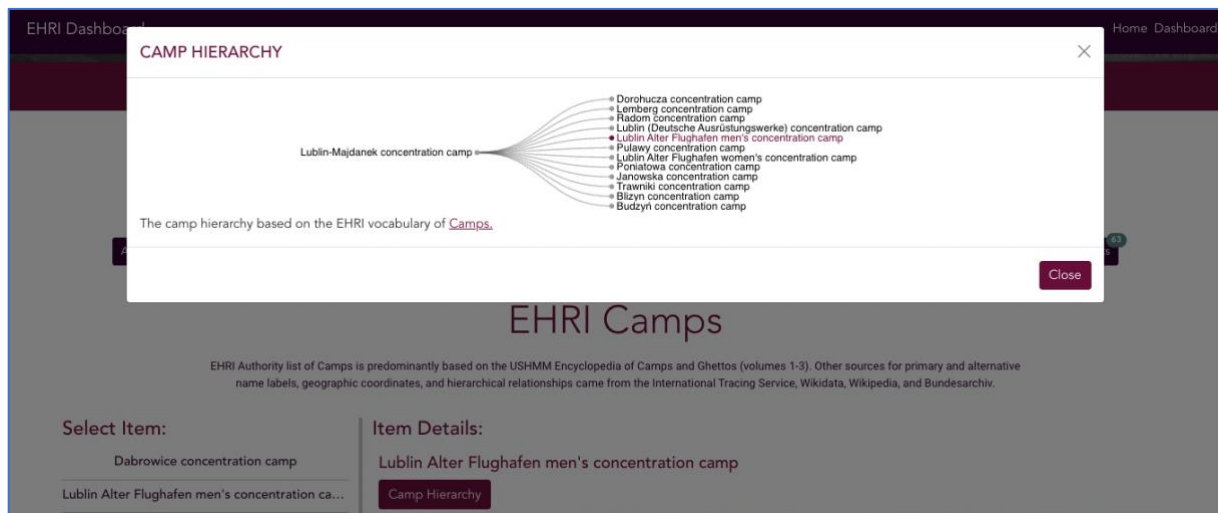


Figure 17 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: EHRI Camps UI – Camp Hierarchy visualisation

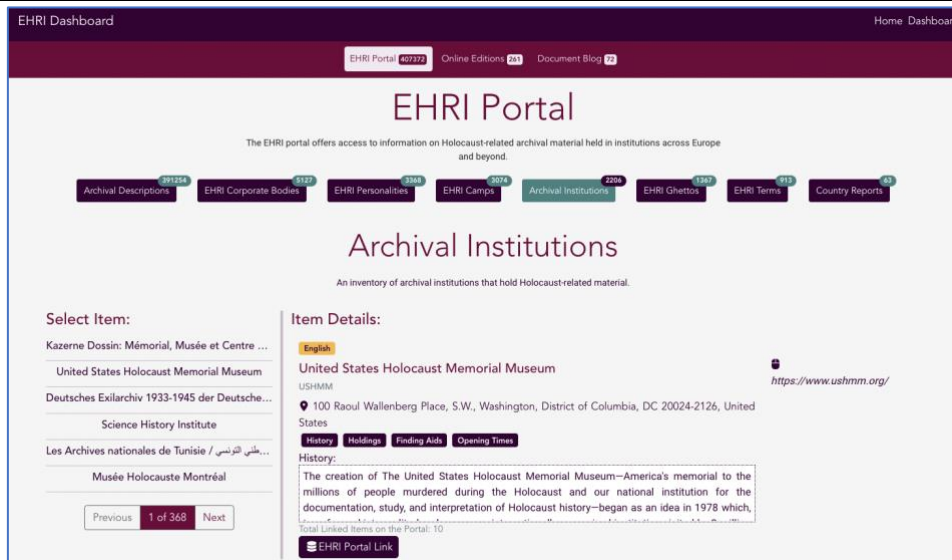


Figure 18 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: Archival Institutions UI

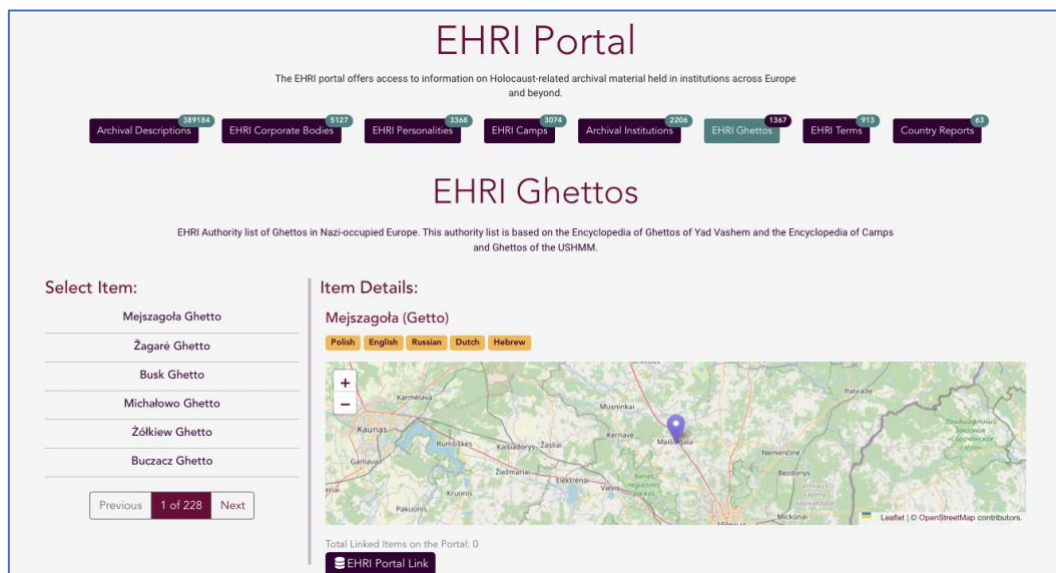


Figure 19 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: EHRI Ghettos UI

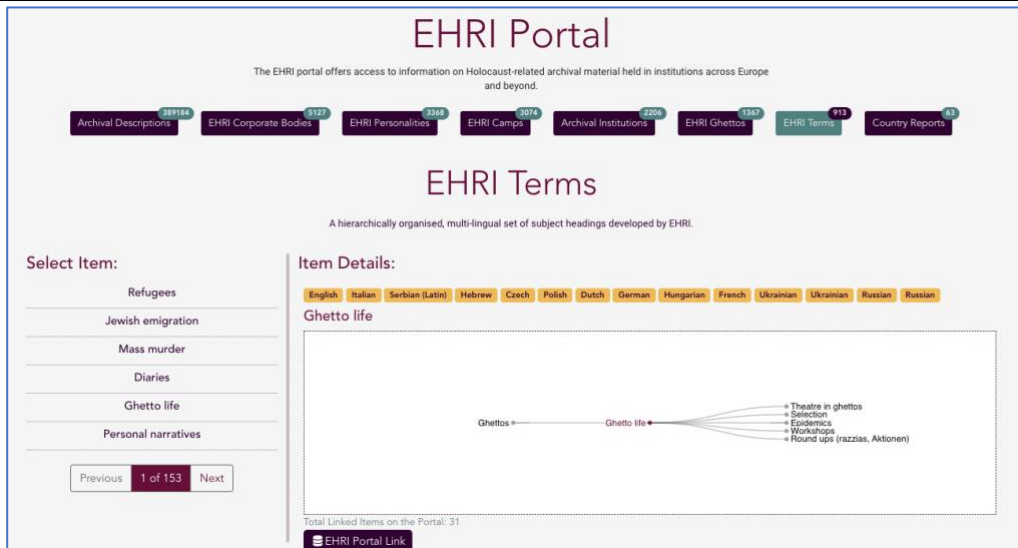


Figure 20 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: EHRI Terms UI



Figure 21 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: Country Reports UI

By clicking on one of the other data source buttons, i.e., on the *Digital Editions* or *Document Blog* buttons, indicating the count of items per available data source, the user can browse through items of the related data source. A custom interface was also designed for each different data source depending on the nature of the metadata provided by them, as shown in the figures below (Figures 21, 22):

EHRI Dashboard
Home Dashboard

# EHRI Dashboard

Use this service to search for Holocaust-related information across the EHRI Portal, Document Blog and Online Editions.

EHRI Portal **49772**
Online Editions **243**
Document Blog **72**

## EHRI Online Editions

The EHRI Online Editions consist of annotated digitized documents from various sources gathered around a theme, and are a new way of presenting digital archival content.

[DeGruyter Flight Edition \*\*157\*\*](#)

[Early Holocaust Testimony Edition \*\*137\*\*](#)

[Diplomatic Reports Edition \*\*27\*\*](#)

## Diplomatic Reports Edition

The online edition "Diplomatic Reports" focuses on how diplomatic staff reported the persecution and murder of European Jews during World War II.

**Filters**

Choose one or more filters:

**Coverage**

- All
- Poland (24)
- Romania (18)
- Berlin (14)
- Germany (15)

**Creator**

- All
- Gunther, Franklin Mott (6)
- Berry, Burton Y. (5)
- Glutiniari, Ramondo (3)
- Kirk, Alexander (3)

**Subject**

- All
- Jews and Jewish life (55)
- Anti-Jewish orders and decrees (23)
- Government (21)
- Deportations (19)

**Person**

- All
- Gunther, Franklin Mott (6)
- Antonescu, Ion (5)
- Berry, Burton Y. (5)
- Caruso, Castro (3)

**Organisation**

- All
- Foreign ministry of Italy (11)
- Bulgarian Government (6)
- Garda de Fier (4)
- U.S. Department of State (4)

**Documents**

**John F. Montgomery on the "Proposed Hungarian Jew Bill" in 1939**

National Archives and Records Administration II, RG 59 - Records of the Department of State relating to the internal affairs of Hungary 1930-1944, Wilmington, Del. 1987 (Microfilm), Doc. 864.4016/125. Original in English.

1939-01-12

**Franklin Mott Gunther on "The Situation of Jews in Rumania" in 1939**

National Archives and Records Administration II, RG 59 - Records of the Department of State relating to the internal affairs of Hungary 1910-1944, Wilmington, Del. 1981 (Microfilm), Doc. 871.4016 JEWIS/119. Original in English.

1939-01-25

**North Winship on plans to "enact anti-Jewish legislation" in Poland, 1939**

National Archives and Records Administration II, RG 59 - Records of the Department of State relating to the internal affairs of Poland 1916-1944, Washington D.C. 1981 (Microfilm), Doc. 860C.4016/583. Original in English.

1939-01-27 Original in English.

**Ray Atherton on the reaction of the non-Jewish Bulgarian population towards antisemitic demonstrations in 1939**

National Archives and Records Administration II, RG 59 - Records of the Department of State relating to the internal affairs of Bulgaria 1910-1944, Washington D.C. 1982 (Microfilm), Doc. 874.4016/45. Original in English.

1939-04-04 Original in English.

**John F. Montgomery on the "Hungarian Jew Bill" in 1939**

National Archives and Records Administration II, RG 59 - Records of the Department of State relating to the internal affairs of Hungary 1910-1944, Wilmington, Del. 1987 (Microfilm), Doc. 864.4016/141. Original in English.

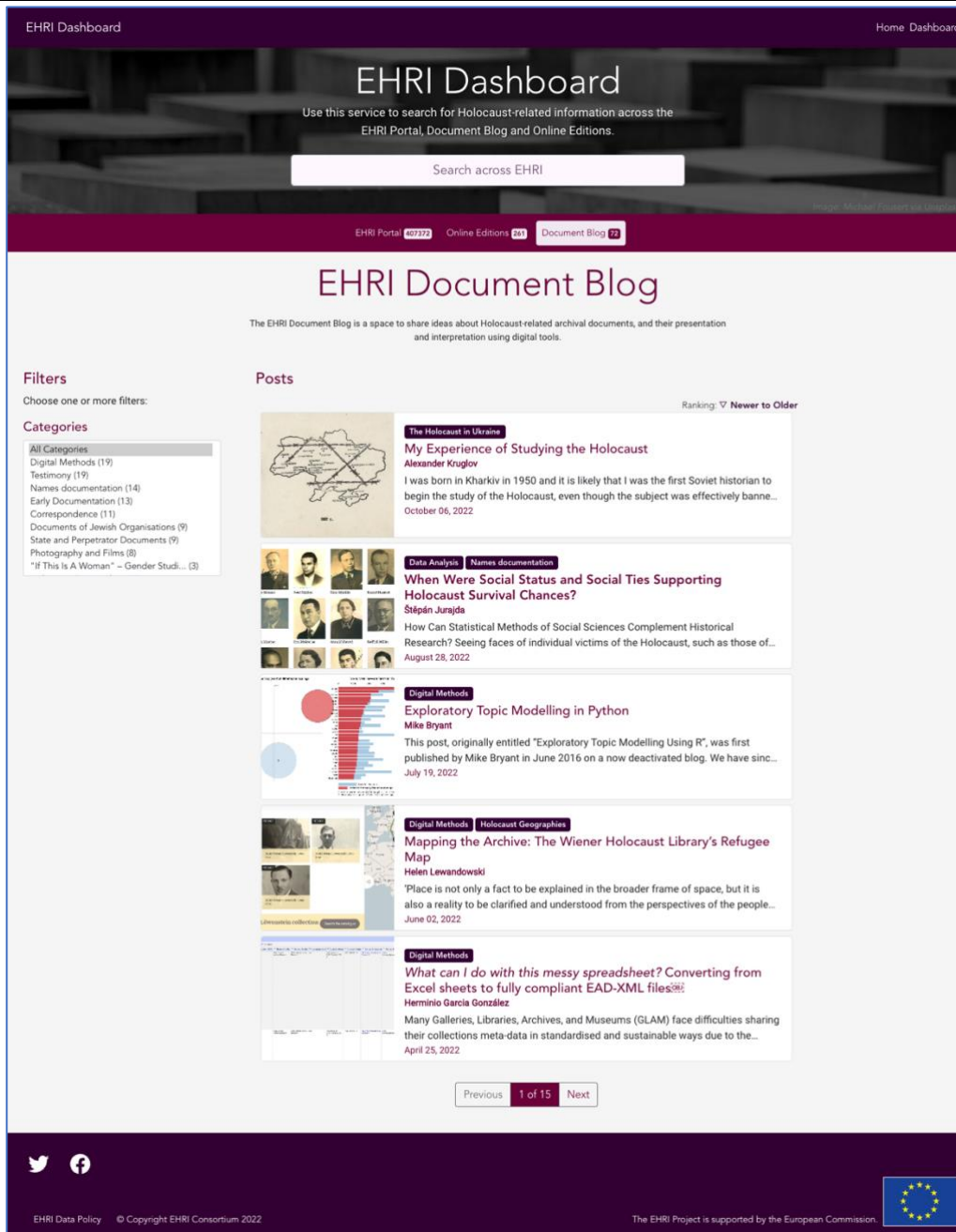
1939-05-19 Original in English.

Previous 1 of 15 Next

Subject Distribution

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Figure 22 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: EHRI Digital TEI Editions UI



The screenshot shows the EHRI Dashboard with the following elements:

- Header:** "EHRI Dashboard" and "Home Dashboard" links.
- Main Title:** "EHRI Dashboard" with a subtitle: "Use this service to search for Holocaust-related information across the EHRI Portal, Document Blog and Online Editions."
- Search Bar:** A white input field with the placeholder text "Search across EHRI".
- Counters:** "EHRI Portal 407372", "Online Editions 201", and "Document Blog 22".
- EHRI Document Blog Section:**
  - Subtitle: "The EHRI Document Blog is a space to share ideas about Holocaust-related archival documents, and their presentation and interpretation using digital tools."
  - Filters: "Choose one or more filters:" and a list of categories including "All Categories", "Digital Methods (19)", "Testimony (19)", "Names documentation (14)", "Early Documentation (13)", "Correspondence (11)", "Documents of Jewish Organisations (9)", "State and Perpetrator Documents (9)", "Photography and Films (8)", and "If This Is A Woman" - Gender Studi... (3)".
  - Posts: A list of five blog posts with titles and authors:
    - "The Holocaust in Ukraine" by Alexander Kruglov (October 06, 2022).
    - "When Were Social Status and Social Ties Supporting Holocaust Survival Chances?" by Stéphan Jurajda (August 28, 2022).
    - "Exploratory Topic Modelling in Python" by Mike Bryant (July 19, 2022).
    - "Mapping the Archive: The Wiener Holocaust Library's Refugee Map" by Helen Lewandowski (June 02, 2022).
    - "What can I do with this messy spreadsheet? Converting from Excel sheets to fully compliant EAD-XML files" by Herminia Garcia González (April 25, 2022).
  - Navigation: "Previous", "1 of 15", and "Next" buttons.
- Footer:** "EHRI Data Policy © Copyright EHRI Consortium 2022" and "The EHRI Project is supported by the European Commission." with the European Union flag logo.

Figure 23 - Screenshot of the pre-populated EHRI Dashboard when the user has not provided a search term yet: EHRI Document Blog UI

If the user decides to enter a search term, the displayed information and its associated counts change accordingly based on the search results (Figure 24 below).



The screenshot displays the EHRI Dashboard interface. At the top, the search bar contains the term "antisemitism". Below the search bar, there are statistics for "EHRI Portal 10949", "Online Editions 33", and "Document Blog 4". The main content area is titled "EHRI Portal" and "EHRI Terms". The "EHRI Terms" section shows a hierarchical tree structure for "Antisemitism", with sub-categories like "Periods" and "Ideologies". The "Select Item" sidebar on the left lists "Antisemitism", "Religious antisemitism", and "Antisemitism, Racism, Fascism, and National ...". The footer includes social media icons and the European Commission logo.

Figure 24- Screenshot of the EHRI Dashboard when the user has provided the search term "antisemitism"

The code of the Alpha stage of the EHRI Dashboard is available on [GitHub](#) and an online demo link has been shared within WP10 for further testing. We expect to release a public version of the Dashboard before M36.

## 4 Future Work

In delivering the Alpha stage of the EHRI Dashboard, emphasis was given on adjusting the EHRI APIs of the currently available data sources so that they correspond to the user requirements of the Dashboard and on the way information sourced through those APIs should be visually displayed within the Dashboard. Apart from the continuing testing, refinement, and maintenance needed to ensure that the Dashboard reaches the Beta version milestone and that it remains functional, up to date and accessible, future work might focus on three main objectives:

- Adding more data sources which will be searchable through the Dashboard in the same way current data sources are. This will potentially involve the development and deployment of more EHRI APIs. For example, steps are already being taken to ensure that the Geospatial repository also developed as part of WP10 will be interoperable and searchable through the Dashboard.

- Offering users the ability to customise parts the Dashboard. For example, adding a feature that will resemble an online “shopping cart”, where users will be able to add items that they have discovered through the discovery process, view them in a separate window and have the option to download the “cart” list in a printable format or share a link to it with others. Apart from helping researchers organise their research data, this functionality could also facilitate event organisers who might want to share printouts with participants as well as educators who wish to create lesson plans or reading lists using resources found throughout EHRI.
- Incorporating ways to perform a deeper analysis of the materials retrieved from different EHRI resources instead of simply displaying the results that were retrieved.

## 5 Conclusion

This deliverable presents the progress of T10.2 on the integration of EHRI tools and platforms. Following an iterative design and development methodology which resulted in several prototype iterations, we developed an [open-source web application](#) which offers a way for EHRI stakeholders to search for Holocaust-related information across a variety of EHRI services through a single-entry point. By integrating the feedback collected after each user testing checkpoint, we ensured that each iteration of the EHRI Dashboard was a refined version of the one preceding it. The EHRI Dashboard presented in the previous sections is currently in its Alpha stage and will continue to get expanded and improved. Future steps might include enriching the Dashboard with more data sources, enabling customisation, and adding features that will help users analyse the resources discovered through the Dashboard.

## 6 References

- Baglioni, M., Bardi, A., Kokogiannaki, A., Manghi, P., Iatropoulou, K., Principe, P., Vieira, A., Nielsen, L. H., Dimitropoulos, H., Foufoulas, I., Manola, N., Atzori, C., La Bruzzo, S., Lazzeri, E., Artini, M., De Bonis, M., & Dell’Amico, A. (2019). The OpenAIRE Research Community Dashboard: On Blending Scientific Workflows and Scientific Publishing. In A. Doucet, A. Isaac, K. Golub, T. Aalberg, & A. Jatowt (Eds.), *Digital Libraries for Open Knowledge* (pp. 56–69). Springer International Publishing. [https://doi.org/10.1007/978-3-030-30760-8\\_5](https://doi.org/10.1007/978-3-030-30760-8_5)
- Carter, K. S., Gondek, A., Underwood, W., Randby, T., & Marciano, R. (2022). Using AI and ML to optimize information discovery in under-utilized, Holocaust-related records. *AI & SOCIETY*. <https://doi.org/10.1007/s00146-021-01368-w>
- Naron, S., & Kara, J. (2020, September 1). *More Watching, Less Searching: Repurposing Fortunoff Archive Metadata for Visual Searching – EHRI Document Blog*. <https://blog.ehri-project.eu/2020/09/01/fortunoff-archive-metadata/>
- Nielsen, J. (1993). Iterative user-interface design. *Computer*, 26(11), 32–41. <https://doi.org/10.1109/2.241424>
- Whitelaw, M. (2015). Generous Interfaces for Digital Cultural Collections. *Digital Humanities Quarterly*, 009(1).