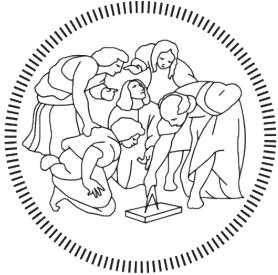


Hypermedia Applications

Design Report



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[Our Website](#)

17/07/2024

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1 Abstract

This report presents the design of our website, which is created for **HERmet**: a no-profit anti-violence center for women.

The report includes a C-IDM diagram to illustrate the interactions between various content elements, detailed content tables outlining the data structures, and a DB design schema showcasing the database architecture. Additionally, annotated screenshots of the website provide insights into the user interface and key features. An explanation of a user testing session, conducted to evaluate the website's user-friendliness, is also included.

Together, these components offer a comprehensive **overview of the system's architecture**, data management, and user experience design.

2 C-IDM Diagram

The **C-IDM** (Content-Interactive Dialogue Model) schema **in the large** provides an overarching view of the **interactions** and **relationships** between major content elements within the website. It illustrates how different components integrate and interact at a high level, offering insights into the system's overall architecture and data flow.

C-IDM in the large follows this simple **legend**:

- **Group of Topics**: represents a group page, that is an introductory page for a topic, usually a starting point for the navigation
- **Topic**: represents a topic page, that is basically a single page in the website
- **Kind of Topic**: represents a category of topic, it's useful when there are some pages that shares the same structure, but differ in their content



Figure 1: C-IDM Legend

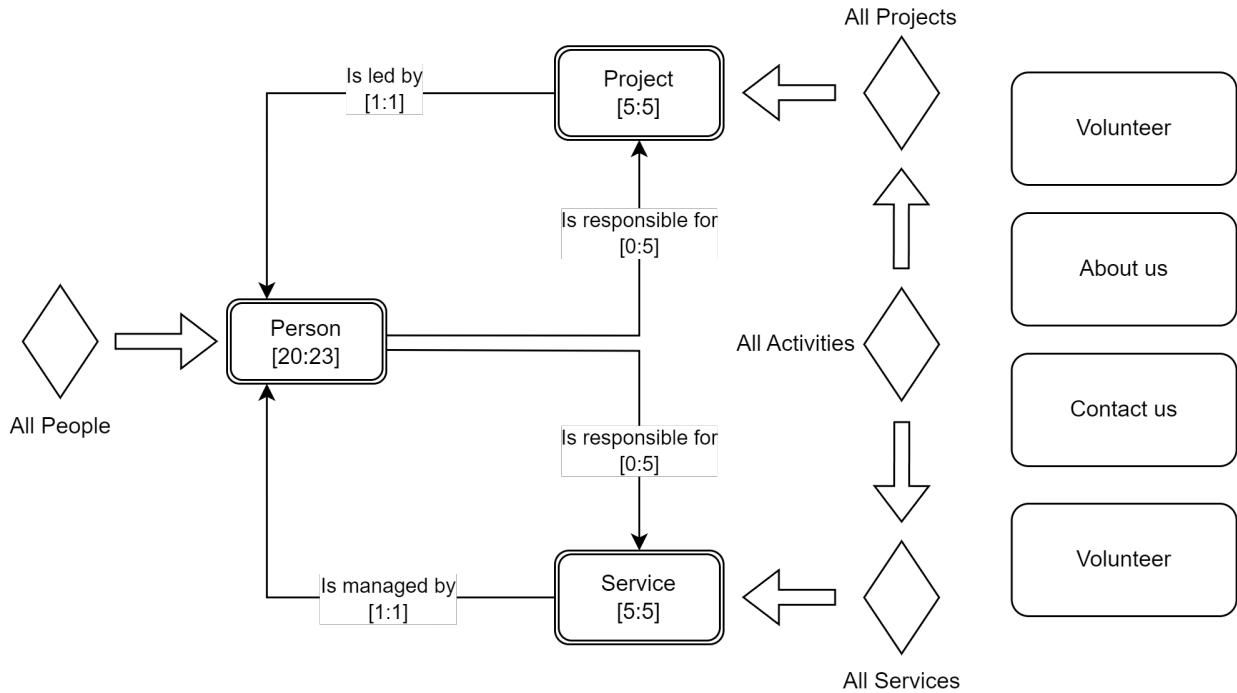


Figure 2: Our C-IDM in the large

As depicted in the diagram, there are three primary types of topics: Person, Project, and Service, serving as the main categories where content is distributed. The diagram also illustrates the relationships between them. *About us* and *Contact us* page complete the website, even if they are not linked with the main pages. It's important to note **cardinality**, as it signifies two distinct concepts: within the rectangles, it denotes the

number of topics appearing for that kind. Meanwhile, cardinality on arrows signifies the effective cardinality of the relationship, for instance a person **could be** responsible for **a maximum** of 5 projects (**0:5**) and a project **must be** led by **only one** person (**1:1**)

3 Content Tables

The C-IDM schema can be applied also in the small, represented through detailed content tables. It defines the specific **data structures** and **attributes** within the web application. These tables outline the fields, types, and relationships of data, providing a granular view of how information is organized and managed within the database.

3.1 Kind of Topic Tables

KIND OF TOPIC: Person
Name and Surname: TEXT[30]
Role: TEXT[50]
Person's picture: IMAGE
Contact information: TEXT[100]
Short Description: TEXT[50]
Related Projects Preview: LIST OF [Project Name, Image]
Related Services Preview: LIST OF [Service Name, Image]

KIND OF TOPIC: Service
Service Name: TEXT[30]
Service picture: IMAGE
Service logo: IMAGE
Contacts: TEXT[100]
Leader: TEXT[30]
Description: TEXT[500]
Testimonials: LIST OF TEXT[200]

KIND OF TOPIC: Project
Project name: TEXT[30]
Project's image: IMAGE
Statistics: TEXT[100]
Contacts: TEXT[100]
Leader: TEXT[30]
Description: TEXT[500]

3.2 Topic Tables

TOPIC: About Us
”About Us”: TEXT[8]
Picture: IMAGE
Mission: TEXT[200]
History: TEXT[500]
Practical Information: TEXT[500]
Activities: LIST OF[Activity Name, Picture]
Volunteer: TEXT[500]

TOPIC: Contact Us
Physical location: MAP
Phone Number: TEXT[13]
Email: TEXT[20]
Picture: IMAGE
Social medias: LIST OF IMAGES

3.3 Group Tables

GROUP: ”All Activities”
”Our Services”: TEXT[12]
Service Preview: LIST OF [Service Logo, Service Title]
”Our Projects”: TEXT[12]
Project Preview: LIST OF [Project Logo, Project title]

GROUP: ”All Services”
”Our Services”: TEXT[12]
Service Preview: LIST OF [Service Logo, Service Title]

GROUP: ”All Projects”
”Our Projects”: TEXT[12]
Project Preview: LIST OF [Project Logo, Project Title]

GROUP: ”All People”
Members Preview: LIST OF [Person thumbnail image, Person’s name and surname, Person’s current role]

Just by examining the tables above, one can gain a **preliminary understanding of the website’s structure**. There are distinct groups representing our main pages, categorized by kind of topic. **Projects** and **Services**, collectively referred to as **Activities**, share a similar framework, as evidenced by their comparable table structures: they typically include an activity name, accompanying image, contact details, and a descriptive overview.

The **Person** section represents HERmet members, featuring essential details such as their name, role within

the organization, contact information, and a brief profile description. Additionally, each person's page includes a list of **activities they are associated with**.

The **About Us** page provides comprehensive insight into the association, delving into its mission and history, while the **Contact Us** page serves as a practical resource for users seeking to connect with the association via phone, email, or in person.

3.4 Landmarks

In addition to our content tables, every page contains some **landmarks** designed to suit each page, facilitating the implementation of these elements. In particular, we designed a **Navbar**, a **Footer**, and two fixed buttons, one for the **Chatbot** and the other to display the **social buttons**.

The Navbar is crucial for helping the user to **navigate** among the different topics of the website. Inside the Navbar, there are several links: *Home*, *About Us*, *Our Activities* (divided into *Services* and *Projects*), *Our Women*, and *Contact Us*.

The Footer **marks the end** of the page content, containing a link to the *Home*, some *contacts* to facilitate quick interaction if needed, and a note on the website's copyright and credits.

The Chatbot initially appears as a button on the bottom right corner of each page and when clicked toggles a chat window, used to interact with the assistant. The purpose of this assistant is to be a sort of anti-stalking help desk, where women can get information on how to get immediate help in certain situations. The last landmark present in the website is reserved to the socials of the centre, when the screen size is larger than an *ipad* this landmark presents itself as a button (like the chatbot) on the bottom left corner, when clicked it toggles a column with the links to the centre's profiles in the most famous social networks. This social button, when using the website on a mobile device, is not displayed anymore and it's substituted with the socials list inside the *footbar*.

4 Final Screenshots

4.1 Landmarks

As previously mentioned, our main landmarks are the navbar and the footer.



Figure 3: Navbar open

Inside the Navbar, there are **links** to the main individual topic pages and to each group page of the website. Note that *Services* and *Projects* only appear when the cursor hovers over *Our Activities*. The **current page** is highlighted with a red underline.

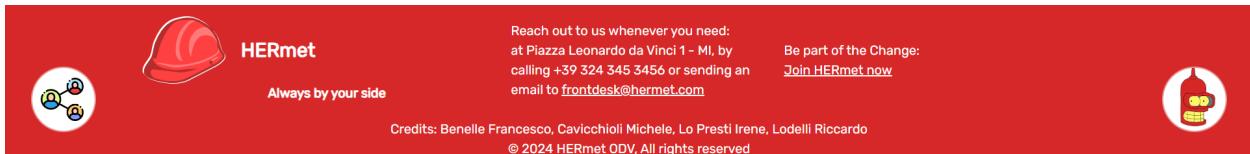


Figure 4: Footer

The Footer features a coral red background color, consistent throughout the website. It contains the logo — which serves as a link to the *Home page* —, some responsive contact information, a link to become *volunteer*, copyright and credits.

The two **buttons** located on the left and right sides, which link to social media and chatbot assistant respectively, **are not part of the footer**. They remain fixed in the bottom right and left corners of the window while scrolling the page. The footer is designed to integrate seamlessly with this feature. Down here you can find the screenshots of how the chatbot and the social buttons appear when clicked.

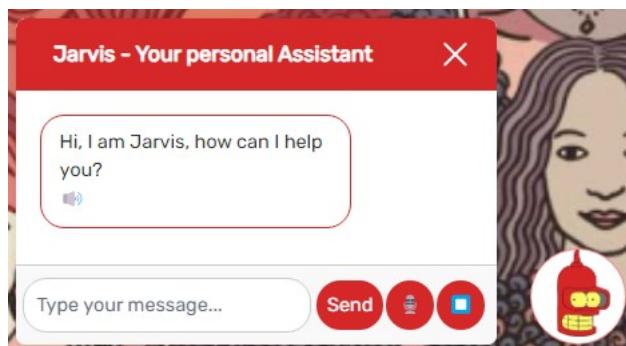


Figure 5: Chatbot window

The entire website is designed to be **accessible from various devices**, such as PCs and mobile phones.

In this section, we will provide the **mobile design** only for the **landmarks**. On mobile devices, the Navbar expands vertically when clicking on the three lines at the top right. The Footer content is arranged into multiple rows, and the **social links button is removed** to save screen space, replaced by a new line in the Footer for these links. From now on, we will **exclusively present the PC version of each page**, considering it as the default view.

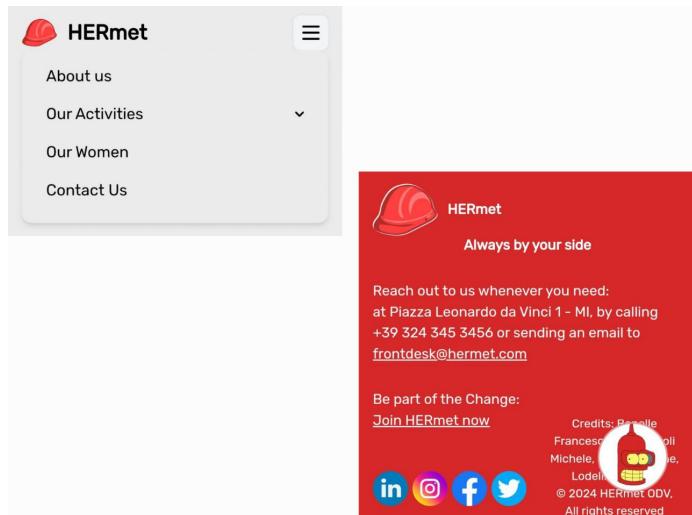


Figure 6: Landmarks mobile version

4.2 Legend

For the upcoming screenshots of the website, we have established some **common rules** to ensure consistency and clarity. These guidelines will help maintain a uniform presentation across all images:

- **Navbar and Footer** have been **excluded** from the image.
- The entire page is displayed as a **single block**, even if longer than the monitor.
- **Transition** links are highlighted by a **yellow circle**
- **Group** links are highlighted by a **light blue circle**
- **External** links are highlighted by a **purple circle**

4.3 Homepage

The initial page that greets users upon opening the website was the final one crafted. It starts with the association's **slogan**, delivering an immediate understanding of HERmet's purpose.

The homepage was designed to offer a quick glimpse into the website's offerings and functionalities. It features **transition** links to other pages, including About Us, CONTACT US (written in caps as it's deemed crucial), and Volunteer.

The page concludes with a succinct description of **Jarvis**: HERmet's virtual assistant.

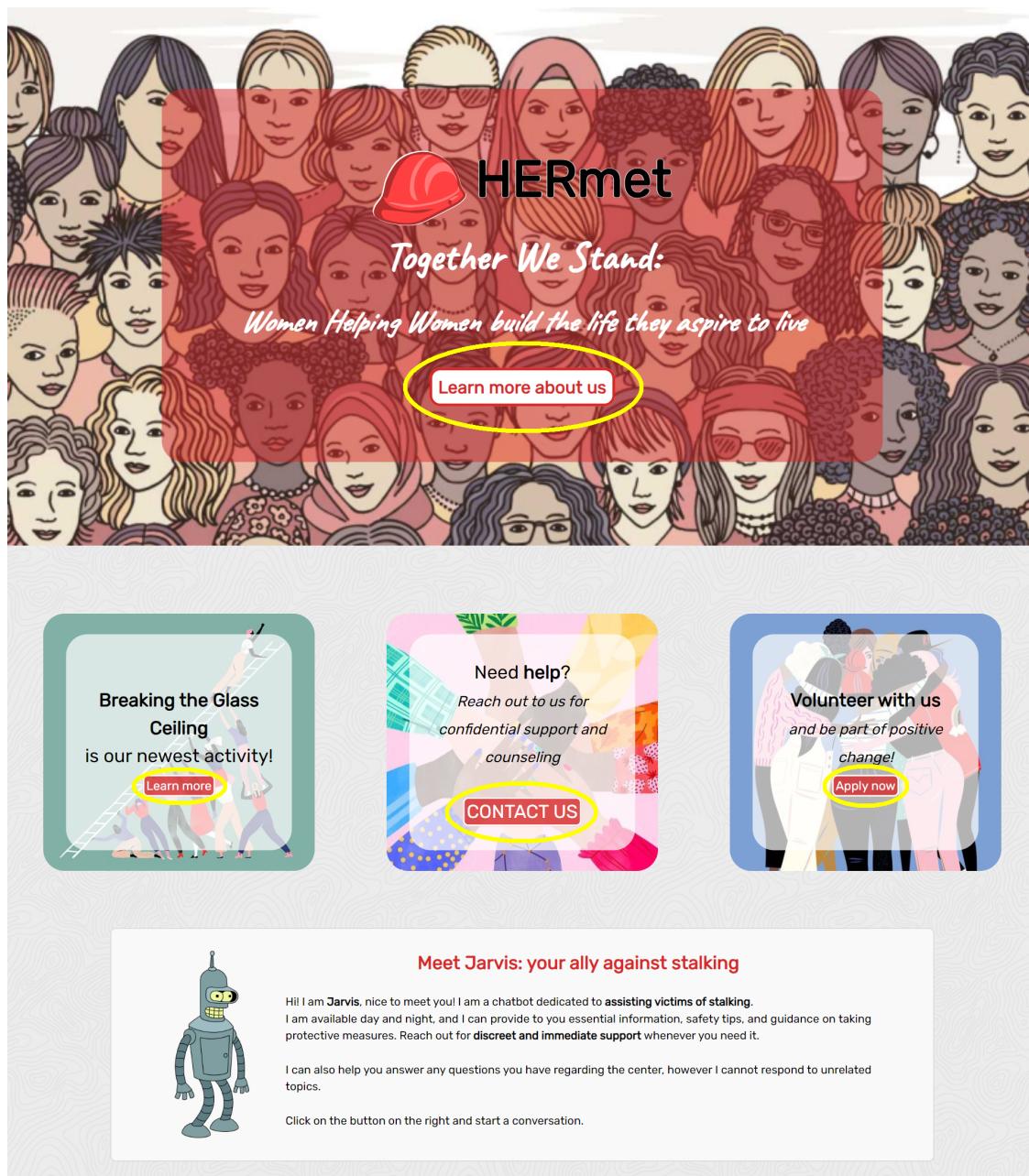


Figure 7: Homepage

4.4 About Us page

The page that provides a more **detailed description** of the HERmet association includes some written paragraphs outlining the Mission and History of the organization.

Notice the different categories of links present on this page: **transition** links, an **external** link to Maps, and **group** links. Specifically, these group links are part of a recurring component of the website: the **carousel**. This is a slider of clickable images that can be scrolled through by clicking on the arrows to show another activity.

The screenshot shows a website page with a light gray background. At the top, there is a large, rounded rectangular image containing a group of diverse women standing in a row. Overlaid on this image are the words "About us" and "How we started and what drives us today". Below this, there is a smaller image of three women holding a banner that reads "STOP VIOLENCE AGAINST WOMEN". To the right of this image is a section titled "OUR MISSION" with descriptive text. Further down, there is a section titled "OUR HISTORY" with text and a photograph of a group of people seated around a conference table in a meeting room.

About us
How we started and what drives us today

STOP VIOLENCE AGAINST WOMEN

OUR MISSION

The mission of HERmet is to provide comprehensive assistance to women who have experienced or perceive themselves as victims of violence, stalking, or abuse of any kind. This non-profit organization offers a diverse array of programs aimed at safeguarding victims from multiple perspectives, encompassing legal, psychological, and preventive measures, with the ultimate goal of ensuring the safety and well-being of all women affected by such circumstances.

OUR HISTORY

HERmet, established in 2015, emerged from a movement aimed at fighting violence against women and promoting gender equality. Since then, the organization has worked tirelessly to provide support, advocacy, and resources for survivors while also advocating for systemic change through education and awareness initiatives. With a commitment to empowerment and social justice, HERmet continues to grow and adapt, driven by the voices and experiences of survivors and allies, as it strives to create a world free from violence and discrimination for all women and girls.

A photograph showing a group of approximately 15 people, mostly women, seated around a long conference table in a meeting room. They are engaged in a discussion, with papers, laptops, and water bottles on the table. The room has a modern interior with large windows and a painting on the wall.

PRACTICAL INFORMATION

HERmet's headquarter is situated at [Piazza Leonardo da Vinci 1, Milano MI](#). It offers various services 24h per day, but you can find us at the center at these opening hours:

Monday - Friday: 9:00 AM - 6:00 PM
Saturday - Sunday: 10:00 AM - 4:00 PM

[Contact Us](#)

OUR ACTIVITIES

[More Details](#)

JOIN THE CAUSE

By becoming a **volunteer**, you'll support women who have experienced violence, stalking, or abuse, offering them crucial assistance and hope. Your dedication can help **change lives**, providing legal, psychological, and preventative aid.

At our association, you'll be part of a compassionate team committed to **making a difference**. Stand with HERmet and be a beacon of strength and support in our community.

[Volunteer with Us](#)

Figure 8: About Us

4.5 Contact Us page

This page provides information on how to reach **HERmet center**, both physically and virtually. It is divided into two section horizontally.

On the left it is shown how to reach the headquarter, thanks to an interactive **map** which acts also as a Google maps link.

On the right there is a list of contacts, disposed vertically, which are ways to reach HERmet virtually: **calling a dedicated telephone number**, **sending an email** to the front desk, linking to HERmet's **social networks**.

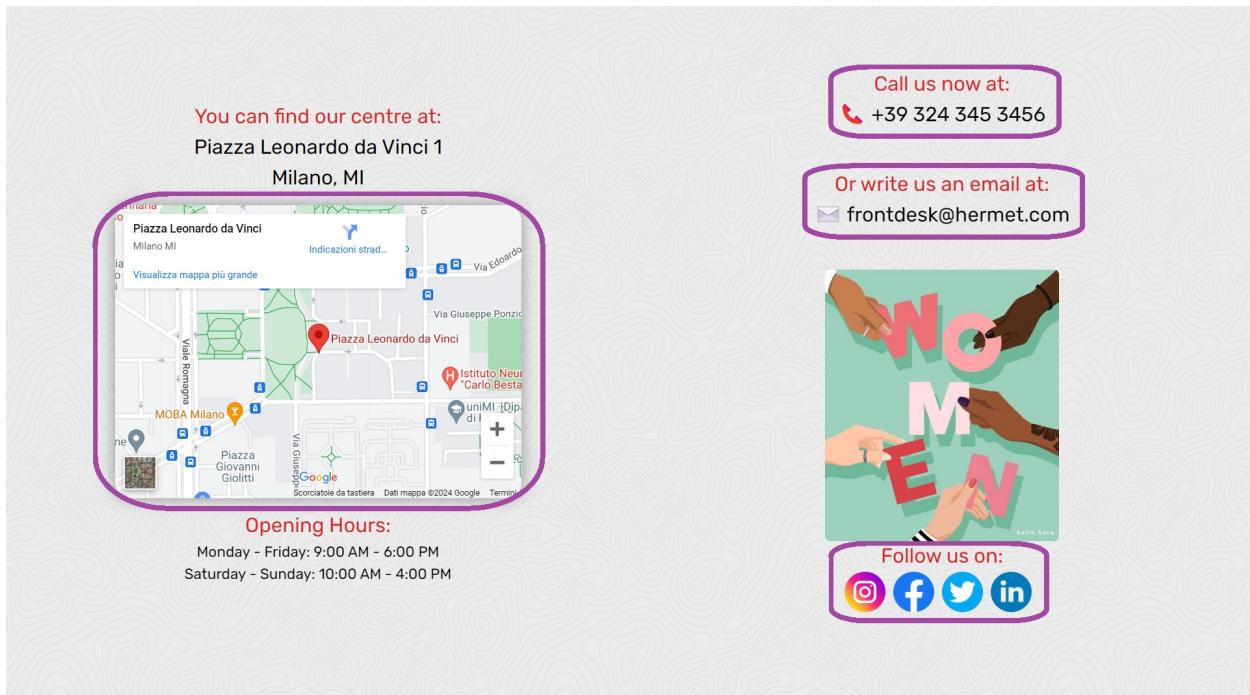


Figure 9: Contact Us page

4.6 Volunteer page

This page provides information on how to **volunteer with HERmet**. It begins with an **introduction** encouraging community involvement, followed by detailed information on **volunteering opportunities** and benefits. Below the introduction, there is a **form** for interested individuals to provide their information and availability. On this page, there are no direct internal links; instead, users can seamlessly navigate through the website using the always-present navbar.

The screenshot shows a "Volunteer" page with a red header. The page content includes:
- A heading "Volunteer" in red.
- A sub-heading "Volunteer with us and be a part of a supportive community committed to positive change!"
- A paragraph about the organization's mission and impact.
- A paragraph about volunteer roles and matching interests.
- A paragraph about the application process and coordinator support.
- A closing message: "Together, we can achieve great things. Thank you for considering joining our volunteer team!"
Below this is a form with the following fields:
- Name: Jane (first name) and Doe (surname)
- E-mail: example@mail.com
- Phone Number: 1234567890
- Current Occupation: Your current occupation
- Availability: Days available (Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday)
- Hours per week: Please insert how many hours per week you would be available (e.g., 10)
- Brief presentation letter: Provide a brief presentation letter (text area)
At the bottom is a red "Submit" button.

Figure 10: Volunteer Page

4.7 Activities group page

This page provides an insight on HERmet's activities, through the already mentioned **carousel**: a group of sliding images, which can be scrolled also by clicking arrows.

Activities are divided into **Services** and **Projects**.

The **elements** of this webpage are **all clickable**: both the titles bring the user to the sub-group pages, while clicking on an image, user is directly sent to the specific Activity page, "skipping" a cognitive step and fasten the navigation

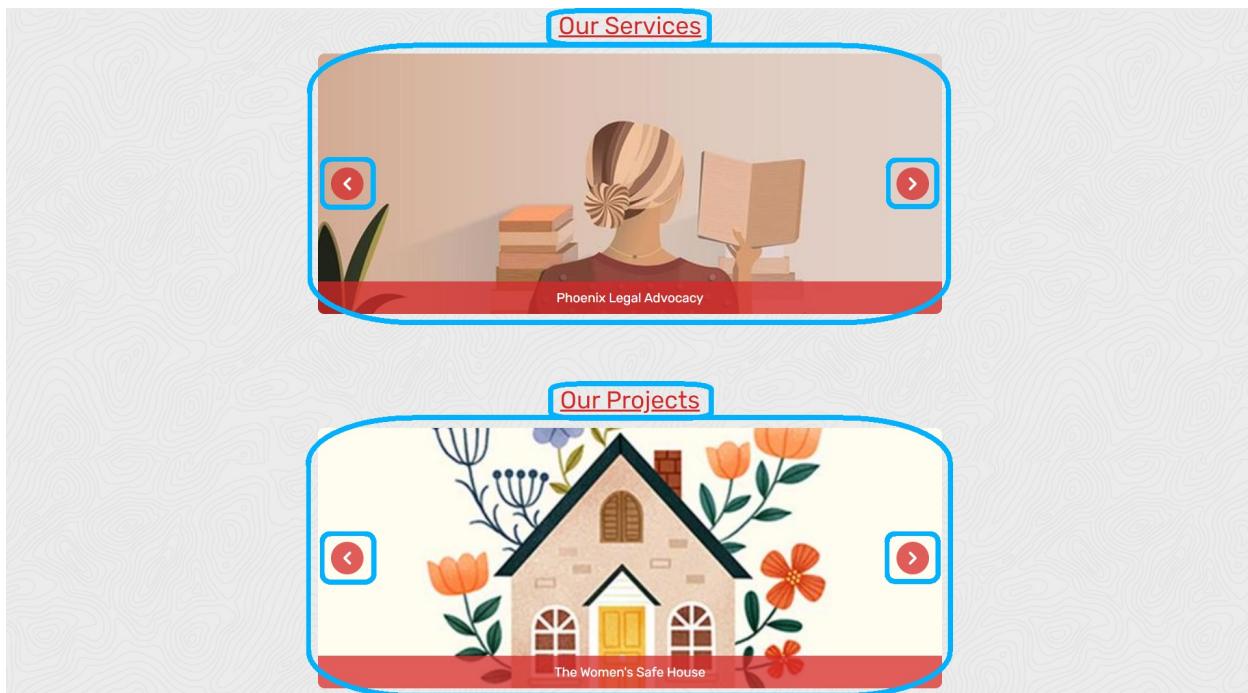


Figure 11: Our Activities

4.8 Services group page

This page provides a comprehensive list of HERmet's services, displayed two at a time. We have chosen to represent each service with its **unique logo**, which acts as a **distinctive identifier**, ensuring clear separation between services and projects. Alongside the logo, the **name of the service** is provided.

Each item on the list is **clickable** and serves as a direct link to the specific service's webpage, allowing for **easy navigation** and access to detailed information.

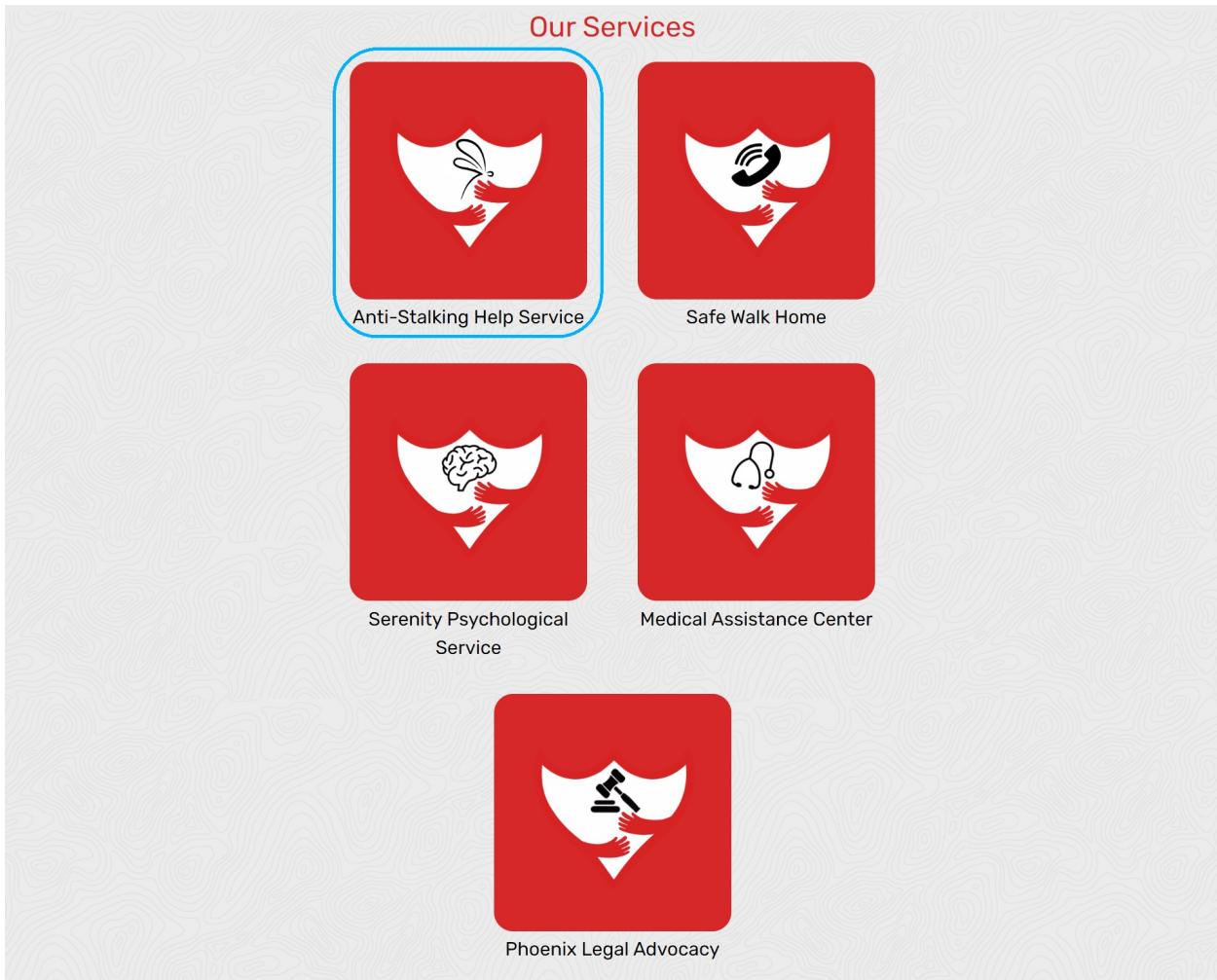


Figure 12: Our Services

4.9 Service KOT page

The following screenshot highlights HERmet's legal assistance service, showcasing the **default structure of every service** webpage:

- Service **title**
- An **introductory section** featuring an image, a brief description, the service logo, and contact information
- A detailed **description** of the service

- **Testimonials** from people who have already used the service

Regarding navigation, several interactive links are embedded within the page. For instance, users can directly **call or send an e-mail** by clicking on the contact information. Clicking on underlined names redirects users to the **person page**. Additionally, in the top left corner, there are **breadcrumbs**, which are helpful links that indicate the user's current location on the site and facilitate navigation through related sections.

The screenshot shows a service page for "Phoenix Legal Advocacy". At the top, there are two blue buttons: "Our Services" and "Phoenix Legal Advocacy". Below them is the page title "Phoenix Legal Advocacy" in red. To the left is a stylized illustration of a woman sitting at a desk, reading a book, with a potted plant and a small shelf with a plant and a camera in the background. To the right is a text block: "Phoenix Legal Advocacy is your **trusted ally** in navigating the **complexities of the legal system**, providing comprehensive support and empowerment for women facing various legal challenges." Below this is a red shield logo containing a gavel and a hand. Further down, there is contact information: "From Monday till Friday 8:00 - 13:00 and 14:00 - 19:00", a phone number "+347 782 8956", an email address "legal.service@hermet.com", and "Person in charge **Jessica Pearson** Attorney". A note says "You can make an appointment through the number indicated or via email." At the bottom, there is a section titled "Our impact in their words" with a colorful illustration of diverse women supporting each other. Two testimonial boxes are shown: one for "Giulia" and one for "Polly".

This service is led by esteemed legal advocates [Jessica Pearson](#), and [Dana Scott](#). Our mission is to ensure that every client receives the **guidance, representation, and resources** they need to assert their rights and achieve their legal goals.

Under the leadership of [Jessica Pearson](#), a seasoned attorney renowned for her dedication to justice, Phoenix Legal Advocacy offers a wide range of legal services tailored to meet the diverse needs of our clients. Whether you're facing family law matters, employment disputes, immigration issues, or any other legal challenge, our team is here to provide **personalized counsel**, strategic representation, and compassionate advocacy every step of the way.

At Phoenix Legal Advocacy, we believe in the power of women to rise above adversity and thrive in all aspects of their lives. Whether you're seeking **legal advice, representation, or advocacy**, Phoenix Legal Advocacy is here to stand by your side, empowering you to face the future with courage and resilience.

Together, let's soar to new heights of legal empowerment and justice. Phoenix Legal Advocacy: Your partner in legal support and empowerment.

Our impact in their words

"Phoenix Legal Advocacy has been a lifeline for me during one of the darkest periods of my life. Their team, led by Jessica Pearson and Dana Scott, provided unwavering support, guidance, and legal expertise as I navigated through a challenging legal battle. Thanks to their dedication and advocacy, I not only achieved a favorable outcome but also regained a sense of empowerment and hope for the future. I am forever grateful for their professionalism and compassion."

Giulia

"Phoenix Legal Advocacy, led by Jessica Pearson, has been an invaluable source of support for me throughout my journey as a survivor of domestic violence. Beyond their exceptional legal expertise, Jessica and her team provided me with much-needed emotional support and reassurance during one of the most challenging times of my life. Their compassion and dedication helped me feel empowered and supported every step of the way. Thanks to their guidance and advocacy, I not only obtained the legal protection I needed but also found strength and resilience to rebuild my life. I am deeply grateful for their unwavering support and would highly recommend Phoenix Legal Advocacy to anyone seeking compassionate and effective legal assistance."

Polly

Figure 13: A service page

4.10 Projects group page

This page provides a comprehensive list of HERmet's projects, displayed two at a time. To distinguish services from projects, the former are represented by their logos, while projects are depicted with a general image that best represents them. Alongside each image, the **name of the project** is provided.

Each item on the list is **clickable** and serves as a direct link to the specific project's webpage, allowing for **easy navigation** and access to detailed information.



Figure 14: Our Projects

4.11 Project KOT page

The following screenshot shows HERmet's project "The women's Safe House", highlighting the **standard layout of every project webpage**:

- Project **title**
- Project **main image** on the left
- A short text used as **introduction** of the project
- Some **curiosities** about it and **contact information**
- A detailed **description** of the service

Regarding navigation, users can easily move to other pages of the website, in a similar way w.r.t. the service KOT page. For instance, they can return to other services or access another one directly through **breadcrumbs**. The name of the project leader is highlighted in red and links to the **person page**. Additionally, by clicking on the contact details, users can **call or send an e-mail** directly from their devices.

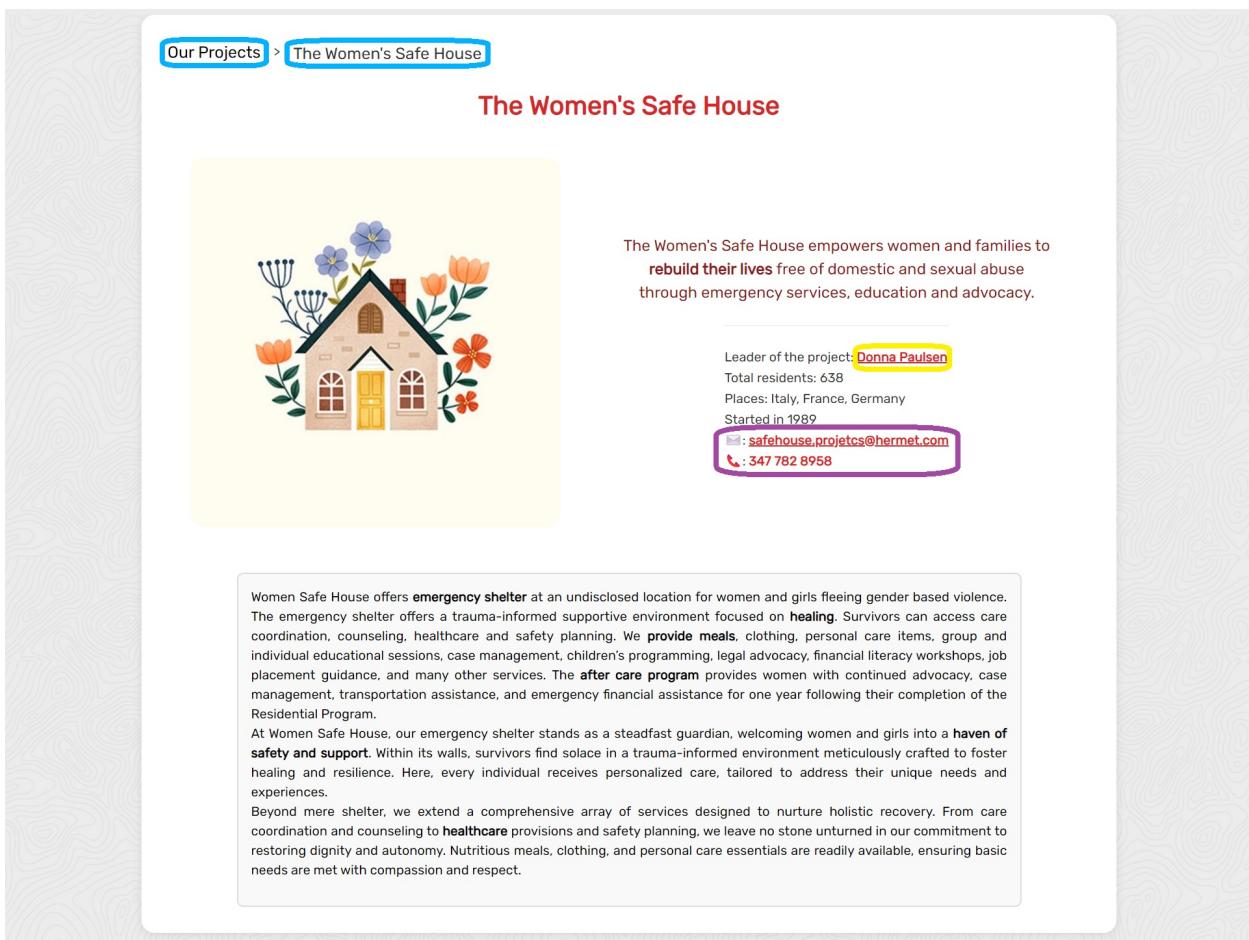


Figure 15: A project page

4.12 Our Women group page

The following screenshot shows the "Our Women" webpage, which contains a list of HERmet's members. Each member is displayed as a **person card** featuring their **photo**, **full name**, and **position** within the organization. By clicking on a card, users can directly [access the page of that specific person](#).

Additionally, we have implemented a **filtering functionality** based on the members' roles within the association. For instance, if users are interested in learning more about HERmet's **Educators**, they can select the desired role from the **dropdown menu**, and the page will display only those members who hold that specific role in the association. The section dedicated to all roles contains also an additional sorting dropdown menu to choose between the alphabetical and reverse alphabetical orders.

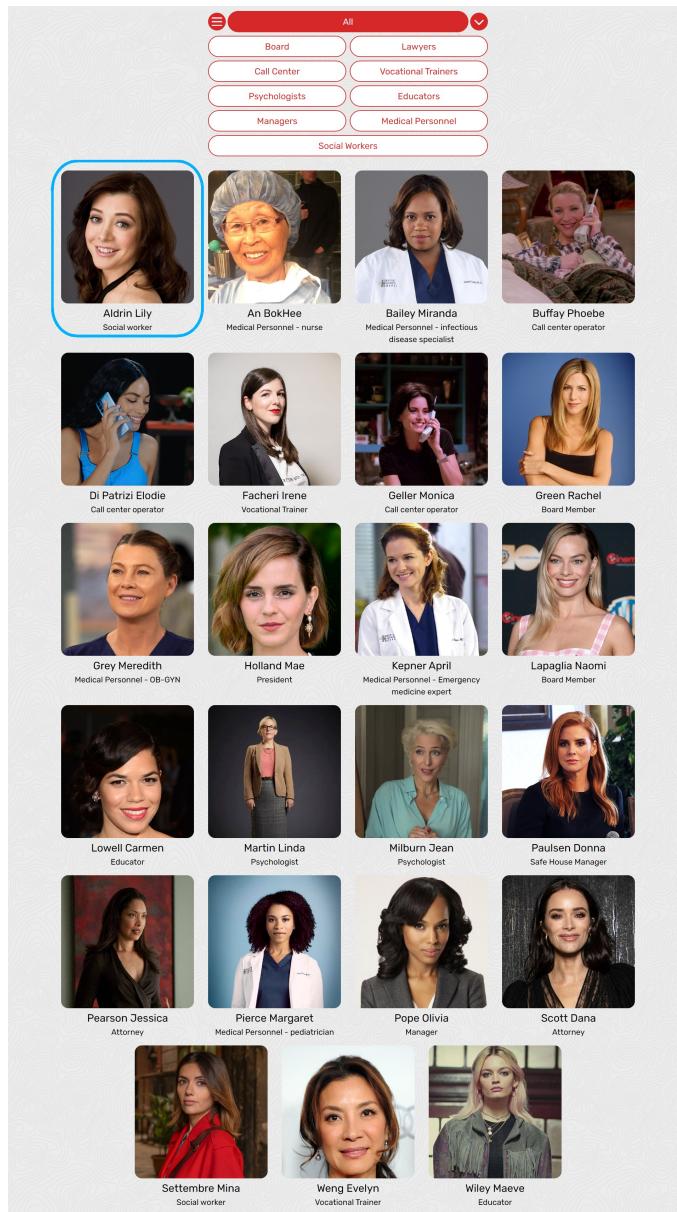


Figure 16: Our women

4.13 Person KOT page

This page features the personal profile of HERmet's CEO, Mae Holland, providing a glimpse into the **design of the women's pages**:

- The woman's **name**
- A **picture** of the member
- Her **role** in the association
- A box containing the **Curriculum Vitae** of the participant
- **Contact information** such as email and social media links
- An in-depth **description** of her professional profile

Navigation on this page is divided into two main categories: **breadcrumbs** allow users to navigate within the website, particularly providing the option to switch to another woman's page or the general group page. The links displayed to the right of the image enable users to perform actions outside HERmet's website, such as **downloading woman's CV**, **sending her an email** or being redirected to **her social media pages**.

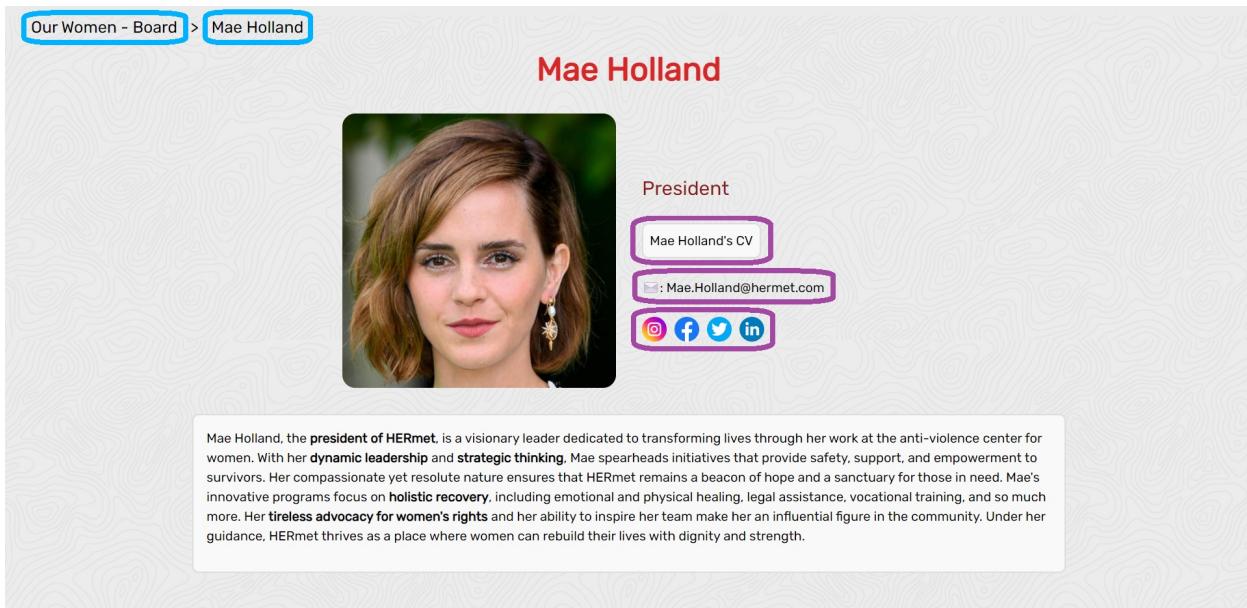


Figure 17: A woman page

5 Interaction Scenarios

In this section, we explore how different people use our website. These interaction scenarios offer a peek into their experiences, showing how they move through our site to achieve their goals.

In the following narratives, we present a series of structured interactions, each encapsulating a user's journey across our web interface. These narratives delineate the user's profile, their goal, and the sequence of tasks undertaken to fulfill that goal.

5.1 First scenario

A young woman who does not own a car wants to go to a club, within walking distance from her home, where she plans to meet some friends. However, she does not feel safe walking alone at night. Upon hearing about the services offered by the HERmet anti-violence center for women, she believes they may provide her with assistance in this situation, in particular with the "Safe Walk Home" service.

So, she picks up her smartphone and goes to the HERmet Home Page, opening the navbar she notices the link to the services and clicks on it.

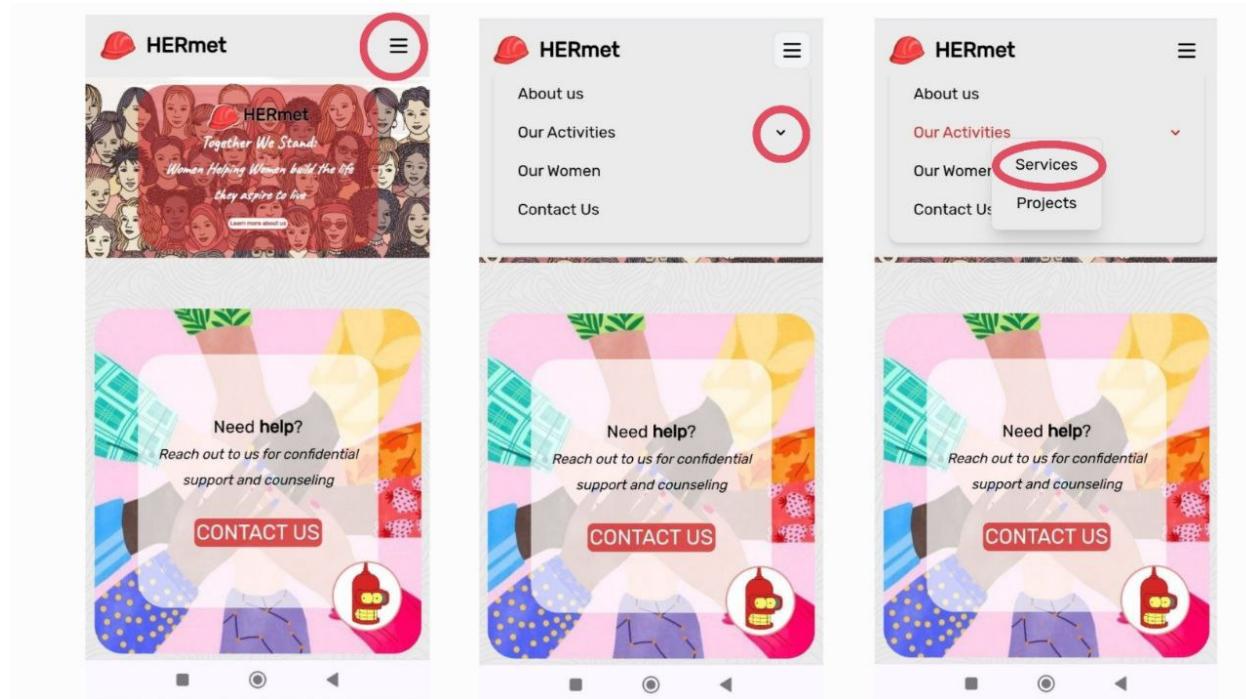


Figure 18: She uses the navigation menu to find the services of the center

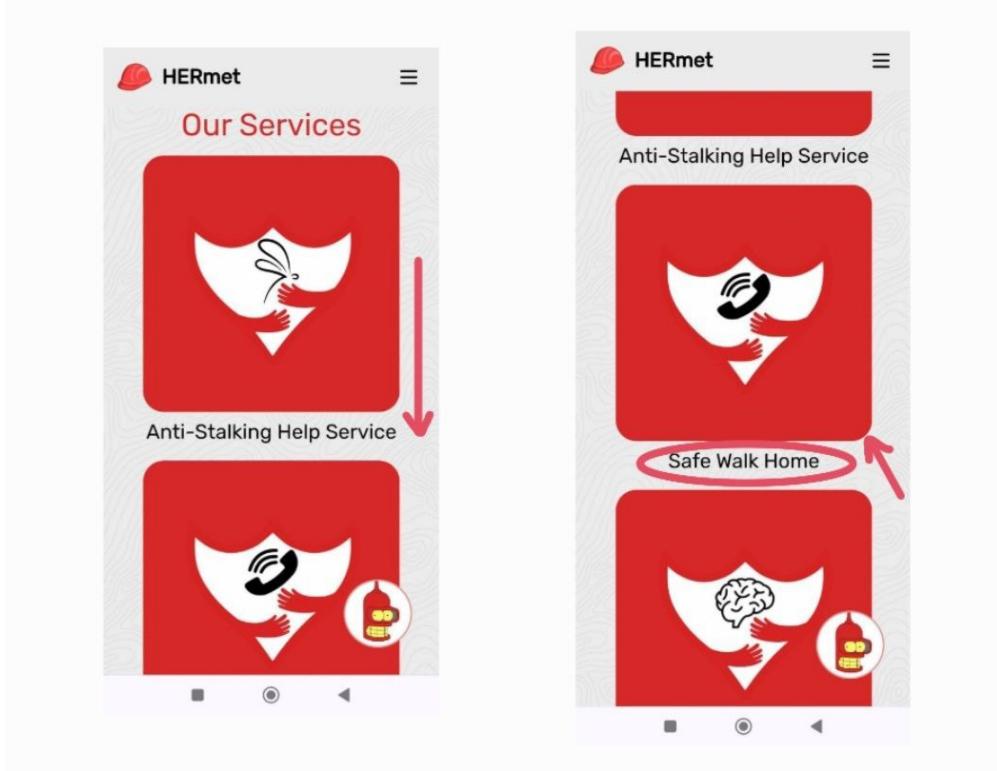


Figure 19: She scrolls down the page and finds the service Safe Walk Home

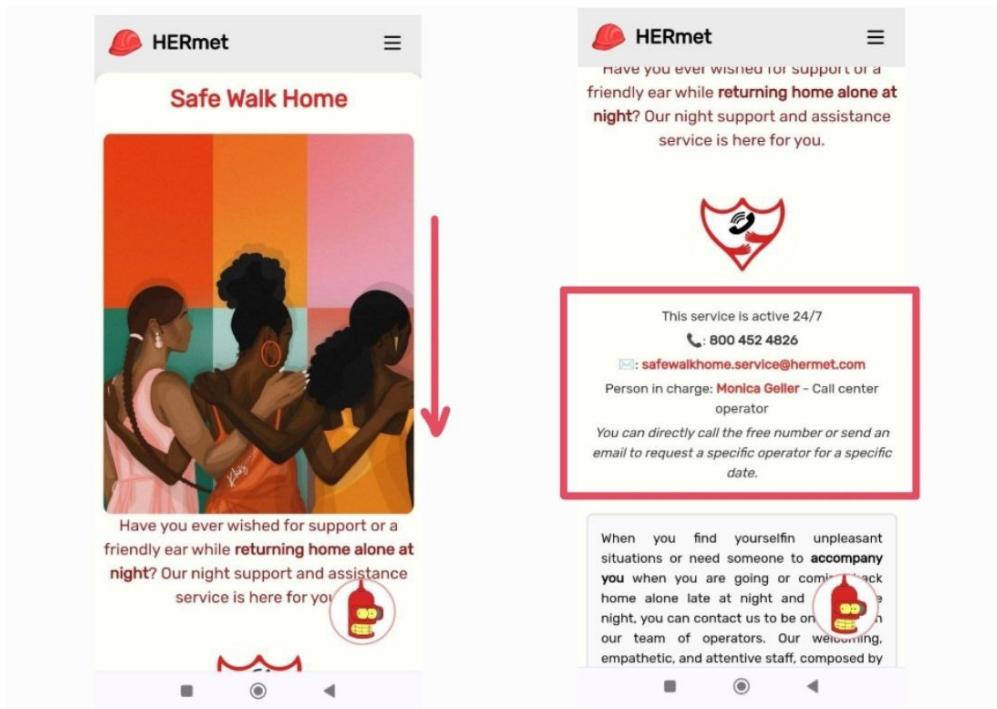


Figure 20: She scrolls down the page of the service and finds the information she needs to use it

5.2 Second scenario

During a conference focused on raising awareness about gender disparities and preparing young people to confront them, a high school teacher crossed paths with a vocational trainer from HERmet. The teacher learned that the vocational trainer is overseeing a school-based awareness project at the HERmet center, which aims to educate and involve young individuals in combating violence against women. Interested in enrolling her classes in the project, the teacher realizes she cannot recall the name of the woman or the project.



Figure 21: She uses the navigation menu to go to the personnel page

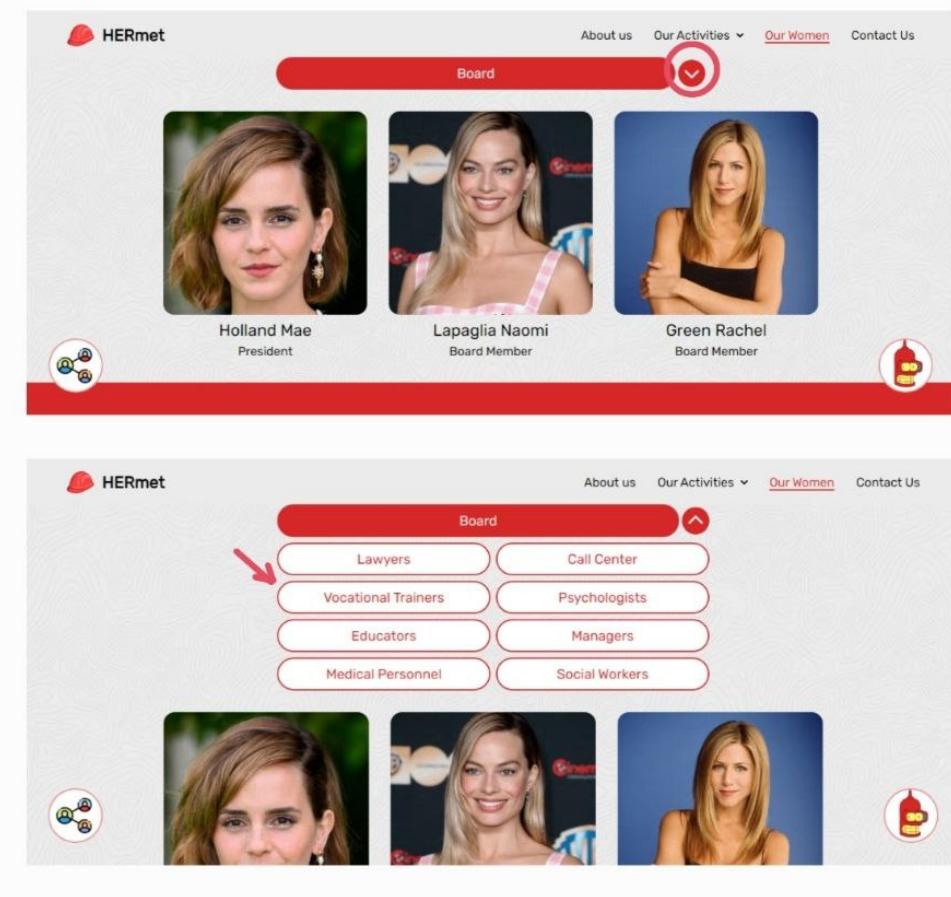


Figure 22: She uses the structural links to go to the Vocational Trainers section.

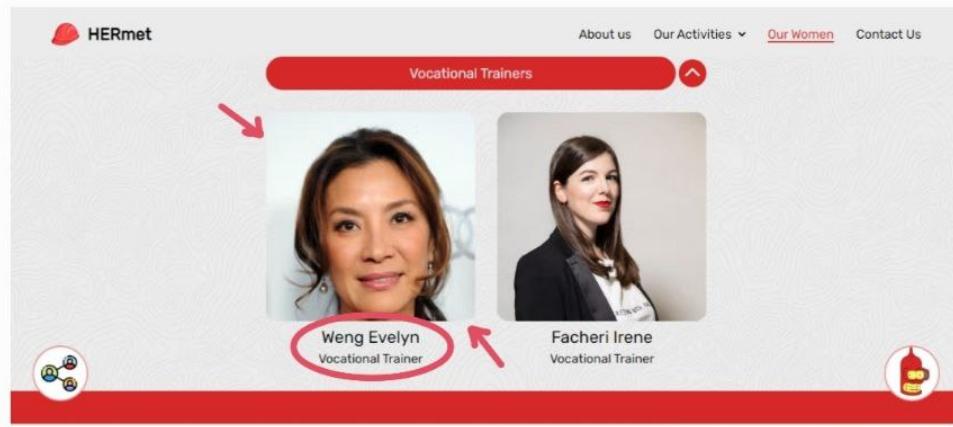


Figure 23: She recognizes Evelyn Weng, so she clicks on the group link to go to her personal page.



Figure 24: She scrolls down Evelyn Weng's personal page.

A screenshot of a project page for 'School Sensitization' managed by Evelyn Weng. The page shows a thumbnail image of Evelyn Weng in a classroom setting. A red circle highlights the project name 'School Sensitization' at the bottom of the thumbnail. The top navigation bar is identical to Figure 24. The project details section on the right includes a description of the school-based awareness project, leader information (Evelyn Weng), and contact details (schools.projects@hermet.com, 347 782 8959).

Figure 25: She finds the School Sensitization project and clicks on the transition links to go to the project's page.

5.3 Third scenario

A woman is experiencing domestic violence and urgently requires assistance. However, she does not feel safe reaching out to the center via email or phone. Instead, she opts to visit the center in person, seeking refuge and support.

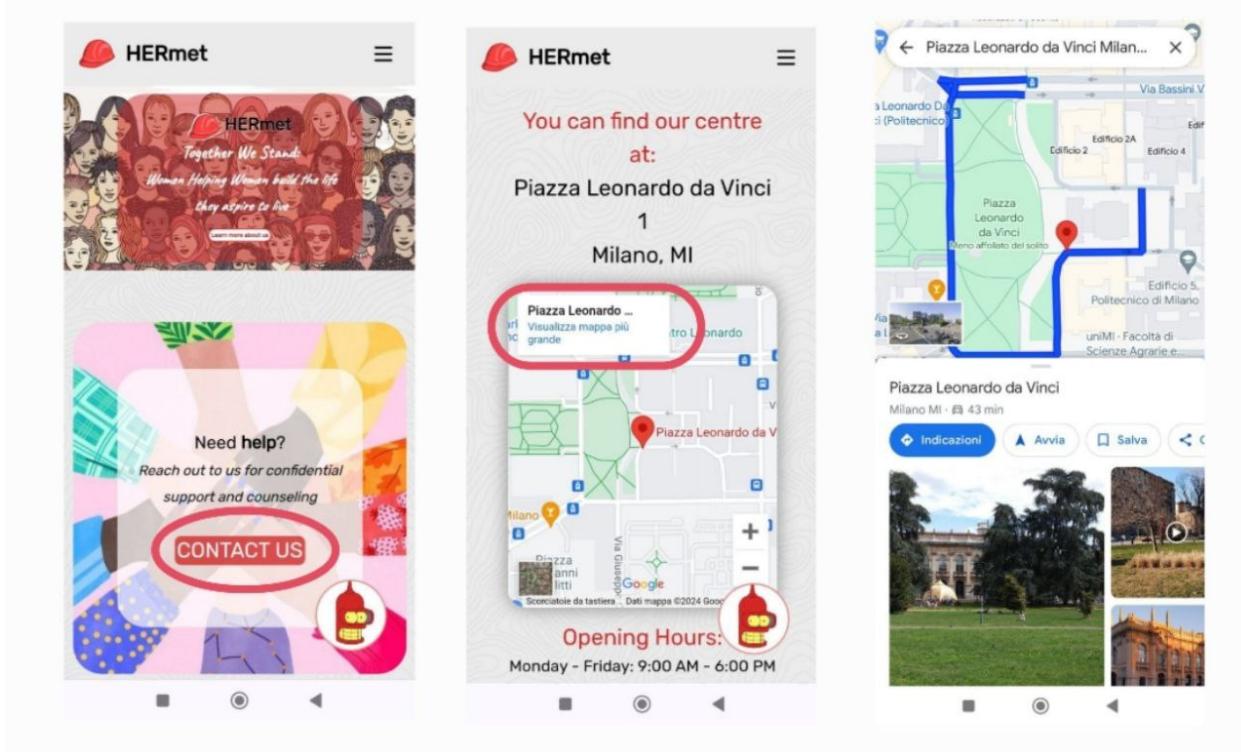


Figure 26: She clicks on the shortcut on the Home Page to go to the Contact Us page where she finds the address of the center that can be opened with Google Maps.

6 Data Base Design

An ER diagram, short for **Entity-Relation diagram**, is a visual representation of the **structure of a database**, illustrating the **entities**, their **attributes**, and the **relationships** between them. It serves as a powerful tool for database design, providing a clear and concise overview of the data model. ER diagrams help to understand the **organization of data** within the system, facilitating the development. By visually mapping out the relationships between different entities, ER diagrams enable efficient database design and implementation, ensuring that the system meets the needs of its users while maintaining data integrity and consistency.

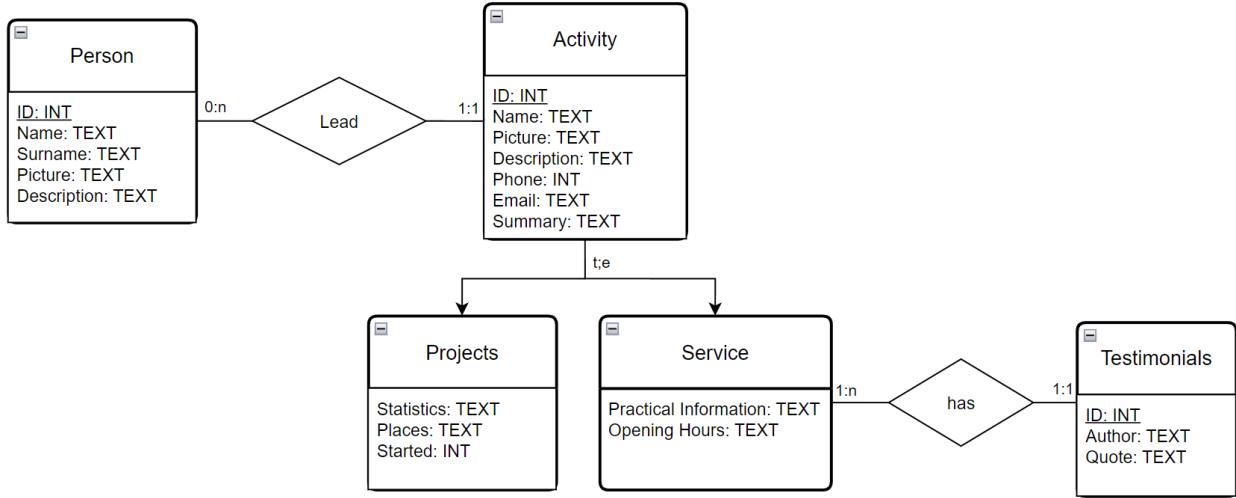


Figure 27: Our Entity-Relation diagram

For our website, the database comprises three primary entities, corresponding to the kinds of topic in the C-IDM: Person, Project, and Service. To avoid any primary key conflicts, we assigned an ID to each entity.

One notable aspect of this ER diagram is how we addressed the grouping of Activities, which encompasses both Projects and Services. We opted to utilize the **hierarchy** pattern to represent them, as they share many attributes. Services have an additional **multiple attribute**: testimonials, which necessitated a separate table.

To resolve the hierarchy, we consolidated them into a **single table** called Activity, with a **boolean attribute** to distinguish between Projects and Services. This resulted in the final design depicted in the image below:

7 User Testing

The objective of User Testing is to assess the reactions of typical website users to our website. We selected 15 users (according to Nielsen's Rule) and asked them to perform tasks to explore website functionalities through two different kind of devices: laptops and smartphones. The users' behaviours was be observed, recorded and analyzed to highlight the issues that come from the experiences of the users while they interact with the system. Then, the users were asked to complete a questionnaire to provide insights into their experiences and thoughts while using the website. The outcome is a comprehensive summary highlighting the users' experience with the website.

7.1 User Selection

The target user we selected is a young woman, aged between 17 and 25, who is familiar with using websites and conversational agents. While our website is designed for women of all ages, we chose this age range to specifically test the chatbot, which was primarily developed with young women in mind.

7.2 Tasks

The tasks assigned to the users are mainly based on the scenarios we envisioned for both the website and the chatbot:

1. You urgently need assistance from the center but do not feel safe reaching out via email or phone. Instead, you prefer to visit the center in person for refuge and support. Please find out the center's address.
2. You don't own a car and can't use other means of transportation, but you still want to reach your friends at a nightclub within walking distance from your home. However, you don't feel safe walking alone late in the evening and at night. Find out if HERmet offers solutions for this issue and how to contact them about it.
3. During a conference on raising awareness about gender disparities and preparing young people to confront them, you, a high school teacher, met Evelyn, a vocational trainer from HERmet. Evelyn told you about an activity she is responsible for, and you would like to enroll your classes in it. Find more information about it.
4. You have a friend who survived a stalking experience but still doesn't feel safe and sometimes exhibits symptoms of PTSD (post-traumatic stress disorder). Find out through the chatbot how you can help her.
5. You met Jessica Pearson because you needed legal advice and used HERmet's "Phoenix Legal Advocacy" service. She inspired you so much that you want to study to become a lawyer just like her. Find out which university she attended.
6. Find the form to fill out to become a volunteer at the center.

7.3 Evaluation Criteria

The users will be evaluated based on their usage of the Home button, back button, and navigation menu. Additionally, the evaluation will consider the time taken to complete each task, as well as the number of attempts and failures made. Each task will be assigned an evaluation mark for each user according to the following criteria:

- 1: The task could not be completed or the user gave up on it.

- 2: The task required many attempts to be completed, while the user committed many errors.
- 3: The task required a hint from the inspector or multiple attempts to be completed.
- 4: The task is completed successfully without errors.

The success rate of each task will be measured as follows: a score of 1 will be assigned a value of 0, a score of 2 will be assigned a value of 0.3, a score of 3 will be assigned a value of 0.7, and a score of 4 will be assigned a value of 1. These values will be used to compute the success rate for each task individually as well as for the entire set of tasks.

7.4 Pilot Test

A pilot test was conducted with a user who respected the profile indicated. Thanks to her feedback, we were able to have an idea about the timing and the difficulty of each task, and so to make a more precise User Testing.

7.5 Execution of the test

7.5.1 Pre-test procedures

Before the test, the objective was immediately explained to the users, who were assured of the value of their contribution and the importance of their honest feedback. They were informed that they could stop at any time for any reason. Additionally, they were informed that their screen and voice would be recorded, but that the recordings would only be accessible to their evaluator and would not be shared with anyone else. Finally, they were encouraged to think aloud during the test, with the option for the evaluators to ask questions such as "What are you doing?", "Why are you doing it?", and "Do you have any doubts?" to prompt them and to start collecting feedback already during the process.

7.5.2 Test execution

Throughout the test, the evaluator observed the interactions of the user with the website, intervening only upon explicit user requests for assistance or to prompt verbalization of thoughts and feelings. The evaluator maintained detailed notes about the main errors and feedback and kept track of the time needed for each task to evaluate the test based on the performance metrics that have been explained before.

7.5.3 Post-test procedures

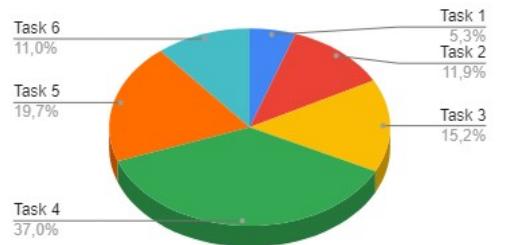
Upon completion of the tasks, users were invited to fill out a questionnaire to provide detailed feedback. They were encouraged to freely navigate the website to provide more precise responses. The questionnaire aimed to gather users' opinions, allowing for a deeper understanding of the experiences and insights of the users.

7.6 Results

We are going to analyze the results obtained from the user testing, focusing on specific sections: the average amount of time spent on each task, the success rate, the average number of attempts, and the usage of the home page, the menus, and the browser's back button. Additionally, we will report some of the most common comments expressed by the users.

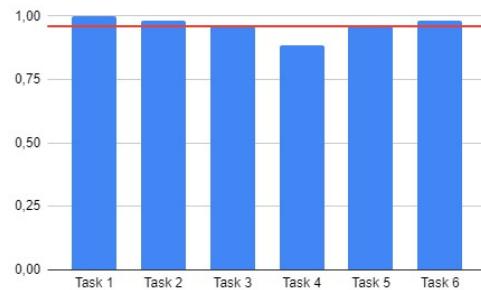
Average time

Accessing the most relevant and specific information on a website quickly is crucial, especially in situations where users are in danger and need immediate help. Fortunately, the average time for completing tasks on our website is generally satisfactory. The most important task was the first one (finding HERmet address) and, fortunately, the average time is the lowest, around 10 seconds with an approximately zero variance, indicating a consistent and efficient process. The task with the longest time spent on was the fourth (finding help through the virtual assistant), the main reason is that every user had to write her own message and that, naturally, required some time.



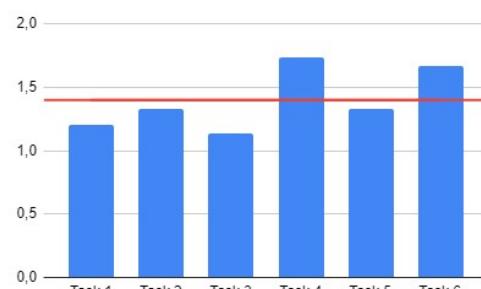
Success Rate

As previously mentioned, the success rate is calculated as a value between 0 and 1 based on the evaluator's rating (with a range from 1 to 4) for each user's task. The average time spent on tasks generally aligns with their success rate. Overall, the average success rate is impeccable. The only task with a slightly lower success rate is the forth one. Some users experienced difficulties locating the chatbot on the website, primarily because they had never used a virtual assistant before. However, once they read the instructions on the home page, they were able to find and use it successfully.



Average number of attempts

The average number of attempts for completing tasks on our website is below two, which is a very impressive result. The two tasks with the highest average are the fourth and the sixth. The fourth task, finding help through the virtual assistant, requires more attempts due to users' unfamiliarity with using a virtual assistant, as previously explained. The sixth task, finding the volunteer form, also has a higher average number of attempts. This is because the form is not directly accessible from the navigation menu but can be found on the "About Us" page, in the footer, and on the home page.



Frequency of Navigation Menu usage

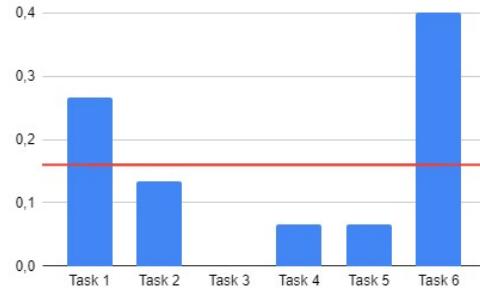
The menu is a fundamental component of a website, as it directs users to the appropriate pages by providing suggestions and organizing items into categories or sections based on their purpose or semantics. As depicted



in the accompanying plot, the menu was frequently utilized during User Testing, indicating that it effectively guided users to the necessary information to complete tasks.

Frequency of Home button usage

The Home button was not frequently used during the test. The main reason is the effectiveness of the navigation menu.



Back button usage

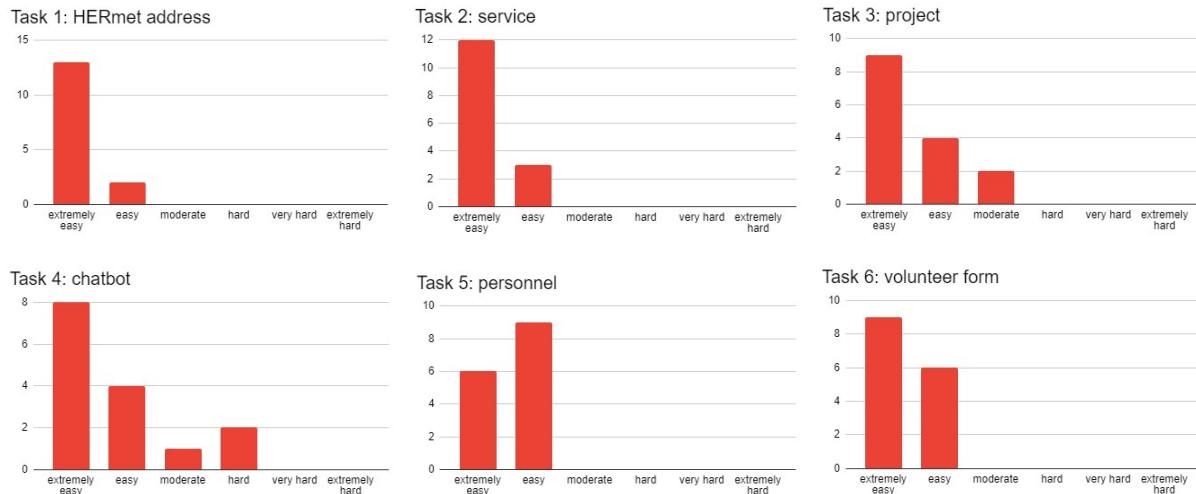
The browser back button was never used by any of the users.

7.7 Questionnaire

After each user completes their testing, the evaluator provides them with a questionnaire to complete. This questionnaire is essential for us because it provides another method to gather additional information from the users regarding the testing they just completed. Please note that most questions require a rating within a specified range, but there are also multi-option questions and questions with open-ended answers. The full set of questions is provided in the annexes. Users had mainly positive comments regarding the website, along with some suggestions. They found the navigation very intuitive, and they loved its aesthetic design. Here are the users' considerations:

- The chatbot is the most interesting part; its answers are understandable and consistent.
- The activities are well organized and easy to navigate between. The title is self-explanatory, the practical information is clear and visible, and the descriptions are readable.
- Finding the employees based on their role is not very intuitive. However, once figured out, it was very helpful. The personal pages of the employees were clear and readable.
- The contacts are easy to find, and the "Contact Us" page is well balanced. The only problem was that the address of the center was not present in the footer.
- The home page was well organized and easy to scroll.
- The arrangement of the items on the About Us page was interesting and pleasant to see. The only problem was finding the links.

Additionally, here are the plots of the grades given by the users in the questionnaire, regarding the difficulty of each of the assigned tasks.



7.8 Conclusions

We took into account the users' suggestions and made several improvements. We added the address of the center to the footer, set the default filter on the personnel group page to "All" to make it more intuitive, and added some buttons on the About Us page.

Overall, we believe the user testing went very well. The positive feedback highlighted the intuitive navigation and aesthetic design of the website. Users found the chatbot to be particularly engaging and appreciated the clarity of information provided about activities and contacts. While some minor issues were noted, such as finding employees based on their role and locating certain links on the About Us page, these have been addressed. We conclude that our website is well-organized, user-friendly, and effectively meets the needs of our target audience.

8 Annexes

8.1 Abstract Pages

8.1.1 Kind Of Topic Pages

KIND of TOPIC SERVICE	
Orientation Info	Practical information and description of a particular service
Kind Of Topic Content	Service Name: TEXT[30]
	Service picture: IMAGE
	Service logo: IMAGE
	Contacts: TEXT[100]
	Leader: TEXT[30]
	Description: TEXT[500] Testimonials: LIST OF TEXT[200]
Landmarks	Navigation Menu
	Home
	Socials
	Chatbot
Transition Links	To the person responsible for the service
Group Links	Up to All Services
	Next/Previous Service

KIND of TOPIC PROJECT	
Orientation Info	Detailed description of a particular project
Kind Of Topic Content	Project Name: TEXT[30]
	Project picture: IMAGE
	Statistics: TEXT[100]
	Contacts: TEXT[100]
	Leader: TEXT[30]
	Description: TEXT[500]
Landmarks	Navigation Menu
	Home
	Socials
	Chatbot
Transition Links	To the person responsible for the project
Group Links	Up to All Projects
	Next/Previous Project

KIND of TOPIC PERSON	
Orientation Info	Detailed description of a particular person
Kind Of Topic Content	Name and Surname: TEXT[30]
	Role: TEXT[30]
	Person picture: IMAGE
	Contact information: TEXT[100]
	Short description: TEXT[500]
	Related Projects Preview: LIST OF [Project Name, Image]
Landmarks	Related Services Preview: LIST OF [Service Name, Image]
	Navigation Menu
	Home
	Socials
Transition Links	Chatbot
	To the person responsible for the project
Group Links	Up to All Projects
	Next/Previous Project

8.1.2 Topic Pages

TOPIC: ABOUT US	
Orientation Info	Introductory page, contains small description about the website and history of the centre.
Topic Content	"About Us": TEXT[30]
	Picture: IMAGE
	Mission: TEXT[200]
	History: TEXT[500]
	Practical Information: TEXT[500]
	Activities: LIST OF[Activity Name, Picture]
Landmarks	Volunteer: TEXT[500]
	Navigation Menu
	Home
	Socials
Transition Links	Chatbot
	To the activity pages
	To the Contact Us page
	To the Volunteer page

TOPIC: HOME	
Orientation Info	Home page of the website.
Topic Content	Title: TEXT[30]
	Picture: IMAGE
	Activity: TEXT[200]
	Contacts: TEXT[200]
	Volunteer: TEXT[200]
	Chatbot: TEXT[500]
Landmarks	Navigation Menu
	Home
	Socials
	Chatbot
Transition Links	To one activity page
	To the Contact Us page
	To the Volunteer page

TOPIC: CONTACT US	
Orientation Info	Contacts and address of the centre.
Topic Content	Physical location: MAP
	Phone Number: TEXT[13]
	Email: TEXT[20]
	Picture: IMAGE
	Social medias: LIST OF IMAGES

TOPIC: VOLUNTEER	
Orientation Info	Volunteer Page.
Topic Content	Introduction: TEXT[5000]
	Form

8.1.3 Group Pages

GROUP: ALL ACTIVITIES	
Orientation Info	List of projects and list of services.
Group Content	”Our Services”: TEXT[12]
	Service Preview: LIST OF [Service Logo, Service Title]
	”Our Projects”: TEXT[12]
	Project Preview: LIST OF [Project Logo, Project title]
	Navigation Menu
	Home
Landmarks	Socials
	Chatbot
	Down to All Services
	Down to All Projects
Group Links	Down to Service
	Down to Project

GROUP: ALL SERVICES	
Orientation Info	List of services.
Group Content	"Our Services": TEXT[12] Service Preview: LIST OF [Service Logo, Service Title]
Landmarks	Navigation Menu Home Socials Chatbot
Group Links	Down to a specific Service

GROUP: ALL PROJECTS	
Orientation Info	List of projects.
Group Content	"Our Projects": TEXT[12] Project Preview: LIST OF [Project Logo, Project Title]
Landmarks	Navigation Menu Home Socials Chatbot
Group Links	Down to a specific Project

GROUP: ALL PEOPLE	
Orientation Info	List of projects and list of services.
Group Content	Members Preview: LIST OF [Person thumbnail image, Person's name and surname, Person's current role]
Landmarks	Navigation Menu Home Socials Chatbot
Group Links	Down to a specific Person

8.2 User Testing

8.2.1 Evaluation table

	U1	U2	U3	U4	U5	U6	U7	U8	U9	U10	U11	U12	U13	U14	U15
TASK 1	Completed	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	Time	0.00.10	0.00.09	0.00.09	0.00.08	0.00.06	0.00.05	0.00.20	0.00.16	0.00.12	0.00.10	0.00.07	0.00.05	0.00.21	0.00.24
	#Try	1	1	1	1	1	1	2	2	1	1	1	1	2	1
	#Back	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	#Home	1	1	0	0	0	0	0	0	0	0	1	1	0	0
TASK 2	Completed	4	4	4	4	4	4	4	4	4	3	4	4	4	4
	Time	0.00.26	0.00.27	0.00.33	0.00.18	0.00.18	0.00.39	0.00.13	0.00.14	0.00.32	0.00.21	0.00.40	0.00.28	0.00.33	0.00.26
	#Try	1	1	1	1	1	1	1	1	1	2	2	3	2	1
	#Back	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	#Home	0	0	0	0	0	0	0	0	0	0	0	1	1	0
TASK 3	Completed	4	4	3	4	4	4	4	4	4	3	4	4	4	4
	Time	0.00.47	0.00.25	0.01.58	0.00.17	0.00.20	0.00.18	0.00.10	0.00.09	0.00.27	0.00.30	0.00.38	0.00.49	0.00.21	0.00.42
	#Try	1	1	2	1	1	1	1	1	1	2	1	1	1	1
	#Back	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	#Home	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TASK 4	Completed	4	4	4	4	3	2	4	4	2	4	4	4	4	4
	Time	0.01.00	0.01.10	0.00.52	0.00.49	0.02.13	0.03.38	0.00.55	0.00.29	0.02.57	0.01.00	0.01.08	0.00.43	0.00.46	0.01.37
	#Try	1	1	1	1	4	5	1	1	4	1	1	1	2	1
	#Back	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	#Home	0	0	0	0	0	1	0	0	0	0	0	0	0	0
TASK 5	Completed	4	4	4	4	4	3	4	4	4	3	4	4	4	4
	Time	0.00.15	0.00.52	0.00.26	0.00.57	0.00.18	0.00.40	0.00.35	0.00.55	0.01.03	0.00.30	0.01.07	0.00.15	0.01.09	0.00.55
	#Try	1	1	1	2	1	1	1	2	1	1	2	1	3	1
	#Back	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	#Home	0	0	0	0	0	0	0	0	0	0	0	1	0	0
TASK 6	Completed	4	4	4	4	4	4	4	4	3	4	4	4	4	4
	Time	0.00.15	0.00.08	0.00.17	0.00.32	0.00.08	0.00.15	0.00.10	0.00.12	0.00.38	0.00.05	0.00.15	0.01.20	0.00.11	0.00.54
	#Try	1	1	2	2	1	1	1	1	4	1	2	2	1	3
	#Back	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	#Home	0	1	0	1	0	1	0	0	1	1	0	0	1	0
	#Navbar	1	0	2	1	1	0	0	1	3	0	2	2	0	2

8.2.2 Questionnaire questions

Graded questions

- Select the difficulty of Task 1 - find HERmet address - [0,5]
- Select the difficulty of Task 2 - find desired service - [0,5]
- Select the difficulty of Task 3 - find desired project through person in charge - [0,5]
- Select the difficulty of Task 4 - use the chatbot - [0,5]
- Select the difficulty of Task 5 - find information about the personnel - [0,5]
- Select the difficulty of Task 6 - became a volunteer - [0,5]
- Rate the aesthetic and design of the website - [0,5]

Activities questions

Regarding the following sentences select how much you agree on a scale from 0 to 4:

- The name is self-explanatory

- The description is clear and readable
- Images are relevant and appropriate
- Practical information are visible and understandable
- Finding the person in charge is easy and intuitive
- Services' testimonials are readable
- Navigation between the activity is easy and intuitive

Personnel questions

Regarding the following sentences select how much you agree on a scale from 0 to 4:

- The description is clear and readable
- The length of the description is right
- Finding the contacts is easy
- Finding the CV is easy
- Photographs are of the right dimension
- Photographs are appropriate
- Finding the personnel based on the role is simple
- Navigating between the personnel of the center is easy

Chatbot questions

Regarding the following sentences select how much you agree on a scale from 0 to 4:

- Her purpose is clear
- Finding her in all pages is convenient
- Her answers are clear
- Her answers are consistent
- Her answers express the right amount of sentiment

The users may, also, provide some comments about positive and negative features that they recognized while navigating through the website, in addition to whatever kind of feedback they could provide.