



## Join Us to Optimize Health Through Cohort Research

Deliverable 3.2 Report on technical implementation of the platform

Version 1.0

This project has received funding from the *European Union's Horizon 2020 research and innovation programme* under grant agreement No 101006518.



<b>Project Name</b>	Join Us to Optimize Health Through Cohort Research (JoinUs4Health)
<b>Project No.</b>	101006518
<b>Project Type</b>	Coordination and Support Action
<b>Project Duration</b>	01/01/2021 – 31/12/2023 (36 months)
<b>Project Website</b>	<a href="https://joinus4health.eu/">https://joinus4health.eu/</a>
<b>Project Platform</b>	<a href="https://platform.joinus4health.eu">https://platform.joinus4health.eu</a>
<b>Project Coordinator</b>	Birgit Schauer (UMG)
<b>Funded under</b>	Grounding Responsible Research and Innovation in society with a focus on citizen science (SwafS-23-2020)
<b>Work Package</b>	WP3 Technical implementation
<b>Deliverable</b>	D3.2 Report on technical implementation of the platform
<b>Version</b>	1.0
<b>Planned Date</b>	Month 24 (December 2022)
<b>Actual Submission</b>	31/01/2023
<b>Author</b>	Birgit Schauer (UMG)
<b>Contributors</b>	Benjamin Winter (UMG), Robert Kondracki (Science4People)
<b>doi</b>	<a href="https://doi.org/10.5281/zenodo.7591916">https://doi.org/10.5281/zenodo.7591916</a>

UMG: University Medicine Greifswald

Please cite this work as:

JoinUs4Health Consortium, 2023. Deliverable 3.2 Report on technical implementation of the platform (version 1.0), University Medicine Greifswald, Germany; <https://doi.org/10.5281/zenodo.7591916>

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## Summary

This deliverable summarizes the technical implementation of the online JoinUs4Health platform, which was designed to promote inclusive innovation and engagement of different societal groups in cohort research. The platform and processes were designed to provide safe spaces for structured exchanges linking consultative mechanisms with deeper co-creation processes in smaller teams. Platform contents are publicly accessible. Registered users (minimum age: 16 years) can submit suggestions, vote or comment on other users' suggestions and provide contributions via Tasks or Teams. This document describes the technical platform implementation, the platform design, possibilities for external hosting and outlook.

## 1 Introduction

The goal of the JoinUs4Health online platform (<https://platform.joinus4health.eu/>) is to

- collate suggestions, ideas, needs and expectations regarding health-related aspects,
- recruit volunteers to contribute to selected topics, and
- co-create knowledge and activities around selected topics via voluntary contributions.

Ultimately, the platform allows

- promoting inclusive innovation and citizen engagement in cohort research,
- increasing transparency regarding cohort research,
- sharing cohort findings with the community in targeted manner, and
- deepening democratic opportunities within science.

This deliverable provides an overview of the platform including its technical, visual and content design and outlines options for external hosting of the platform by other institutions.

## 2 Background

### 2.1 The JoinUs4Health project

The JoinUs4Health project combines Responsible Research and Innovation and crowdsourcing as converging approaches to make cohort research more engaging and inclusive. Responsible Research and Innovation and crowdsourcing both opt for a systemic holistic perspective and combine retrospective perspectives (learning from experience) with prospective ones (exploring scenarios). Crowdsourcing reflects the urgent need to transform our methodologies on the basis of “collective thinking”, while Responsible Research and Innovation implies that societal actors work together during the whole process in order to better align its outcomes with the values, needs, concerns and expectations of society. Combining crowdsourcing and Responsible Research and Innovation has the potential to break the glass wall between the general public and scientists and increase society's readiness to see science as an investment in the future.

### 2.2 The JoinUs4Health platform

Under the JoinUs4Health project, we have developed an online platform and established processes of engagement with the goal to provide safe spaces for structured exchanges linking consultative mechanisms with deeper co-creation processes in smaller groups. The concept includes the collation of suggestions and ideas, options to up-vote, comment and indicate willingness to contribute and recruitment of volunteers for selected topics (Steps 1-3 in Figure 1). Team-level interactions via facilitated teams consist of implementation (4) and dissemination of outputs (5).

Three of the project partners are medical universities implementing cohort research ('cohort institutions'):

- University Medicine of Greifswald: Study of Health in Pomerania, Germany
- Medical University of Bialystok: Bialystok Plus, Poland
- Erasmus Medical University: Rotterdam Study, the Netherlands

Teams can apply for cohort results tailored to their question of interest (4e) if the respective local Citizen Science Board with potential input from the Boards and Scientific Steering Committee of the cohort institutions approves the result application.

The innovative potential of this concept arises from the options to collate suggestions, systematically cross-fertilize between team- and community-level interactions and combine different scales of collaboration contribute. The JoinUs4Health platform (subsequently referred to as 'Platform') allows the responsible crowdsourcing methodology to be integrated into the three partner institutions implementing cohort research and thus acting as driver for institutional changes. At the same time, the platform provides a tool for cohort institutions to communicate their outputs tailored to the needs of the local community, thus emphasizing the potential benefits resulting from these local cohort projects. This may in turn enhance the preparedness of randomly selected cohort participants to take part in the medical examinations.

The minimum age for registering on the platform is 16 years, which is the minimum age in all three Member States to provide informed consent independent from parents or legal representatives. Platform contents are accessible without registration apart from suggestions and contributions, which have not yet undergone review and interactions within teams until they are made publicly visible.

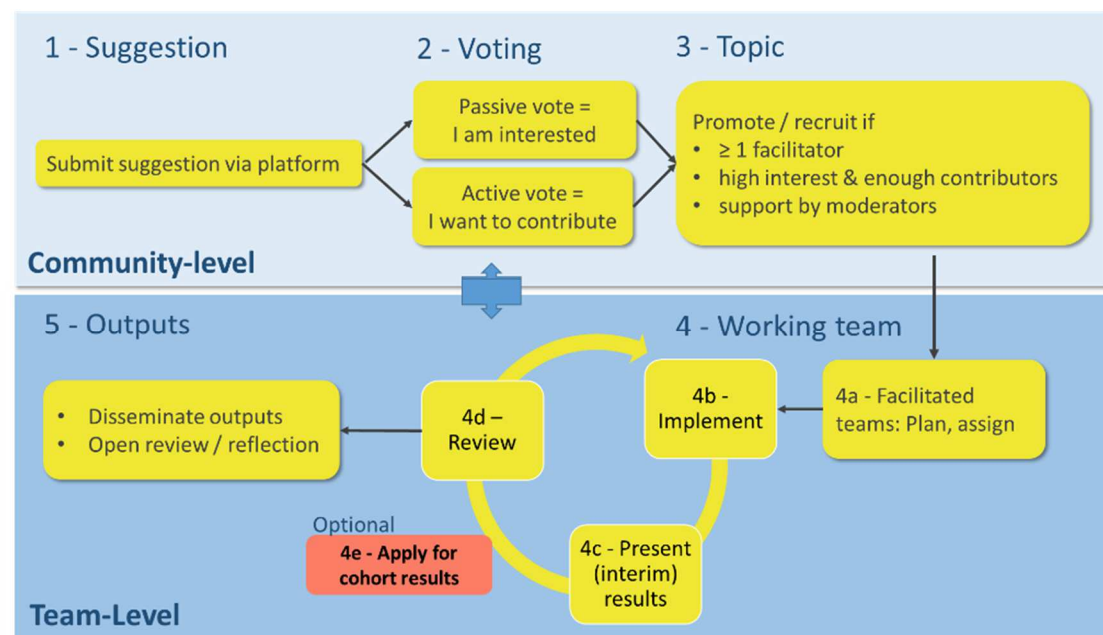


Figure 1. Core mechanism of JoinUs4Health with five core steps.

## 3 Technical implementation

### 3.1 Architectural design decisions

WordPress is a well-known and widely used open source content management system. Besides its important core features for the construction of the platform and content management, its functionalities can be extended through customisation and plugins created by independent or third-party developers. WordPress is built with a Hypertext Pre-processor (PHP) and uses an open source relational database management system (MariaDB) to store platform contents.

Advantages:

- easy to use
- well-known and broadly used: In 2018, the worldwide market share of WordPress amongst Web Content Management Systems was 60% (Martinez-Caro et al., 2018)
- wide, active development community
- includes important core features needed for construction of the platform and content management
- allows extending the content management system functionality through customisation and development of own plugins (e.g. JoinUs4Health plugin).

Risks

- plugins and their development state
- Hypertext Pre-Processor (PHP) in the back-end
- WordPress-Functions to be disabled and restricted for safety and security reasons
- no automatic build-process possible

### 3.2 Context view

The context view describes the platform in relation to other systems and tools as well as the platform users and their relationship with the platform.

#### 3.2.1 Online Platform

The JoinUs4Health platform is the system designed and implemented by the JoinUs4Health project team under Work Package 3 and is hosted under the address <https://platform.joinus4health.eu>. Design requirements were documented in Deliverable 3.1 (JoinUs4Health Consortium, 2021). This Deliverable 3.2 describes the technical implementation of the platform.

WordPress is installed with a so-called “WordPress-Toolkit” but without any special Plugins/Themes added. The “WordPress-Toolkit” provides further possibilities to simplify WordPress-Jobs like Backup, Clone and Security-Check. Technical details are continuously updated in our technical documentation, which will be published on GitHub: <https://github.com/JoinUs4Health>.

#### 3.2.2 Databases

The platform uses two separate databases, one for platform contents and a second one for personal user data such as profile data. The separation of content- and user-data adds a layer of security to protect the most sensitive information from unauthorised access.

### 3.3 Functional view

The functional view describes the components of the platform’s architecture and related access rights. The WordPress Content Management System forms the basis of the platform (Figure 2). Contents and user data of the platform are stored in two separate databases for security reasons.

Non-WordPress-tools are set up external to the platform. For Information about the used software, please see Section 3.5.

The front-end provides the end user with a customized user interface. The administration panel component represents the user interface for content creators and platform administrators to manage contents and permitted settings of the platform even with little technical skills. The WordPress backend component contains additional options for platform administrative staff, like automatic backup, security settings and server configuration.

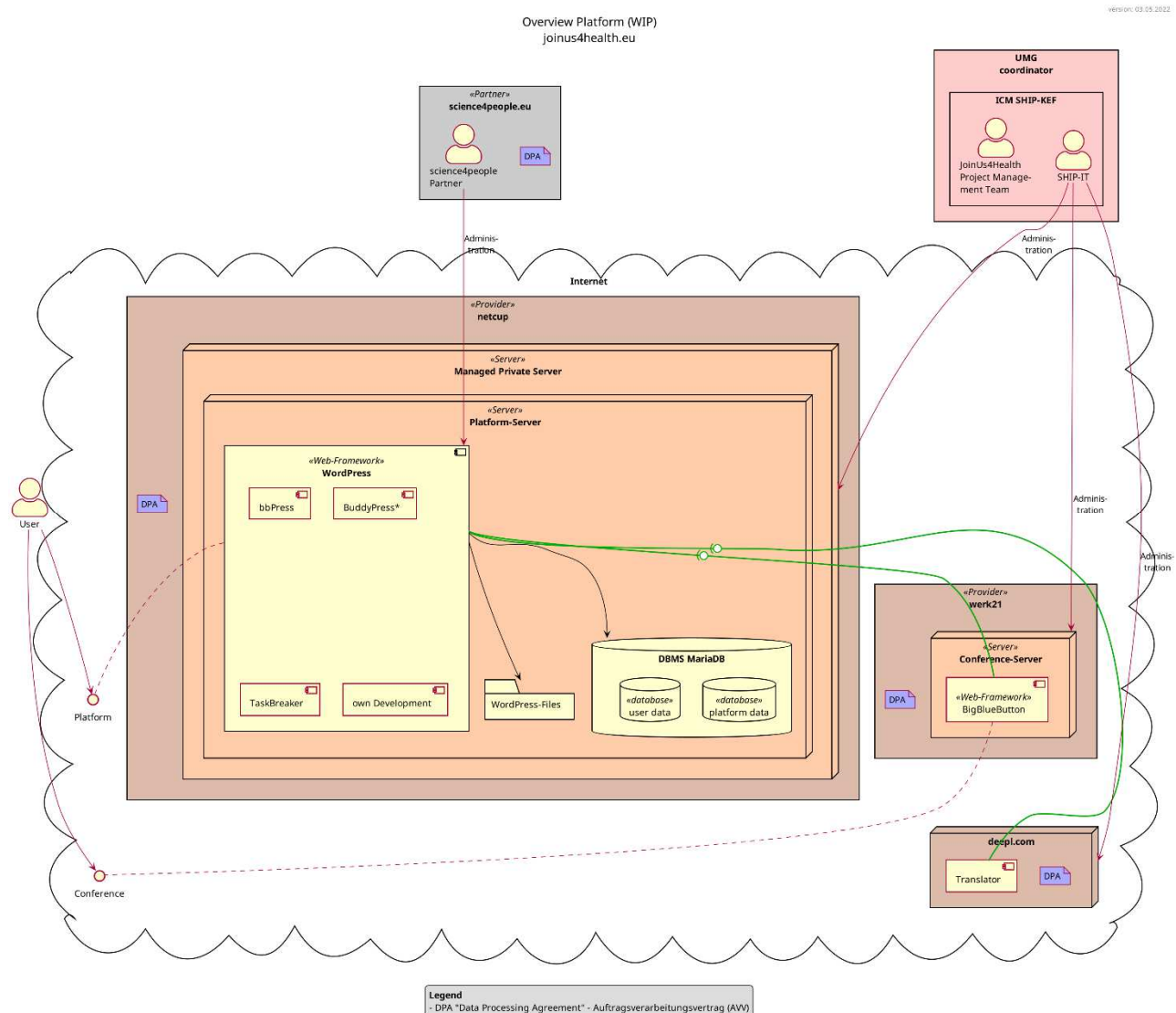


Figure 2. Functional view of the JoinUs4Health Platform



## 3.4 WordPress Themes and Plugins

### 3.4.1 Themes

Based on the "astra" theme we developed an own JoinUs4Health-theme adapted to our needs.

### 3.4.2 Plugins

WordPress functionality can be extended via additional plugins. At the time of submitting this deliverable version, the JoinUs4Health platform is using four plugins.

#### Plugin developed by JoinUs4Health project

##### JU4H plugin

- Description: This plugin was specifically developed to facilitate the crowdsourcing process described in Section 4.
- Links: Will be provided once the plugin is published.

#### Plugins officially developed by the WordPress founders and community

##### bbPress

- Description: This plugin provides the functionality of a discussion board
- Links
  - <https://wordpress.org/plugins/bbpress/>
  - <https://bbpress.org/>

##### BuddyPress

- Description: This plugin provides the functionality of a locally running social network software and handles registration and user interactions
- Links
  - <https://wordpress.org/plugins/buddypress/>
  - <https://buddypress.org/>

##### TaskBreaker - Group Project Management

- Description: TaskBreaker is project management plugin for WordPress and integrated with BuddyPress.
- Links
  - <https://wordpress.org/plugins/taskbreaker-project-management/>
  - <https://github.com/codehaiku/taskbreaker-project-management>

The documentation and settings of each plugin have been checked for privacy and security by a designated project representative. The results of these checks were documented and will be published in the technical documentation on GitHub: <https://github.com/JoinUs4Health>.

Experience report: Whilst general information about privacy policies for WordPress plugins can be found here: <https://termsfeed.com/blog/privacy-policy-wordpress-plugins/> (accessed on 21.12.2020), WordPress does not require plugin developers to provide a privacy policy. Therefore, there is no default link on the plugins page, if plugins have some kind of privacy policy. All the information about what data is processed can often only be found somewhere in the plugin's documentation (<https://developer.wordpress.org/plugins/privacy/>). Therefore, such checks can be very time-consuming. Plugin-developers should remind users, if they are legally required to have a Privacy policy and make the relevant information easily accessible.

Our plugin usage check was primarily concerned with privacy and security issues. We checked the plugin's documentation, history and reputation, as well as its update cycle and licence. Once checked, the plugin was tested on our dedicated test system to integrate it with the rest of the

platform. In addition, the configuration was often heavily changed due to privacy-unfriendly defaults. All changes are documented in the technical documentation.

### 3.5 Software used

Table 1 lists tools used in association with the Platform (Table 1). Details of their implementation are described in the following sub-sections.

Table 1. Overview of tools that can be applied in association with the JoinUs4Health platform

Tool	Purpose	URL
LimeSurvey	Questionnaire System	<a href="https://limesurvey.org">https://limesurvey.org</a>
DeepL	Automated translations	<a href="https://deepl.com/">https://deepl.com/</a>
Big Blue Button	Virtual meetings	<a href="https://bigbluebutton.org/">https://bigbluebutton.org/</a>
Matomo	Web analytics	<a href="https://matomo.org/">https://matomo.org/</a>

#### 3.5.1 LimeSurvey: Tool to create online questionnaires

LimeSurvey provides easy to configure and easy to use online questionnaire forms with machine readable data output for good postprocessing.

The implementation in our project is to allow users to create questionnaires within their projects to collect more data on their topics. The release of a questionnaire to the public is only done after we have checked that no personal data is being collected.

#### 3.5.2 DeepL: Automated translations

DeepL provides a data friendly translation service and supports many languages. The implementation on our platform helps users to understand content, even if it's written in a foreign language.

#### 3.5.3 Big Blue Button Tool: Virtual meetings

BigBlueButton is software that enables virtual audio and video conferencing. In addition to a range of tools such as whiteboard, chat, shared pad and hand signals, it can also be used in a privacy-compliant manner.

#### 3.5.4 Matomo: Web analytics

Matomo is a software that runs in the background and collects anonymous information about the users of the platform. The data collected can be used to determine how many people have used which pages at what time and it can also be roughly determined where these people come from and which pages are well received by them.

In contrast to US services, Matomo can be set up in a privacy-friendly way and runs completely locally. User data is immediately anonymised and cannot be linked to other data.

## 3.6 Access to the JoinUs4Health platform

### 3.6.1 Language options

The platform interface is available in four languages, that is the national language of each participating Member Country (Dutch, German, and Polish) as well as English as international language. These translations were checked by project partners. The language setting option (Figure 3) is placed on all pages at the top right corner.

Contents of Suggestions, Topics, Tasks and Teams are also provided in all four languages (with use of automated translations).

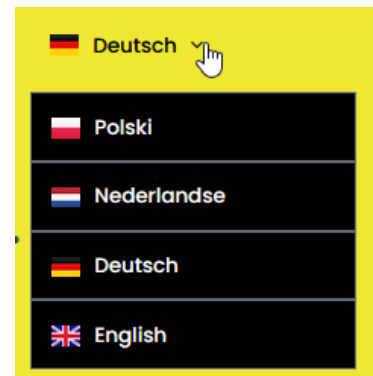
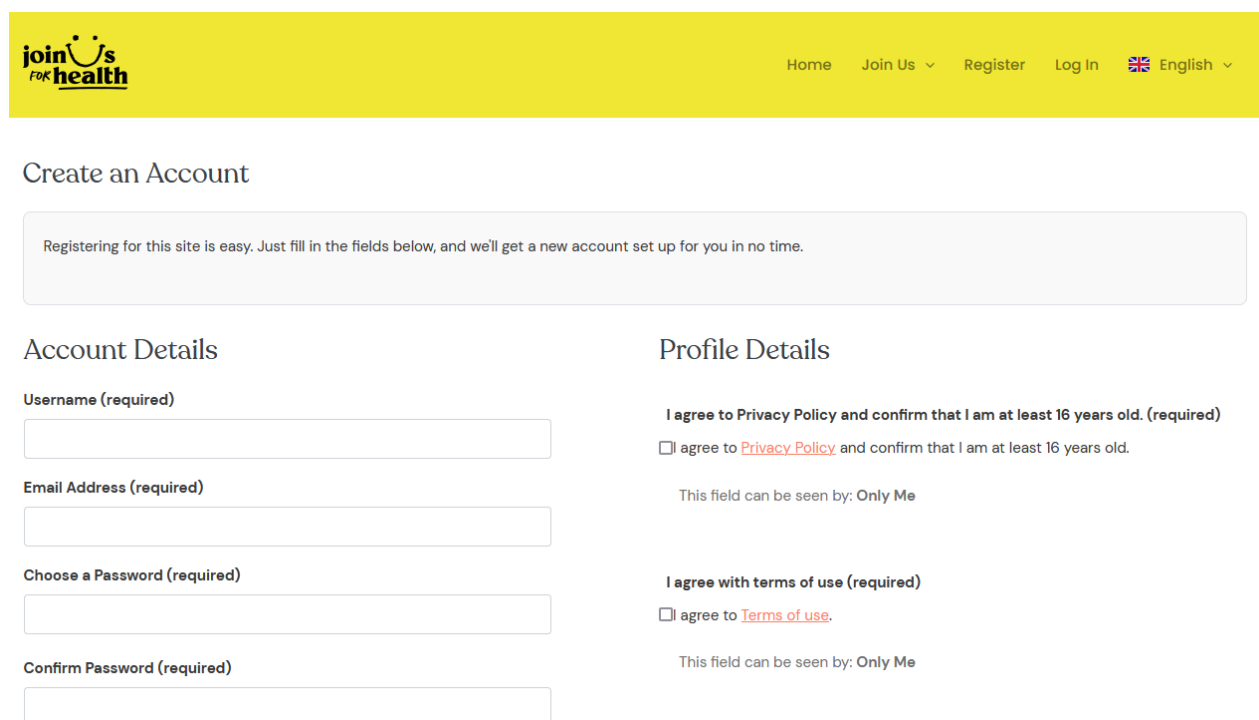


Figure 3. Selection of language option in the header section

### 3.6.2 Registration

Registration on the platform is not required to view platform contents. However, any engagement via the platform (e.g. submit suggestions, vote, contribute) requires a prior registration with an email account.

Upon registration, the user only needs to choose a user name (fictional or non-fictional) and specify the email address and a password (Figure 4). Furthermore, the user is obliged to agree to the Privacy Policy and Terms of Use via marking two tick boxes and confirm that the age requirement (16 years+) is met. A link is provided to access both of these documents. In addition, a double-opt-in is required to confirm the email address before the account is activated.



joinUs  
for health

Home Join Us Register Log In English

### Create an Account

Registering for this site is easy. Just fill in the fields below, and we'll get a new account set up for you in no time.

#### Account Details

Username (required)

Email Address (required)

Choose a Password (required)

Confirm Password (required)

#### Profile Details

☒ I agree to Privacy Policy and confirm that I am at least 16 years old. (required)

☐ I agree to [Privacy Policy](#) and confirm that I am at least 16 years old.

This field can be seen by: Only Me

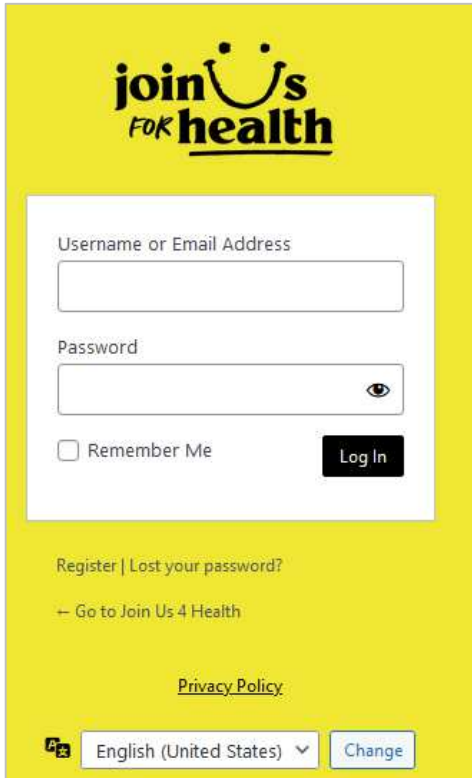
☒ I agree with terms of use (required)

☐ I agree to [Terms of use](#).

This field can be seen by: Only Me

Figure 4. Registration form of the JoinUs4Health platform

### 3.6.3 Log in



The log in page (Figure 5) offers the option to log-in via the registered account, request a new password and view the privacy policy document. Furthermore, the user has the option to change the language.

Figure 5. Sign in form accessible under <https://platform.joinus4health.eu/wp-login.php>

## 3.7 Analytics & Cookies

We do not use any third party tool to track user related information (e.g. Google Analytics). Only technically needed session cookies are used to identify the logged in users.

The privacy policy describes how user information is collected, for what purpose it is used and what rights the user has over it and can be accessed in German and English via a link provided in the footer.

## 3.8 Search engine optimisation

The WordPress Yoast SEO<sup>1</sup> plugin provides options of optimizing the site's search engine optimisation. At present, we added multi-language meta description and keywords, but do not fulfil requirements for further search engine optimisation.

In order to make our platform visible, we use the basic rules of website optimisation. Search engine bots are given permission by us to crawl the entire site via the robots.txt file.

## 3.9 Licensing

In line with the EU Commission's open access requirements, the platform and most of its tools are released under open-source licenses to allow free access, use and future modifications. The following tools require contractual agreements and purchases of licences:

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<sup>1</sup> <https://wordpress.org/plugins/wordpress-seo/>

- DeepL API Pro: DeepL API FREE can be used without paying for it but needs an account verified with a credit card
- Big Blue Button: as this is free, libre and open-source software, it can also be used self-hosted if an experienced technical team maintains it

The source code of the platform and related documentation will be published on the GitHub Organisation "JoinUs4Health" (<https://github.com/JoinUs4Health>).

### **3.10 Re-use of contents**

Users have the option to upload existing contents when

- making a suggestion,
- contributing a comment or
- interacting as part of a Team.

Furthermore, the facilitator or moderator of a Topic may upload an image to be displayed. We recommend a series of sites that can be used to select images with a free license (e.g. Creative Commons, OpenClipart, Unsplash).

Whenever a user uploads contents, the user is obliged to confirm that he/she has the right to upload this content and that it complies with the JoinUs4Health Terms of Use. Furthermore, the licence, the license-holder and (if applicable) source link are specified for images. JoinUs4Health allows some Creative Commons Licences and Public Domain content to acknowledge that the intellectual property of the original authors of the content has to be protected.

## 4 Platform design

### 4.1 Visual guidelines

The choice of logo, colours, fonts and layouts are based on the JoinUs4Health brandbook (JoinUs4Health Consortium, 2022) and in line with the JoinUs4Health website design.

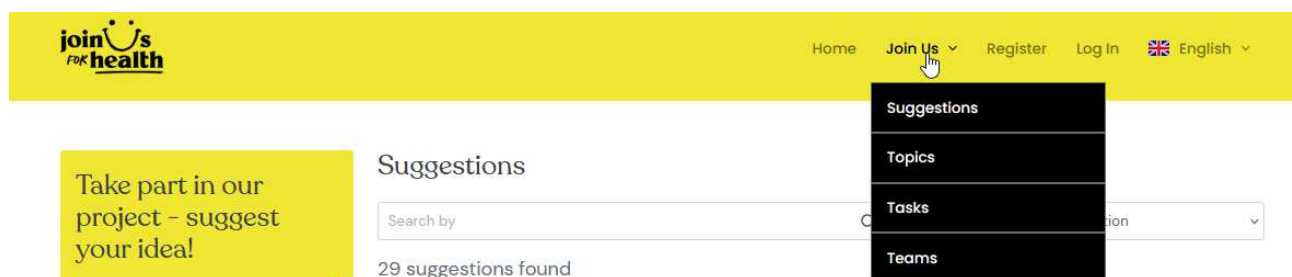
### 4.2 Page layouts

All page layouts are stored in the platform library. Administrative users can modify these layouts if required. Configurations for the JoinUs4Health platform and design specifications for headers, footers and contents are specified in the JoinUs4Health documentation.

### 4.3 Header and footer

The header and footer are shown in Figure 6 and Figure 7, respectively. The header includes the logo, the navigation bar, tabs for registration and log in as well as language settings (Figure 6). The footer provides links to the privacy statement, Terms of Use, Legal notice (English), funding information as well as the report abuse email address, for which a functional email account has been established (Figure 7).

a)



b)



Figure 6. Header of the JoinUs4Health platform with the logo and navigation bar including language settings (a) and a search function across all platform contents (b).

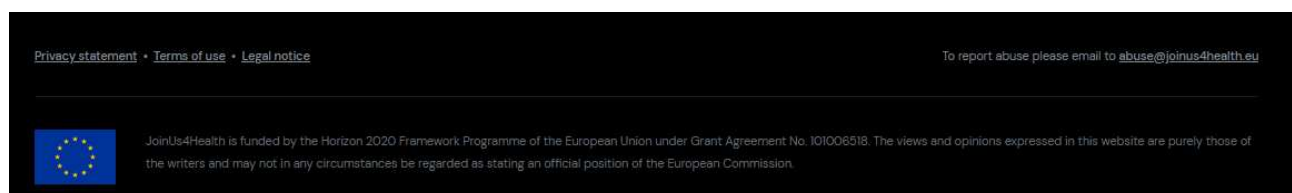


Figure 7. Footer of the JoinUs4Health platform with links to the privacy statement, Terms of Use, Legal notice, report abuse email address and funding information.

## 4.4 Platform structure

The platform consists of the Landing page and four main pages (Listing view). Each of the four main pages includes respective sub-pages for individual items (Detail view) (Figure 8). Another main page (Outputs) is in planning. The contents of each (sub-)page is briefly described below. The structure allows platform users to easily navigate to page needed by either using the navigation menu at the top right, the path shown on top of the contents or the respective links on the landing page.

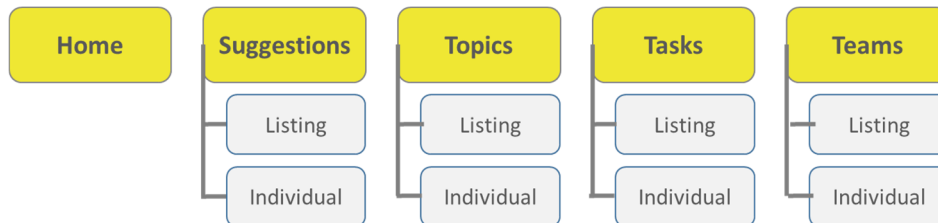


Figure 8. Overview of contents of the JoinUs4Health platform

### 4.4.1 Landing page

The landing page provides an overview of current focus areas, hot topics, suggestions (Figure 9), tasks and teams. These contents can be viewed by platform visitors as well as registered users.

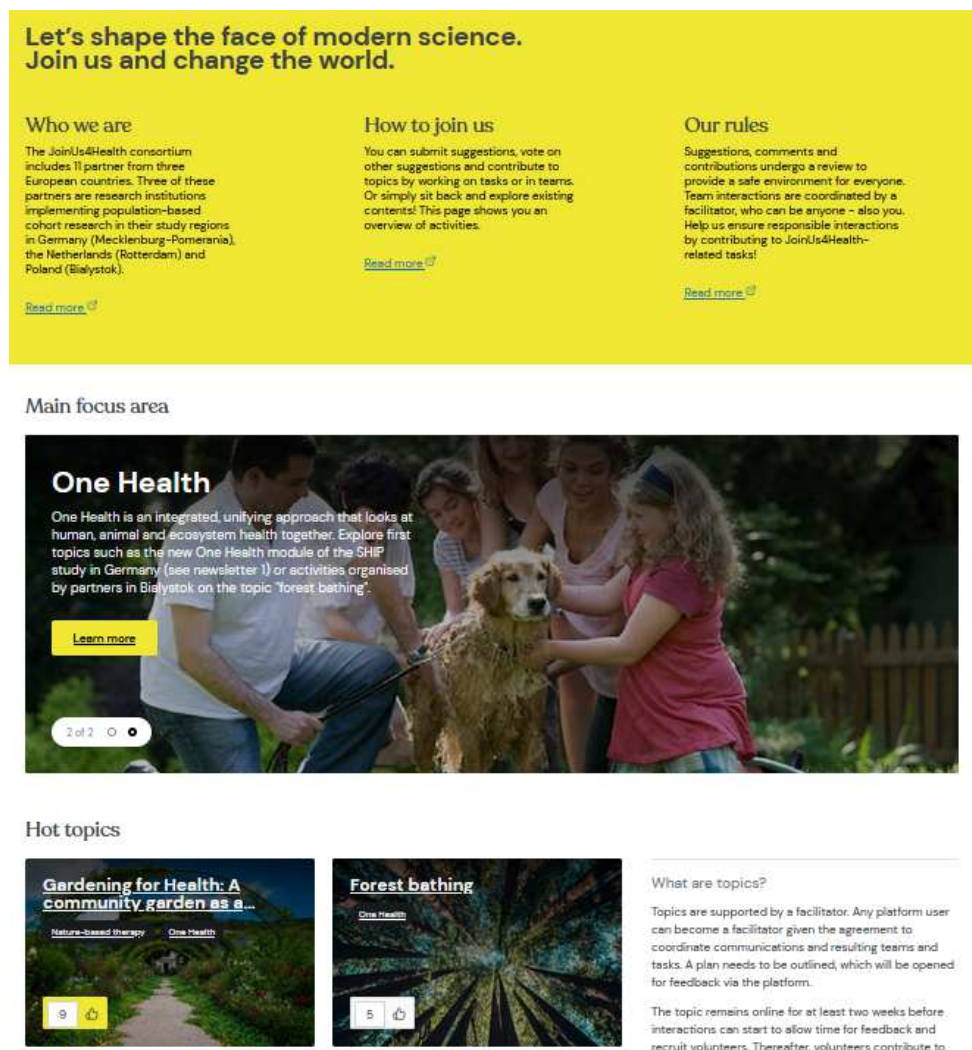


Figure 9. Screenshot of top part of the landing page showing current focus areas and hot topics (not shown: Further below the landing page also shows an overview of recent suggestions, tasks and teams)



## 4.4.2 Page Suggestions

Figure 10 and Figure 12 show the page designs of the listing of suggestions and of individual suggestions, respectively. The page listing suggestions allows registered platform user to submit own suggestions related to the topic of health and up-vote, share and follow suggestions. For suggestions, the action button “contribute” provides an indication of potentially interested contributors who will be notified in case further activities result from that suggestion. Submitted suggestions may for example be topics of interests, research questions, information needs, offers or other forms of suggestions. Please note that at present submitted suggestions as well as comments are requested to be reviewed by a reviewer or moderator. This process restriction may be turned off if this is deemed too limiting. Currently applied filtering fields and categories are shown in Table 2, whilst available action buttons are listed in Table 3. The page individual suggestions also allows users to upvote, share, follow and contribute. Furthermore, comments can be viewed and posted.

The screenshot shows the 'Suggestions' page. At the top, there is a yellow header with the 'join us for health' logo and navigation links: Home, Join us, Register, Log In, and English. Below the header, on the left, is a sidebar with a yellow box that says 'Take part in our project - suggest your idea!' and a 'Create new suggestion' button. Below this is a 'Filter' section with dropdown menus for Language, Country of submission, Stakeholder group, and Type, and input fields for Time period / from and Time period / to. The main content area is titled 'Suggestions' and shows a search bar and an 'Order by' dropdown. Below this, it says '25 suggestions found' and lists several suggestions with their titles, submission dates, and the number of votes. The suggestions listed are:

- What is the optimum deworming schedule for dogs and cats to protect all family members? (submitted by birgit / 21 February 2022, 21:29)
- Cohort findings related to nutrition, body weight, exercise, smoking and social activities? (submitted by birgit / 21 February 2022, 04:13)
- What is the connection between childhood worm diseases and allergy development or chronic diseases in old age? (submitted by birgit / 15 February 2022, 11:04)
- Impact of environmental influences, both on physical and mental health of humans (submitted by birgit / 15 February 2022, 11:03)
- Research into environmental awareness and actual environmental behaviour (submitted by birgit / 15 February 2022, 11:02)
- Influence of pets on human health (submitted by birgit / 15 February 2022, 11:01)
- Effect of road noise (residential location) on health (submitted by birgit / 15 February 2022, 11:00)
- How does eating pesticide-free and organically produced food affect healthy eating and also life expectancy? (submitted by birgit / 15 February 2022, 11:00)

Figure 10. Design of the listing of suggestions

The screenshot shows the 'Create new suggestion' form. At the top, there is a yellow header with the 'join us for health' logo and navigation links: Home, Join Us, and English. Below the header, the title 'Create new suggestion' is displayed. The form itself is a white box with a 'Type' dropdown menu. The dropdown menu is open, showing the following options: Topic of interest, Research question, Information need, Training need, Offer, Suggestion, and Example. Below the dropdown menu is a large text area for details. At the bottom of the form is a 'Create new suggestion' button.

Figure 11. Entry form when submitting a new suggestion including type of suggestion (e.g. Topic of interest, Research question, Information need), title and details.



a)

**Language**

any

any

Dutch

English

German

Polish

b)

**Country of submission**

any

any

Germany

the Netherlands

Poland

other

c)

**Stakeholder group**

any

any

citizens / citizens' organization

scientists

policy makers

business / industry

pupils / students

other group

d)

**Type**

any

any

topic of interest

research question

information need

training need

offer

suggestion

example

e)

**Time period / from**

**Time period / to**

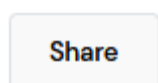
Table 2. Available filter criteria when screening collated suggestions: a) available language since not all items are always translated into all other three languages; English translations are recommended to be made available; b) country of submission, c) stakeholder group, d) type of suggestion and e) time period of submissions, for example allowing to screen suggestions made during a time in relation to other activities happening on the platform.



Creating new suggestion is highlighted as main action button. When clicking “create a suggestion”, the user is taken to the page shown in Figure 11



Activates or de-activates (colour = grey) the user’s vote on this suggestion



Allows sharing contents via Facebook, Twitter, Linkedin or via copying the URL-link (Figure 13)



User receives a notification if activities come up related to this suggestion in the future



The contribute button under suggestions indicates the willingness to contribute in case this suggestion is lifted to the status of a topic.

Table 3. Available action buttons on the page Suggestions



Figure 12. Page design of individual suggestions with action buttons Vote, Share, Follow and Contribute as well as a comment field

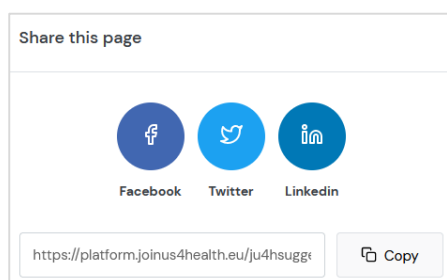


Figure 13. Options to share contents via Facebook, Twitter, Linkedin or via copying the URL-link

### 4.4.3 Page Topics

All tasks and teams need to be linked to an overarching topic, and each topic can have one or more associated tasks or teams. Topics can be searched, filtered according to the language available and sorted by date of publication or number of votes (Figure 14).

A topic can only be created if a facilitator and moderator is available. If a user is willing to take on either of these two roles, they can either take on this role for their own submitted suggestion or volunteer to facilitate or moderate a topic based on a suggestion made by other users. In some cases, topic can be created without making a suggestion first, for example upon invitation by a project representative or if a facilitator and moderator have already been identified a priori.

For Topics, the same action buttons are available as for suggestions apart from the first action button (make a suggestion). Furthermore, the “Contribute” action button has a different meaning: For topics, “contribute” means that the user is willing to contribute time to the topic (with suggestions, it is only an indication of the willingness, but no actual activities start until the suggestion has reached the level of a topic). The facilitator of a topic or team has the option to post a task to the JoinUs4Health community to support the work of the respective Topic or Team.

The screenshot shows the 'Topics' page of the JoinUs4Health platform. The header is yellow with the 'joinUs4Health' logo on the left and navigation links (Home, Join us, Register, Log In, English) on the right. Below the header, the word 'Topics' is centered. A search bar with a magnifying glass icon is on the left, and filters for 'Language' (set to 'any') and 'Order by' (set to 'Date of publication') are on the right. Below the filters, it says '5 topics found'. The topics are listed in a grid-like format. Each topic card includes a title, a submission date, a description, and tags. The first topic is 'Join the Festival of the New European Bauhaus', submitted by 'birgit' on 15 March 2022, 09:52. It has a description about the festival and tags for 'climate change', 'co-creation', and 'Europe'. The second topic is 'Hand-in-Hand', submitted by 'birgit' on 24 February 2022, 23:07. It has a description about cohort participants and a tag for 'Hand-in-Hand'. The third topic is 'JoinUs4Health-related tasks and activities', submitted by 'birgit' on 16 February 2022, 02:00. It has a description about tasks and a tag for 'JoinUs4Health-related tasks and activities'. Each topic card also features a small image on the right side.

Figure 14. Page design of the listing of topics

#### 4.4.4 Page Tasks

Tasks refer to specific actions, for which input is sought. Tasks may be content-related or system-relevant. Content-related tasks refer to a platform Topic.

Examples of content-related tasks:

- Completion of an online questionnaire, e.g. to provide feedback on the online platform
- Sharing of experiences or suggestions on a specific issue
- Review existing evidence
- Generate cohort-based results

System-related tasks allow the JoinUs4Health processes and concept to be implemented in a responsible and crowdsourced manner.

Examples:

- review of submissions (suggestions or comments)
- facilitator: taking care of a topic if considerable interest has arisen or relevance is considered high, but no facilitator has yet volunteered
- moderator: providing background support for a topic, task or working group

If such needs arise, which cannot be covered by current resources, the need is posted via the platform. In case the task cannot be covered by volunteering input, project staff may need to prioritize in consultation with the citizen science board. Specific efforts may then be taken to have these tasks addressed by representatives of the respective target group. For instance, personal or institutional networks could be used to promote the task. It may be worthwhile establishing sub-groups of interested volunteers within such networks. For example, an email distribution list could be established with cohort scientist interested in engaging via JoinUs4Health.

The listing of tasks (Figure 15) provides the same action buttons as the listing of topics. An individual task (Figure 16) includes a description including instructions on how to contribute. The action button “Contribute” is highlighted as main action button. Contributions to a task can be submitted via comments, by uploading related materials (via comment function) or by responding to an online questionnaire specifically developed for the task.

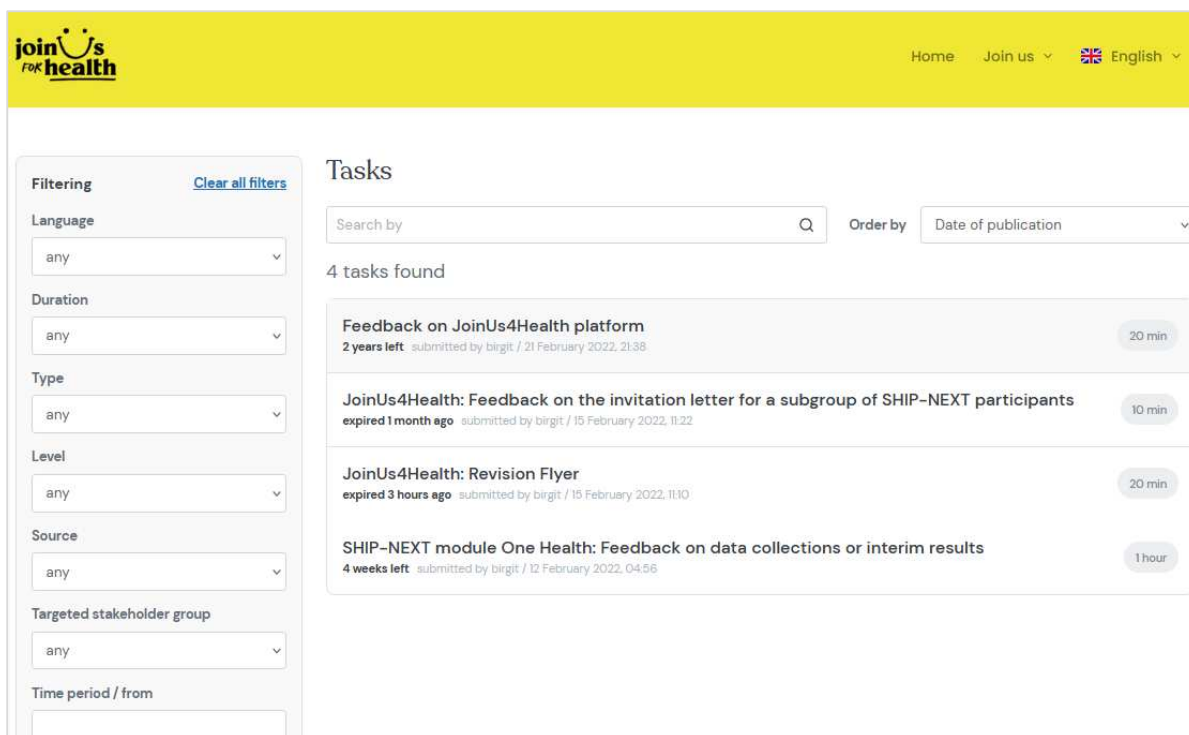


Figure 15. Page design of listing of tasks

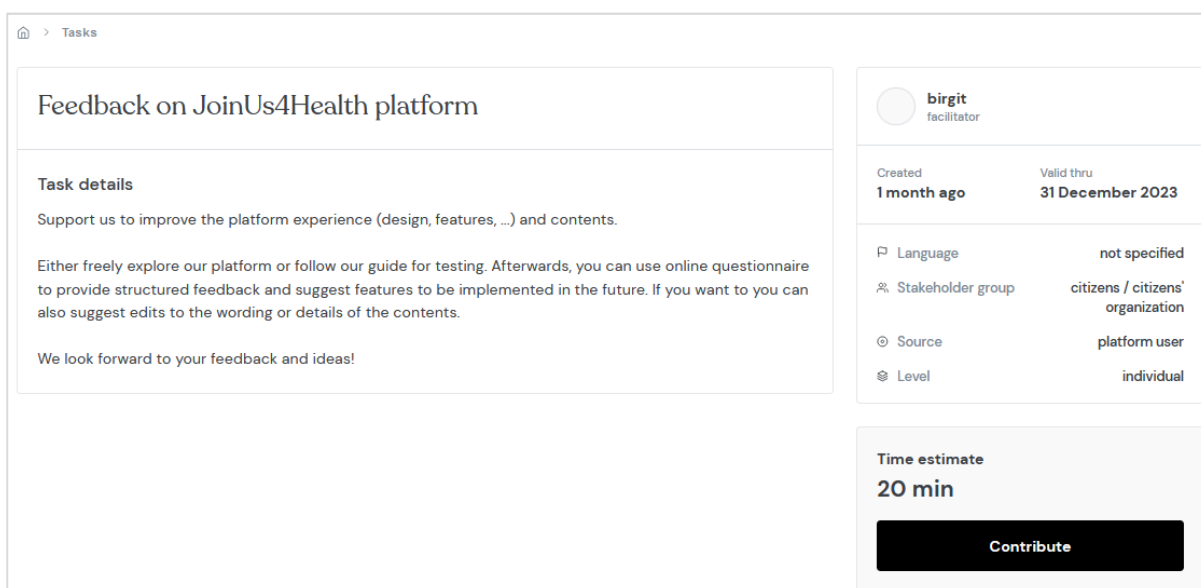


Figure 16. Page design of an individual task

#### 4.4.5 Page Teams

Teams allow users to participate in groups with common interest and content. Depending on the methods to be applied, a Team can be a small group or a larger group, which in turn may be split-up into sub-teams to work separately on specific activities and then report back to the larger team.

A team is always linked to a topic and managed by an assigned facilitator. The moderator of the corresponding topic acts as the principal moderator of linked teams, but can delegate tasks to other moderators.

A platform user can ask to join a team. The administrative users have the right to accept or reject a user request. Once a user is a team member, the user can use the team's forum to post content and join related sub-projects.

In the user profile, the user can select the role to play to interact with the social platform: personal profile or a specific team profile. As a team member, the user is able to perform exactly the same actions as with a personal profile, but everything will be owned by the team and on behalf of it.

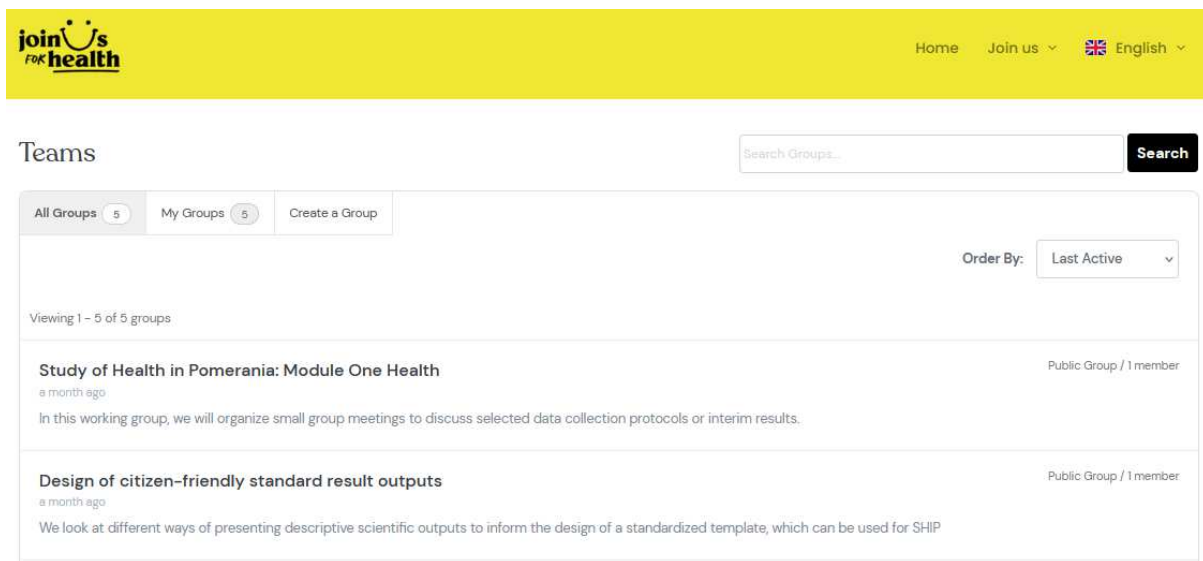


Figure 17. Page design of the listing of teams

#### 4.4.6 Profile section

The profile section allows the user to edit or delete their profile, get an overview of engaged topics and teams and view notifications.

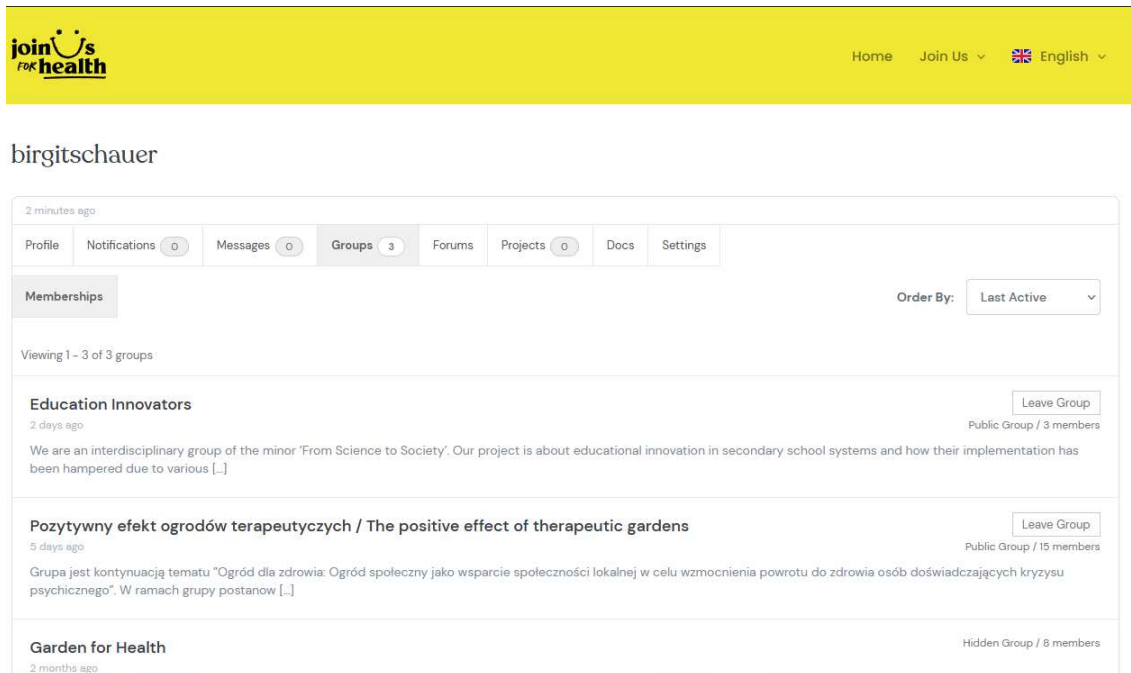


Figure 18. Design of the profile page

## 5 Outlook

The following platform features are planned to be developed during the 2<sup>nd</sup> phase of the project:

- Page “Repository” to provide an overview of and easy access to outputs
- WordPress plugin “Mind maps”
  - Description: Create mind maps to plan, take notes, visualise information, brainstorm, solve problems, study, and share
  - Information: languages: english, french
  - Link: <https://wordpress.org/plugins/mind-maps/>
- [Response to user feedback](#)

We continue to gather user feedback to optimize platform features and user experience, via the JoinUs4Health Task (<https://platform.joinus4health.eu/ju4htask/feedback-to-the-joinus4health-platform/>) and via feedback from people directly interacting via the platform (contributors, facilitators, moderators). Feedback can also sent directly via email ([contact@joinus4health.eu](mailto:contact@joinus4health.eu)).

## References

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- Martinez-Caro, J. M., Aledo-Hernandez, A. J., Guillen-Perez, A., Sanchez-Iborra, R., & Cano, M. D. (2018). A Comparative Study of Web Content Management Systems. *INFORMATION*, 9(2). <https://doi.org/10.3390/info9020027>