CONCEPT HANDBOOK

The COnCEPT platform is a collaborative design platform that has been developed as part of the COnCEPT FP7 EU funded project. The project aims to implement a semantically driven collaboration framework to be integrated into future synchronous/asynchronous collaborative design environments, to assist professional product designers during the early stages of the design process. In the current document, guidance to the usage of the platform is provided, through a tour among the supported tools and functionalities.

1. Access to the COnCEPT platform

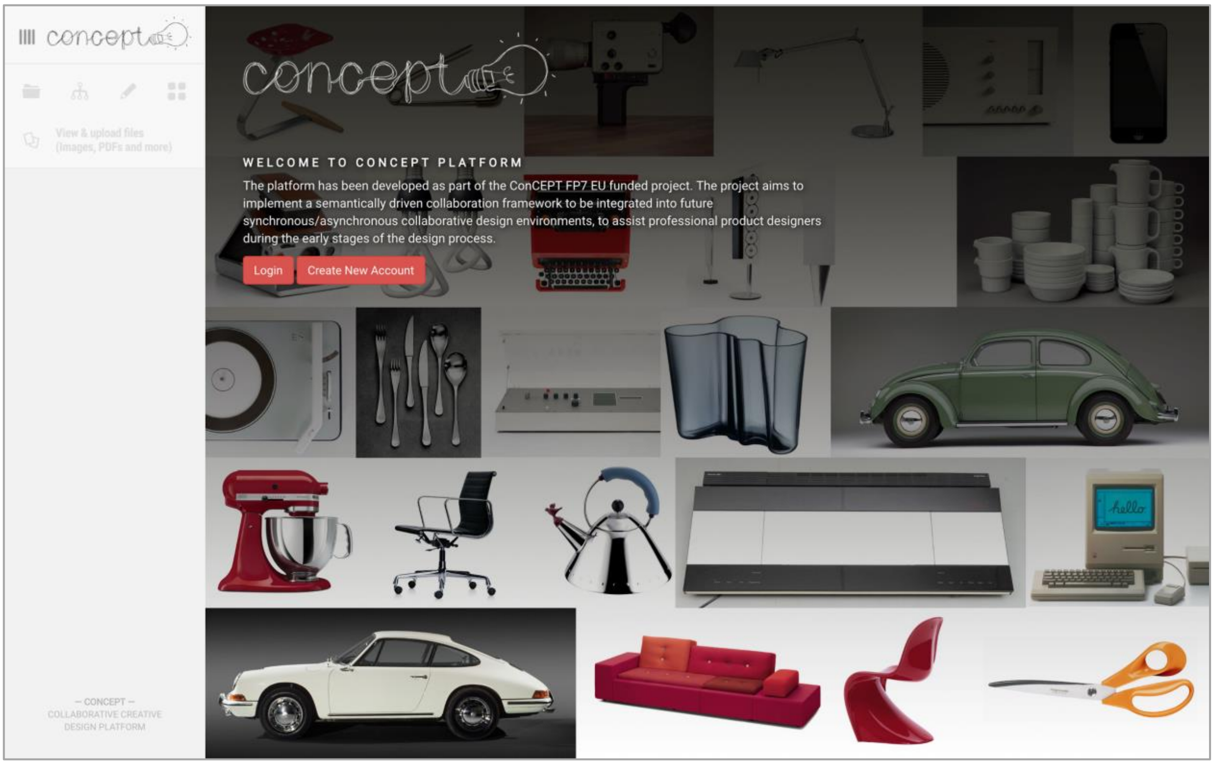

FIGURE 1: THE CONCEPT PLATFORM LANDING PAGE

The COnCEPT platform landing page (see Figure 1) (available at http://concept.euprojects.net/) provides the user with the ability to log-in to the platform by selecting the "Login" button. The user has to provide his/her user name and password in order to enter to the platform (see Figure 2).

Besides the log-in function, a new user can also be registered to the platform by selecting the "Create New Account" button. Here, one must fill all the given fields, select a fitting role (possible values: project manager, designer, client) and finally select the "Create Account" button (see Figure 3). The new user is then created and redirected to the main COnCEPT dashboard page.

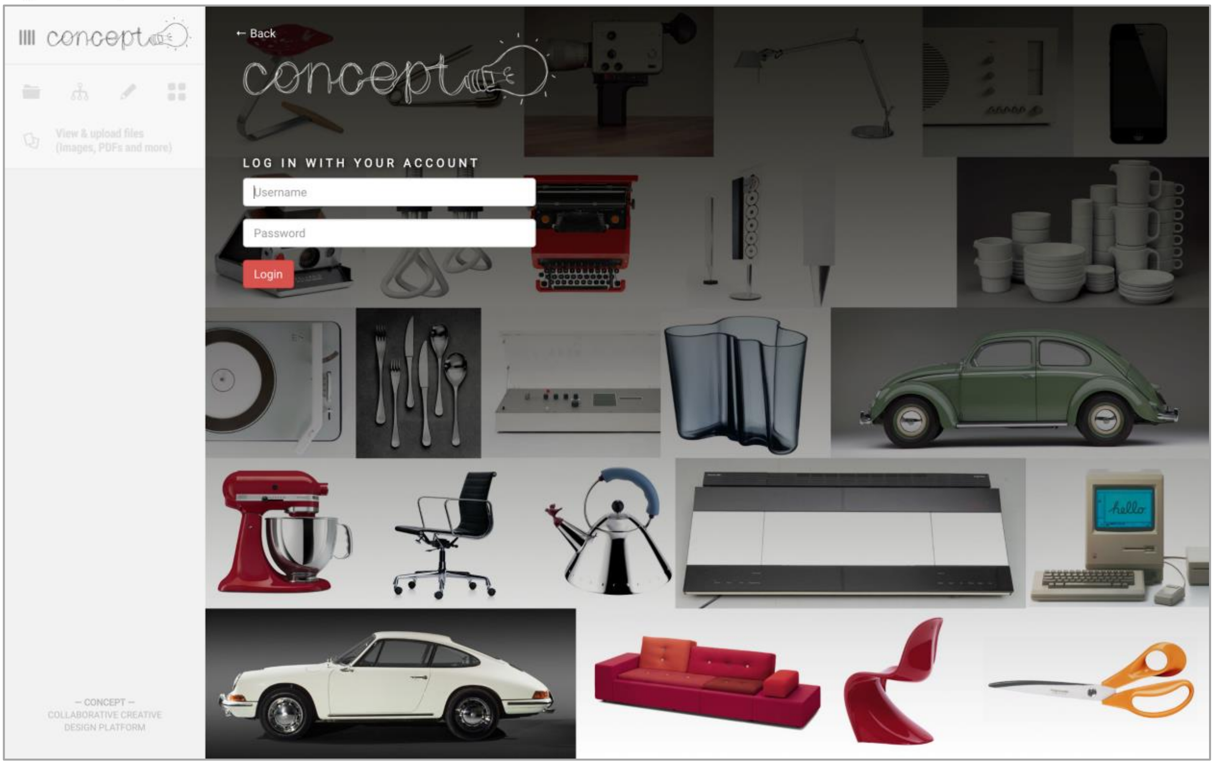

FIGURE 2: THE CONCEPT PLATFORM LOGIN PAGE

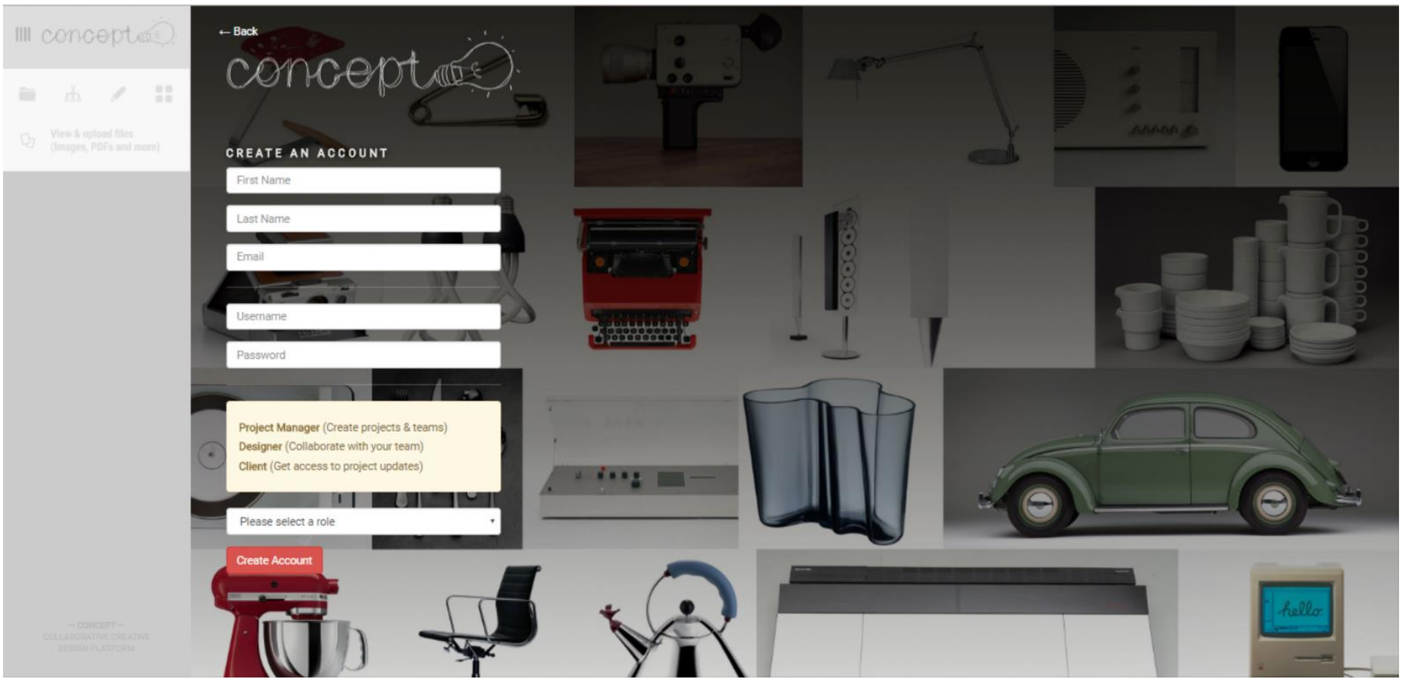

FIGURE 3: THE CONCEPT PLATFORM REGISTRATION PAGE.

2. COnCEPT Dashboard

Upon logging into the COnCEPT platform, the first view that a user has is the main COnCEPT dashboard (Figure 4). The main dashboard layout has inactive areas that are unlocked only when a project is created or chosen (Figure 5). It should be noted that each COnCEPT user has access only to the project that participates as a team member (as a project manager, designer or client).

The main dashboard is “separated” in two functional views. The left pane and the right pane, that include:

- The sidebar area (launcher icons for the set of tools, chat) at the left pane;
- The header area (project creation/selection/details, timeline, account, notifications) at the right pane;
- The main working area (application widgets, quick actions, recent changes) at the right pane;

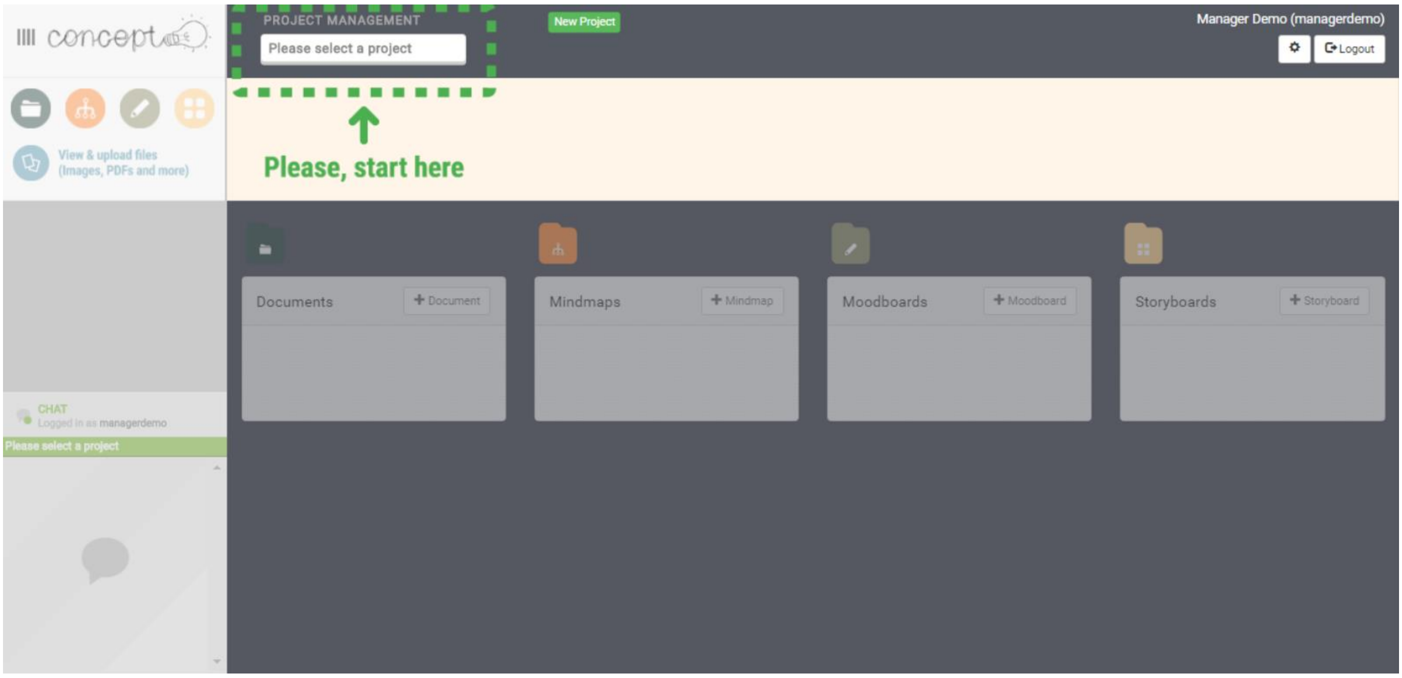

FIGURE 4: THE CONCEPT MAIN DASHBOARD (INACTIVE).

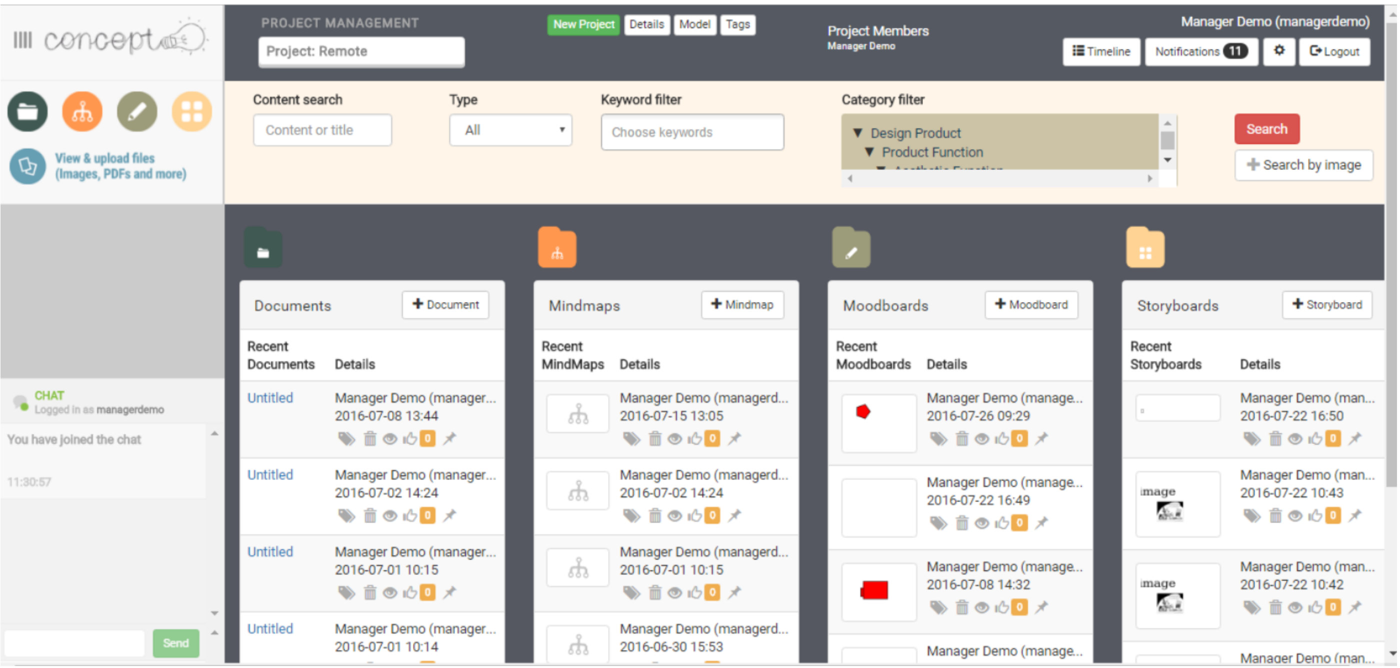

FIGURE 5: THE CONCEPT MAIN DASHBOARD (ACTIVE).

3. Project Management

Upon entering in the COnCEPT platform main dashboard, the user has to select a project in order to start working on it. In case that the user is a project manager, he is also able to manage an existing project or create a new one.

New Project Creation

In order to create a new project, the user navigates to the left side of the dashboard and selects the green button, named "New Project". The screen is then transferred to the OpenProject module used by the platform for project management purposes. There, the user completes the required fields for the description of a new project (see Figure 6, Figure 7, Figure 8):

- Name: The desired name of the project;
- Subproject of: Select from a dropdown list, whether this project is a spin-off of an already existing project or not;
- Summary: A short summary of the project;
- Description: A detailed description of the project;
- Identifier: A keyword that defines the project and can be used as an identifier later on. Identifiers are used for search and distinction purposes;
- Homepage: The project's URL;
- Public: Whether this project can be viewed by others or appear during search;
- Project type: Select from a dropdown list the type of the project. Possible values include "Scrum team" and "Standard project";
- Also, one can choose the modules to be enabled for this project by selecting the desired tickbox and the types to be used.

It should be noted that all the required fields are marked with an asterisk. Finally, the "Save" button must be pressed to save the project.

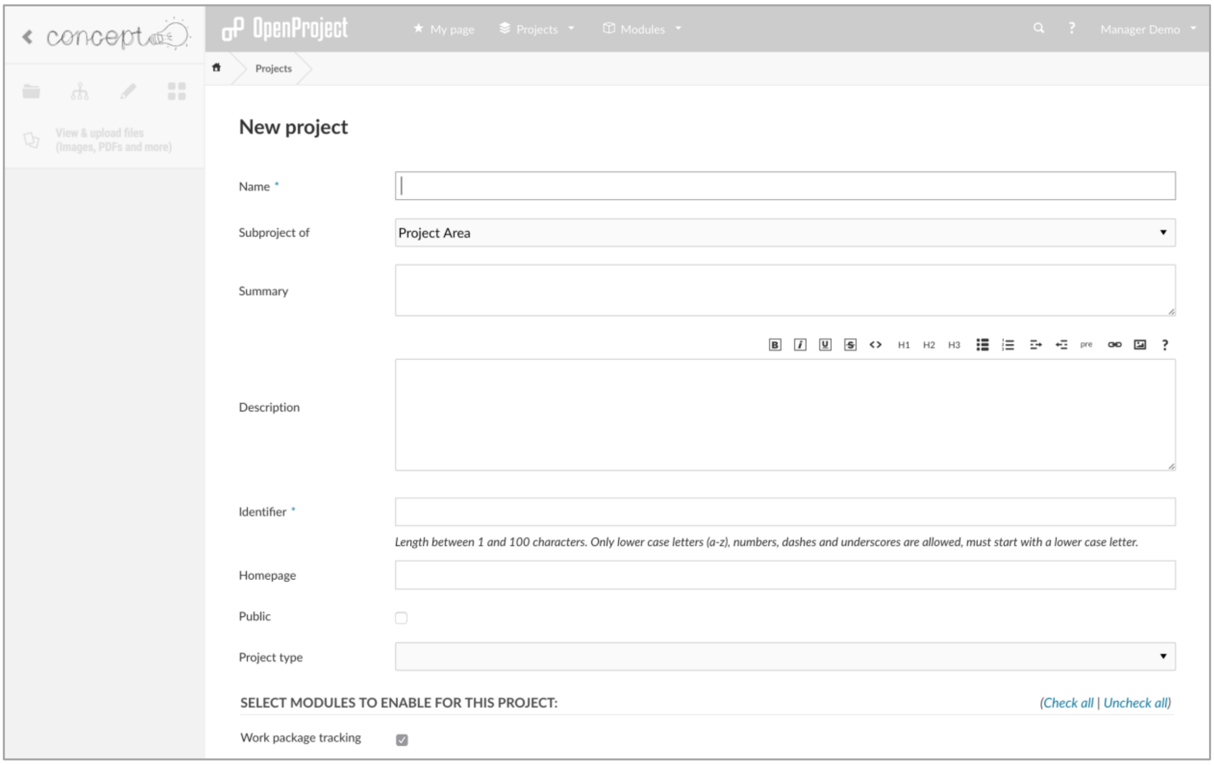

FIGURE 6: NEW PROJECT CREATION.

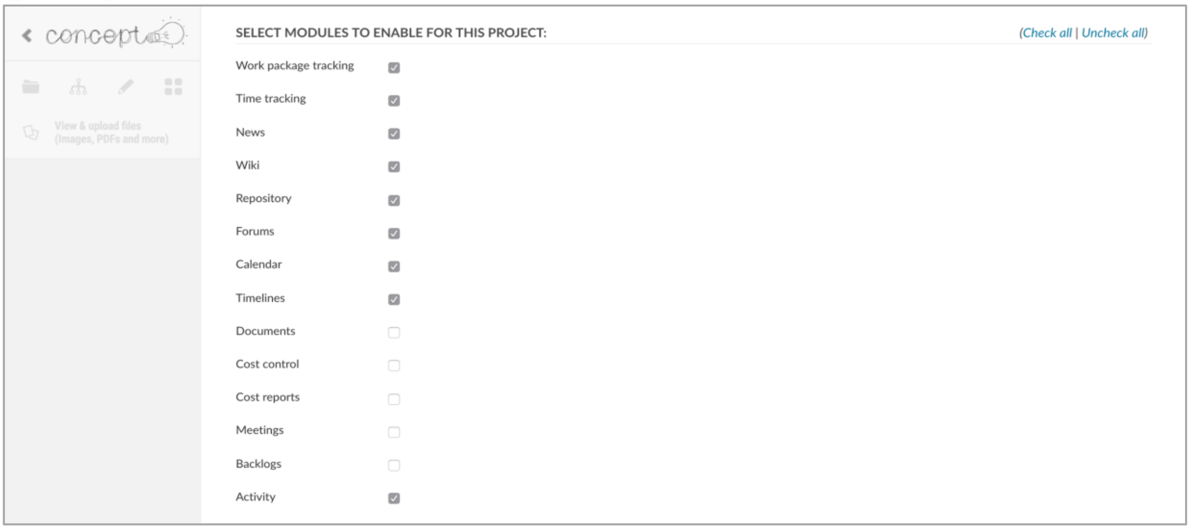

FIGURE 7: NEW PROJECT CREATION - SELECTION OF MODULES TO BE ACTIVATED (OPTIONAL).

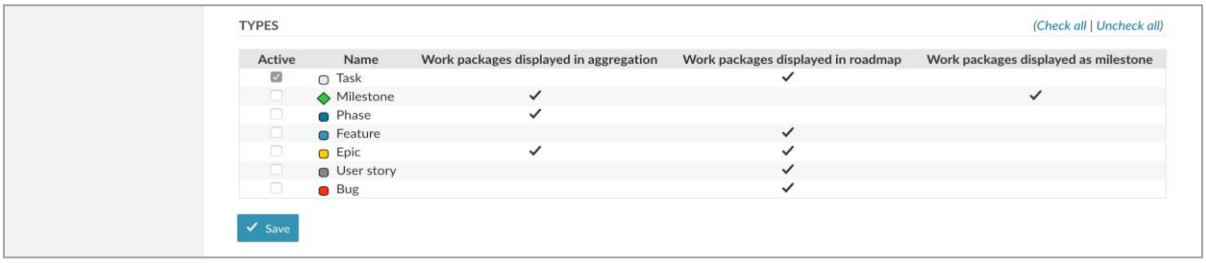

FIGURE 8: NEW PROJECT CREATION - CONFIGURATION OF PROJECT VIEW OPTIONS (OPTIONAL).

The user is then navigated to the created overview of the project (see Figure 9). Here, as it can be seen from the list on the left side on the central pane, the newly created project can be further customized. The most important customizations include: work package creation, timeline creation, team creation and activities overview.

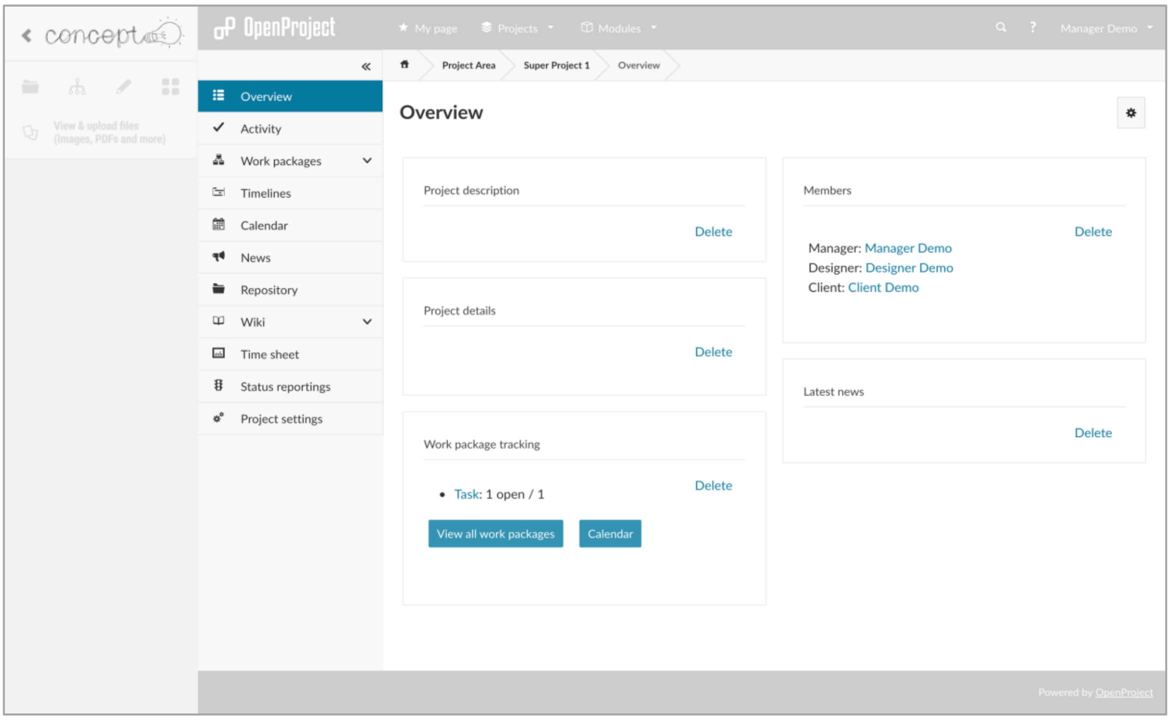

FIGURE 9: PROJECT OVERVIEW.

New Work Package creation

In order to create work packages, the user must first select the "Work packages" dropdown list button from the left side dashboard in the main project overview screen. A second button entitled "+ New work package" appears. By pressing it, the user is directed at the "New work package" screen. There, he completes the desired fields with the relevant information (see Figure 10, Figure 11, Figure 12):

- Type: The type of the work package. Only task is supported at the current version since it fully covers the needs of the project;
- Parent: The work package's parent, that is the project initially defined. Autocomplete is used for a list of possible candidates;
- Subject: The name of subject that the work package deals with;
- Description: A detailed description of the work package;
- Status: The work package's status. Possible values include: In progress, Closed, On hold and Rejected;
- Priority: The work package's priority. Possible values include: Low, Normal, High and Immediate;
- Assignee: Select the name of the one to whom this work package is assigned to, using a drop down list;
- Responsible: Select the name of the one who holds overall responsibility for this work package, using a drop down list;
- Start date: The date this work package starts;
- Due date: The date this work package ends;
- Estimated time: Time estimation to completion given in hours;
- % done: The completion percent of the work package;
- Also, one can add watchers by selecting the checkbox next to the desired ones;
- Files by pressing the "Choose File" button.

It should be noted that all the required fields are marked with an asterisk. Finally, the "Create" button must be pressed in order to create the work package.

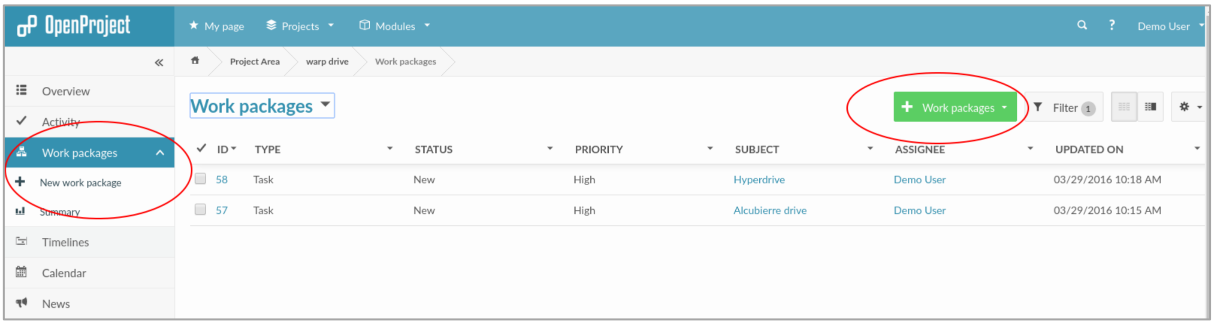

FIGURE 10: CREATE A NEW WORK PACKAGE.

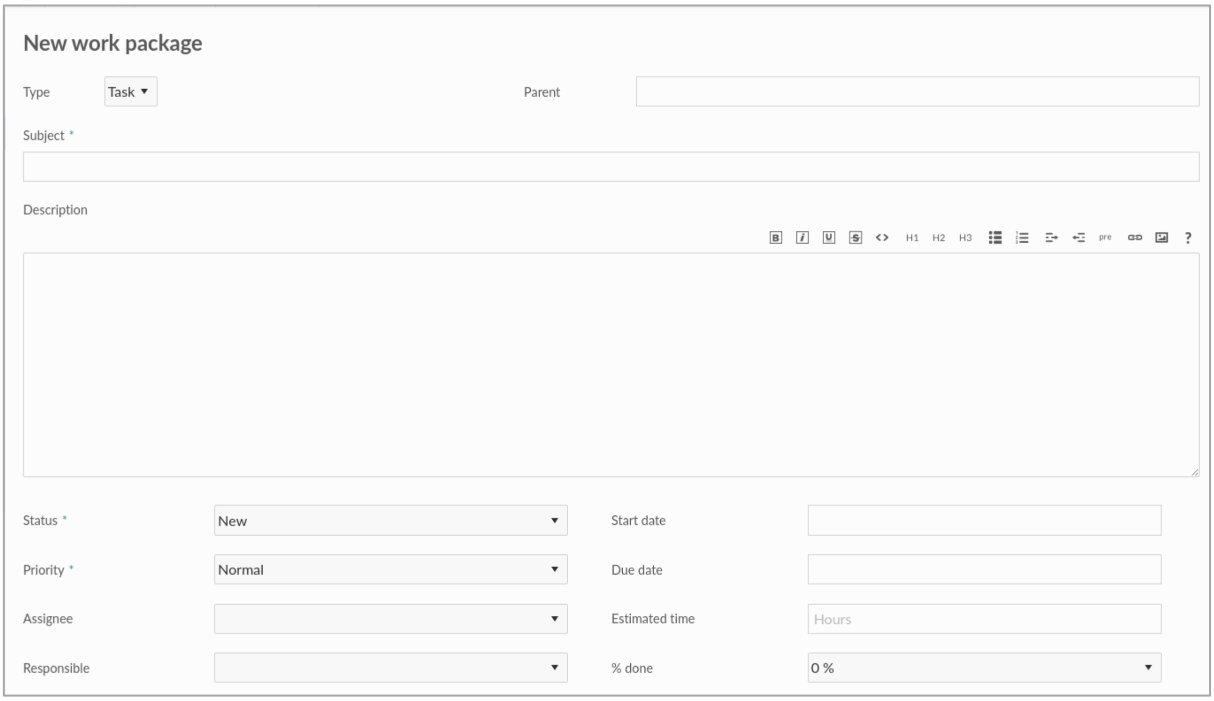

FIGURE 11: CREATE A NEW WORK PACKAGE - PROVIDE DETAILS.

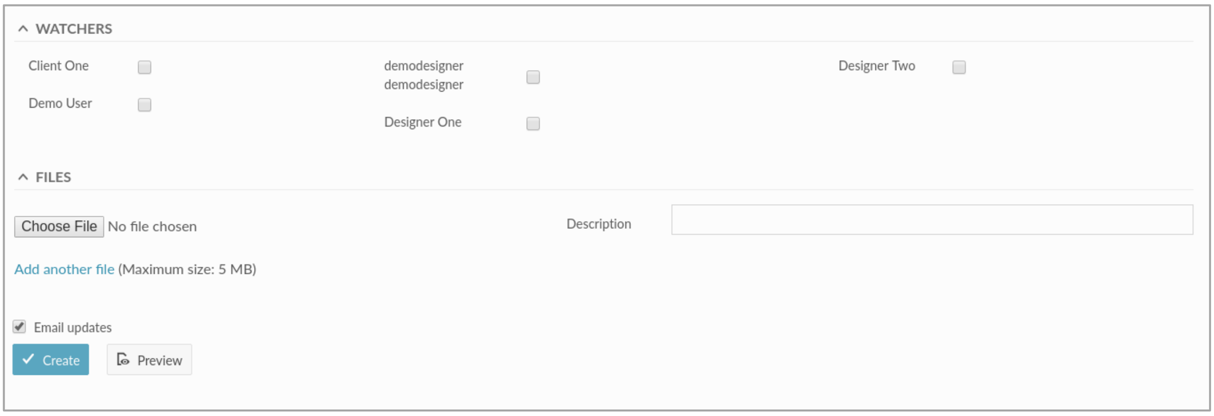

FIGURE 12: CREATE A NEW WORK PACKAGE - OPTIONS.

Project Management Timeline

In COnCEPT, we support two types of timelines. One related strongly with the project management activities and providing information for the available WPs and milestones (e.g. in the form of a Gantt chart) and one related with a customized timeline with information regarding selected artifacts per project (as described in a following section).

Regarding the project management timeline, the user can create a timeline by selecting the “Timelines” button from the left side dashboard in the main project overview screen. There, by pressing the green “+ New timeline report” button the user is navigated to the desired screen. There, the desired fields must be completed with the relevant information (see Figure 13, Figure 14):

- Name: The name of the created timeline;
- Hide chart: If the chart depicted on the right side is hidden;
- Zoom factor: The details depicted regarding the work packages zoom factor. Possible values include: Years, Quarters, Months, Weeks and Days;

- Initial outline expansion: Whether the outline should be expanded to the various work packages. Possible values include: Show aggregations only, Expand level 1 - 5 and Show all;
- Show timeframe: The timeframe to show;
- Columns: The columns used to depict information. Possible values include: Start date, End date, Type, Status, Responsible, Assignee;
- Sort projects by: This value controls the view order of the created timeline's work packages;
- Other fields regarding timeline creation are Comparison, Vertical Work Packages, Filter Work Packages, Filter Projects and Grouping.

It should be noted that all the required fields are marked with an asterisk. Finally, the "Create" button must be pressed in order to create the timeline.

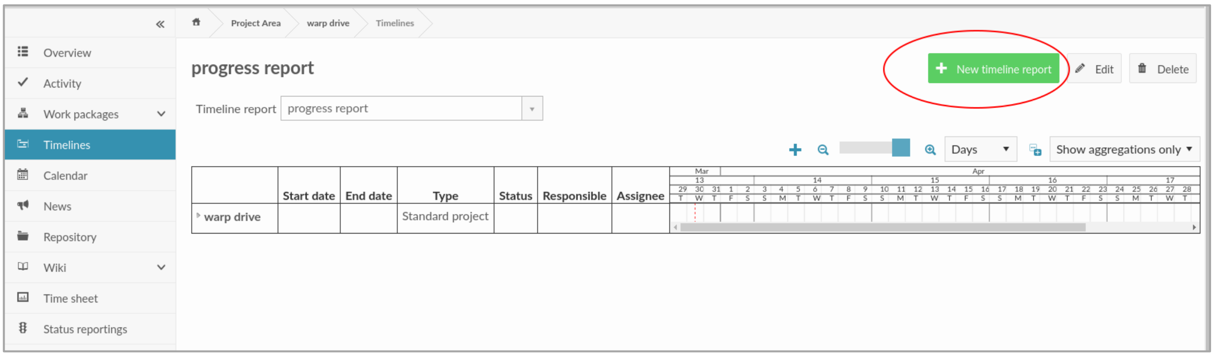

FIGURE 13: TIMELINE CREATION.

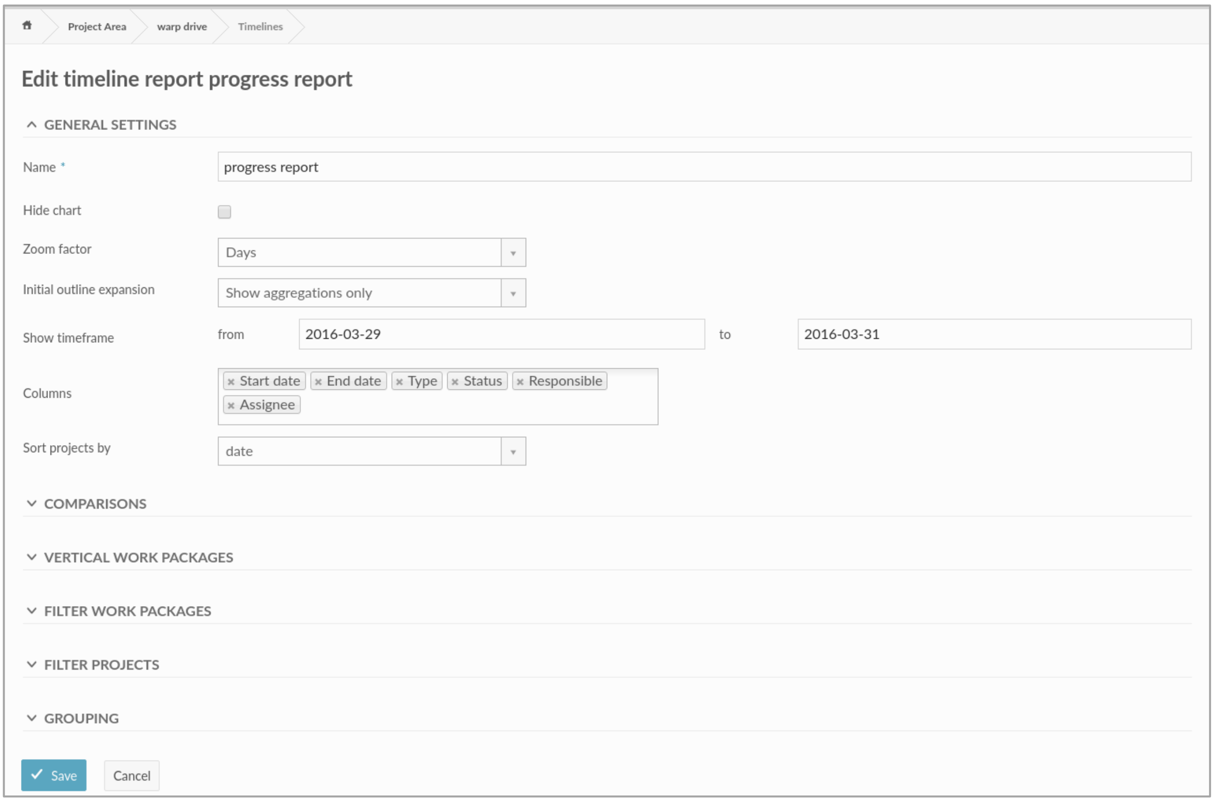

FIGURE 14: TIMELINE CREATION - CONFIGURATION.

Team creation

The user can create a team for a given project (and subprojects) by selecting the “Project settings” button from the left side menu in the main project overview screen. Then, the “Members” tab in the main windows must be selected. There, the desired fields must be completed with the relevant information (see Figure 15):

- Search for users of groups: There, users or groups of users are added. An auto-search function facilitates the process;
- Search for roles: Three main roles are available to choose from. Possible values include: Manager, Designer, Client.

Finally, the “Add” button must be pressed in order to add the desired users.

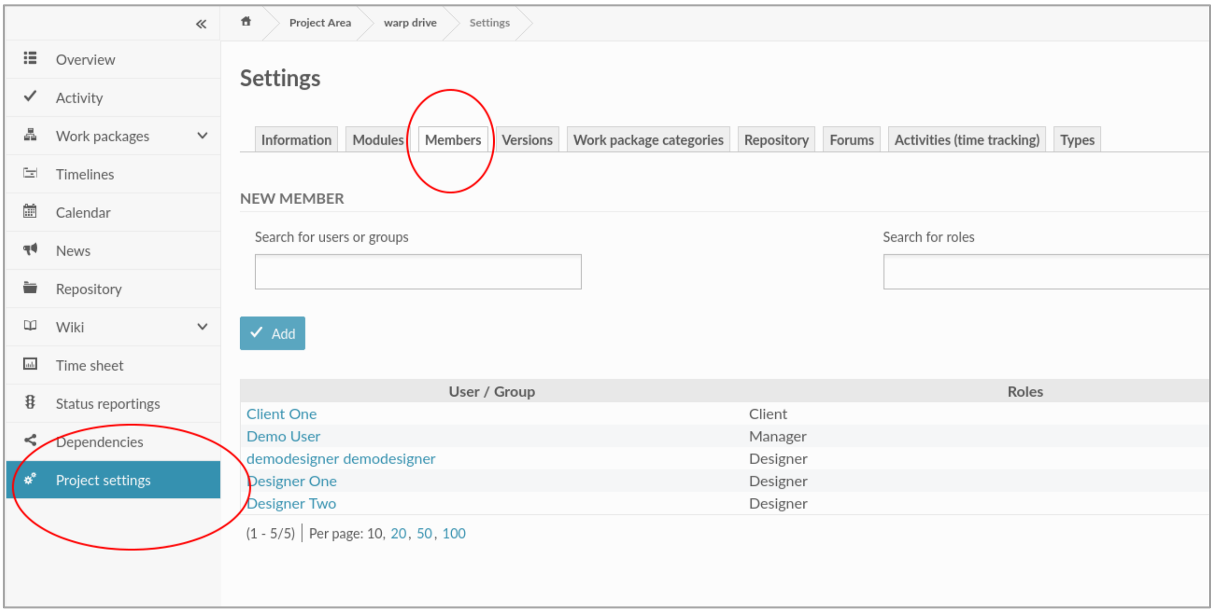

FIGURE 15: TEAM CREATION.

The user may also view any activity by selecting the “Activity” button from the left side menu in the main project overview screen (see Figure 16).

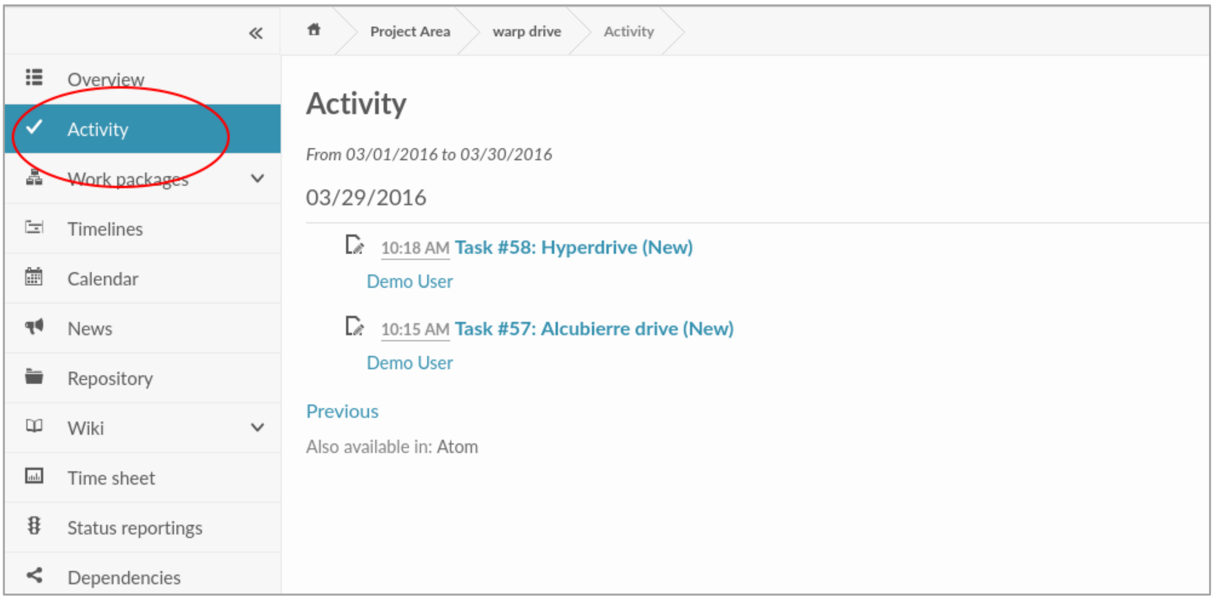

FIGURE 16: VIEW ACTIVITIES.

To return to the central dashboard, the user presses the “DASHBOARD” button on the top left corner of the platform (see Figure 17).

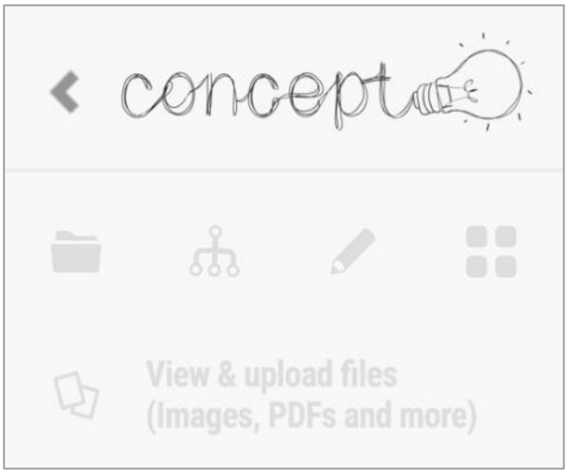

FIGURE 17: RETURN TO DASHBOARD.

4. File Management

As soon as the project, work packages and team are created, the user can add various files to the project including but not limited to PDFs, Word Documents and more.

View & Upload Files

To view all files uploaded in the project workspace click on the sidebar quick link labeled “View & Upload Files” (see Figure 18). To upload new files, click on the “Upload File” button on the files list.

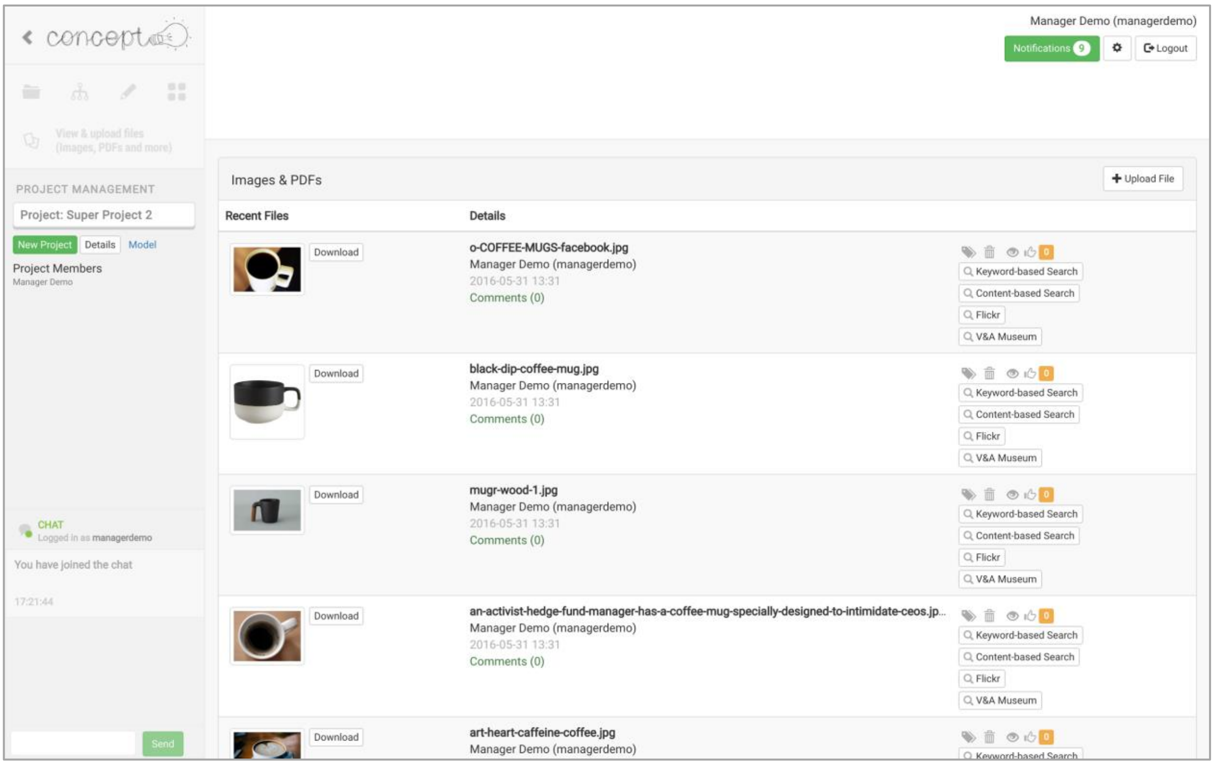

FIGURE 18: VIEW FILES

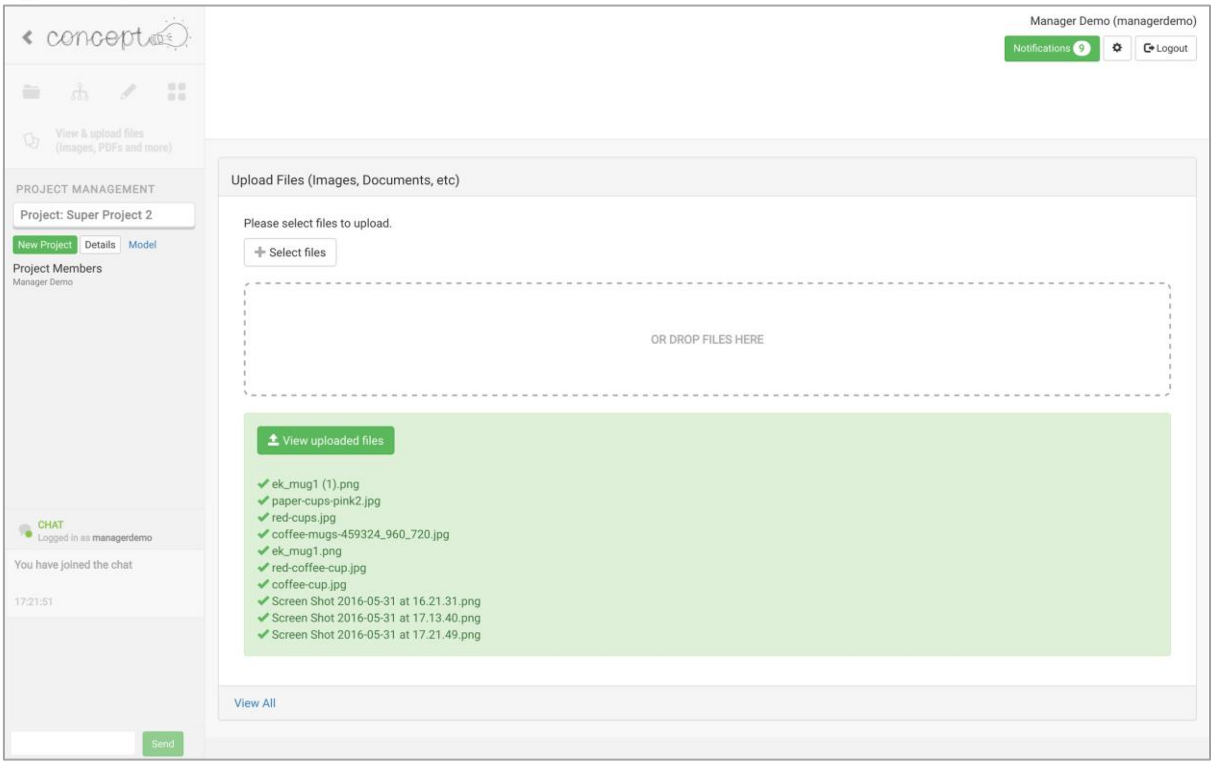

FIGURE 19: UPLOAD FILES

Then, the user is redirected in the "Upload Files" screen. There, two ways of adding files are made available (see Figure 20):

- By selecting the "Select files" button in the main window and browsing to the desired files or
- By drag & dropping the files on the indicated area (dashed area)

Finally, the user can review the uploaded files by pressing the "View uploaded files" green button that appeared in the main screen after file uploading.

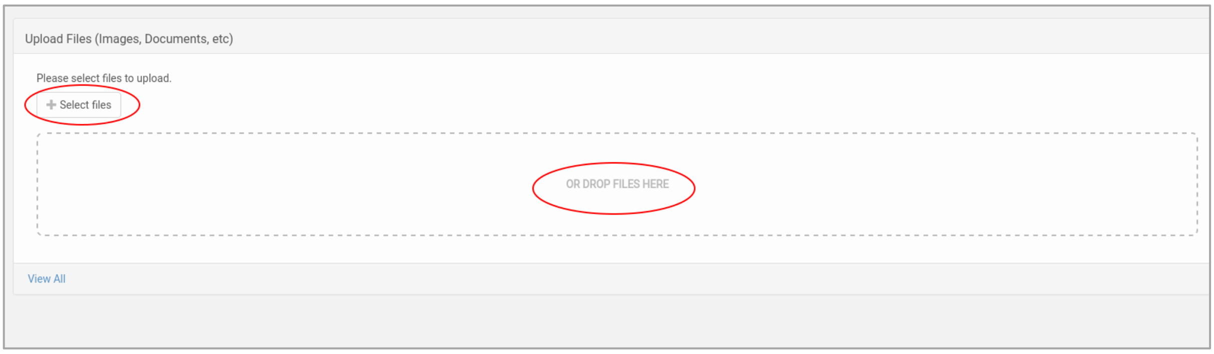

FIGURE 20: UPLOADING FILES.

File management options

Upon uploading of the data, a set of file management operations are supported, including -among others- the addition of metadata/annotations, like/sharing functionalities and file deletion options. A list of the available options is as follows (see Figure 21):

- Annotate content (see Figure 22): The user has three annotation types (as explained later on)
  - Auto-annotate;
  - Manually annotate;
  - Annotate through provided categories.

- Deleting: The user can delete the file;
- Client sharing: The user can share the selected file with the client;
- Like: The file can have likes;
- PinIt: pin a file in order to be added to the timeline;
- Keyword-based Search: used for searching relevant content based on the annotations added in the specific file;
- Content-based Search: used for searching relevant content based on image processing (apply only to images);
- Flickr: used for searching relevant content in Flickr. By pressing the “Flickr” button, the user is redirected to the Flickr search page, where automated search is realised for relevant content based on the annotations of the specific file;
- V&A Museum: used for searching relevant content in V&A Museum. By pressing the “Flickr” button, the user is redirected to the V&A Museum search page, where automated search is realised for relevant content based on the annotations of the specific file.

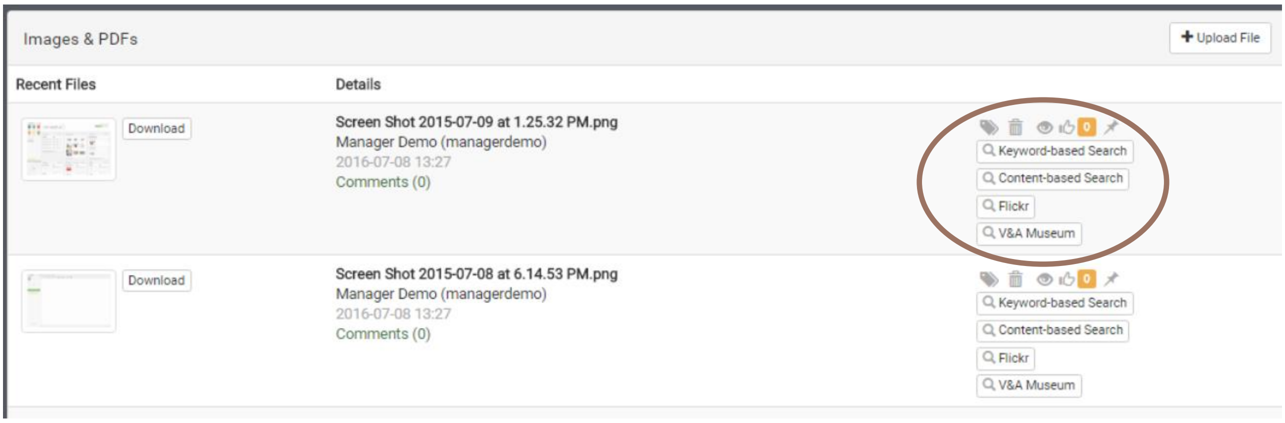

FIGURE 21: FILE MANAGEMENT FUNCTIONALITIES.

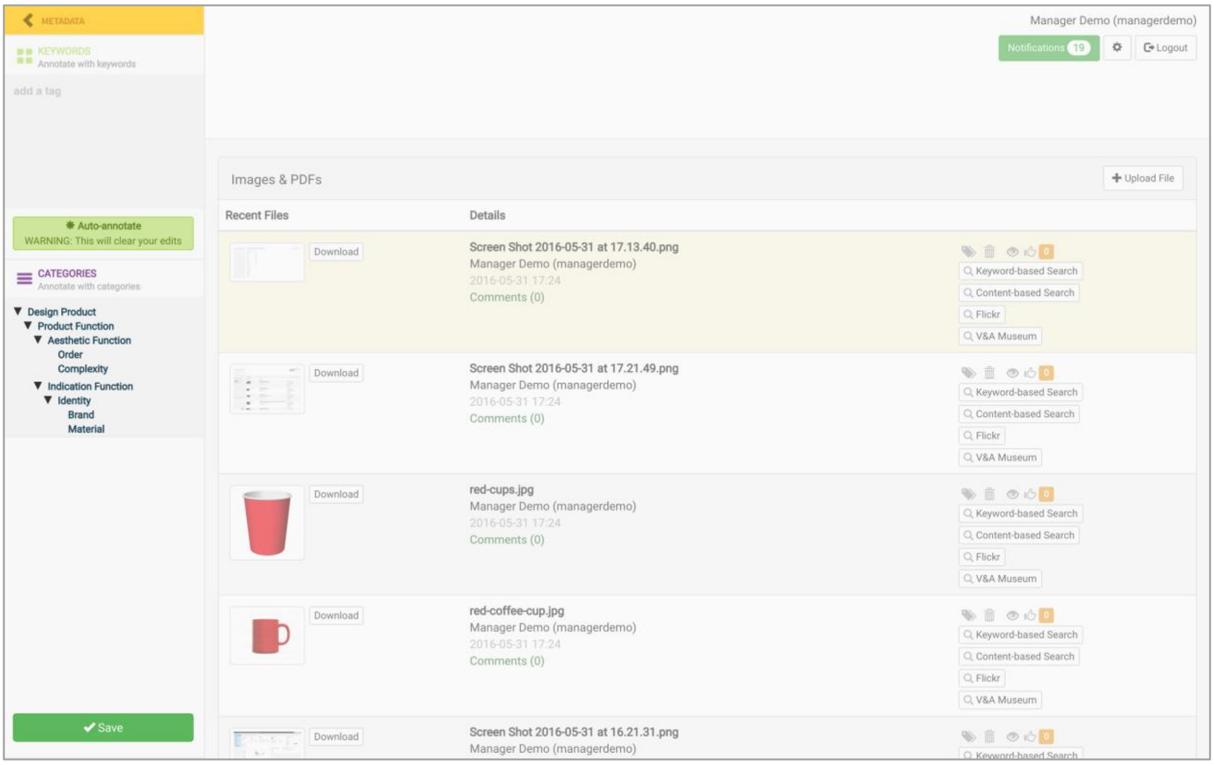

FIGURE 22: ANNOTATING A FILE.

The user is also able to perform additional functions, such as:

- Comments: The comments can be added by pressing the “Comments” link located in the file’s details column. The user is redirected to the comments page where he can write the desired comment and then press the “Send” button to add it;
- Download link: As soon as the file is uploaded, it can be downloaded by pressing the “Download” button located on the leftmost column, near the generated file image.

5. Annotations Management

A set of options are made available for addition/management of annotations associated with each file. By selecting the appropriate icon (see Figure 23), the user is able to see the auto-created annotations, as well as add/remove annotations. Addition of annotations can be realised through the addition of tags (see Figure 24) or the association of the file with concepts represented in the denoted model/taxonomy for the specific project. Actually, a model/taxonomy is defined per project (as explained later on) with the main design concepts for the specific product. Such concepts are made available for annotation purposes. Finally, the user, presses the button “Save” and saves the provided annotations for the specific file.

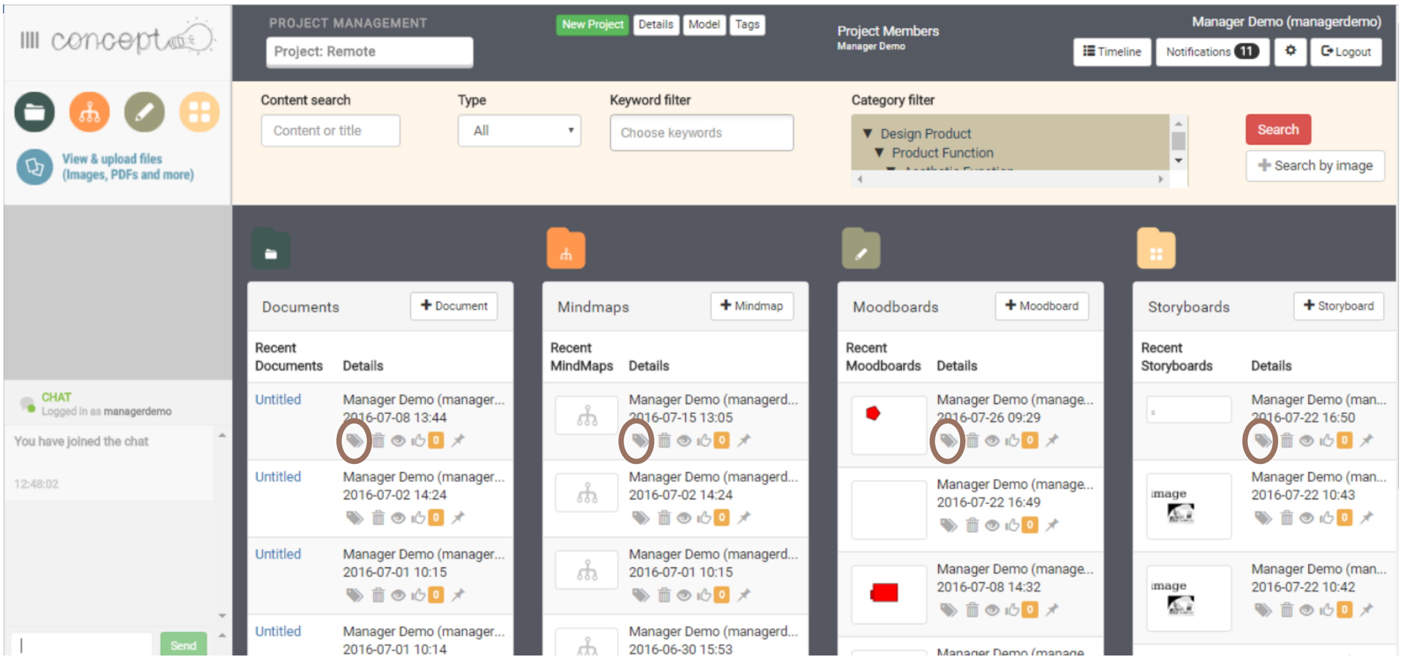

FIGURE 23: INITIALIZING ANNOTATION FUNCTIONALITY

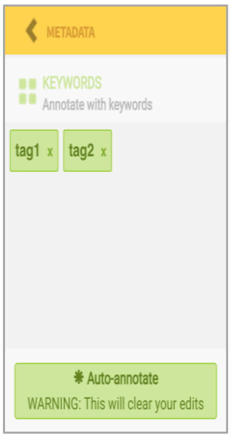

FIGURE 24: ADDING ANNOTATION TAGS

6. Documents

In the documents editing module, the user is able to create and edit documents in a collaborative fashion.

Create New Documents

To create new documents, the user selects the "+ Document" button from the object Documents in the main Dashboard screen (see Figure 25). He is then redirected to the editor linked to the selected project. There, the user can add the Title, the text and make use of the various functions provided by the control buttons along the main screen. Finally, to save the created document, the user must press the red "Save" button located at the top of the main screen (see Figure 26).

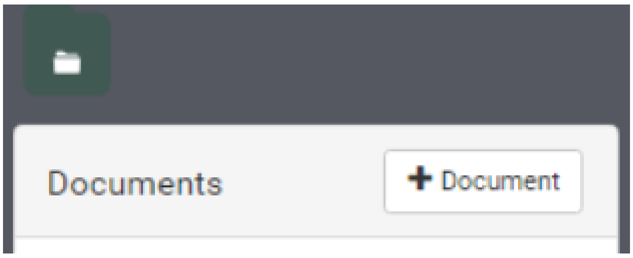

FIGURE 25: DOCUMENT CREATION.

Timeslider

One of the functionalities provided by the editor is the ability to show all document changes made during a period of time. This is displayed as an animation by pressing the "Timeslider" button and then the play button in the top right of the main document creation screen (see Figure 26, Figure 27).

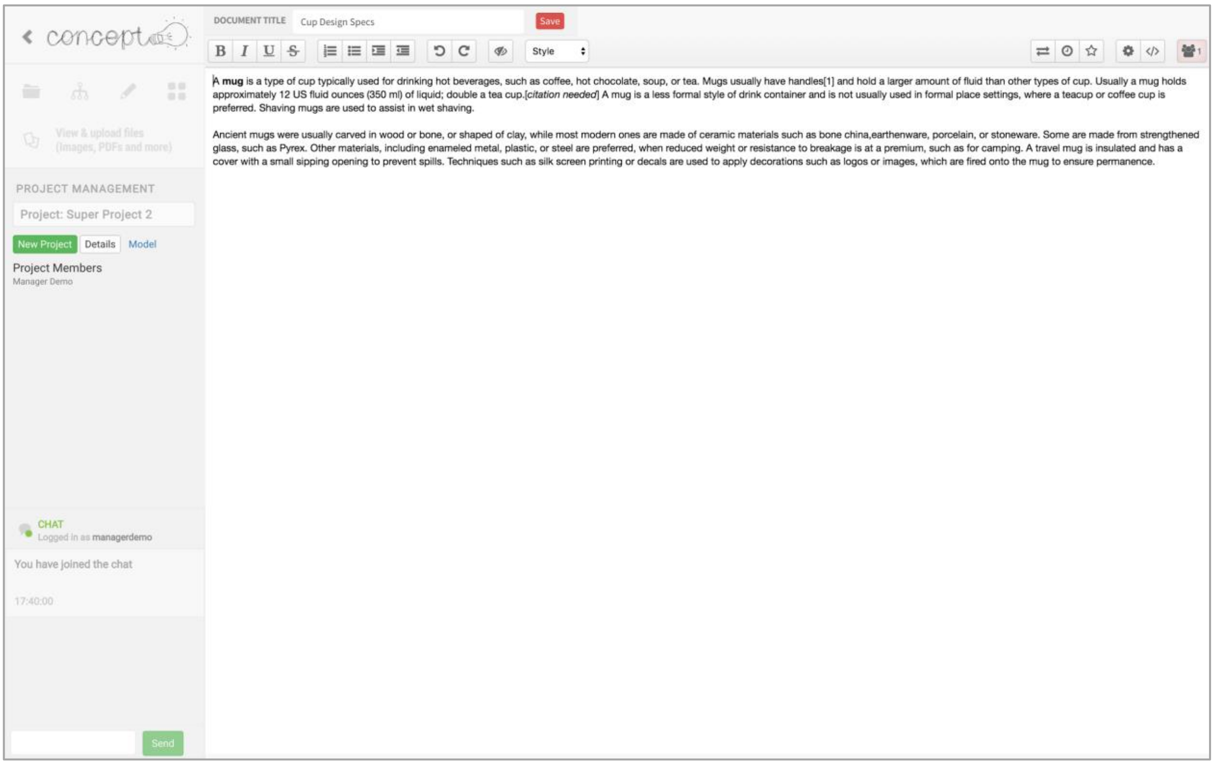

FIGURE 26: DOCUMENT EDITOR.

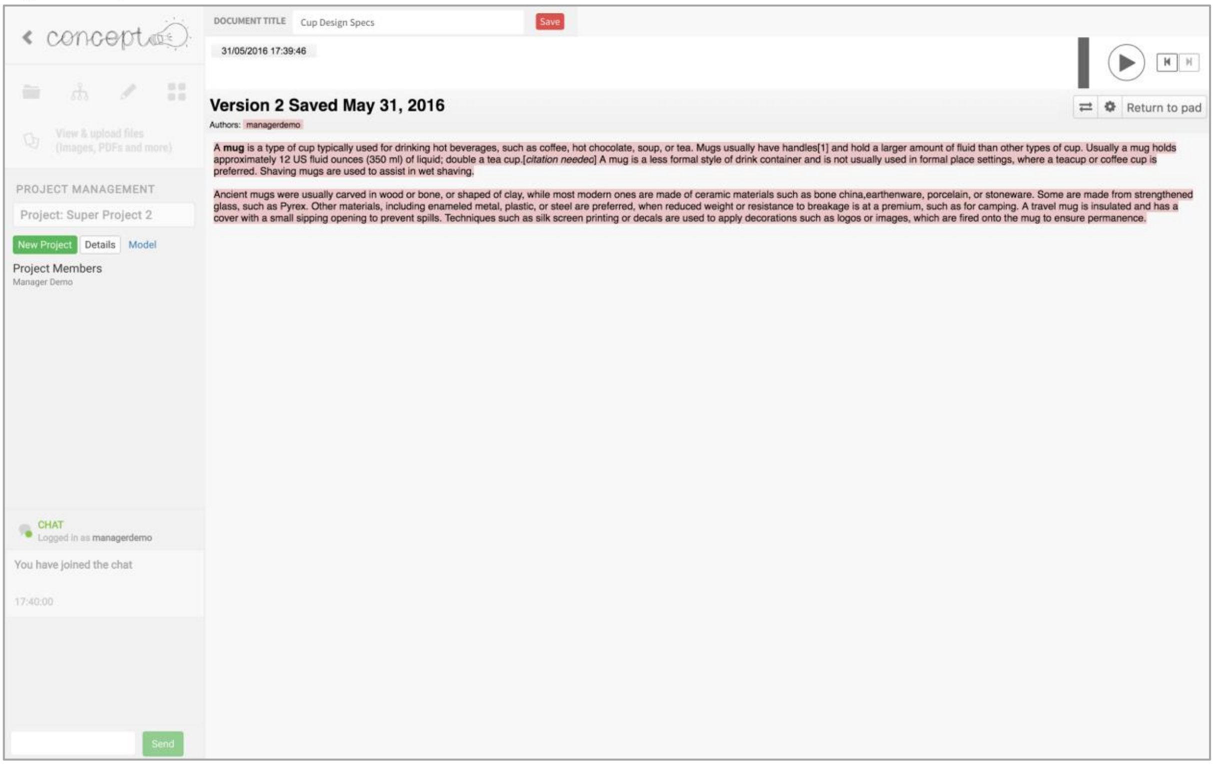

FIGURE 27: TIMESLIDER - PLAY BUTTON.

The provided editor supports synchronous collaborative editing among the project members, thus multiple of them may work in parallel in the same document. Colouring of additions per user is provided, facilitating tracking of the evolution of the document.

7. Mindmaps

Through the Mindmaps module, the user is able to create mindmaps for the selected project.

Create new mindmap

To create a new mindmap, the user selects the "+ Mindmap" button from the object Mindmaps on the left bottom in the main Dashboard screen (see Figure 28, Figure 29). He is then redirected to the mindmap creation editor linked to the selected project. There, the user can add ideas (as topics) and generally change various attributes of the generated mindmap. The various buttons along the main screen provide various editing capabilities. Finally, to save the created mindmap, the user must press the "Save in Concept" control button located at the top left of the editor.

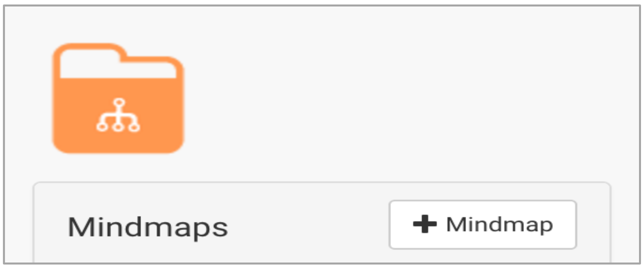

FIGURE 28: CREATE A NEW MINDMAP.

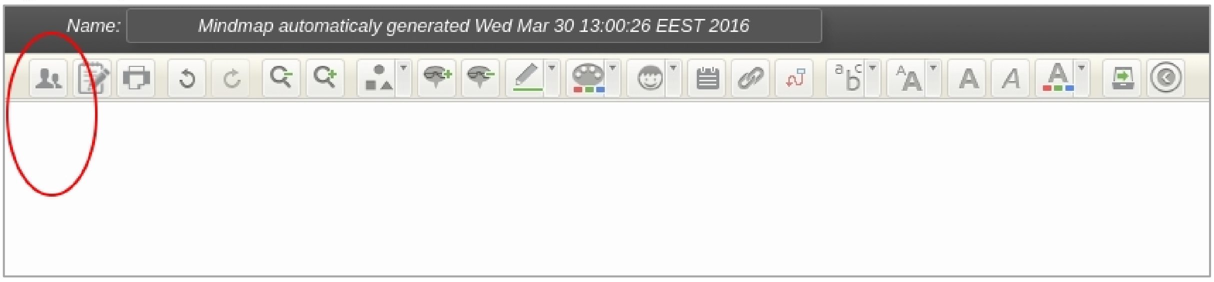

FIGURE 29: SAVE THE NEWLY CREATED MINDMAP.

Mindmap node creation

One of the functionalities provided by the Mindmap is the ability to create topics on one of the sides of the main node. This is the ability to separate the screen to east and west side, using the main node as the reference point. Due to this ability, the only thing the user must perform is a double click on the side he/she wishes to add the topic. The topic is automatically generated and added to the appropriate side (see Figure 30).

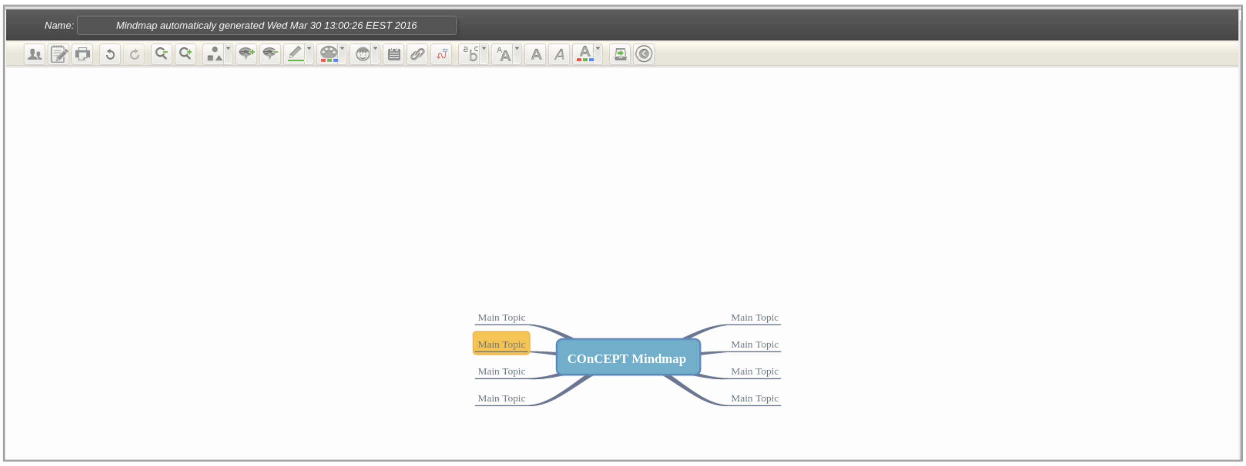

FIGURE 30: CREATE NEW NODE CREATION IN A MINDMAP.

8. Moodboards

Through the Moodboards module, the user is able to create moodboards for the selected project. A set of moodboards may be created and made available for further usage in the project.

Create new moodboard

To create a new moodboard, the user selects the "+ Moodboard" button from the Moodboards tool in the main Dashboard screen (see Figure 31). He is then redirected to the moodboard creation editor linked to the selected project. There, the user can create various drawings from scratch and add various predefined images. Finally, to save the created mindmap, the user must enter the desired name and press the blue "Save" control button located at the top right of the editor (see Figure 32).

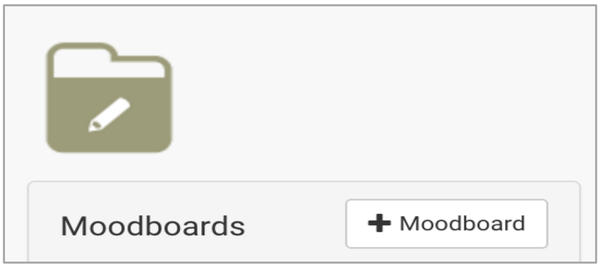

FIGURE 31: CREATE NEW MOODBOARD.

Sketching functionality in moodboard

The Moodboard tool provides basic sketching functionality through the various control buttons along the main screen axes and also provide various editing capabilities. As an example, the user can create his/her own drawings by using the line and pencil tools (changing the colour output) or use ready versions of drawings by utilising the shape library (see Figure 32).

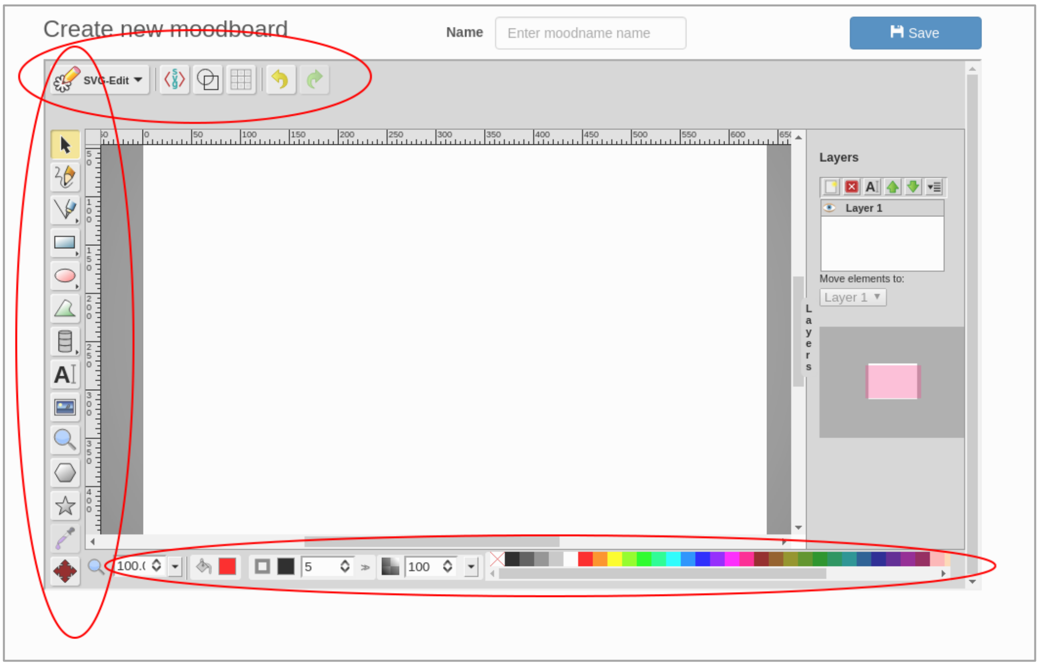

FIGURE 32: DRAWING CONTROL BUTTONS IN MOODBOARD.

Add image to moodboard

One of the functionalities provided by the Moodboards tool is the ability to add icons. This is performed by using the "SVG-Edit" control button located on the top left corner of the editor. When the user presses the button, a menu is made available and the "Import Image" is selected. Then the user browses to the desired image in order to add it to the moodboard (see Figure 33).

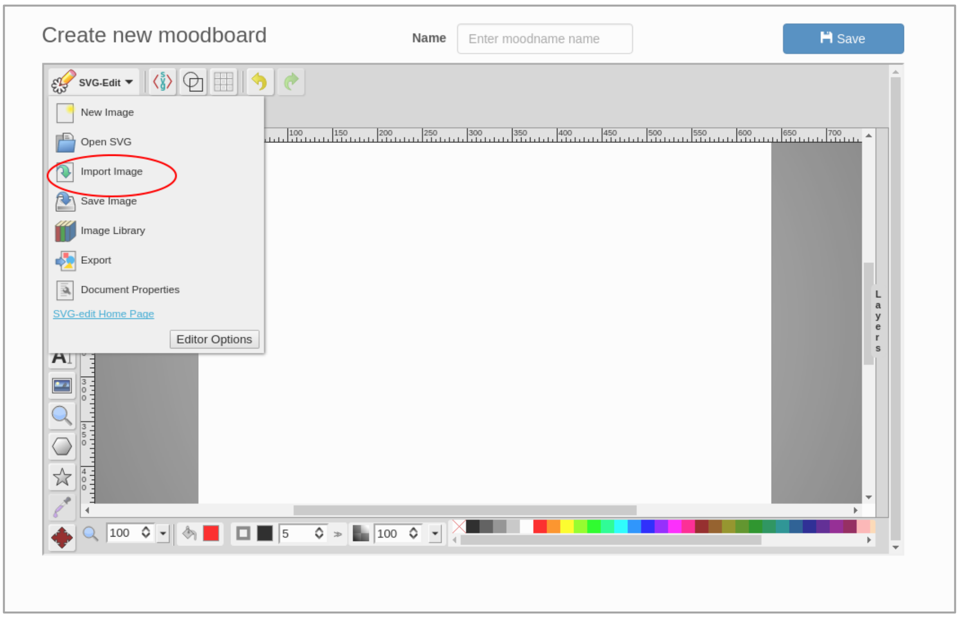

FIGURE 33: IMPORT IMAGE TO MOODBOARD.

9. Storyboards

Through the Storyboards module, the user is able to create storyboards for the selected project. A set of moodboards may be used for each storyboard creation.

Create new storyboard

To create a new storyboard, the user selects the "+ Storyboard" button from the storyboards tool at the main Dashboard screen. He is then redirected to the storyboards creator linked to the selected project. There, the user can use the images created from the Moodboard tool to create a full-fledged story. The user can select the images from the available scenes and drag & drop them on the appropriate sequence boxes on the left side pane. Finally, to save the created storyboard, the user must enter the desired name and press the blue "Save" control button located at the bottom left of the main screen (see Figure 34, Figure 35).

FIGURE 34: CREATE A NEW STORYBOARD.

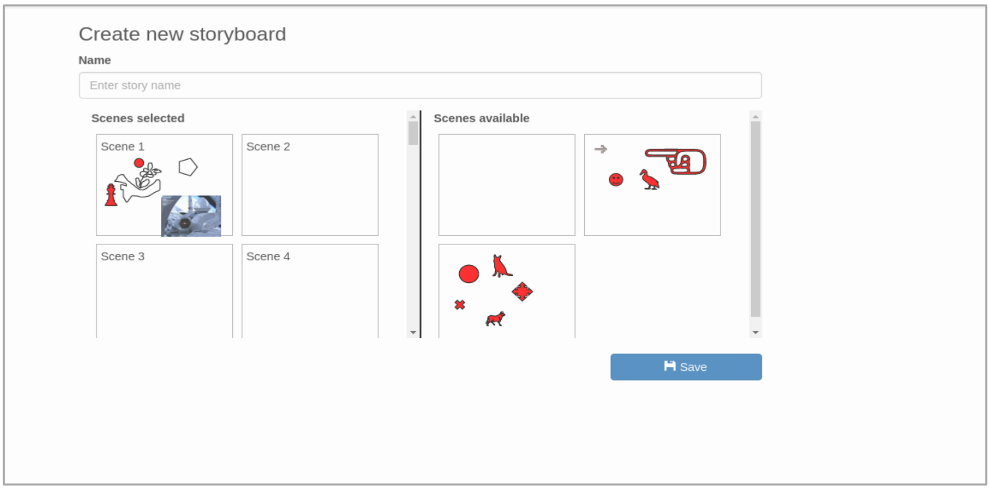

FIGURE 35: CREATE A NEW STORYBOARD - SCENES SELECTION.

10. Search Tool

Through the COnCEPT search functionalities, the user can perform a set of searches based on the annotations of the files, the indexing that has been realised as well as searches based on the similarity of the content with web resources.

Semantic search based on text

The first search function offered by the search tool is the Semantic search. The user can enter either a title (partial) or a content (partial) and the search engine will semantically associate it with the project's files metadata and the return the most relevant ones (see Figure 36).

FIGURE 36: SEMANTIC SEARCH.

Filters

The second search function offered by the Search tool is the filtered search. The user can choose various filters -e.g. based on concepts defined in the semantic models- to realise advanced search functionalities. Autocomplete feature is supported. Upon, pressing the Search button, the results are made available (see Figure 36).

Image based search

The third search function offered by the Search tool is the image based search. The user can upload an image to the search engine, which in turn tries to associate it with the various stored data and finally the closest match is returned. The image upload can be performed by pressing the "+ Search by Image" button located at the bottom right of the Search tool (see Figure 36).

Search results

When the user presses the "Search" button, he/she is redirected to the search results page (see Figure 37). There the various results are displayed in a structured way. The following lines depict the search result structure and their meaning:

- Title: The title of the uploaded object;
- Link: The permalink assigned to the file;
- Type: The type of the object (possible values includes: pdf of image, document, mindmap, moodboard and storyboard);
- Categories: Assigned attributes based on the model used;
- Keywords: Auto Generated or manually added words as metadata for search purposes.

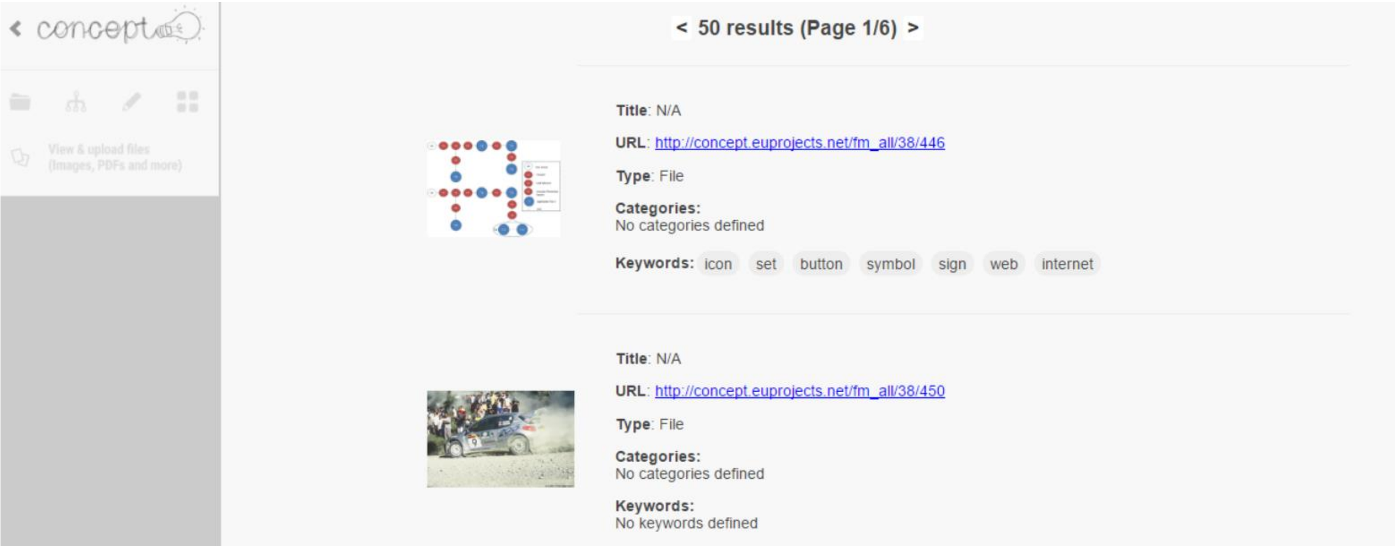

FIGURE 37: SEARCH RESULTS.

11. Chatting

The main dashboard provides a chatting tool on the bottom left corner of the main screen. The user can utilize the provided chat function to send and receive instant messages with other collaborators. It only requires to write the desired text and then press the green "Send" button or enter (keyboard shortcut) (see Figure 38).

concept

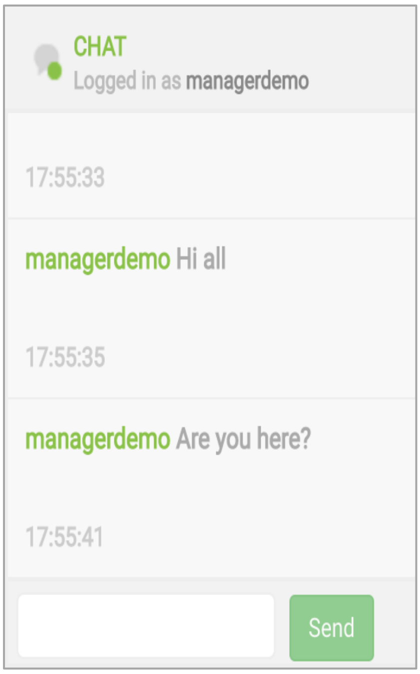

FIGURE 38: CHAT OBJECT.

12. Notifications

The notifications object is located on the top right corner of the main dashboard. There, every change made to the underlying project is recorded and the rest project participants are notified accordingly. Therefore, Notifications is an object used for cataloging history of the application during usage. The user can access it by pressing the green "Notifications" button (see Figure 39, Figure 40).

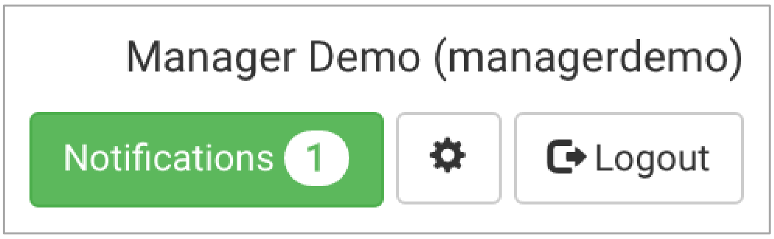

FIGURE 39: NOTIFICATIONS BUTTON.

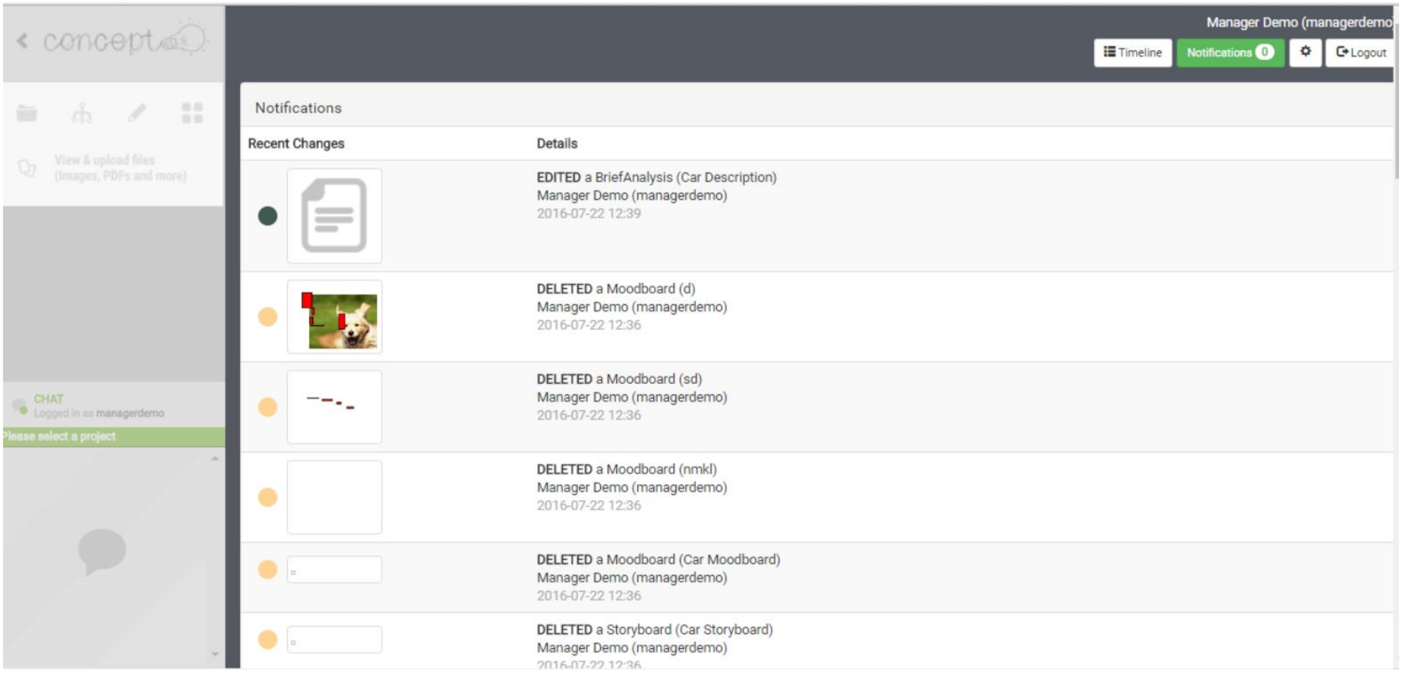

FIGURE 40: NOTIFICATIONS.

13. Timeline

As already mentioned, a timeline functionality is provided to end users where -in addition to project management functionality (tasks and milestones)- the user is able to pin specific files and monitor the activity related to them. The timeline per project is accessible by selecting the “Timeline” button in the COnCEPT dashboard. An indicative timeline is depicted in Figure 41, including the visualisations of tasks and pinned files.

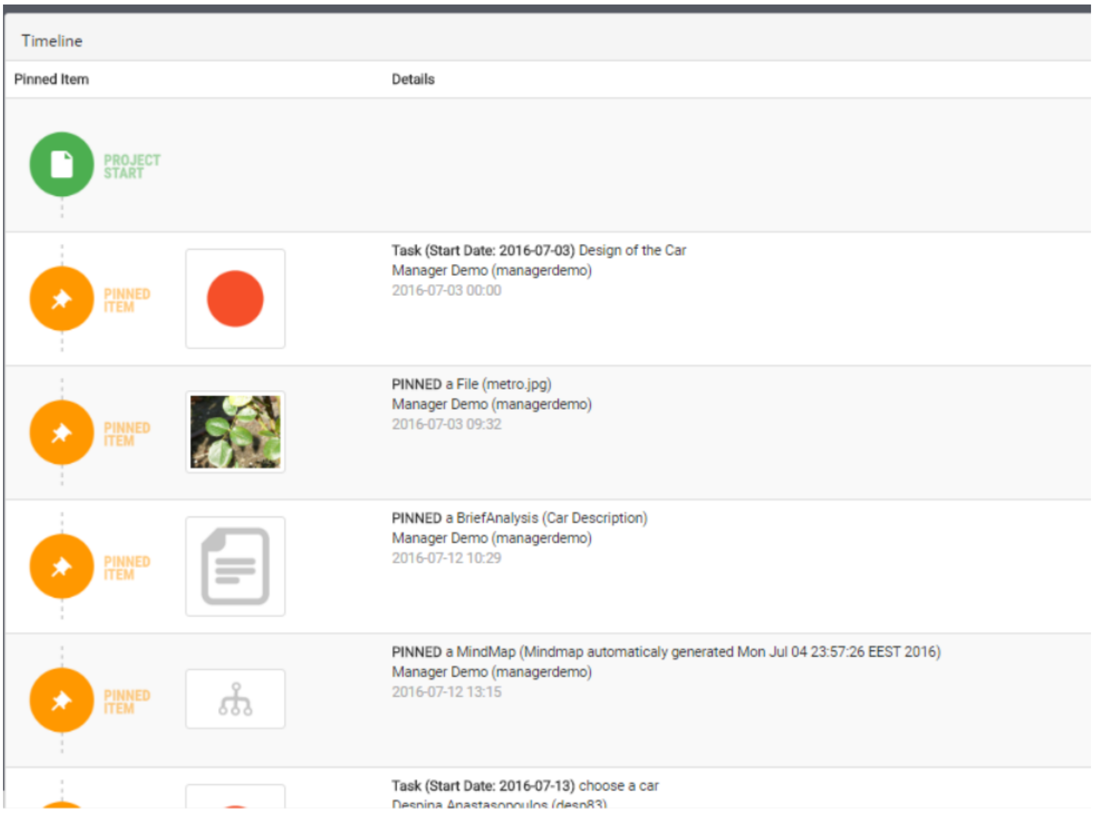

FIGURE 41: TIMELINE.

Pinning of files in order to be included in the timeline can be realized by the pin-it icon, as depicted in Figure 42 .

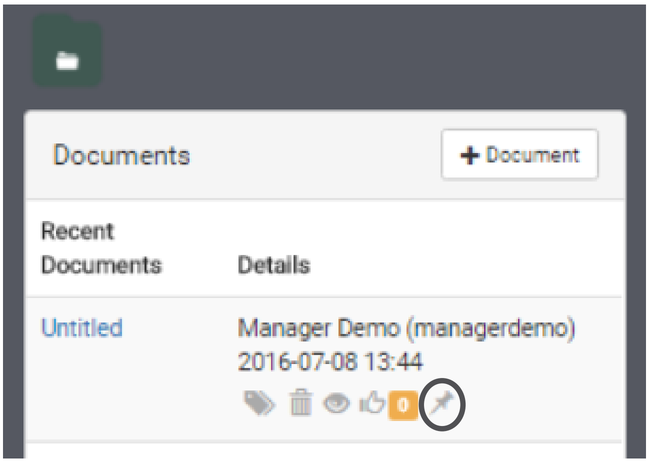

FIGURE 42: PINNING FOR TIMELINE.

14. Model editing

The COnCEPT platform offers the ability to create a custom model in order to use it for searching purposes, as already mentioned.

Creating a new Model

The user can create a new Model by selecting the "Model" button located on the far left side on the main dashboard. Then, the user is redirected to the Model creation tool. There, by pressing the "Add" button on right side off the screen a new category can be created. For example, suppose he wants to create a chair hierarchy which contains the armchair subcategory (see Figure 43, Figure 44, Figure 45):

- The user presses the "Add" button;
- He then enters chair under the "Category name" and presses "Save";
- After that, he presses the "Add" button again and enters armchair under the "Category name";
- In addition, he clicks the radio button on the left side of field below and enters the name of the parent. In this case it is chair (the autocomplete function facilitates the word insertion process);
- Finally, he hits the "Save" button.

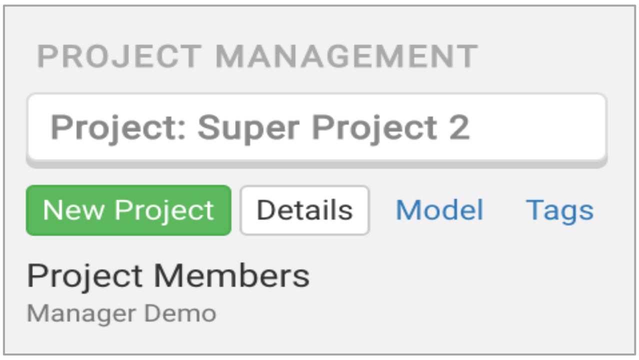

FIGURE 43: CREATE A NEW MODEL LINK

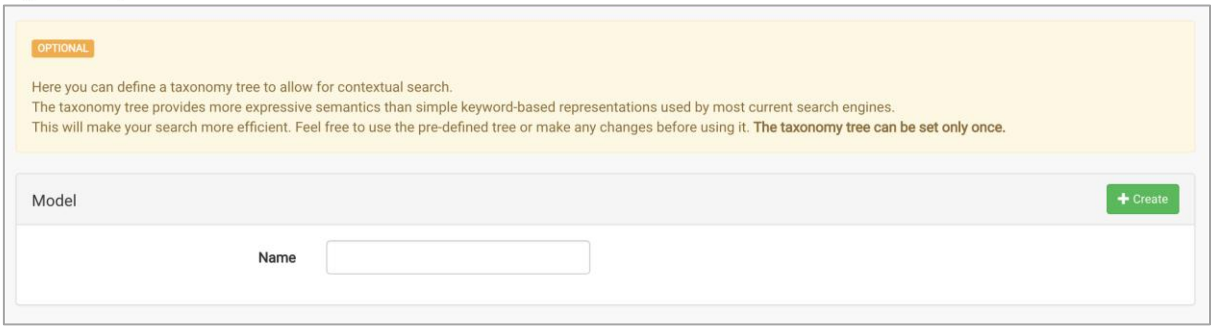

FIGURE 44: CREATE A NEW MODEL - NAME

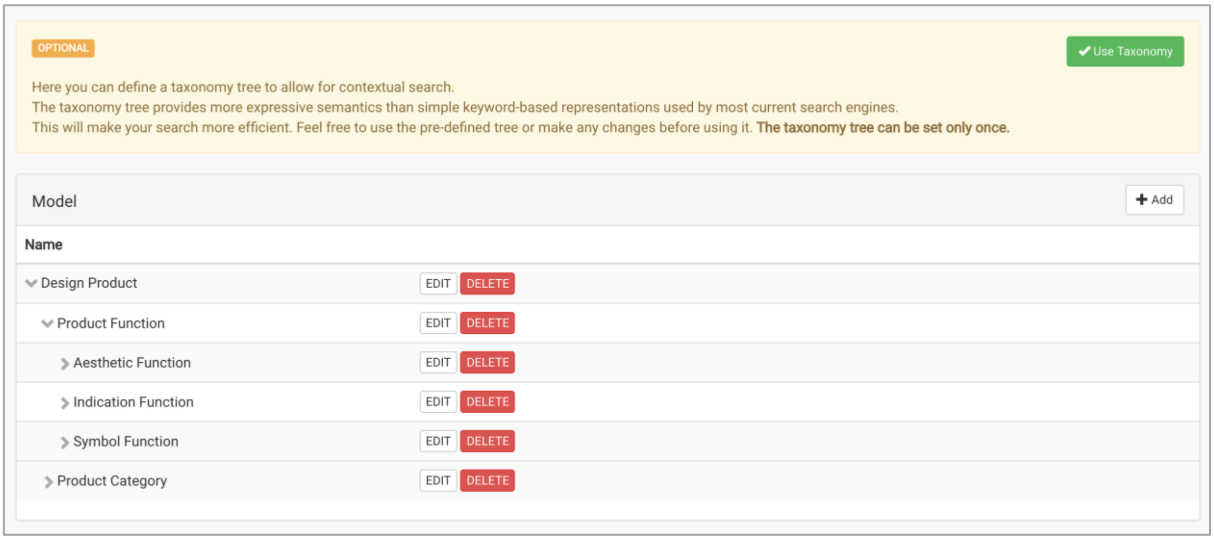

FIGURE 45: CREATE A NEW MODEL - CONFIGURATION

Edit an existing Model

If the user wants to edit an already created model, he must navigate to the Model tool and press the "pencil like" object on the desired model (see Figure 46).

FIGURE 46: EDIT AN EXISTING MODEL

15. Options

The "options" button located on the top left corner of the main screen can be used to navigate to the application options. For the time being only the "change password" functionality is allowed (see Figure 47). In the near future, further functionalities will be added.

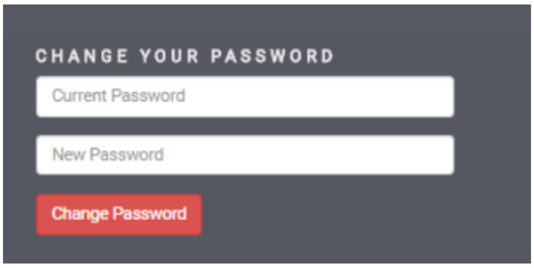

FIGURE 47: PROJECT OPTIONS

16. Designer Role

The Designer role has all the functionality provided for the Project Manager except the ability to create a new Project and Model editing (see Figure 48). Therefore, we omit any reference to the functionalities mentioned in the previous paragraphs.

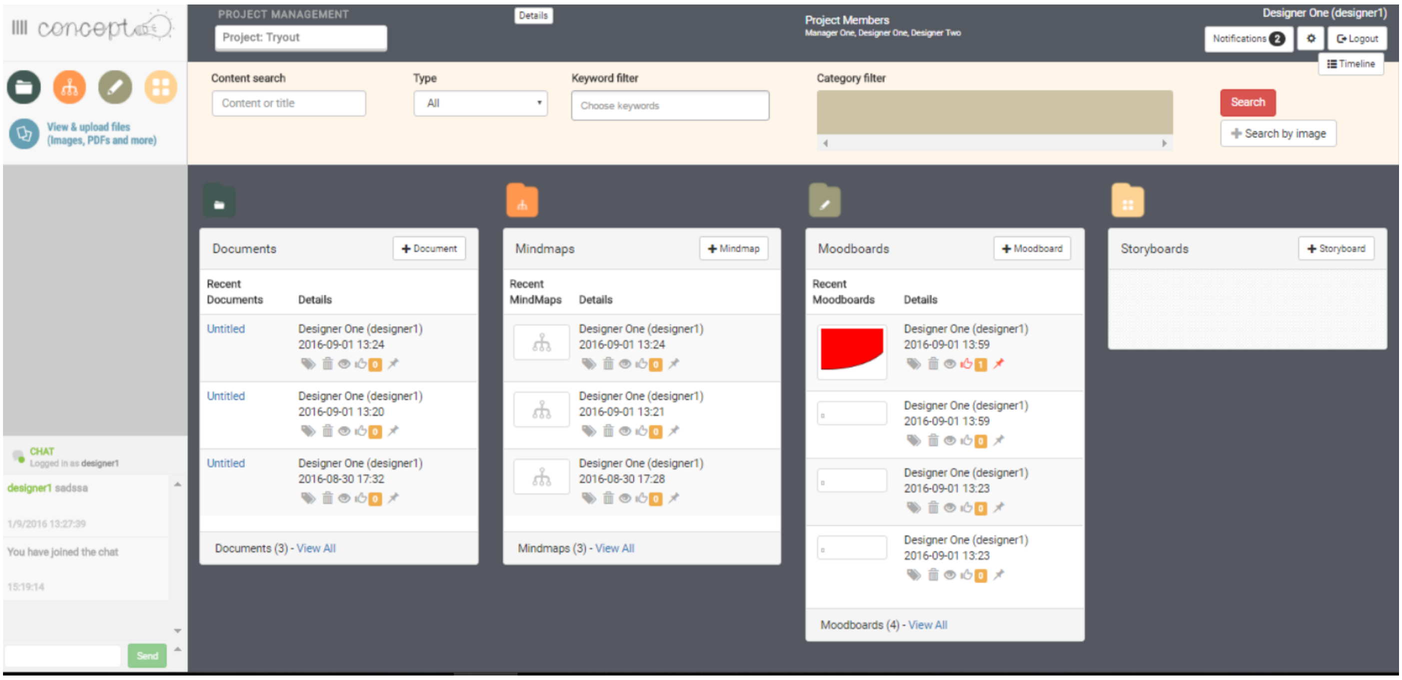

FIGURE 48: DESIGNER MODE.

17. Client Role

THE CLIENT ROLE HAS LIMITED FUNCTIONALITY COMPARED WITH THE PROJECT MANAGER AND THE DESIGNERS ON EACH PROJECT. HE CAN ONLY SEE WHAT THE PROJECT MANAGER AND DESIGNER MAKE PUBLICLY AVAILABLE (SEE

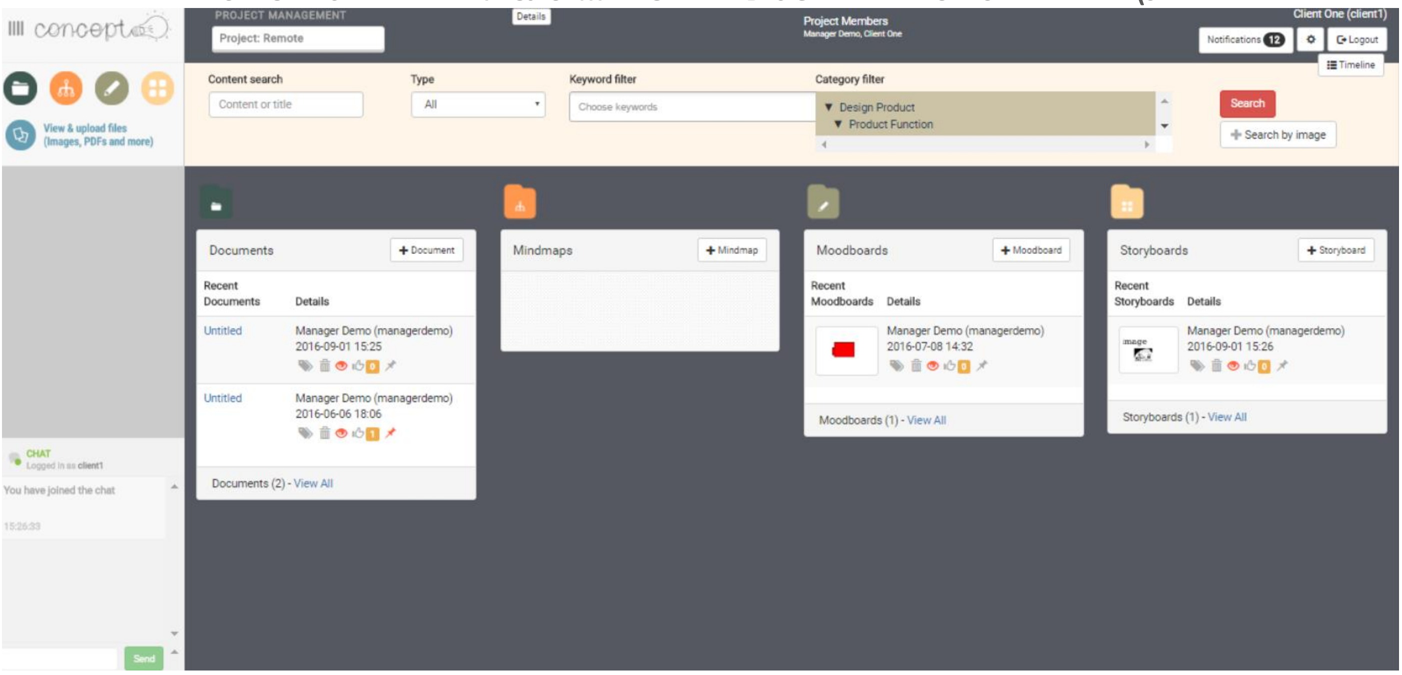

Figure 49). He is allowed to use the chatting tool to discuss with the team.

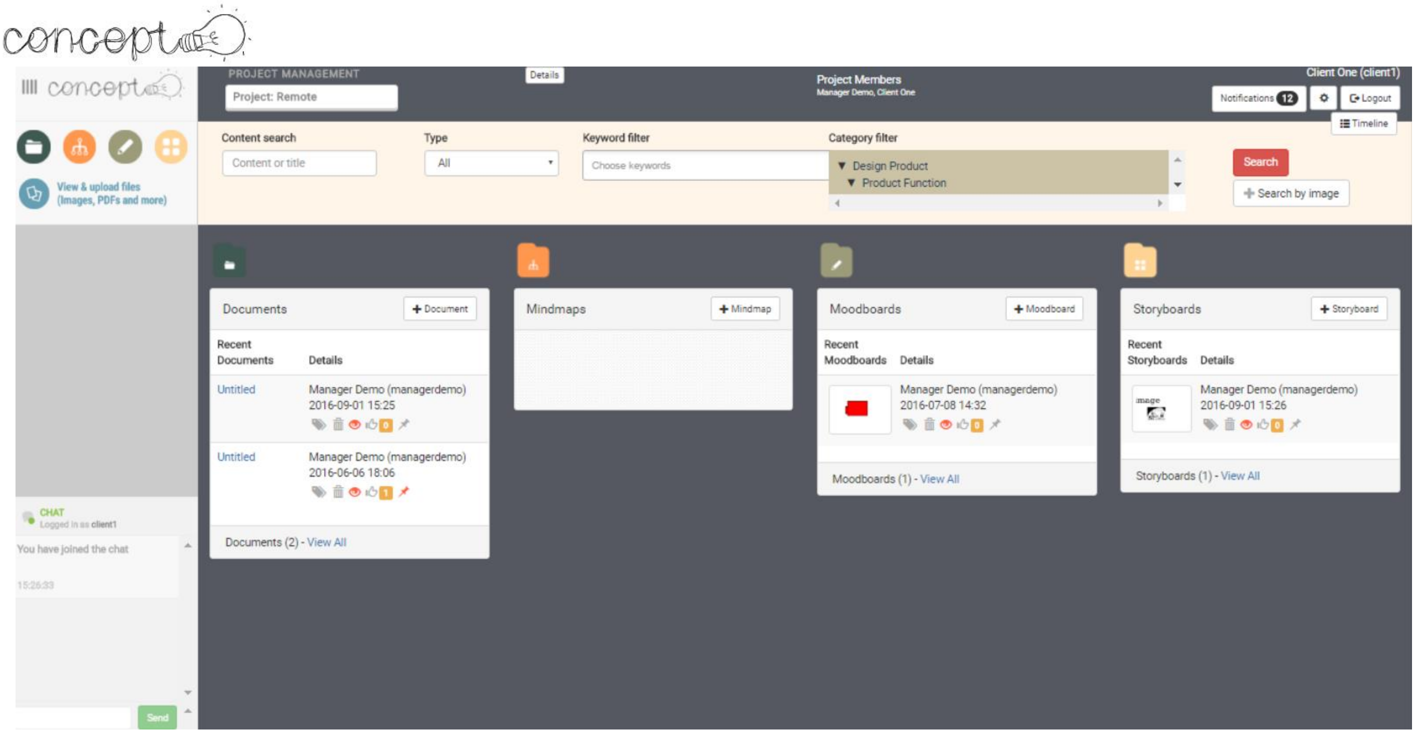

FIGURE 49: CLIENT MODE.