Backlog of the Talio Application

Stakeholders:

- **User:** Any person that is able to use the application
- **Admin:** A person that has access to all the created boards and all of the application's functions; a user can become an admin if they have the password

Terminology:

- **Task:** Description of an activity inputted by user
- **Card:** Contains the task, along with (possibly) a description and a nested task list
- **List:** Collection of tasks that have names
- **Board:** Collection of lists
- **Password protected board:** A board which is in read only mode by default and whose contents can only be edited if the user has the password set by the board's creator
- **Task details screen:** Screen opened when a task is clicked that shows further information that was added to a task

Mocks:

You will find several mocks of the application in the appendix. These are not meant as definitive requirements for the final form of the UI, they only exist to illustrate the intention for the different features.

Minimal Application

The core functionalities of the basic application

As a user, I want...

- to be able to add and remove cards in a list, so I can update what my current priorities are
  - I can click on the '+' button on the bottom right on the lists (see mock 1) to start creating a new card. Then the popup shown in mock 4 appears, where I can enter the title of the card. By clicking confirm, I can create a new card with the title. By clicking cancel, I can discard the card.
  - To remove a card, I can click the red 'x' button on the top right of the card to remove the card.

- to be able to add and remove lists in a board, so I can sort my cards in a more efficient way
  - I can click on the 'Add list' button (in mock 1) to start creating a new card. The popup shown in mock 3 appears, where I can enter the the title of the card. By clicking confirm, I can create a new list with the title. By clicking cancel, I can discard the list.

- To remove a list, I can click the red 'x' button on the top right.

- to move cards from one list to another, so I can change the list that the card belongs to.
  - Moving is done either by right clicking and selecting the list that I want the card to be moved to or by dragging-and-dropping the card into the desired list

- to be able to edit the same board with multiple other users, so we can keep track of the tasks that need to be done (e.g., when working as a group/in a team)
  - Anyone can make modifications (adding/removing cards and lists) to the board, and it will be shared to everyone on the board

- the changes between all users to be synchronized, so everybody sees the same board contents in real-time
  - When a modification is made to the board, the server should refresh automatically for everyone to make sure that everyone sees the change immediately.

As an admin, I want…
- to enter the admin mode by entering a specific credential, so I can maintain the application by using all the admin functionalities
  - By clicking "Add list" and "cancel" five consecutive times, a popup where you can put the admin password shows up. If you enter the correct password, you gain the functionalities of the admin.

- to be able to reset the server, so I can clear all the data on the database
  - By clicking the "Reset" button on the top left corner in the admin view, you can reset the server and delete all the existing items (except the default board).

Multiple Boards

Users' ability to access multiple boards, creating and deleting their own and joining others'.

As a user, I want...
- to be able to create and delete my own board, so I can have a private board that others won't be able to access unless I give them the name/key
  - I can click the create and delete board buttons (top right Mock 1) in order to create a new board or delete an existing one.
  - I will select the board name on creation in the window which prompts after clicking the create board button. (Mock 2)

- to be able to join a different board by name or by using a key, so I can see the task lists of other people (see mocks) (e.g., you need to work in a team and you want to have a private board, separate from the default board that every user has access to)
  - I can click the join board button (To right Mock 1) in order to join another board by inputting the board key in the following prompt (Deletion confirmation popup shown in Mock 5)

- ○ I can enter the key of the board that I want to join in the prompt that show up after clicking join board (Mock 6)

- ● to be able to see a collection of the boards that I have joined, so I can bring up their overview quickly
    - ○ On the left side of the main screen I see a list of all the boards I have joined (As seen on Mock 1)
    - ○ I am able to click any of the boards on the joined board list and immediately be sent to its main screen.

As an admin, I want…
- ● to be able to see the board ID for every board in the server, so that I am aware of everything in the system
    - ○ On the joined board list, placed on the left of the main screen (as visible in Mock 1) I can see all of the boards stored in the database without needing to manually join them
    - ○ I can click on any of the existent boards and see its contents displayed immediately

Advanced Task Options

Additional functionalities on basic tasks, such as having details or nested tasks.

As a user, I want...
- ● to be able to add descriptions to a task, so I can save relevant information about a task
    - ○ Clicking a task opens a second screen (the task details screen) with a text field labeled "Description" and a button labeled "Save"
    - ○ When the button labeled "Save" is clicked, text typed in the text field is added to the task's database entry's "description" attribute
    - ○ If a task already has a description added to it, clicking the task and opening its task details screen shows that task's description

- ● to be able to create subtasks nested within other tasks, so that I can break down a task into smaller tasks
    - ○ The task details screen shows a button labeled "Add subtask"
    - ○ Clicking the "Add subtask" button opens the add task screen (as seen in mock 4)
    - ○ Adding the subtask adds an entry in the subtask table of the database, with a reference to the parent task
    - ○ If a task has any subtasks opening that task's details screen will show a list of all subtasks

- ● to be able to mark a subtask as completed, so I can quickly see if I already finished it
    - ○ Clicking the task shows all the subtasks
    - ○ By clicking on a subtask, and selecting the "Mark as completed" option, it will appear with a "Completed" text and the completeness ratio will increase.

- to be able to see a ratio for completeness in the task, so I know how many subtasks I still have to complete until the task is finished
    - I can see a progress bar on the card of the task, which indicates what percentage of the subtasks have been completed.

- to be able to add tags to a card, so I can categorize cards based on their respective tags
    - I can click the task, opening the task details screen and press the button "add tag"
    - I can input the name and color of the tag in the popup screen that appears after pressing the "add tag" button.
    - Adding the tag creates a database entry for that tag with a reference to its task
    - If a task has any tags, they are visible inside the task's card in the list

Advanced Board Options

Additional functionalities on boards so that the application offers more freedom to users.

As a user, I want...
- to be able to recover deleted tasks via an undo button, so I can regain a task if I deleted it by mistake
    - When I press the undo button, the last deleted task should reappear.
    - It will be in the same list.

- to have the option to set a password on the boards I create, so I can protect them from the changes other people might make (thus becoming a password protected board)
    - In the board settings, there is a button named 'Make Board Password-Protected'
    - Two text boxes should appear: 'Enter Password' and 'Confirm Password
    - If the two fields match, the user is able to create the board password
    - When a user joins a password protected board, they are not able to add or remove tasks and lists
    - Password protected boards show a button labeled "Enter Board Password", when a user clicks that button they are able to input a password which, if it matches the password in the database, allows the user to add or remove tasks and lists

- to be able to use keyboard shortcuts to facilitate certain actions (e.g., creating a new board), so I can quickly complete frequent actions
    - By pressing Ctrl + N + L , the 'Add new list' pop-up window appears (see mock 3)
    - The user can input the required information, and the new list appears as the last list

- By pressing Ctrl + N + T , the 'Add new task' pop-up window appears (see mock 4)
- After entering the task info, the task appears in the selected list
- By pressing Ctrl + D, a deletion confirmation pop-up will appear (see mock 5)
- If the user gives their consent, then the selected task/list will be deleted

- to be able to customize the style of boards/tags (e.g., change the background color, change the tag color), so they match my personal preference
  - When you press the edit button on in the board menu, a list of pre-designed themes appear
  - Each theme contains background colors for the actual board, lists, tasks and tag colors
  - The user can select an existing theme or create one themselves
  - After pressing the 'Confirm' button, the changes appear on that particular board

As an admin, I want…
- to be able to access any password protected board without inputting the password, so that I am able to monitor what is happening in every board in the server
  - If the admin attempts to join a password protected board, they are not prompted to input a password
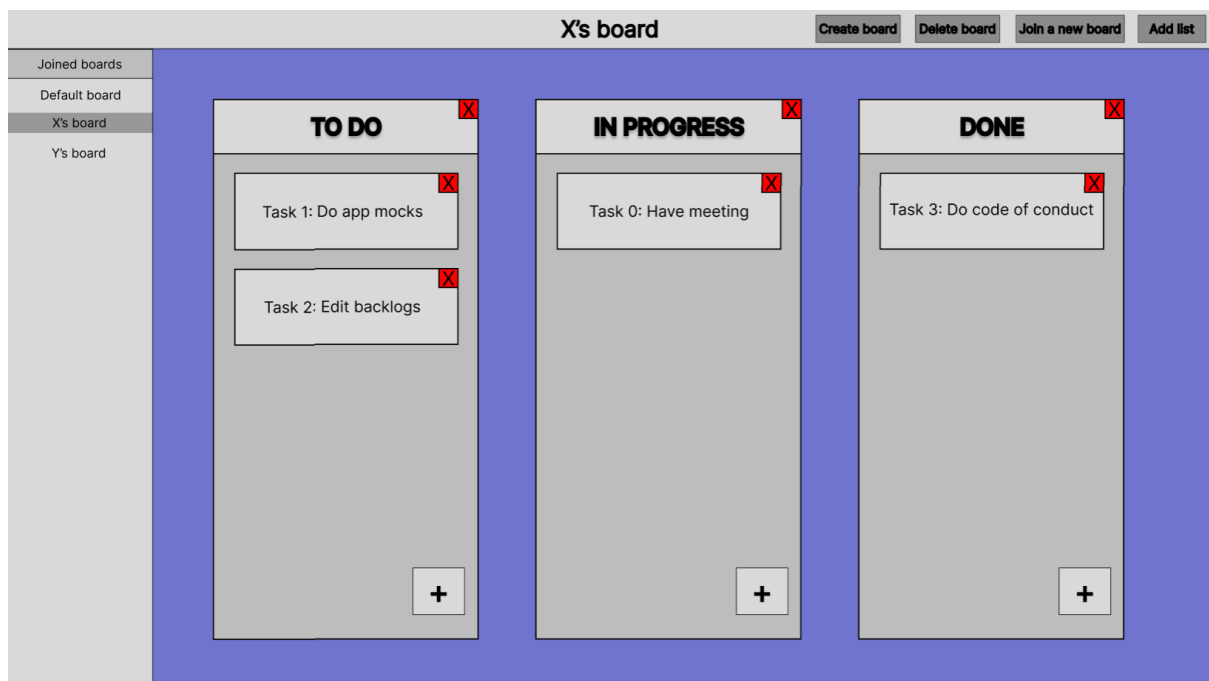
Search Options

Functionalities which allow the user to sort and filter the tasks.
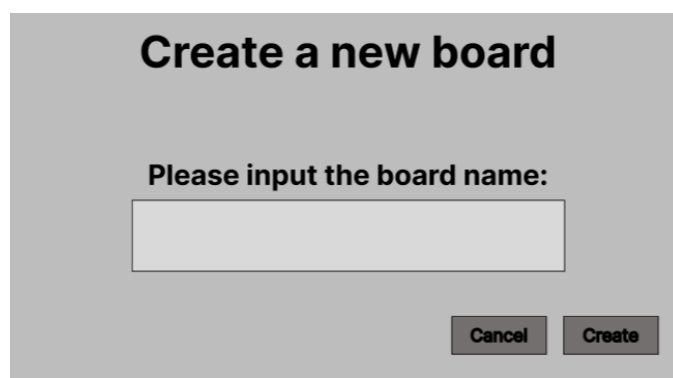
As a user, I want…
- to be able to see filtered tasks based on the tag I choose, so I can quickly view the tasks that have the chosen tag assigned to them.
  - all the tags that appear on the board are clickable, if a user clicks a tag, all the tasks which contain this tag will show, while other tasks are non-visible.
  - a clicked tag(filtering tag) should be different than other tags, for example: a different color/shape.
  - users can remove the filter by clicking the filtering tag again, then all tasks are visible again.
  - there can only be one active filtering tag, if a user clicks another tag while a filtering criteria is applied, then the old criteria is removed automatically.
- to be able to search for tasks based on the title of the card, so I can quickly find in which list it resides
  - There is a search bar that appears on the board, and users can type a string in the search bar.

- There is a search button near the bar, once the user clicks it a pattern match will be performed on all tasks based on there title + description, and all match tasks will appear while others are removed.
  - to be able to prioritize tasks, so I know which ones are more important and need to be finished first
    - a number is displayed on the task which is a integer from 1 to 9, which indicates its priority
    - priority can be entered by the user when they create the task, but it's not a mandatory field. tasks without priority can still show without the numbers.

Mocks

Mock 1

Mock 2

Add new list

Title:

Cancel Confirm

Mock 3

Add new task

Title:

Cancel Confirm

Mock 4

Delete the current board

Are you sure you wish to delete the current board? (Default board cannot be deleted!)

Cancel Delete

Mock 5

Join a different board

Please input the board ID:

Cancel Join

Mock 6