Backlog

Stakeholders

User – anyone who is able to start the application and wants to manage their tasks/goals
Admin – the person who starts, manages and moderates the server

Terminology

Board – a shared workspace where users can create different **lists** of **cards**
List – a list of **cards** which are somehow related (for example, a "TODO" **list**, which contains **cards** to be completed)
Card – a card represents a single task

User stories

Non-Functional Requirements

The system should use Spring Boot for the server, and JavaFX for the client.

Basic Features (Required for passing)

Basic features epic – Talio is a client-server application which can be used for collaborating in real-time to create and manage goals/tasks. Users can create lists and add cards to those lists (Figure 1.1). Cards can be dragged and moved into different lists to indicate the stage of progress they are in, or moved up or down a list to indicate priority (Figure 1.2). Finally, users can delete tasks or lists, if they feel they are no longer relevant. This would be done by clicking one of the delete buttons shown in Figure 1.1. Below are the user stories related to this epic:

As a user, I want:
- to be able to create a new list, by pressing the '+' button and entering a title, so that I can add layers to the workflow of my project
- to be able to add a card to a list by providing a title for it, so that I can further manage the task represented by the card
- the cards in the lists to be represented by just their titles, so that my overview of tasks is clear
- to be able to delete a card by clicking on the 'x' button, in case the card was added by mistake or is no longer needed
- to be able to delete a list (along with its cards, if any) by clicking the 'delete' button, in case the list was created by mistake or is no longer needed
- to be able to click on a card, and drag it into another list, to indicate that progress has been made on this task

- to be able to click on a card, and drag it to a different vertical position in the same list, to change its priority relative to the other cards in the list
- to be able to use the application and the same board concurrently with other users, so that I can see any changes they made to the board and collaborate with them, and vice versa
- any changes to the overview (adding/deleting lists or cards, moving cards around) made by one user to be immediately visible to all other users, so that we can collaborate in real time

As an admin, I want to be able to restart the server without losing the boards, lists and cards, so that the server can be easily updated

Advanced Features

Multi-board epic - The basic feature of having one shared board should be expanded on by allowing users to create multiple boards. Each boards is identified by a name, which can be entered into a search bar to later find the board. Since there can be multiple boards, the users will not be taken to a shared board immediately upon opening the application. Instead, they will be taken to the home screen, shown in Figure 2.3.

As a user, I want:

- to be able to create multiple boards and give them a name, so that I can organise tasks for different projects, or simply tasks from different categories, unrelated to each other
- to be able to search for a board by its name, so that I can easily access it whenever I want to use it

As an admin, I want to be able to delete boards, in case they are inappropriate or are not being used any more.

Card details epic – The cards can hold more information than just the title. They can have a description, which gives more information about a task. Each task can also be broken down into subtasks, which are represented as a list of checkboxes. Users should be able to add and remove subtasks at will. Users can also see the progress made on a certain card, displayed as a percentage of completed subtasks. Finally, cards can have associated tags, which provide a classification of cards. Users can add and remove the tags. The window with the card details can be seen in Figure 2.1.

As a user, I want:
- to be able to open a popup window by clicking on a card, so I can get more information about a task without cluttering the window
- to be able to enter a description of a card, so I can provide more details about the task
- to be able to edit the description of the card, so I can provide more details or make the description clearer, or simply change it if I make a mistake
- to be able to add a subtask consisting of a title to a card, so I can break the task down into smaller parts
- to be able to tick a checkbox corresponding to a subtask, to indicate that this subtask has been completed
- to be able to untick a checkbox corresponding to a subtask, in case I tick it my mistake, or realise that this subtask has not actually been completed
- to be able to delete a subtask by clicking on a button next to it, in case I feel a subtask is no longer relevant

- to see an indication of what percentage of subtasks have been completed in the card details popup, so I can have a clear idea of how this task is progressing
- to be able to select a tag from a list of available tags and add it to a card, so that I can better categorise different types of tasks
- to be able to see all the tags added to a card, so that I can better understand the significance of the task
- to be able to delete a tag by pressing the 'x' button next to it, so I can delete any tags that are no longer relevant to my card

Board and tag customisation epic - Users can customise their boards by clicking on one of the "Edit" buttons from each board (Figure 2.2) and then choosing a colour from some predefined ones given (Figure 2.3). They can also change the colour of a tag in a similar manner.

As a user, I want:
- to be able to change the background colour of a board by selecting a colour from a list, in order to make the board more personalised
- to be able to select the background colour of a tag, in order to emphasise the meaning behind it (for example, red = urgent)

Keyboard shortcuts epic – users can perform some of the basic functions of the application using only their keyboard in order to use the application more efficiently or more conveniently.

As a user, I want:
- navigate through lists and cards with the arrow keys, in order to be able to select a list or card. Acceptance criteria:
    - left and right arrow keys move between lists
    - up and down keys move between cards in a list
    - the selected card stands out from the rest by having a slightly different background colour
- add cards to a list by pressing the enter key and entering a title, in order to be able to enter many cards quickly, without the need to press a button
- delete a selected card from a list by pressing the backspace key, in order to be able to quickly delete many cards, without the need to press a button

Password protected boards epic – users can create password protected boards. These boards can be viewed by anyone, but can only be edited by those who have the password. System admins have unrestricted access to all boards.

As a user, I want:
- to be able to specify whether a board should be password protected while creating it, and enter a password if needed, in order to restrict access to the board
- to be asked for a password when trying to edit a password-protected board, so that I can gain access to it. Acceptance criteria:
    - if the password entered is incorrect, I am alerted and prompted to try again
    - if the password is correct, I am alerted, and can edit the board
- to be able to remove password protection from a board I have access to, so that I can share a protected board to all the users

As an admin, I want:
- to be able to enter a hardcoded password, which would grant me admin rights. Acceptance criteria:
    - if the password entered is incorrect, I am alerted and prompted to try again
    - if the password is correct, I am alerted, and have admin rights

- to be able to edit password-protected boards without a password, so that I can properly moderate them
- to be able to change the password for any board, in case the password is forgotten or in case I want to change who has access to it
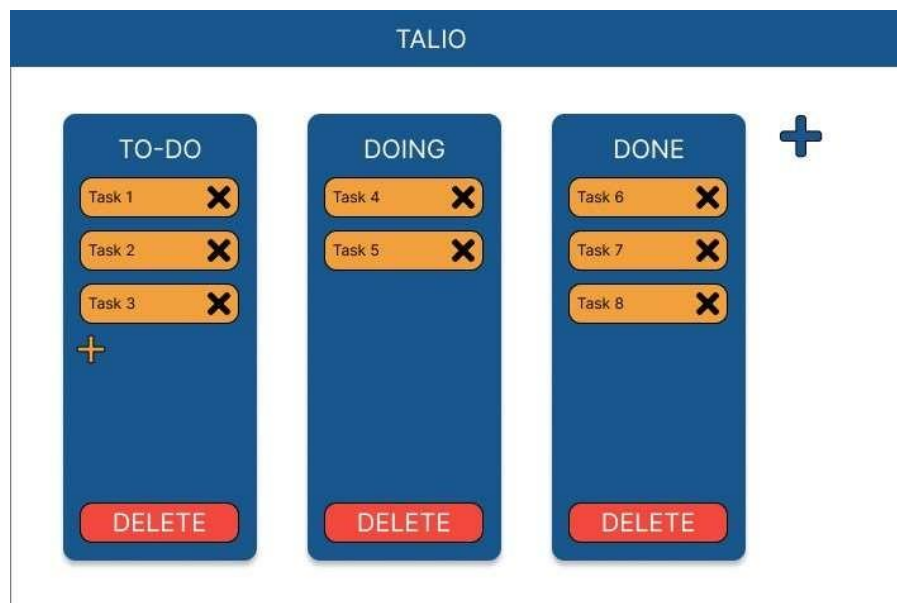
Mocks

Figure 1.1 – the layout of a board, showing the buttons for adding and deleting lists and cards
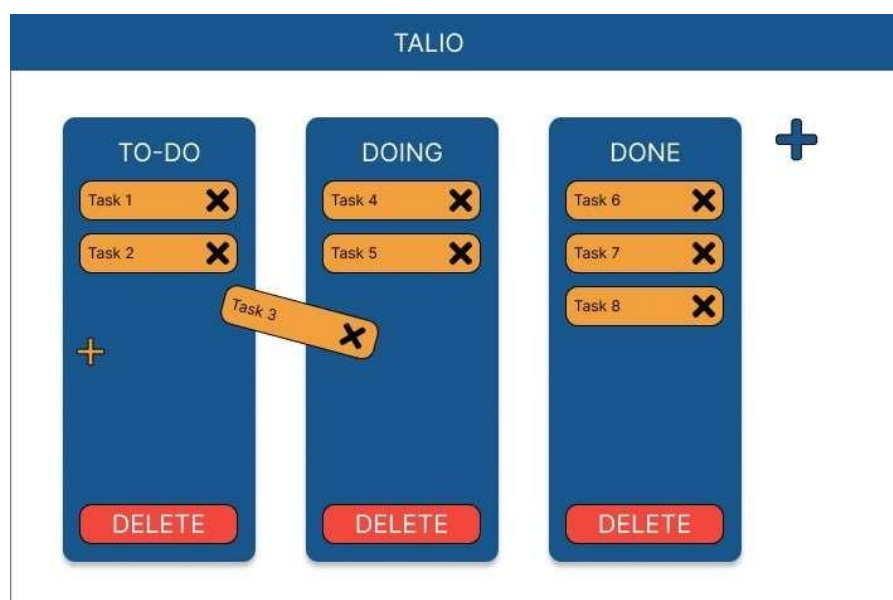

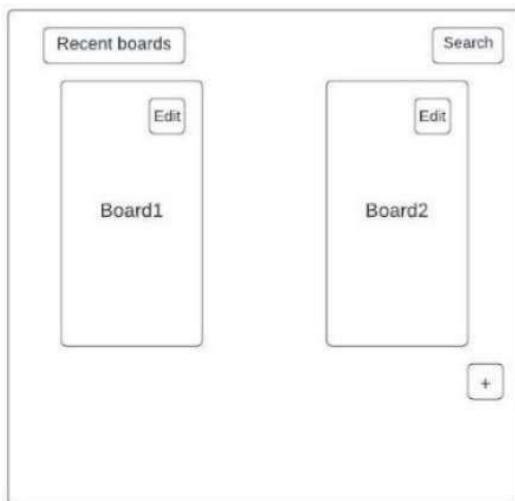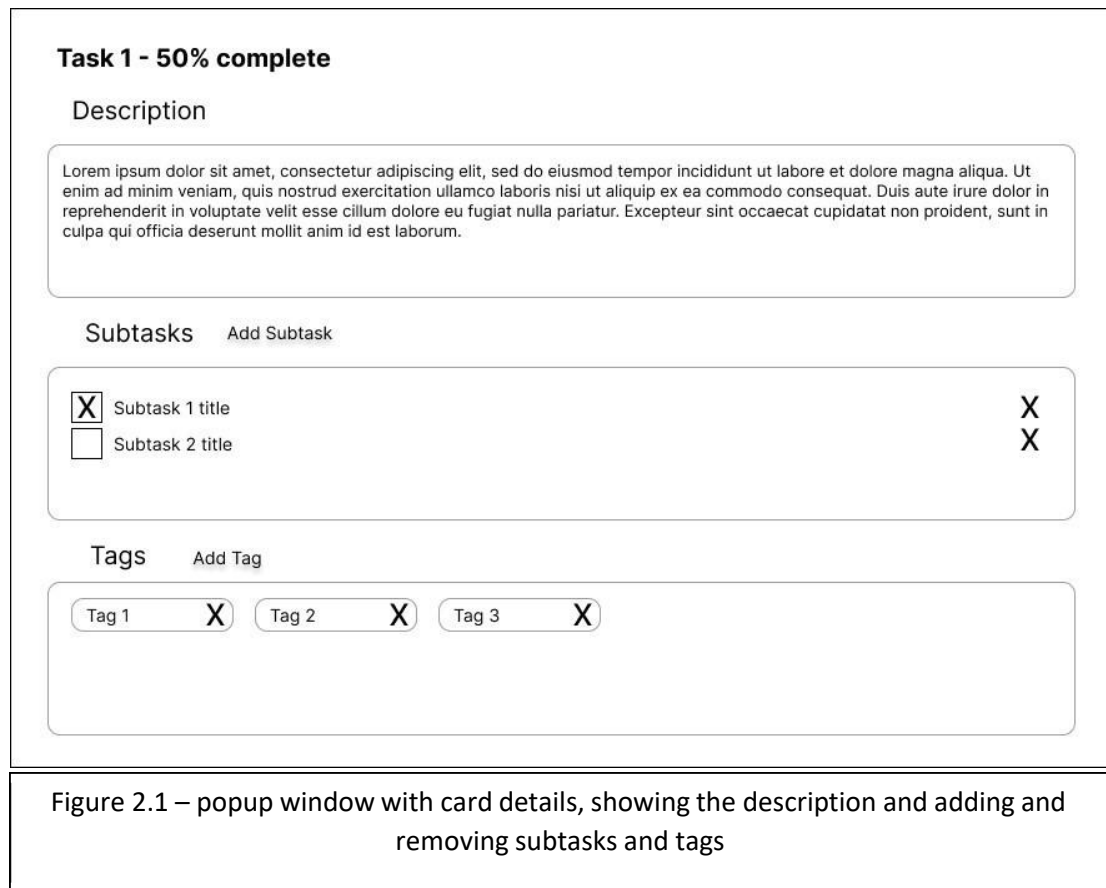Figure 1.2 – showing the drag and drop functionality

Task 1 - 50% complete

Description

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

Subtasks   Add Subtask

[X] Subtask 1 title   X
[ ] Subtask 2 title   X

Tags   Add Tag

(Tag 1   X) (Tag 2   X) (Tag 3   X)

Figure 2.1 – popup window with card details, showing the description and adding and removing subtasks and tags

Recent boards   Search

Edit   Edit

Board1   Board2

+

Figure 2.2 – showing the multi-board features (search bar, and creating new boards), as well as the edit button for board customisation

Recent boards   Search

Edit   Edit

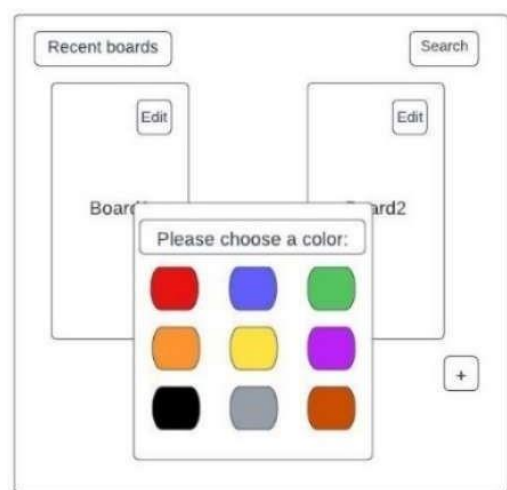Board   ard2

Please choose a color:

+

Figure 2.3 – showing the menu for selecting a board background colour