Backlog - Requirements Engineering

1   Stakeholders

- *User* - Any person that is able to create/join a board using an id/key, modify or delete it.

- *Admin* - A person that can start, restart and stop the server, access, modify and delete any board or/and any data. An admin is also a user.

2   Terminology

Board Refers to the main screen of our application, contains lists which in turn contain entries.. 1

Entry Refers to a task added to the board, organised on the vertical axis under a specific list.. 1

List Are on the horizontal axis, encapsulate entries.. 1

3   The objective

An overview: We are building a personal task list organizer. The main page is a board that contains lists and these lists, in turn, contain cards that can be added, removed and moved between the lists.

INTENTIONALLY LEFT BLANK

4 Epics

4.1 Mandatory requirements

1. *As a user* I want an application to manage my tasks, and track their progress so I can organize my thoughts.

    (a) A Server Application (using Spring Boot)

    (b) A Client Application (using JavaFX)

2. *As a user* I want my changes to be saved remotely after I exit the application so that I don't have to keep it running at all times.

    (a) After an application restart the board should persist.

3. *As a user* I want to be able to modify my entries and lists so that I can organize my tasks well.

    (a) Entries can be added.

    (b) Entries can be removed.

    (c) Entries can be edited.

    (d) Lists can be added.

    (e) Lists can be removed.

    (f) Lists can be edited.

4. *As a user* I want an intuitive interface so that I can easily use the app.

    (a) Buttons do what they are expected.

    (b) Descriptive and concise titles.

    (c) Simple descriptions.

5. *As a user* I want to be able to drag and drop lists so that I can order them however I please.

    (a) Lists can be dragged and dropped like items in a table.

    (b) Scrollable design.

    (c) The order persits.

6. *As a user* I want to be able to drag and drop entries so that I can organize/prioritize tasks in an easy way.

    (a) Entries can be drag and dropped between lists.

    (b) Scrollable design.

    (c) The order persits.

7. *As a user* I want to have see changes happen in real time so that the board can function much like a whiteboard in a room of people would.

    (a) Changes are relayed real-time, to all users.

8. *As a user* I want to be able to to join a board(s) created by another user so that we can collaborate on task organization.

    (a) Board(s) can be joined by multiple users and the changes are synchronized.

9. *As a user* I want the created entries to be identifiable by their title.

    (a) The entries are visible on the board as their titles.

4.2   Multiple boards

1. *As a user* I want to be able to create a new board so that I can have different boards for different projects.

   (a) Boards can be created by users.

2. *As a user* I want to be able to join different boards so that I can collaborate with others.

   (a) Boards can be joined by their identifier. (Figure 1)
   (b) Generation of SHA-1 identifiers for boards.

3. *As an admin* I want to be able to manage boards of other users so that I can administrate the system.

   (a) Boards can be deleted by admins.
   (b) Boards can be edited by admins.

4.3   Detailed entries and boards

1. *As a user* I want to be able to add entries with details so that I can organize my tasks better.

   (a) Entries have descriptions.
   (b) Entries can be tagged.

2. *As a user* I want to be able to add sub tasks to tasks so that I can group tasks properly.

   (a) Sub tasks can be added to tasks.
   (b) Sub tasks can be removed and edited.

3. *As a user* I want to be able to customize entries and boards so that I can make boards aesthetically appealing.

   (a) A background color can be chosen.
   (b) Tags can be colored.
   (c) Font size and color can be changed.
   (d) Basic font decorations can be used.

4. *As a user* I want to be able to attach media to entries so that I can specify my tasks better.

   (a) Pictures can be added to entries.
   (b) Attachments can be added to entries.
   (c) Both of these can be removed from an entry.

5. *As a user* I want to be able to filter the entries so that I can find entries speedily.

   (a) Entries can be filtered based on tags.
   (b) Entries can be filtered based on titles.

4.4   Security

1. *As a user* I can password protect my boards so that unwanted actors cannot edit my boards.

   (a) A password can be set on a board.
   (b) A password protected board cannot be joined without the password.

2. *As a user* I want to be able to pick the access level for my boards so that only I can edit it but others can view it.

   (a) A board can be set password protected for writing (p.p.w.).

    (b) A p.p.w. board cannot be edited without the write password.

  3. *As an admin* I want to be able to override password protections on boards so that I can access all boards.

    (a) Password protected boards can be joined by admins with no need for passwords.
    (b) An admin can change or remove a password to a board.
    (c) An admin doesn't need a write password to edit p.p.w boards.

4.5   Ease of use

  1. *As a user* I want to be able to easily edit entry names and properties.

    (a) All task properties can be edited from the overview. (Figure 2)

  2. *As a user* I want to be able to edit tasks using keyboard shortcuts, so that I can use the application efficiently.

    (a) Fields can be cycled by virtue of the "tab" key.

  3. *As an admin* I want to be able to view all active boards so that I can properly administrate the system.

    (a) Admins can view a list of all boards.

  4. *As a user* I want to be able to view who authored some change, and view board statistics.

    (a) Board history can be viewed, with the authors of changes.

  5. (very optional) *As a user* I want to be able to view board analytics so that I can gather information about my board.

    (a) Board analytics can be viewed such as: cards created, activity per week, users connected. (Figure 3)
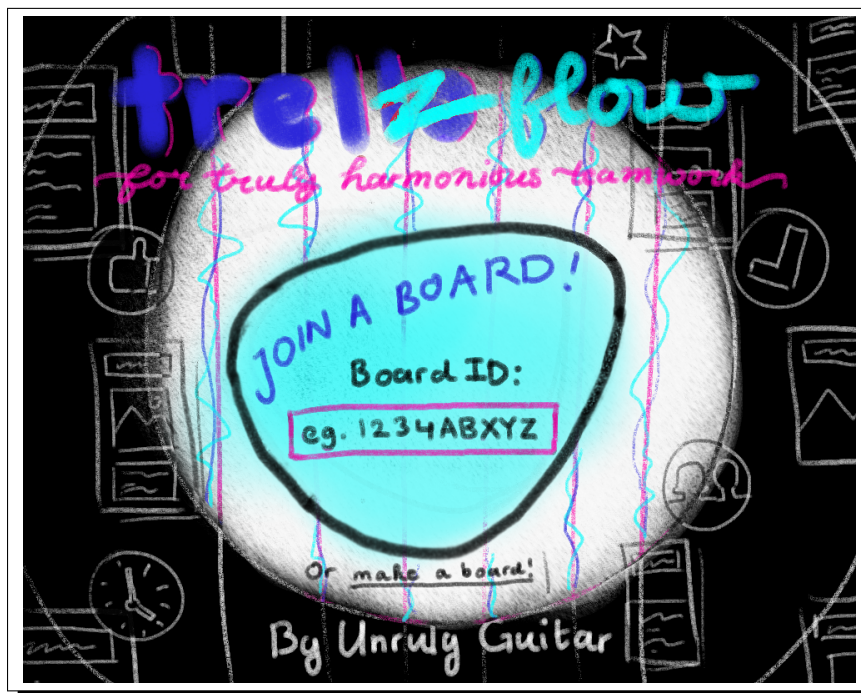
5   Additional Mocks

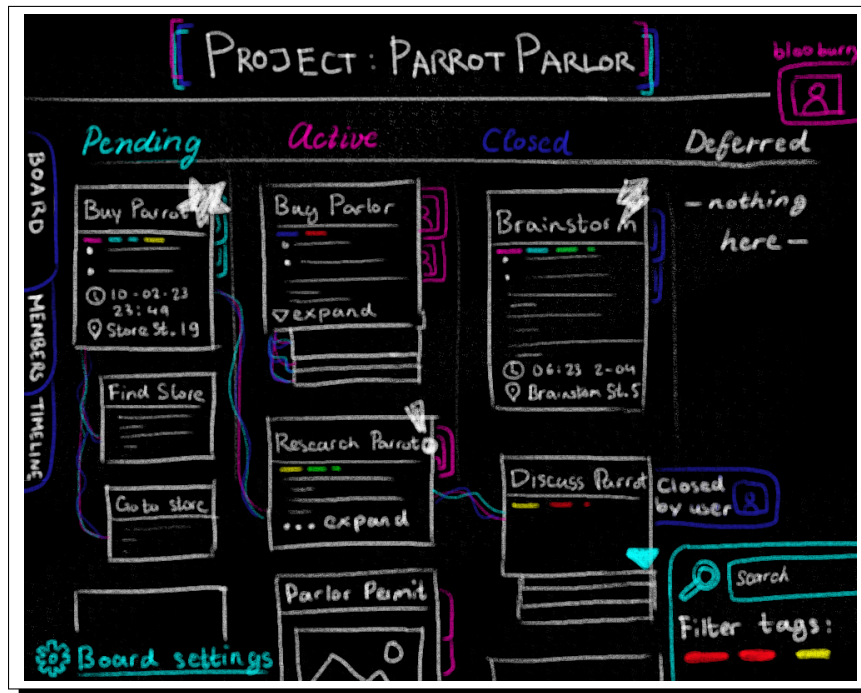Figure 1: A mock of the join screen
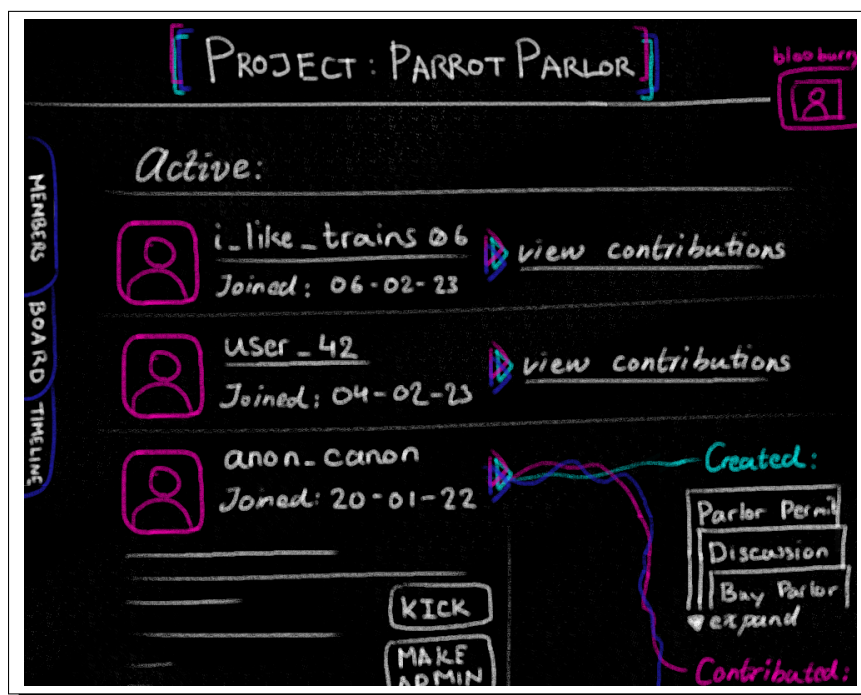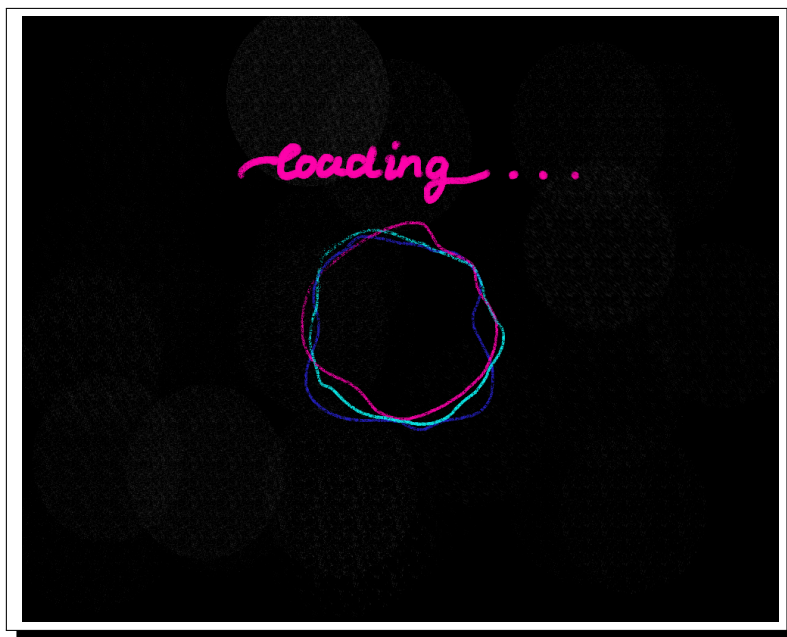
Figure 2: A mock of the board screen

Figure 3: A mock of the analytics screen

Figure 4: A mock of the loading screen