BACKLOG

STAKEHOLDERS
- User: Any person who is able to access a board.
- Administrator: A person who has full access to the functionality of the app as well as the servers and is responsible to manage the correct operation of the project.

TERMINOLOGY
- Card: the entity that represents a specific task.
- List: the unit that combines 'Cards' into different groups (e.g. TODO, Doing, Done). A list can contain multiple cards.
- Board: the canvas where 'Lists' are displayed. A board can contain multiple lists.

MUST REQUIREMENTS

EPIC 1: Core functionality
These basic features are needed, so that the app can function in its simplest form.

- As a user, I want to be able to use the application anonymously, so that I can divide my tasks quickly without providing any personal information.
  - Acceptance Criteria:
    - The user can access and edit the board without registration.
- As a user, I want to create new lists within a board, so that I can organize and structure my tasks.
  - Acceptance Criteria:
    - The user can create multiple lists within a single board.
    - The user can give the list a name.
- As a user, I want to create new cards with different titles within my lists, so that I can represent my tasks.
  - Acceptance Criteria:
    - The user can create a card within a list.
    - The user can give the card a title.
- As a user, I want the application to be easy to navigate and use so that I can focus on my tasks.
- As a user, I want the interface to be clearly labeled and accessible, so that I have a pleasant user experience.
  - Acceptance Criteria:

- The layout should be clear and organized, making it easy for the user to find what they need.
- The application should be responsive, with fast loading times and smooth transitions.
- As a user, I want to be able to share the same workspace, so that I can collaborate with other users.
  - Acceptance Criteria:
    - There is support for multiple people to be using the application at the same time.

EPIC 2: Client-Server Application

These features ensure that the integrity of the data is preserved indefinitely and accessible from different devices.

- As a user, I want my data to be stored in a reliable database, so that I can use the app continuously without losing my information.
  - Acceptance Criteria:
    - When I make changes to my boards, lists, and cards, the changes are automatically saved to the database.
- As a user, I want the overview of a board and actual data to be synchronized automatically across different devices, so that changes are visible from anywhere.
  - Acceptance Criteria:
    - The application should synchronize the board overview as soon as it is updated, across all devices.
    - The synchronization should be seamless and automatic, without requiring the user to manually trigger it.
    - The synchronization should occur in real-time, with minimal delay or lag.
- As an administrator, I want to be able to monitor usage and performance of the application so that I can make improvements as necessary.
  - Acceptance Criteria:
    - There is a dashboard or other interface where administrators can view usage and performance metrics.
    - Metrics include things like server logs, number of active users, frequency of use, and any error or performance issues.
    - Administrators can use these metrics to identify areas for improvement and make changes as necessary.

- As an administrator, I want to be able to restart the server without losing data, so that I can ensure that the app operates correctly and fix problems in functionality.
- As an administrator, I want to be able to delete boards, so that I can remove information that has not been used for an extended period of time.

EPIC 3: Flexibility

These features allow the user to reorganize and modify their workspace.

- As a user, I want to be able to delete lists, and/or cards so that I can remove redundant information.
    - o Acceptance Criteria:
        - ▪ The user should be able to delete a list by clicking on the delete icon next to the list name.
        - ▪ The user should be able to delete a card by clicking on the delete icon next to the card name.
        - ▪ When a list or card is deleted, it should be permanently removed from the user's workspace and cannot be restored.
        - ▪ The user should be prompted to confirm the deletion action before the list or card is permanently deleted to prevent accidental deletion.
- As a user, I want to be able to drag and drop cards between lists so that I can easily change their placement.
    - o Acceptance Criteria:
        - ▪ The user can select a card by clicking on it, and then drag and drop it into another list.
        - ▪ The card is visually moved from the original list to the destination list upon release of the mouse click.
        - ▪ If the user drags a card outside of the board area, the card should not be lost and should be able to be retrieved easily.
- As a user, I want to be able to drag and drop lists within the board so that I can structure them in a clear manner depending on their priority at the time.
    - o Acceptance Criteria:
        - ▪ The user can select a list by clicking on its title and then drag and drop it into a different position on the board.
        - ▪ The list is visually moved from the original position to the destination position upon release of the mouse click.
        - ▪ The list is moved to the correct position within the board based on the position where it was dropped.

- The list remains in the new position and maintains its previous information, such as its name and its contained cards.
- The cards contained within the list being moved are also moved with the list, and their order within the list is maintained.

SHOULD REQUIREMENTS

EPIC 4: Enhancements to Basic Functionality

These features build up on the existing functionality, allowing the user to create multiple boards and add details to cards.

- As a user, I want to create a new board, so that I can divide my tasks more efficiently.
  - Acceptance Criteria:
    - The user can create a board without any form of registration required.
    - The board is automatically saved and can be accessed later using a unique key.
    - The board can be given a name upon creation.
- As a user, I want to be able to access a homepage at all times, so that I can create a new board or search for an existing one.
  - Acceptance Criteria:
    - There is a page that has a "create a new board"ww button and search bar.
- As a user, I want to be able to join boards by entering a key, so that I can collaborate on specific boards.
  - Acceptance Criteria:
    - There is a textbox where keys can be entered.
    - Upon entering a valid key, the application will display the corresponding board.
- As a user, I want to be able to delete boards, so that I can discard unnecessary information.
  - Acceptance Criteria:
    - There is a "delete board" option available.
    - Clicking on the "delete board" option prompts a confirmation message to ensure that the user wants to delete the board.
    - If the user confirms the deletion, the board and all of its contents (lists and cards) are permanently deleted.
    - After the board is deleted, searching for the unique key of that board will not appear anymore.

- As a user, I want to be able to view details of my cards so that I can find out more about the task.
  - Acceptance Criteria:
    - The user should be able to view the title of the card from the overview.
    - Upon clicking on the card, the user should be able to view the description of the card.
- As a user, I want to be able to add a description to my cards so that I can provide additional information about the task.
  - Acceptance Criteria
    - The user should be able to access the card details by clicking on the card.
    - There should be a text box where the user can enter the description of the card.
    - The user should be able to save the description by clicking on a "Save" button.
    - The saved description should be displayed on the card for future reference.
    - The user should be able to edit or delete the description at any time.
- As a user, I want to be able to create subtasks in the form of checklists within cards, so that I can break down large tasks into smaller sub-tasks.
  - Acceptance Criteria:
    - The user should be able to easily create new checklists within a card.
    - The user should be able to add items to a checklist.
    - The user should be able to edit or delete items within a checklist.
    - The user should be able to mark items within a checklist as complete or incomplete.
    - The user should be able to view the progress of a checklist in the overview of the card, including the number of completed items and the total number of items.

EPIC 5: Customization
These features provide options for personalization, allowing for a better user experience.

- As a user, I want to be able to add tags to my cards, so that I can categorize them.
  - Acceptance Criteria:
    - The user can add a tag to a card by typing the name of said tag.

- The user can create new tags or choose from existing ones.

- Each tag has a unique name and color assigned to it.

- The user can add multiple tags to a single card.

- Tag colors are displayed on the front of the card, along with the card title.

- The user can remove tags from their cards.

- Tags are visible to all members of the board.

- As a user, I want to be able to customize the background and color of my boards, lists, and cards, so that I can personalize them.
  - Acceptance Criteria:

    - The user can select a background for their board.

    - The user can change the color of the lists and/or cards.

COULD REQUIREMENTS

EPIC 6: Keyboard Shortcuts

These features suggest alternative options to conventional navigation of the application to perform repetitive actions more efficiently.

- As a user, I want to be able to use keyboard shortcuts, so that I can quickly navigate and perform actions.
  - Acceptance Criteria:

    - The user can navigate the application using keyboard shortcuts.

    - The user can perform actions such as creating a new card or editing a card using keyboard shortcuts.

    - The keyboard shortcuts should work consistently across different pages and features of the application.

    - The keyboard shortcuts should be compatible with commonly used keyboard layouts.

- As a user, I want to be able to exit the detailed view of a card by pressing ESC, so that I can quickly return to the board overview.

- As a user, I want to be able to save changes in the description of a card by pressing CTRL + S, so that I can update the description more efficiently.

EPIC 7: Security

These features ensure that the user's data is protected at all times.

- As a user, I want to be able to password-protect boards, so that I can keep sensitive information secure and control who can access them.
    - Acceptance Criteria:
        - The board creator can set a password for the board.

        - The board can only be accessed with the correct password.
- As a user, I want to be able to set different access levels for board members, such as read-only or write.
    - Acceptance Criteria:
        - When creating the board, a user can set two different passwords, one that gives read-only access and one that gives write access.

        - A user can set access levels for board members by sharing the password with other users.

        - If a user has joined a board using a read-only access password, they can view the board and its contents, but cannot make any changes.

        - If a user has joined a board using a write access password, they can view, edit and make changes to the board and its contents.
- As an administrator, I want to be able to reset passwords, so that I can provide support to users who have forgotten them and enable them to access their boards again.