Kanban Board

Overview:

We want to develop a web based application for managing day-to-day tasks. Through this application, users can add, update or delete his/her to-do list. Users need to register first to access the web application.

Functional Requirements:

1. Registration   *4 Hours*

When anyone opens the sign-up link, they will see the form with the following fields.

1. Name (Mandatory)
2. Username (Mandatory)
3. Email (Mandatory)
4. Contact Number (Optional)
5. Password (Mandatory)
6. Profile Image (optional)

2. Login   *4 Hours*

Users can log in via username/email and password + captcha. After successful login, users will be redirected to the Dashboard page.

3. Dashboard   *4 Hours*

In this page, users will be able to see the count of total tasks created by him/her, total completed and total pending tasks.

4. Task Management   *16 Hours*

In this page, users will see the board containing 4 stages of tasks in sequence - 'Backlog', 'To Do', 'Ongoing' and 'Done'.

The task inputs should initially be empty. The user has to enter a task name, priority and deadline for the task and clicking on the 'Create task' button should add a new task with this task name. This newly created task should be added to the Backlog stage (the first stage). Post this, clear the input fields. If the 'Create Task' button is clicked with inputs being empty, a proper error message should be shown.

Each task has 4 properties -

1. name - name of task. This is the unique identification for every task. [STRING]
2. stage - stage of task [NUMBER] (0 represents Backlog stage, 1 represents To Do stage, 2 represents Ongoing stage, 3 represents Done stage).
3. priority - Values can be high, medium, or low.
4. deadline - Due Date for the task.

In every individual stage, the tasks are rendered as a list. Each task list item should have 3 icon buttons at the right, i.e., Back, Forward, Edit and Delete. Back and Forward buttons move the task to the previous and next stages in sequence respectively. These must be disabled if the task is in the first / last stage respectively. The Edit button provides the functionality to update the task details like task name, priority and deadline. The Delete button removes the task from the board.

Tasks can also be dragged and dropped from one stage to another. When a task is picked up using a cursor, a trash bin should appear at the bottom right. If the user drags the task to trash, a popup should appear asking for confirmation. Task should be deleted if the user confirms.

Non - Functional Requirements:

1. Clean coding structure is expected. Code should be test-case friendly.
2. Reusable components are appreciated. UI must be responsive on all devices.
3. Use of lazy loading, memory efficient code is a must.
4. All form fields should contain necessary validations.
5. Functional components with hooks and ES6 standards should be used.
6. Rest APIs should be implemented for tasks-related CRUD operations using a suitable environment. Redux should be used for data storage.
7. Integration of social login would be a bonus.

Guidelines:

Time against each module indicates the maximum time limit. There will be no extension given.

Technology:

ReactJS , HTML, CSS, Bootstrap / Material UI

Delivery Format:

GIT

Delivery Time:

30 Hours