

The assignment will be splitted into a frontend task and a backend task. You just need to attempt one of the tasks. Feel free to attempt both if you want to.

Have your work on a public repo like github. **Commit** early, **commit often**.

Submit the assignment with the repo url and a simple readme on how to set it up on a local machine.

1 - Backend Task:

Requirements:

Let's build a car park availability checking system. However users must register an account in order to use the system.

Build an API using any programming language of your choice. You are allowed to use a framework. It should have the following functionality:

1. Registration
 - a. Mandatory fields: First name, Last name, email, password
 - b. Optional fields: Contact number
2. Login
 - a. Login using email/password
 - b. Respond with a JWT token upon successful login
3. View Member Details
 - a. Protected API - requires JWT token
 - b. Returns the member details
4. Get Carpark Availability
 - a. Protected API - requires JWT token
 - b. Returns data from this data.gov api:
<https://data.gov.sg/dataset/carpark-availability>

2 - Frontend Task:

Requirements:

Build a Kanban board like Trello.

Build a Kanban board like Trello, you may use any JS framework of your choice. You may use any CSS Framework that you prefer.

Additional requirement:

- Minimally must be able to run in the latest version of Chrome. Other browser support is optional. Support on older version of Chrome is optional
- Save the data into LocalStorage if possible, else it is fine to just save in-memory. That is, everything will be reset once I refresh the browser.
- Mobile responsive
- Minimum Kanban board features to implement:
 - Able to create new board
 - Able to name and rename the board as well as the description of the board
 - Minimum 3 columns: To-Do, In Progress and Done. It is not mandatory to have Add Column function
 - Able to configure the maximum number of cards a column can hold and prevent cards from dragging into the column if the column is already at its max.
 - Able to add new cards. Card details will just be the Description
 - Able to delete cards.
 - Able to drag and drop cards between columns.