

WaveScan Pte Ltd

Frontend Engineer Assignment

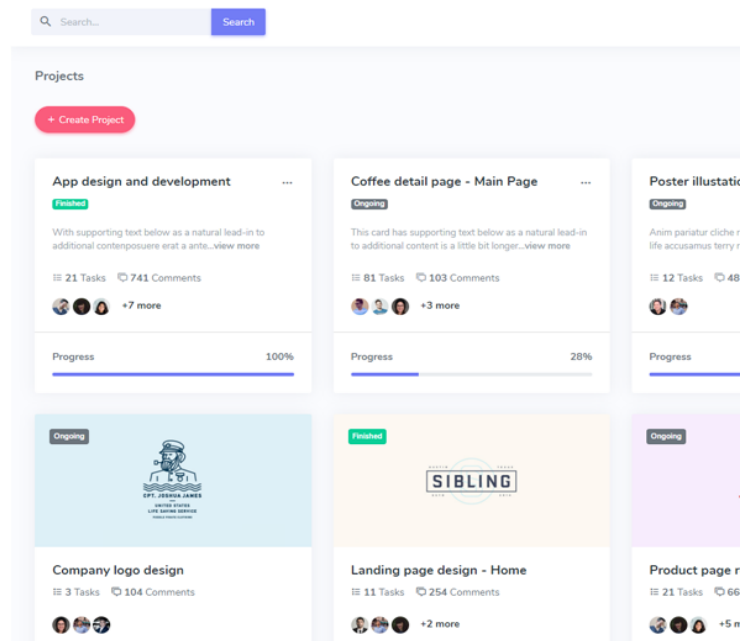
Task: Develop a frontend website, as detailed below, in the next 48 hours.

We use React.js for frontend, but feel free to use languages and frameworks you are most comfortable with.

Part A: Call an API and display data on screen in cards. Implement search and filter feature.

Develop "projects tracker" frontend application that calls a RESTful API (<https://WaveScan-Frontend-Assessment.saurabhmudgal.repl.co>) and displays the incoming JSON data as individual project cards.

We have provided an image below for reference. However, we encourage you to be creative with the UI design and create the cards according to the guidelines below.



The cards are required to contain the following:

1. Body
 - a. Project title
 - b. Project image
 - c. Project tags
 - d. Project description
2. "View More" Button (Read more in Bonus section)

Also implement the following features:

1. **Search bar:** Ability to search and display only cards whose titles and/ or description include the search term. The search should be implemented only if ≥ 3 words are typed in the search bar.
2. **Filter dropdown:** Ability to filter and display only cards whose tags include the selected categories. Selecting and filtering by a combination of more than one category should be possible.
(*Hint: The categories are a unique list derived from all tags in the JSON.*)

So, your UI should contain: Search Bar | Filter Dropdown Menu | Dynamic Project Cards

Part B: Make page responsive and create good UI

This is where we give you the opportunity to show us your creative side.

What colour palette do you use? Do you use gradients? Do you use animations and transitions appropriately and visually pleasingly? And last but not the least, do you care about responsiveness aka is your website mobile friendly?

There are no limitations. Impress us with your ideas and imagination.

BONUS: Add "onClick" functionality to "View More" button

Create a modal window which pops up when "View More" button on respective project card is clicked. This modal window displays data visualization for the project's data.

Inside the modal window chart the two categories of data – equipment and material; where x-axis are the unique datapoints and y-axis is their respective frequency of occurrence.

Also create two toggle button pairs that change the graph:

1. Type: Pie Chart vs Bar Graph
2. Data: Equipment vs Material

Feel free to use any data viz libraries you may know or learn a new one (D3.js, VTK.js, etc). Don't stress. It is a good to have, but it's a bonus round after all. :)

Submission Instructions

Upload the code to your GitHub and share the repo link with us (make sure it is public).

Additionally, we would love it if you could deploy your frontend and share the live site link with us. *Don't know how to do that? Follow these simple instructions for deploying with [GitHub pages](#) or [Netlify](#).*

If you have any doubts, feel free to reach out to our engineers at saurabh@wavescan.sg or latin@wavescan.sg. We look forward to seeing your work. All the best!