

# Full Stack Developer (AI) Assignment

## Description

You need to build an end-to-end application to display information extracted from different project description. The user should be able to see the information in the form of Gallery view or tiles and able to search specific projects.

1. You are provided with a file containing the details extracted from a sample of 100 projects.
2. Please load this information into a database and implement backend APIs to access this data on front-end.
3. Build a user interface where all this information gets displayed in a gallery view (high-level UI sketches are provided in the user story below).
4. Build a list view for the user where user can explore a given project in detail, looking at all the parameters.
5. Build a search functionality where user can search projects.
  - a. Optional: Smart search functionality with the help of GPT-3.5/4 where one can do multi-attribute search. For ex, find me projects where ReactJS is used in front-end, and Python is used in backend.
6. Optional: You create a responsive app that works on different screen sizes including mobile also.

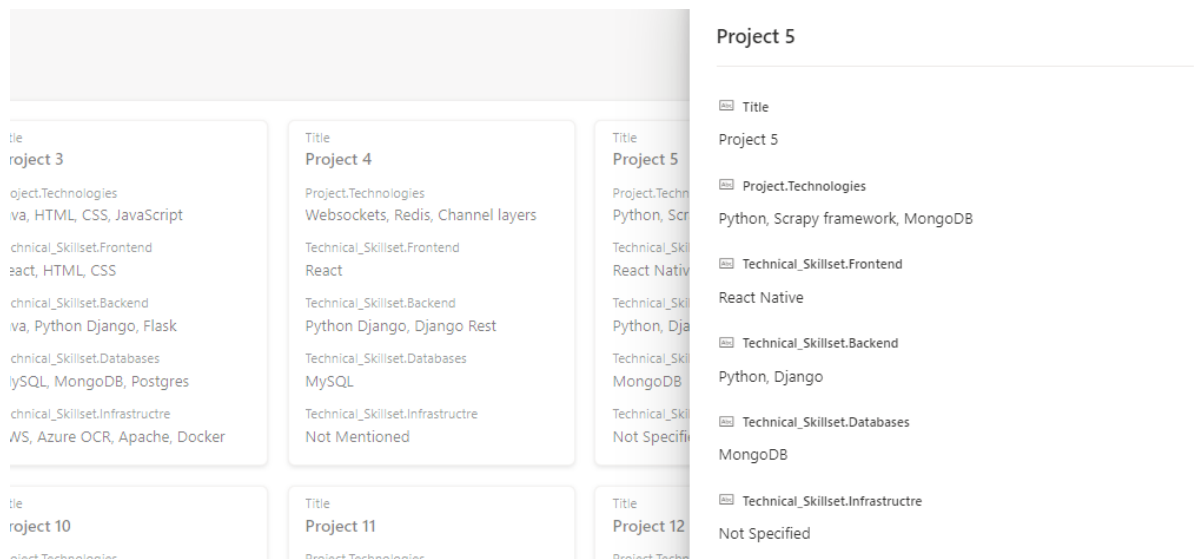
## High-level Sketches

These sketches are indicative in nature. Please feel free to use your own creativity and skills for better UI designs.

1. Displaying all the projects in a gallery view.

<div><div>Title</div><div>Project 1</div><div>Project.Technologies Python, HTML, CSS, Machine Learn...</div><div>Technical_Skillset.Frontend HTML, CSS, JavaScript</div><div>Technical_Skillset.Backend Java, Spring Boot, Hibernate</div><div>Technical_Skillset.Databases MySQL</div><div>Technical_Skillset.Infrastructure Not specified</div></div>	<div><div>Title</div><div>Project 2</div><div>Project.Technologies Java Spring Boot, Hibernate, MySQL</div><div>Technical_Skillset.Frontend React JS</div><div>Technical_Skillset.Backend Java, Spring Boot, Hibernate</div><div>Technical_Skillset.Databases MySQL</div><div>Technical_Skillset.Infrastructure Not specified</div></div>	<div><div>Title</div><div>Project 3</div><div>Project.Technologies Java, HTML, CSS, JavaScript</div><div>Technical_Skillset.Frontend React, HTML, CSS</div><div>Technical_Skillset.Backend Java, Python Django, Flask</div><div>Technical_Skillset.Databases MySQL, MongoDB, Postgres</div><div>Technical_Skillset.Infrastructure AWS, Azure OCR, Apache, Docker</div></div>	<div><div>Title</div><div>Project 4</div><div>Project.Technologies Websockets, Redis, Channel layers</div><div>Technical_Skillset.Frontend React</div><div>Technical_Skillset.Backend Python Django, Django Rest</div><div>Technical_Skillset.Databases MySQL</div><div>Technical_Skillset.Infrastructure Not Mentioned</div></div>	<div><div>Title</div><div>Project 5</div><div>Project.Technologies Python, scrapy framework, Mongo...</div><div>Technical_Skillset.Frontend React Native</div><div>Technical_Skillset.Backend Python, Django</div><div>Technical_Skillset.Databases MongoDB</div><div>Technical_Skillset.Infrastructure Not Specified</div></div>
<div><div>Title</div><div>Project 8</div><div>Project.Technologies Python, Django, API</div><div>Technical_Skillset.Frontend No experience</div><div>Technical_Skillset.Backend Python Django, API</div><div>Technical_Skillset.Databases Not mentioned</div><div>Technical_Skillset.Infrastructure Not mentioned</div></div>	<div><div>Title</div><div>Project 9</div><div>Project.Technologies React, Node, Java</div><div>Technical_Skillset.Frontend React, Java, Angular, Node, JavaScri...</div><div>Technical_Skillset.Backend Node</div><div>Technical_Skillset.Databases SQL</div><div>Technical_Skillset.Infrastructure -</div></div>	<div><div>Title</div><div>Project 10</div><div>Project.Technologies React JS, Redux, HTML, CSS, Bootst...</div><div>Technical_Skillset.Frontend React JS, HTML, CSS, Bootstrap, Ma...</div><div>Technical_Skillset.Backend Python Django</div><div>Technical_Skillset.Databases -</div><div>Technical_Skillset.Infrastructure -</div></div>	<div><div>Title</div><div>Project 11</div><div>Project.Technologies React JS, Node JS, TNT database</div><div>Technical_Skillset.Frontend HTML, CSS, JavaScript, React JS</div><div>Technical_Skillset.Backend Node JS</div><div>Technical_Skillset.Databases SQL, TNT</div><div>Technical_Skillset.Infrastructure Not mentioned</div></div>	<div><div>Title</div><div>Project 12</div><div>Project.Technologies React JS, Mongo DB, MVC architect...</div><div>Technical_Skillset.Frontend React JS</div><div>Technical_Skillset.Backend Mongo DB</div><div>Technical_Skillset.Databases Mongo DB</div><div>Technical_Skillset.Infrastructure Not mentioned</div></div>
<div><div>Title</div><div>Project 15</div><div>Project.Technologies Java, Spring Framework</div><div>Technical_Skillset.Frontend React</div><div>Technical_Skillset.Backend</div></div>	<div><div>Title</div><div>Project 16</div><div>Project.Technologies SQL, Cloud, Ecommerce, Haru, Spo...</div><div>Technical_Skillset.Frontend React, Angular, Next.js</div><div>Technical_Skillset.Backend</div></div>	<div><div>Title</div><div>Project 17</div><div>Project.Technologies HTML, CSS, Node.js, SQL, MongoDB</div><div>Technical_Skillset.Frontend HTML, CSS, React</div><div>Technical_Skillset.Backend</div></div>	<div><div>Title</div><div>Project 18</div><div>Project.Technologies Java, Spring Boot, Angular, HTML, ...</div><div>Technical_Skillset.Frontend Angular, React, Next.js</div><div>Technical_Skillset.Backend</div></div>	<div><div>Title</div><div>Project 19</div><div>Project.Technologies Machine learning, Linear and Logis...</div><div>Technical_Skillset.Frontend React, Angular</div><div>Technical_Skillset.Backend</div></div>

2. Ability to click on any of the project and see the detailed information.



3. Ability to search using a free-form query on the project information. For ex, find me projects which uses python in the backend. The user interface should show only filtered project list in the same view as #1.

## Technologies

- You can use any front-end/backend/database technologies to build above application. The preference would be Next.js or React.JS for front-end, Node or Python for Backend.

## Submission

1. Once you have finished writing the code, please commit to your GitHub account and send us a link to the repository OR host the app publicly (e.g., on [GitHub Pages](#), [Heroku](#))
2. Additionally, record a short video using Loom or any other screen casting software and send us a link to view.

## Acceptable Use

- You are free to use any open-source software/library/LLMs such as ChatGPT to build this application. Pls attribute it as a reference in the final report.

**What happens next?**

1. SHL Labs team will review your submission and then, schedule a discussion with you. Please reach out to Anjali Kataria ([anjali.kataria@shl.com](mailto:anjali.kataria@shl.com)) if you have any question.