

## **JobTASK:**

### **Task Overview:**

Create a Fullstack functionality based Single page website where users can perform some search filtering functionalities. This project will focus on implementing pagination, searching, categorization and sorting of products.

**Note:** Product should include Product Name, Product Image, Description, Price, Category, Ratings and Product Creation date and time.

### **Functionalities:**

#### **1. Setup and Basic Structure:**

- Set up a new MERN stack project (MongoDB, Express.js, React.js, Node.js). If you want you can use Mongoose or Typescript. **You can't use Next.js for the project.**
- Create and structure the relevant APIs to fetch product data from the database.
- Insert dummy product data manually to the database or you can implement an api to insert product data. At least 40 product data is required in the database.

#### **2. Pagination:**

- Implement pagination in the backend server to load products efficiently.
- Display page numbers along with navigation buttons (Next, Previous) on the front end.

#### **3. Searching:**

- Implement a search feature that allows users to search for products based on the product name.

#### **4. Categorization:**

- Categorize products into different categories, such as:
  - **Brand Name**
  - **Category Name**
  - **Price Range**
- The users can filter products with a single filter option or they can use all the available options at the same time if they want. For example: Users can engage brand name, category name, and price range at the same time or they could select just one.

#### **5. Sorting:**

- Implement sorting functionality so users can sort products by:
  - **Price:** Low to High, High to Low
  - **Date Added:** Newest first

## 6. Authentication:

- Implement Google Authentication using Firebase.
- Implement Email and Password Authentication using Firebase.

## 7. UI Instructions:

- Ensure the website is fully responsive with a mobile-first design approach.
- Create fixed-size product cards to display product information concisely.
- Include a Navbar with the website name/logo and relevant routes.
- Implement a Footer with necessary information and links.

## 8. Additional Notes:

- Ensure code is clean, well-commented, and follows best practices.
- Add at least 10 meaning full commits on both frontend and backend repository
- Include a README file in both the frontend and backend repositories, describing the project setup, instructions, and any necessary details for running the project locally.

**Submission Requirements:** Frontend Github Repository & Backend Github Repository or Shared Repository link, Live Website Link