Specification Report

Website for Electronic Devices

Zahraa Haider Adnan

Elif Gultekin

Overview:

Our project aims to create a dynamic and user-friendly online platform for showcasing and describing various technological devices, including phones, laptops, and maybe other gadgets. The website will be developed using React for the frontend, MongoDB for the databases, and Java for the backend. However, we are open to exploring different technologies and tools throughout the development process, and we acknowledge the possibility of adjusting the chosen technologies and tools based on evolving project requirements.

Technical Specifications:

Frontend Development:

- **Framework:** React.js will be used for building the interactive and responsive user interface.

- **UI/UX Design:** Implement intuitive and visually appealing design to enhance user experience.

Backend Development:

- **Language:** Java will be used for server-side development to handle business logic and data processing.

- **RESTful API:** Develop a robust and secure API to facilitate communication between the frontend and backend systems.

- **Authentication and Authorization:** Goal is to implement secure user authentication and authorization mechanisms to protect user data and transactions if it is manageable before the deadline.

Database Management:

- **Database:** MongoDB will be utilized as the NoSQL database to store product information, user data, and transaction records.

- **Data Modelling:** Design efficient database schemas to support fast data retrieval and manipulation.

Search and Filter Functionality:

- Implement advanced search and filtering options to help users easily find products based on specifications, brands, and other criteria.

- Utilize MongoDB's querying capabilities for efficient search operations.

Version Control and Collaboration:

- Will utilise Git and Github for version control to track changes, manage collaboration, and facilitate integration of new features.

Documentation:

- Will maintain comprehensive documentation for code, APIs, databases, and system architecture.