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CAPSTONE PROJECT

PROBLEM STATEMENT

Development of Service booking website to book services like cleaning, painting, plumbing, electricity using React, Material UI, Redux, Thunk in Front end and MongoDB, Node and Express as backend.

OVERVIEW

You are tasked with creating a service booking website like urbancompany.com using

- React for the front-end
- Node and Express for the backend.
- Jest for testing(front-end)
- MongoDB for the database.

This project aims to provide a streamlined experience for booking services like cleaning, salon and massage, electrician, plumber etc. The website should be designed to be user-friendly, responsive, and efficient, making it easy for users to search for and book travel options. This project requires 35-40 hours of work.

OBJECTIVE

Develop a fully functional service providing website that allows users to:

Choose the category of service

- Users should be able to search for category
- Display available categories in which different services are listed with price range e.g. in electrician category there are different services like home-repair, installation, buying products along with prices.

Schedule and book the service within the chosen category

- Provide a search interface for users to find service in the chosen category
- Display available service providers nearby along with rating and average price
- Enable users to complete service bookings by filling in the necessary details and payment information.
- Implement a booking process that captures user information and payment details.

Send otp to consumer and verify the service quality with otp verification

- Once service is marked completed by the worker after attaching proof images
- Send otp to consumer to verify the service

- Once service is verified by the consumer, service request should be closed at backend

TECHNICAL REQUIREMENT

Front-End:

- Use React to build the user interface, ensuring a responsive and intuitive design.
- Implement navigation between different sections of the website to search the various services.
- Use state management techniques, such as React Hooks or Redux, to manage application state.

Back-End and Database:

- Utilize MongoDB database to store and retrieve data related to services and user bookings.
- Implement RESTful APIs to handle search queries and booking operations.
- Ensure data validation and error handling for robust performance.

Testing:

- Use Jest to write and execute unit tests for critical components and functionalities.
- Ensure that the website passes all tests before deployment.

SCOPE AND CONSTRAINTS

- The website should prioritize essential features including services and their categories.
- The project should be completed within an estimated 35-40-hour timeframe.
- The website should be compatible with modern web browsers and devices.
- Focus on implementing a simple and efficient user experience without extensive additional features to meet the project timeline.
- Any additional features can be added at will.(it can add some brownie points for the final evaluation)

EXPECTED DELIVERABLES

- A fully functional service booking website with a responsive design.
- Source code and documentation for the React front-end and database integration.
- A suite of Jest tests demonstrating the functionality and reliability of the application.
- A deployment-ready version of the website for demonstration purposes

By completing this project, students will gain hands-on experience in web development using React, testing with Jest, and database integration, preparing them for real-world application development scenarios.