

Lesson 04: Creating a Frontend Starter Code for a Taxi Ride Booking Application Using Generative AI

Overview:

In this project, you will be tasked with developing frontend starter code for a taxi ride booking application for Book_A_Taxi. The objective is to utilize AI-driven prompts to establish a foundational structure for the website and incorporate basic form functionalities. The project will utilize ChatGPT to facilitate the frontend development process, allowing for the creation of a user-friendly interface for booking taxi rides.

This project is beneficial for learners as it provides a practical opportunity to delve into frontend development, understand the basics of form validation, and explore the integration of AI-generated content into real-world applications.

Instructions:

- Review the learning materials in Lesson 4
- Read the situation, task, action, and result sections carefully to fully grasp the assignment
- Complete and submit your assignment via the Learning Management System (LMS)
- Carefully read the tasks outlined, focusing on leveraging generative AI tools to create a taxi ride booking application

Situation:

You are a member of the team at Book_A_Taxi, a company committed to offering a convenient taxi ride booking service. Your assignment is to kickstart the development process by crafting the frontend code for the company's website. However, you encounter the challenge of beginning from scratch while ensuring that the website fulfills the requirements and functionalities expected from a taxi booking application. To streamline the development process and harness the power of AI, you opt to utilize generative AI prompts to generate the initial frontend code.

Task:

1. Generate a frontend starter code for a taxi ride booking application
2. Create additional pages for the website, including About Us, Services, and Contact pages
3. Link all pages together to ensure seamless navigation within the website
4. Add a new page for booking a ride for various services and link it with existing pages
5. Implement basic form validation for the booking form on the website

Action:

1. Utilize AI prompts to generate the initial frontend folder structure and code for the homepage of the Book_A_Taxi website
2. Generate React scripts for additional pages (About Us, Services, and Contact) using AI prompts
3. Link all pages together by updating the navigation menus on each page with appropriate hyperlinks generated through AI prompts
4. Create a new page for booking a ride using AI prompts and ensure it is linked with all existing pages to maintain website navigation flow
5. Generate basic form validation functionality through AI prompts and integrate it into the booking form to enhance user experience

Result:

The execution of the mentioned actions demonstrates the effective utilization of generative AI to create a frontend starter code for Book_A_Taxi, a taxi ride booking application, utilizing Generative AI. By following the provided instructions, the initial setup phase was expedited, and a functional interface with basic form validation was established. This showcases the potential of Generative AI in streamlining web application development processes.

Rubric:

Your submission will be evaluated based on the following key criteria, each representing a crucial aspect. These criteria are:

Criteria	Complete or Incomplete
Folder Structure and Homepage Generation: Created a structured frontend folder hierarchy, using AI prompts for logical organization and React script for the homepage layout	
React Script Generation for Additional Pages: Generated React scripts for About Us, Services, and Contact pages, ensuring design consistency across all pages	
Navigation Menu Update: Updated navigation menus with appropriate hyperlinks generated through AI prompts for seamless page linking	
Integration of the Booking Page: Created a booking page with AI-generated React code and ensured proper linking with existing pages	
Form Validation Functionality: Updated the booking page using AI prompts to implement basic form validation for an enhanced user experience	