

Progress and Challenges

- **Database Design and Planning:** You've outlined a structured approach to handling data, with clearly defined entities such as landlords, guests, and reservations. Each entity has specific attributes that are integral to the system, such as unique identifiers and relationships that facilitate transactions like bookings and payments.
- **System Development Stages:** Your Gantt chart reflects a well-organized timeline for different phases of the project, including planning, requirement analysis, design, implementation, and testing. This shows a good grasp of project management principles.
- **Challenges Faced:** From the documentation, it appears that ensuring data integrity and handling concurrent bookings without conflicts are potential challenges. The need to integrate with external payment systems and third-party services adds complexity to the project.

Technological Implementations

- **Entity-Relationship Diagram (ERD):** The ERD and related schemas show a logical structuring of the database that supports the functionalities required by different types of users—landlords, guests, and administrators.
- **Normalization and Database Schema:** You have progressed to implementing a schema that is normalized up to Boyce-Codd Normal Form (BCNF), which is beneficial for reducing redundancy and ensuring dependency preservation.
- **Interface and User Interaction:** The focus on a responsive and intuitive user interface suggests a commitment to providing a seamless user experience, which is crucial for the system's usability.

Learning Outcomes

- **Practical Skills:** This project is helping you develop critical skills in database design, SQL programming, and system integration, which are valuable in the field of software engineering.
- **Problem-Solving:** You are applying theoretical knowledge to solve practical problems, such as how to design a system that efficiently handles real-world challenges in homestay bookings.
- **Teamwork and Collaboration:** Working with classmates on this project likely enhances your teamwork and communication skills, as these are essential for

coordinating complex tasks and achieving project goals.

Future Considerations

- **Testing and Feedback:** Ensure that the system is thoroughly tested by potential users to gather feedback that can be used to refine the system.
- **Scalability and Security:** Consider how the system could be scaled in the future and assess security measures, especially concerning data privacy and transaction security.