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**SECD2523-16 PANGKALAN DATA  
(DATABASE)**

Section - 16

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## Topic: Homestay Ordering System

### Table of Contents

#### 1.0 Database Planning and System Definition

- 1.1 Overview of the Current System
  - 1.2 Database Planning
    - 1.2.1 Mission Statement
    - 1.2.2 Mission Objective
  - 1.3 System Definition
    - 1.3.1 System Boundary
    - 1.3.2 Major User View
    - 1.3.3 User Interaction Interface
  - 1.4 Gantt Chart
- 

#### 1.0 Database Planning and System Definition

##### 1.1 Overview of the Current System

Traditional homestay booking systems, such as advertising through online platforms and landlords relying on intermediaries, have significant drawbacks. They lack a centralized database, leading to fragmented and inefficient record-keeping processes, making it difficult to effectively manage and analyze booking information. This inefficiency can result in double bookings, incorrect data handling, and a subpar experience for both hosts and guests. Therefore, there is an urgent need for a structured system that can seamlessly handle reservations, client information, and homestay details, providing an optimized and scalable database solution.

The new system aims to address these inefficiencies by introducing a centralized platform that ensures all data related to bookings, users, and homestays is stored in an organized manner. By automating the booking process, integrating payment systems, and providing an easy-to-use interface for both hosts and guests, the new system will streamline operations and reduce the overhead caused by manual data management.

##### 1.2 Database Planning

### 1.2.1 Mission Statement

The mission of the homestay ordering system is to facilitate seamless booking and management of homestay accommodations by providing an integrated platform for hosts, guests, and administrators. The system aims to improve efficiency and accuracy by centralizing all information in one database, eliminating the need for disparate and error-prone manual systems, thereby enhancing the experience for all stakeholders involved in the booking process, including hosts, guests, and administrators.

### 1.2.2 Mission Objective

The primary objective of the homestay ordering system is to ensure efficiency, accuracy, and reliability in processing homestay bookings. This will be achieved by implementing a centralized database solution that automates various booking tasks, reduces human error, and minimizes manual intervention. Furthermore, the system will provide user-friendly interfaces for hosts and guests, allowing them to easily manage bookings, availability, preferences, and payment options. Additional objectives include offering reporting tools for administrators to gain insights into booking trends, customer preferences, and overall system performance.

## 1.3 System Definition

### 1.3.1 System Boundary

The system will cover all major functions of homestay management, including booking, payments, user registration, and availability checking. It will also integrate with external payment systems to ensure secure transactions and with third-party services for additional functionalities like identity verification. The system boundary includes the entire lifecycle of a homestay booking, from initial availability search and reservation to post-stay reviews and feedback collection.

The system will not manage offline reservations or handle any manual payment methods. Furthermore, legal and taxation aspects are beyond the system's scope, though the system will generate reports that can aid in financial analysis.

### 1.3.2 Major User View

The major user view will include three primary types of users: homestay hosts, guests, and system administrators. Each user role will have distinct functionalities and permissions:

- **Hosts:** Homestay hosts will be able to manage their properties, update availability, set pricing, respond to booking requests, and communicate

with guests. They will also be able to view financial reports and track payment statuses.

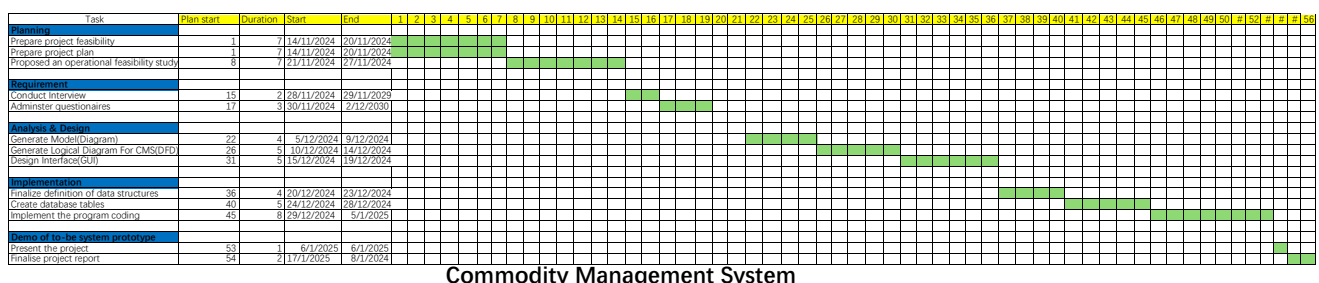
- **Guests:** Guests will be able to search for available homestays, make bookings, provide payment details, and leave reviews after their stay. The guest interface will be designed to provide a seamless and intuitive booking experience, allowing users to manage their reservations and communicate with hosts easily.
- **System Administrators:** System administrators will have overarching control of the system, including user management, property verification, and reporting. They will be responsible for ensuring data integrity, managing security protocols, and monitoring system performance.

### 1.3.3 User Interaction Interface

- The system needs to provide a simple and intuitive user interface that allows hosts to publish and manage their properties, while customers can search and filter homestays easily.
- The interface should feature responsive design to support both mobile devices and desktop usage.
- Interaction between the database and the user interface should ensure quick responses, with hosts and customers seeing their actions reflected in real time in the system database.

## 1.4 Gantt Chart

Below is the Gantt chart produced for the homestay ordering system project, illustrating the planned timeline for the project's key phases and milestones.



The Gantt chart key phases such as requirements gathering, analysis, design, and implementation, each with defined milestones to ensure successful project completion. The Requirements Gathering phase will involve in-depth discussions with stakeholders to identify user needs and system requirements. The Analysis & Design phase will convert these requirements into a comprehensive system design, including database schema and user interface designs.

The Implementation phase will involve coding, integration of payment gateways, testing functionalities, and deploying the initial system prototype. Finally, the System Prototype Demo phase will allow stakeholders to interact with the system, provide feedback, and suggest improvements before the final system launch.