DBMS Project Assessment Part 1

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Project Title: **Park Sense - Smart Parking System**

Overview:

- **Introduction:** Park Sense is a software solution that automates parking management through real-time slot availability, reservations, and digital payments. It enhances user convenience while ensuring efficient utilization of parking spaces.

- **Background:** Traditional parking systems usually rely on manual tracking, which results in errors, congestion, and poor user experience. With the increasing demand for smarter urban solutions, software-driven parking management has become essential. Park Sense uses database management techniques to automate and streamline parking workflows.

- **Methodology:** The system of slots, vehicles, users, and bookings maintains a structured database. A backend service manages allocation, prevents conflicts, and processes payments using secure transactions. The user-friendly web interface allow users to search, view availability, and reserve slots instantly, while database triggers and stored procedures ensure consistency and integrity.

- **Expected Outcome:** Park Sense will reduce booking errors, improve slot usage, and enhance customer satisfaction. It will also generate analytics to support data-driven decisions for parking administrators.

- **Conclusion:** By combining modern application design with robust database management, Park Sense delivers a scalable, reliable, and user-friendly solution for digital parking management. It represents a step forward in creating smarter, software-driven urban mobility systems.