

VAC

1. Group Members

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2. Topic:

Smart Parking System

3. Group Name: Team Xion

4. Idea:

The idea is to develop an AI-powered smart parking solution that addresses the challenges of parking scarcity, security concerns, and user frustration in urban areas. By leveraging existing parking lot cameras and advanced computer vision, the system provides real-time detection of available parking slots. It offers users a seamless experience to find, book, and navigate to safe parking locations with integrated safety ratings based on AI analytics and user feedback. This approach reduces the need for additional hardware, enhances safety transparency, and improves overall urban mobility.

5. How the session helped to build this idea?

The IoT and sensors session helped me understand how interconnected devices and real-time data collection can be used to create smarter systems. It gave me insights into how sensors and IoT components can be integrated with AI to monitor and manage parking spaces efficiently. Although my idea mainly relies on existing cameras and computer vision, the session helped me realize how IoT sensors could enhance the system's accuracy — for example, using ultrasonic or infrared sensors to detect vehicle presence and integrating this data with AI analytics for better real-time updates. Overall, the session broadened my perspective on combining IoT, sensors, and AI to build a more reliable and scalable smart parking solution.