# CMU East Campus Garage Project

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# Project Overview

**Problem:** Hard to know the status of the garage, whether it's full. Additionally, users cannot tell if the EV chargers are working or available

**Objective:** Enhance parking garage experience for students and faculty members. To add parking space detectors and develop a web application that provides real-time updates on the availability of parking spaces at the CMU East Campus Garage (ECG).

**Scope:** Implement smart parking system with real-time parking availability information, hardware installation, and staff training

**Timeframe:** [April 25th, 2023] - [September 20th, 2023]
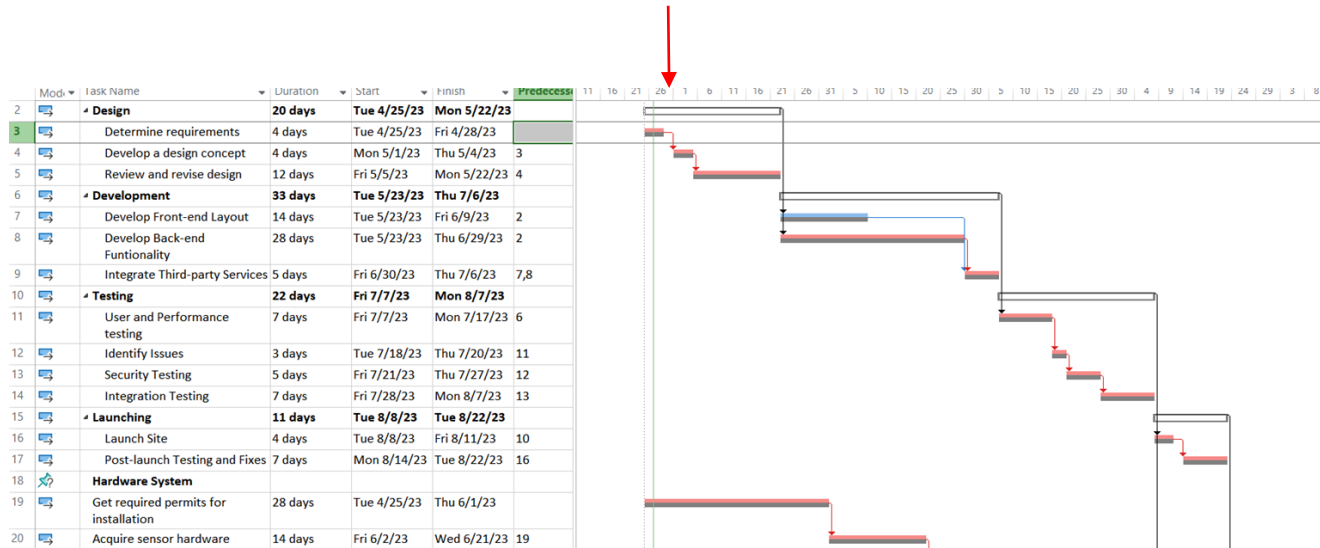
# Business Cases & Objective

- Address parking congestion and inefficient utilization of parking spaces.
- Improve user experience by providing real-time parking availability information.
- Enhance campus security with better monitoring and control of parking areas.
- Support sustainability goals by reducing emissions from vehicles searching for parking spaces.

# Return on the Investment

- Focus on value creation through improved user experience, time savings, and reduced stress

- Address current parking issues: Availability and usability

- Intangible benefits: Time savings, reduced stress, enhanced campus reputation, sustainability

- Indirect revenue generation: Increased ECG utilization, energy savings

- Monetary ROI not the primary focus, but the project provides significant intangible benefits and potential indirect revenue

# Status and Schedule

- Design: Finalizing design requirements

- Hardware System: Started application for required permits for installation

# Risk Management

- Identified risks: Disruption to normal operations, privacy and security risks, technical difficulties, project delivery delays etc.
- We have developed detailed mitigation strategies and contingency plans: Adjust installation schedule, ensure data protection compliance, conduct thorough testing, implement a flexible project management framework.

# Budget Overview

- Total Project Cost: $260,648.00

- Labor Cost: $181,768.00

- Materials Cost: $78,880.00

- Risk and Contingency Budget: $26,064.80 (10% of total project cost)

# Earned Value and Project Control

- PMO will track metrics like Cost and Schedule Variance and Index
- Use performance metrics to inform communications and changes
- Avoid scope creep by well defining scope initially
- All changes and stage gates goes through change control process
- Change control board consisting of stakeholders like CMU, PMO, garage users
- Document and sign all change orders and decisions