

CMU East Campus Garage Project



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

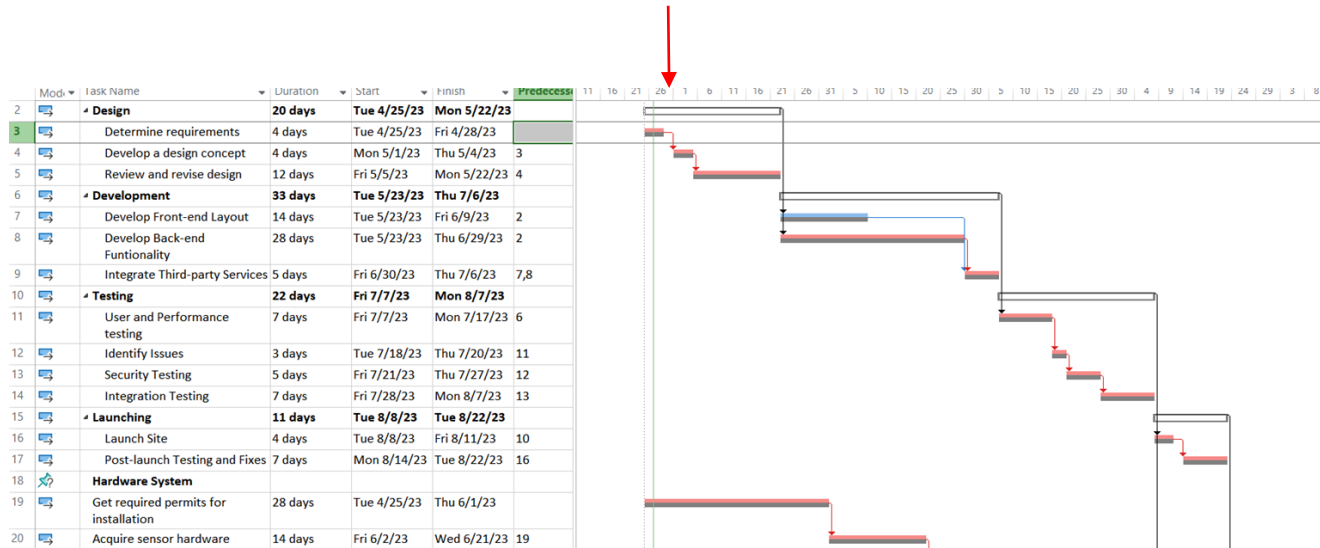
- Address parking congestion and inefficient utilization of parking spaces.
- Improve user experience by providing real-time parking availability information.
- Enhance campus security with better monitoring and control of parking areas.
- Support sustainability goals by reducing emissions from vehicles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