

Group 4

Project Overview

This project aims to build a system for allowing people attending any USU events to be able to purchase a parking spot.

This system will allow a user to select an event on a particular day and allow them to reserve a parking spot for the event. Users will be able to purchase a spot anywhere from weeks in advance to the day of the event. This system will also allow people within close proximity to be able to offer up their private property as additional places to park. All of this will be done universally through a web browser and will be optimized for both desktop and mobile devices.

Team Organization

Team Lead: Jontay

For the team organization, we'll divide up the work as we see fit to fairly distribute the workload. Once we get a better understanding of what needs to be done for the project we can get a better plan for how things can be divided up. The team lead will be swapped every milestone.

Software Development Process

The development will be broken up into five phases. Each phase will be a little like a Sprint in an Agile method and a little like an iteration in a Spiral process. Specifically, each phase will be like a Sprint, in that work to be done will be organized into small tasks, placed into a "backlog", and prioritized. Then, using on time-box scheduling, the team will decide which tasks the phase (Sprint) will address. The team will use a Scrum Board to keep track of tasks in the backlog, those that will be part of the current Sprint, those in progress, and those that are done.

Each phase will also be a little like an iteration in a Spiral process, in that each phase will include some risk analysis and that any development activity (requirements capture, analysis, design, implementation, etc.) can be done during any phase. Early phases will focus on understanding (requirements capture and analysis) and subsequent phases will focus on design and implementation. Each phase will include a retrospective.

	Iteration
	Phase 1 - Requirements Capture

	Phase 2 - Analysis, Architectural, UI, and DB Design
	Phase 3 - Implementation, and Unit Testing
	Phase 4 - More Implementation and Testing

We will use Unified Modeling Language (UML) to document user goals, structural concepts, component interactions, and behaviors.

Communication policies, procedures, and tools

Our team will use Zoom, Google Drive, and Github to coordinate our project.

We will primarily use class time in Breakout Rooms to meet, but additional meetings over Zoom will be planned as needed. Any shared documentation, such as this project plan, will be edited on a Google Drive document. All finalized documentation and code will be pushed to the repository cs3450-group-4 on Github for version control.

Configuration Management

See the README.md in the Git repository.

Risk analysis

Login

Likelihood: High

Severity: High

Consequences: site would not work.

Workarounds: None

Admin Authorization

Likelihood: mid

Severity: Mid

Consequences: The site would be less secure.

Workarounds: None

Account Database

Likelihood: high

Severity: very high

Consequences: login would not be possible.

Workarounds: None

User Class

Likelihood: very high

Severity: very high

Consequences: login and buying parking.
would not work

Workarounds: none

Lot Class

Likelihood: very high

Severity: very high

Consequences: would not be able to buy parking.
parking or add a lot

Workarounds:None

Event Class

Likelihood: high

Severity: high

Consequences:would not be able to select specific
events.

Workarounds: None

Get Location of Lot

Likelihood: very High

Severity: very high

Consequences: could not find parking after purchase.

Workarounds: None

Add parking lot

Likelihood: Very high

Severity: Very High

Consequences: could not add parking spaces to buy.

Workarounds: None

Get type of Space

Likelihood: Mid

Severity: Mid

Consequences: would not be able to pick bigger parking for trailers and rv's.

Workarounds: Not adding that option

Get Price of Space

Likelihood: Very high

Severity: Very high

Consequences: Users could not pick the price that they would want to sell their parking at.

Workarounds: None

Selecting events.

Likelihood: high

Severity: high

Consequences: Would not be able to do multiple events at the same time

Workarounds: just doing one event at a time

Select Space Size

Likelihood: Mid

Severity: Mid

Consequences: Could not pick size of space to buy.

Workarounds: Have no option to pick size.

Buy parking space

Likelihood: Very High

Severity: Very High

Consequences: Users could not buy parking.

Workarounds:

Sending code

Likelihood: High

Severity: High

Consequences: Would not be able to verify if anyone purchased parking.

Workarounds: the honor system

Check code

Likelihood: High

Severity: High

Consequences: Would not be able to verify if anyone purchased parking.

Workarounds: the honor system.