

Intro & Context

This project will allow users to pay for and reserve parking spaces for parking at and near USU. The project will provide parking lot owners with the ability to list parking spaces for people to reserve.

Users and Goals

The people using this app are customers, parking lot owners, and parking lot attendants. The goals for the customers include finding a suitable parking space, paying for that space, and checking in and out of their space. The goals for the parking lot owners include registering new spaces, managing existing spaces, and receiving payment for the use of their spaces. The goals for the attendants include helping the customers to their parking space and verifying the customer.

Functional Requirements

Firebase service to host the backend and track accounts, mobile application that serves as a UI for the “customers”, Backend logic to allow data structures to interact.

Customers need to be able to:

1. Create an account that contains personal identification information.
2. Add funds to their account or a method of payment.
3. Search for available parking spaces.
4. Pay for their parking spaces.

Lot Owners need to be able to:

1. Create an account that allows them to register parking spaces for sale.
2. Receive payment through in-app balance.
3. Manage parking spaces (Add, remove, alter details of, etc.).

Attendants need to be able to:

1. View the user accounts they will be serving.
2. Assist the customers to and from their designated spaces.
3. Receive payment for their work.

Non-Functional Requirements

Github for version control, Trello for task managing, UML diagrams to design the project, Discord for team communication, Android Studio IDE for development, **Spotify for sanity.**

Future Features

Users can reserve a spot continuously for future events, Save credit card details to Users' account, Network security to protect User details, Price modeling to reflect the distance the parking space is from the venue, Waitlist for full parking lots.

Glossary

Discord- A platform that hosts free chat servers

Github- A version control service

Trello- An online project management tool

UI- User Interface

UML- Unified Markup Language