### **Introduction and Context**

Many people like to come and enjoy the events here at USU, anyone from students, to parents, from Alumni to local residents. Those events draw a large crowd, large crowds make it hard to find parking, and especially to those who have not been there before and have no understanding of the parking situation. Our system aims to organize that problem. Our system will allow a user to pay for a parking spot in advance and up to the day of the event. This will allow the user to see what is left and available and where it is located. In addition to that, those who live close to the event will be able to provide additional parking and will be able to know beforehand if it has been booked.

This document Describes the user goals and Requirements for a software application in more detail. It will outline the user and their goals, and explain the functional requirements behind helping to reach those goals. It will provide a general overlook of the user-interface.

#### **Users and their Goals**

Actor	Goal		
Customer	Wants to buy parking for events		
Owner	Wants to sell the parking spaces they have available for events		

Actor	Example		
Customer	Can add funds to buy parking		
Customer	Can find a parking spot to buy		
Customer	Can verify with the owner		
Owner	Can add lots available for purchase		
Owner	Can set price for lots		
Owner	Can set the size of spot (Standard/Trailer)		
Customer/Owner	Login to account		

# **Functional requirements**

- 1. Login
- 2. Admin Authorization
- 3. Account Database

- 4. User Class
- Lot Class
- 6. Event Class
- 7. Get Location of Lot
- 8. Add parking lot
- 9. Get type of Space
- 10. Get Price of Space
- 11. Selecting events.
- 12. Select Space Size
- 13. Buy parking space
- 14. Sending code
- 15. Check code

## **Non-functional Requirements**

- 1. Archiving and Version Control
  - 1.1. All changes to the system will be tracked using Git and Github.
  - 1.2. Releases will be tagged using Git for ease of access in the future.
- 2. Testing
  - 2.1. The system will have a thorough set of testing procedures that will be run before every release.
- 3. Documentation
  - 3.1. All documentation will be kept up-to-date and edited in Google Drive.
  - 3.2. Finished documentation will be pushed to the Git repository
- 4. Application User Constraints
  - 4.1. In the early stages of development, the system may only be able to handle a small number of users. However, the system will be developed using best practices to ensure scalability as the application grows.

#### **Future Features**

- 1. Interactive Map
- 2. Password Reset
- 3. Recurring Spot

## Glossary

**Space:** A single parking spot.

**Lot:** An area set aside for parking, includes many parking spaces.

**Reservation:** A parking spot that has been set aside for a user for a specified period of time.

Funds: Money a user has transferred to their account to use toward reserving parking.