# ParkSmart Team 2 Boolean Bros





### **Team Details**

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### **Project Overview**

- ParkSmart: Where parking meets precision, making every spot count
- Our website will revolutionize parking by allowing you to:
  - View parking spot availability in real time
  - See how public events/holidays affect parking fees
  - Compare rates based on the time and day



### Requirements List

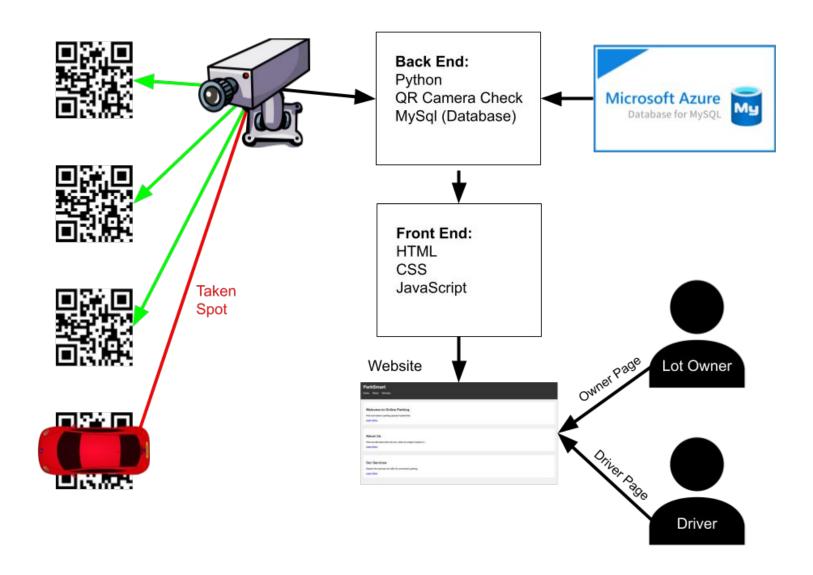
- R1: Constantly updating view of available parking spaces, with respective rates.
- R2: Users with parking lot owner privileges can see how full a parking lot is, and to check how much time each car has paid.
- R3: Login system to allow users to record their assets, such as cars and/or favorite parking lots.
- •R4: Registered users will have a way to reserve spots in advance.
- •R5: There will be a way for users to pay for their parking spot once they park or after they reserve their spot.

### **Project Solution Approach**

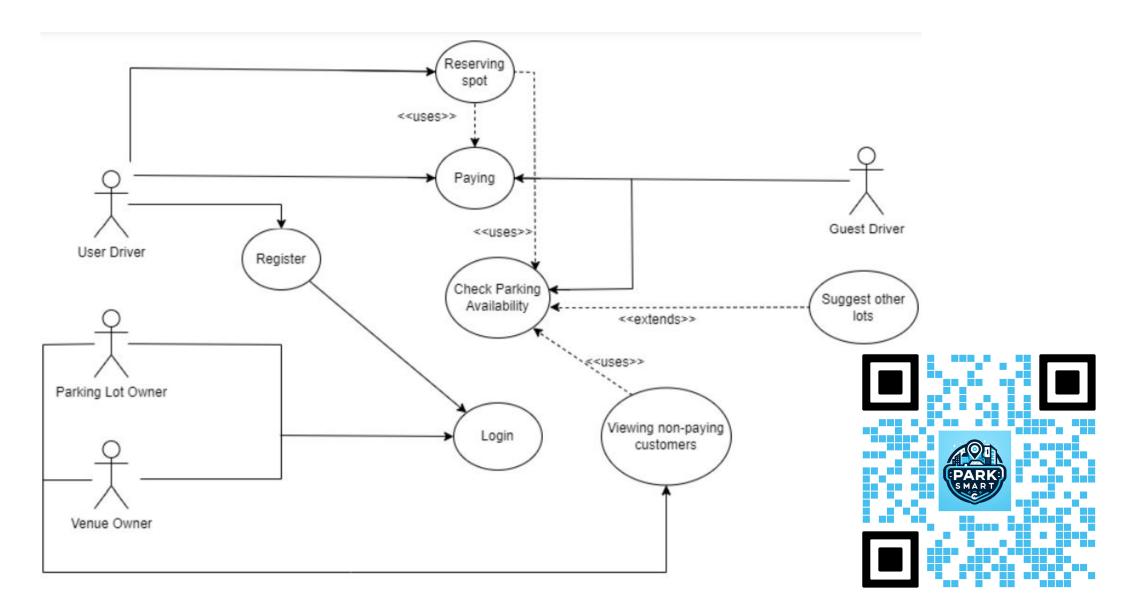
- Our major components in our solution design?
  - Deployed to Azure as a static web app
- What are the tools, frameworks, platforms, libraries, etc. that you'll be using
  - JavaScript/Vue3 frontend
  - Python backend for versatile functionality
  - Azure SQL database for painless (more or less) API calls
  - QR scanner to update parking availability



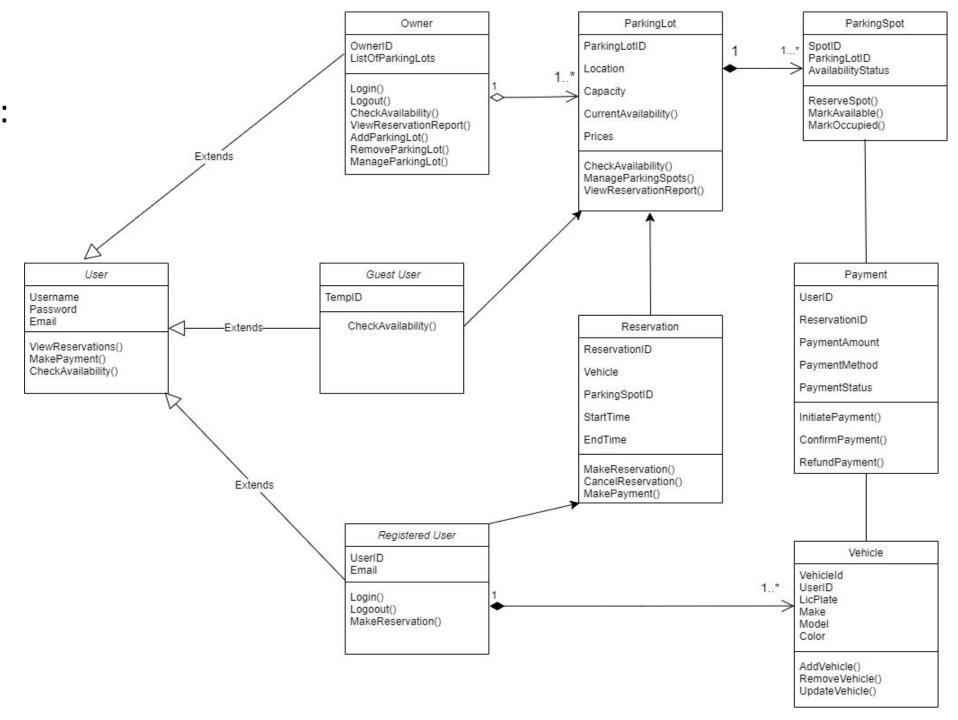
### System Architecture Diagram



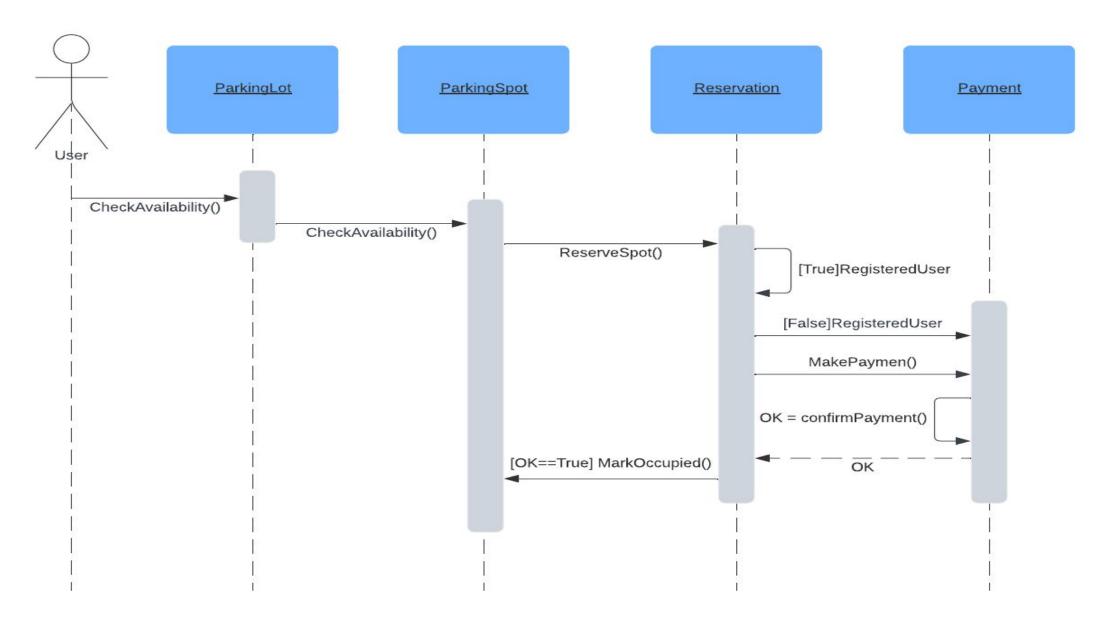
### Use Case Modeling



# Structural Modeling: Class Diagram



## Behavioral Modeling: Sequence Diagram



#### Open Park If Owner Continue as Login a Guest If User Sign up Reserve No Reservsation Reservation Select Date and Time Spot No Spot Avail. No Res Avail. Res Avail. Select Spot Registered Not Registered Pay

# Behavioral Modeling: Activity Diagram



### Screenshots (UI, Code, if any)





Lightning Mcqueen is parked in Lot A Spot 2



### What Next:

- Create/Integrate databases for users and parking lot.
- Have a working frontend that shows what spots are available.
- Add functionality for guest or registered users.
- Implement admin privileges.
- Have a working backend.
- Integrate front end and back end.

