

EE / CprE / CybE / SE / SD 491– sdddec24-17

SmartPark: IoT-Driven Automatic Parking Solution

Week 1 Report

Jan 16 – Feb 6

Client / Advisor: Md Maruf Ahamed

Team Members

William Clemmons - Project Lead and Software Designer.

Kennedey Reiling - Client Interaction and Hardware Design.

Brian Witherspoon - Hardware and Software Design.

Mubassir Serneabat Sudipto - Client Interaction, Quality Control, and Software Design.

Zachary Sears - Hardware Design and Quality Control.

Ethan Haberer - Hardware Design and Quality Control.

Past Week Accomplishments

- Established a medium for communication and file management.
 - Most communication will be done on Discord.
 - Files will be uploaded and managed through Google Drive.
- Determined optimal time to meet with team members - Team.
 - Tuesdays on 6:00 PM - 7:00 PM (CST).
- Conducted our first meeting with our client/advisor - Team.
 - Answered initial questions regarding the project.
 - Established goals, requirements, and expectations for the project.
 - Determined our first tasks.
- Researched multiple sensor technologies.
 - Fiber Bragg Grafting.
 - Infrared Sensors.

Pending Issues

We have yet to implement any technical aspects of our project. We have been engaged in the first stages of planning and generating ideas; hence, our progress has been satisfactory.

Individual Contributions

Team Member	Contribution	Weekly Hours	Total Hours
William Clemmons	Created our team task board and organized meetings.	3	3
Kennedey Reiling	Researched other apps to figure out how we want the interface to look.	2	2
Brian Witherspoon	Researched potential options for weatherproofing.	2	2
Ethan Haberer	Researched existing innovative parking Lot systems.	2	2
Zachary Sears	Researched a potential sensor. Took inventory of personal Arduino kits to use for prototyping	2	2
Mubassir Serneabat Sudiopto	Started learning about Arduino and analyzed into Arduino to explore ways to implement the prototype parking sensors, we discussed in our team meetings.	3	3

Plans for Coming Week

- Clearly define the Requirements and Constraints for the project.
 - Will be presented to our client to make sure that we are all on the same page.
- Brainstorm needed Design Documents.
 - Figuring out what designs we need will help development go smoother.
- Begin Prototyping.
 - Will be using Arduino for now to figure out the fundamentals of our idea.
- Research Server Options.
 - Explore options for our backend server that closely align with the requirements and constraints provided.