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Smart Parking System

The magnetometer and time of flight sensor will be working in tandem and sending the either a true of false data depending on whether a vehicle is present or not, the lora capable Arduino will then send that information to the gateway. The gateway will send that information to the servers where the mobile application will retrieve that information and display to the drivers through application.

Performance and progress is measured by testing our prototype regularly and recording measurements. Through that we can make adjustment and some of the challenges that we must deal with. For example, the current challenge that we are dealing with, is trying to overcome the effect that the glass enclosure has on the sensors and how to mitigate that. Through testing and observation, we found out that the position of the sensor underneath the car outputs different readings of various ranges. That's a variable we must come up with a solution to filter out the noise and get a more stable range.

The quality of our work is measured by how much progress and solutions to the problems we come up during our testing. We record and meet every week to work together as a team and brainstorm, research ways of improving our product.