

WATPark Mark Mar

Summary

WATPark is focused on alleviating parking issues on campus. Through a collaboration with Parking Services, WATPark is able to provide:

- Real-time count data from Lot C
- Predictions for future counts
- Count history for Lot C

This allows users to find available parking lots on campus.

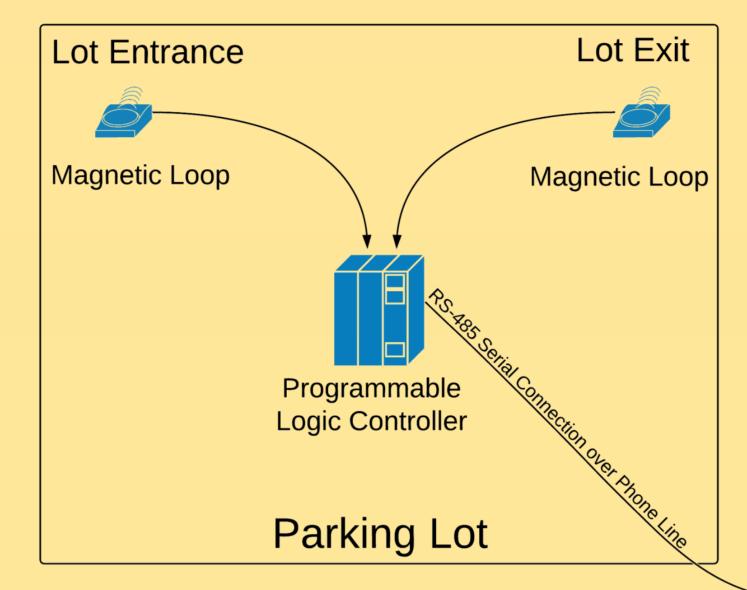
API

All of our data is accessible through a public API through a collaboration with the University of Waterloo Open Data Initiative. It can be accessed at http://api.uwaterloo.ca.

Predicting Counts 800 700 600 500 400 300 200 100 8:00 pm 4:00 pm 8:00 pm

Leveraging machine learning techniques, WATPark can predict how full Lot C will be in the near future. These cross validated predictions allow users to better plan their upcoming trips to campus.

Lot Hardware



The current lot count is

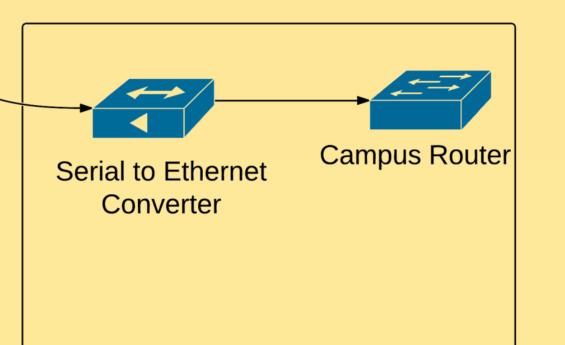
server in South Campus

stored in a PLC over a

retrieved by polling a serial

Hall, which reads the value

Each car is detected as it enters and exits the lot by magnetic loops beneath the surface.

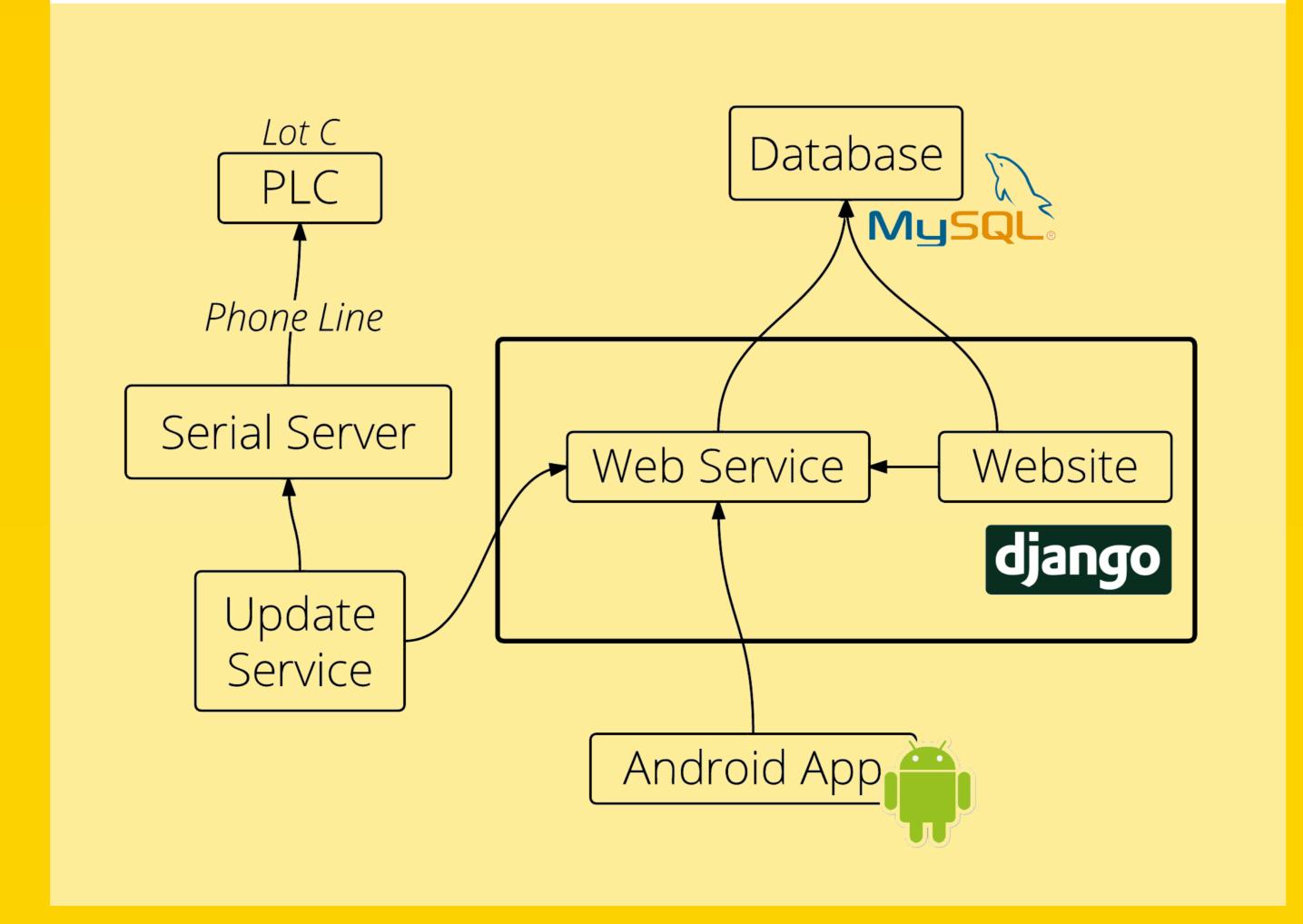


South Campus Hall

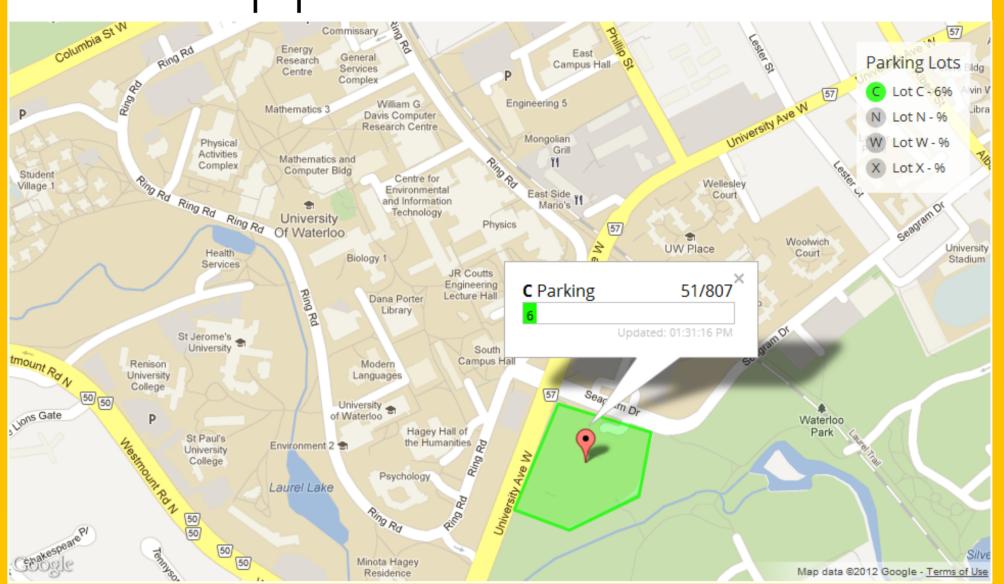
www.watpark.ca

Architecture

phone line.



Web Application







Android Application

Utilizing the Google Maps API and the AndroidPlot library, WATPark features an Android app built on top of the open API, giving users the ability to check the status of the lots from anywhere.







Team

WATPark
Tim Costa
Tom Joynt
Dan Malaki

Dan Malakieh Eric Warsaba Open Data Initiative
Giles Malet

UW Parking Services
Peter Briant