

Final Project Proposal

Summary (What the system will do, what problem it will solve)

This is a reactive system designed to allow actors to communicate in real time based on shared accurate data. Managing a group of stores and a group of delivery drivers can be difficult as status, location, and availability change. Our project aims to solve this problem using events and subscriptions between picos that represent each actor in the model.

Architecture (High-level description of event architecture)

The architecture of this system includes two types of picos that represent people in the real world. A driver pico will represent a delivery driver, and a flower shop pico will represent a flower shop. An intermediary driver pool pico will broadcast available jobs to available drivers. After learning about gossip protocol in lab 9 we may be able to eliminate the driver pool pico.

API's

We plan to use the google maps directions api to get directions from the driver's location to the flower shop then to the delivery location. We will also use this data to calculate how long the delivery should take.

The second API we plan to use is the Twitter api. This can be used as a marketing tool to push tweets to Twitter about how fast the delivery time is.

Work Plan

The logical chunks of the project and the person responsible for each will be:

- Flower shop pico (Tel)
- Driver pico (RT)
- Driver pool pico (RT)
- Test framework (Tel)
- API integration (RT/Tel)