



Trucking Utilization Mobile Application

David Ventresco, Jeffrey Paradis

Sponsors: Brian Widell, Dora Cserna-Nyiro



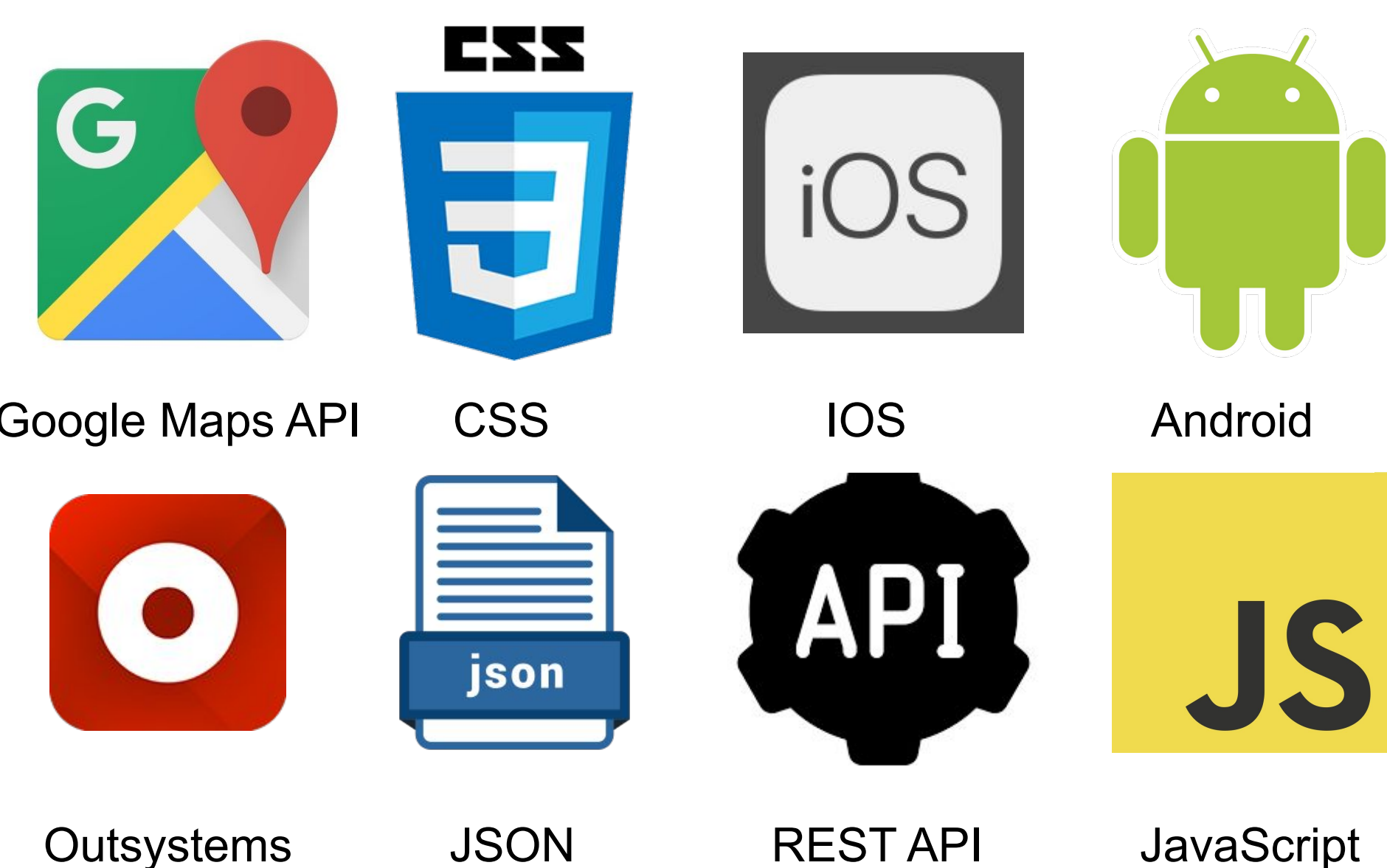
Problem

- Truck drivers are always on the go and they need a way to keep in contact with their company
- Cumbersome to determine cheapest fuel prices near them
- No automation when determining nearest job opportunities

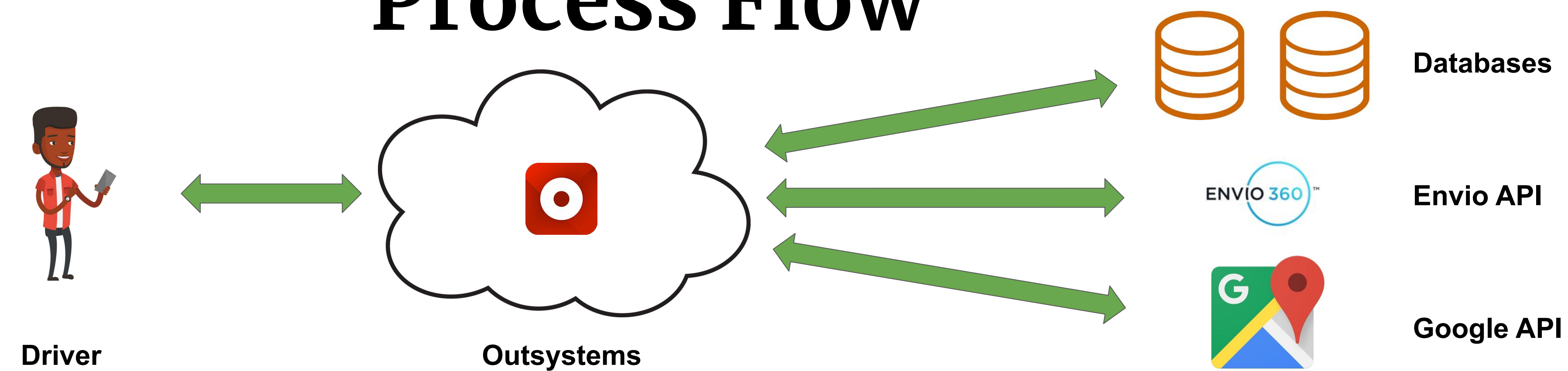
Goals

- Create a friendly UI for drivers to easily navigate the app
- Notify drivers when available jobs are in their area
- Allow drivers to know where discounted fuel is nearby
- Give driver's knowledge of their purchases and how much they are authorized to make

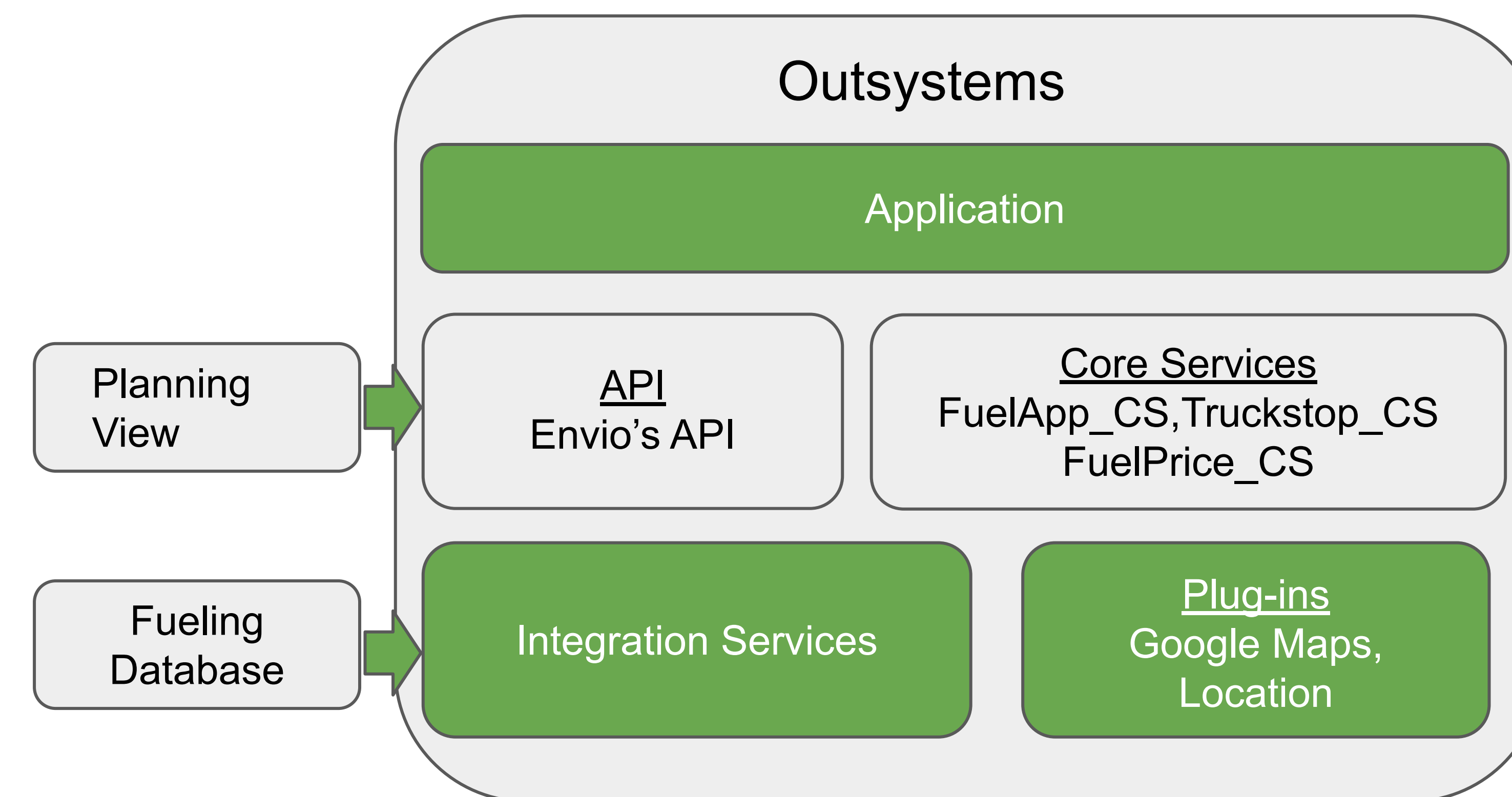
Technology Used



Process Flow



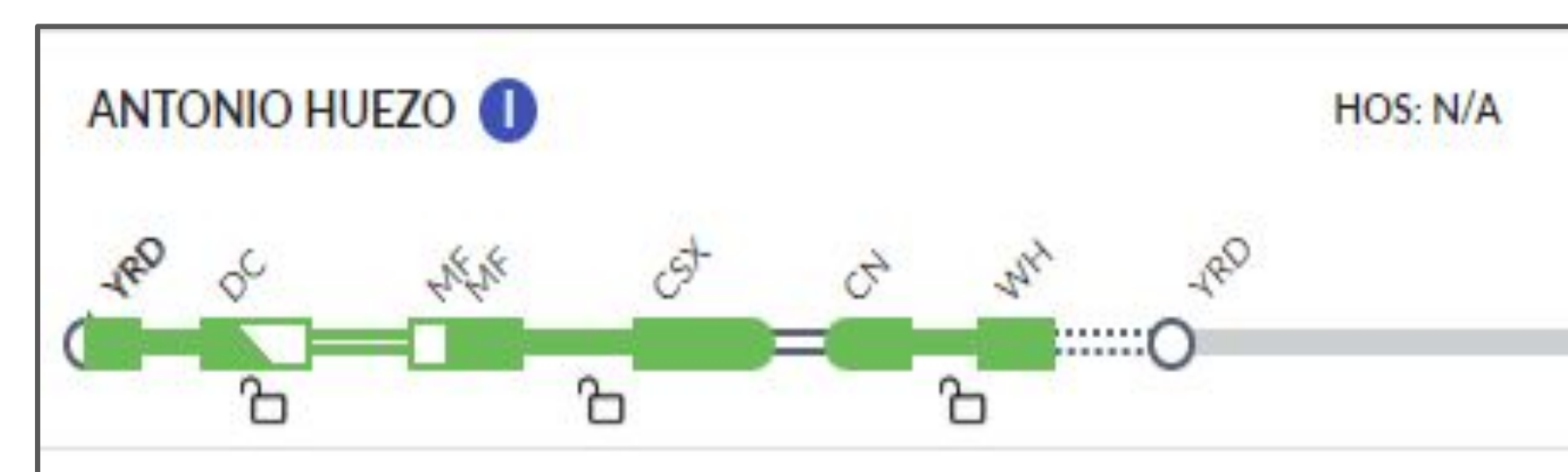
Module Architecture



Solution

- Design application to create a "mobile office"
- Create customized user profiles for individual drivers
- Connect application to third party database containing discounted fuel pricing
- Connect to Google Maps to determine closest fuel stations and location on map
- Extract JSON files from Envio REST API to retrieve available routes
- Display route opportunities in current area
- In-App Accept/Reject of routes near driver
- Connect to Envio database to show drivers details about their purchases and balance remaining on account

Back-End Screenshots



Sample Driver



Sample Route

Effective Date	Truckstop	Pump Price	Your Price *	Discount
2019-04-17	Clean Energy Wilmington	3.899	3.829	0.05
2019-04-17	SC Fuels #165	3.899	3.835	0.05
2019-04-17	SC Fuels #130	3.899	3.839	0.05

Fueling Database

Future

- Profile fueling stations based on service attributes
- Make application bilingual, possibly trilingual
- Implementing push notifications, not just in app notifications
- Show driver wait times at terminals and customer facilities