Taxi Availability

Chen Wai Hoong, Kohei Yamamoto

Pang Hui En, Tan Li Ming

Zhang Hua'an

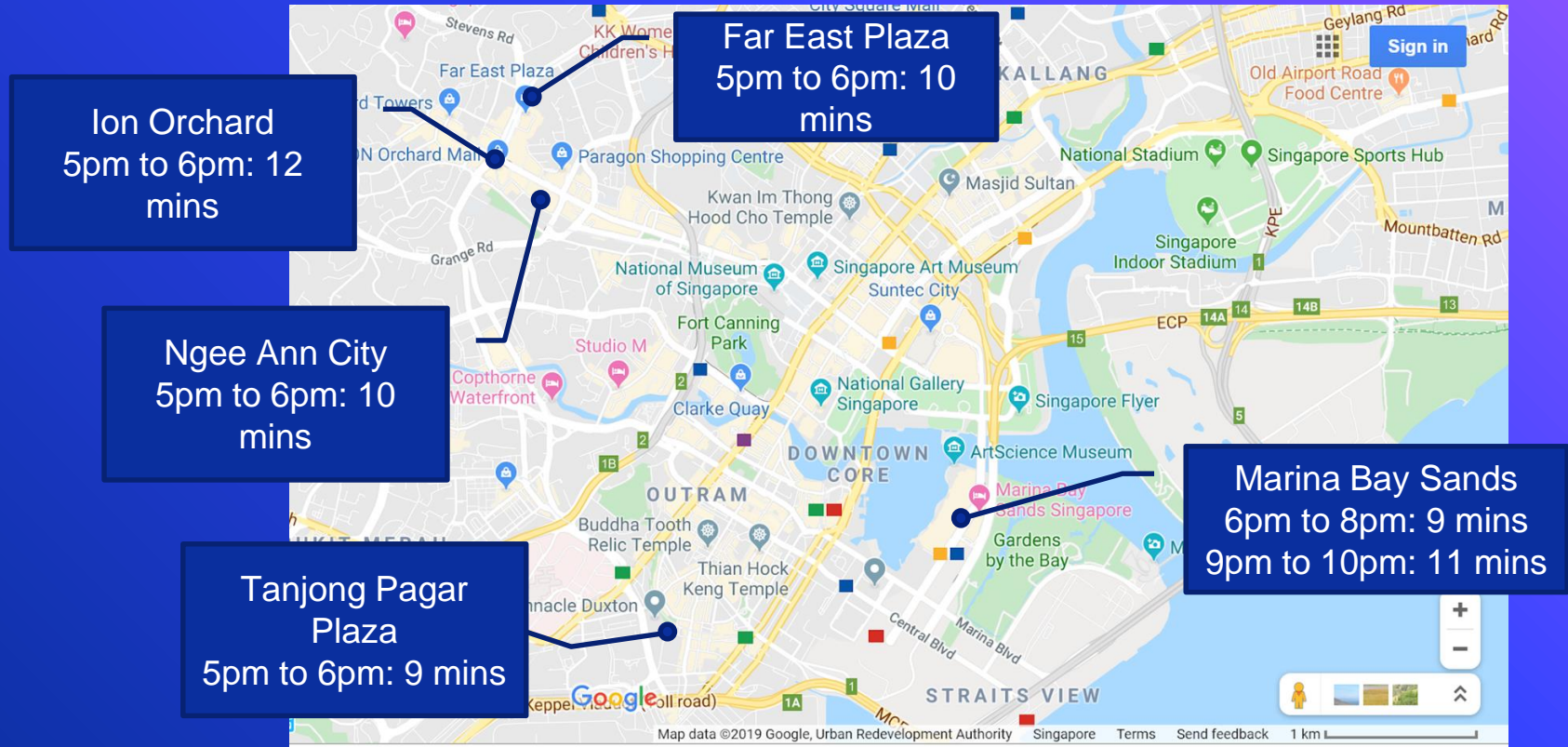Group 4

Ever felt frustrated trying to get a taxi?

Current Situation

18,989 taxis

80% % of taxis on the roads during peak periods (standard set by LTA)

10 minutes Passenger waiting time for taxi to arrive after the booking has been confirmed. Taxi companies need to meet 65% of the time. (standard set by LTA)

$2.30-$20 Booking fees

73.3 points Custom Satisfaction Index of Singapore - Taxi Services

68.3 points Custom Satisfaction Index of Singapore - Transport Booking Apps

*Data taken in Aug 2019

Average Hourly Passenger Waiting Time

Ion Orchard
5pm to 6pm: 12 mins

Far East Plaza
5pm to 6pm: 10 mins

Ngee Ann City
5pm to 6pm: 10 mins

Marina Bay Sands
6pm to 8pm: 9 mins
9pm to 10pm: 11 mins

Tanjong Pagar Plaza
5pm to 6pm: 9 mins

*Data taken in July 2019

"Creating supply does not necessarily mean that you'll be able to meet the commuters _where_ they are and _when_ they want it. So that could be better served through technology"

Mr Ang Hin Kee (Dec, 2016)

Executive Adviser to the National Taxi Association

⚐ Objective

Build an open-source map for

Passengers

- To share their locations so that drivers will know areas where demand is peaking in Singapore
- To cut expenditure on costs like booking fees

Drivers

- To focus on areas where there is high demand
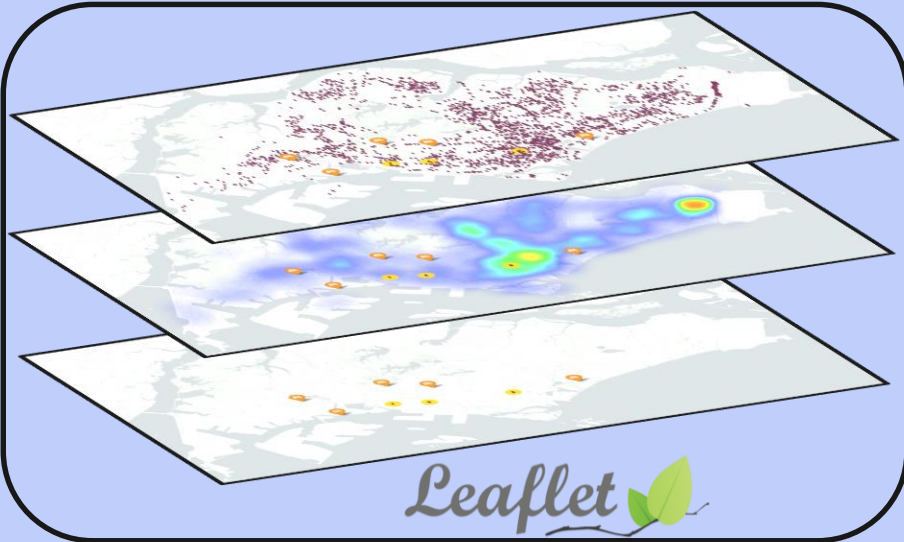- To disperse themselves if there is a high number of taxis in the area
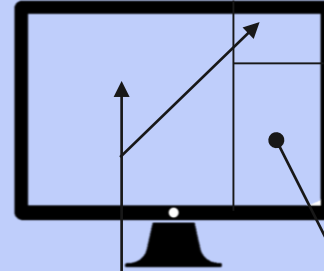
DEMO

System Architecture

API

data.gov.sg

Database

Google Sheets

Taxi availability from LTA

Website

Record

JotForm

Taxi Availability

Form

+ HTML/JS/CSS

Leaflet

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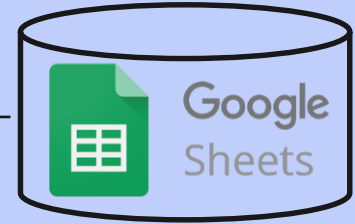
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Taxi Availability

Form

https://koheiyamamoto.net/sandbox/internetgis/project2/
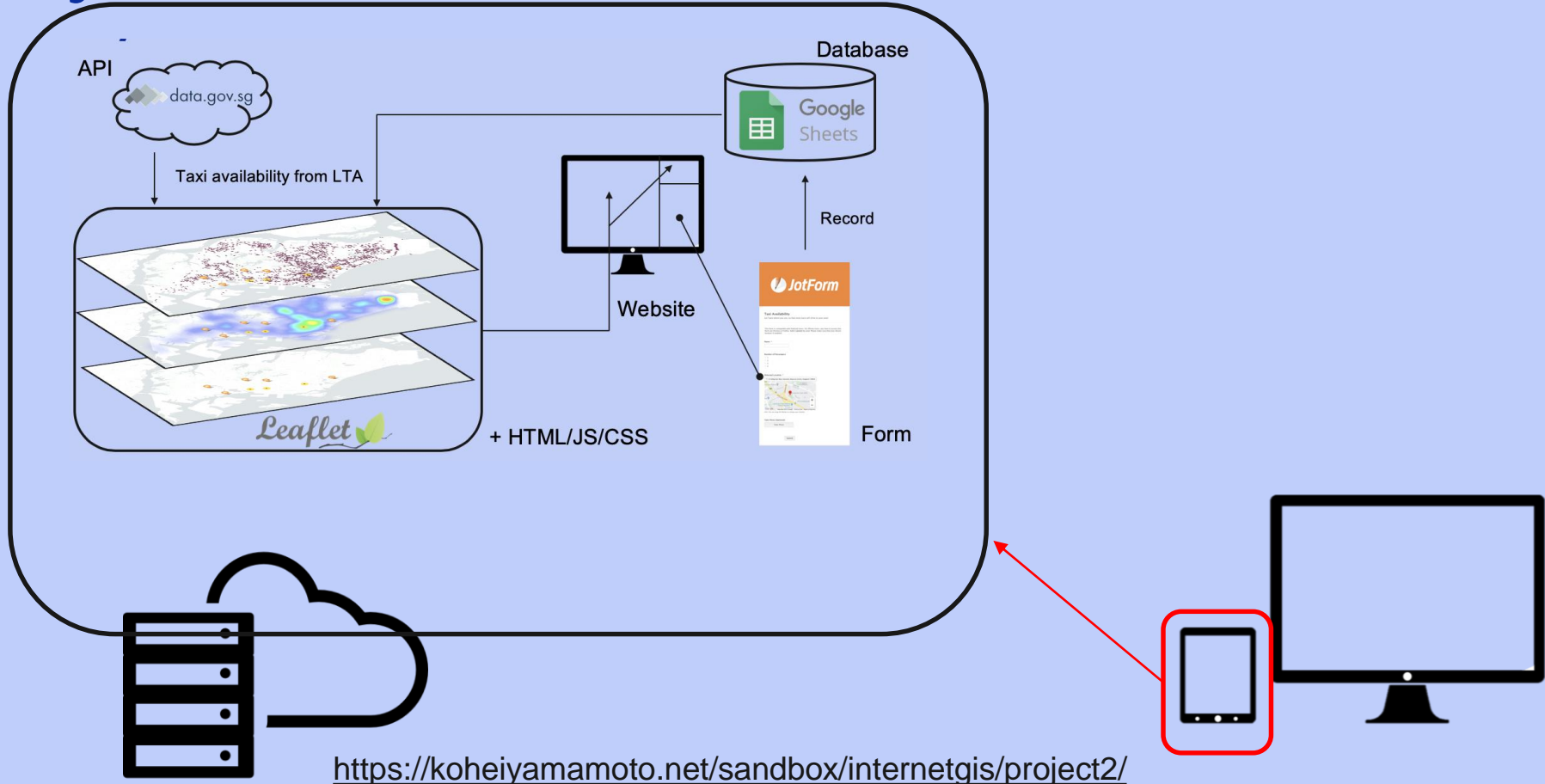
🚀 Future applications

- 2 different interface for drivers and passengers

- An app for drivers to view the demand of passengers + regular hotspots

- A dashboard for the passengers showing how taxi availability varies throughout the day/ week → passengers can plan ahead of time

- An app for passengers to check the estimated time to get a taxi based on proximity to available taxis

- In the event that the user submit the form wrongly, they would have the option to edit it

Thank you!