mXpress

Scrum 4
By Team MX

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mXpress Real Time Vehicle Routing System

Solving slow emergency response times in large cities as well as providing more accurate routing for general consumers

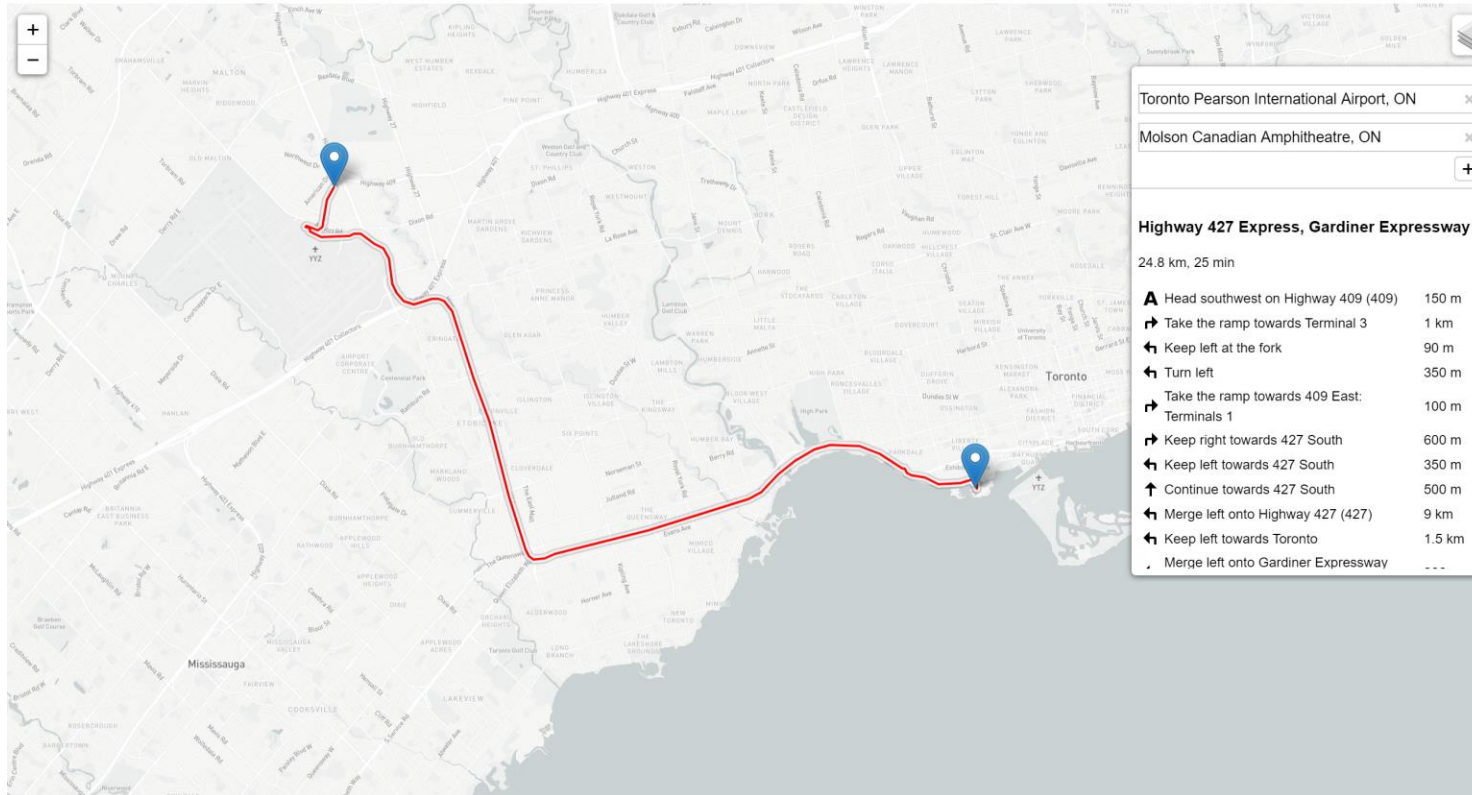**Fills the need for high quality, specialized routing systems for emergency dispatchers**

Innovates by utilizing both batch and stream big data coupled with AI to do predictive and reactive trip planning

Potentially allows for consumer vehicle routing using batch data

Adaptable framework allows for multiple qualities of service provided

- OSRM server reading speeds from real-time traffic database

- Customer-facing routing website version 1 complete

- Nearly completed streaming telemetry updates into real-time traffic database

- Infrastructure enhancements & fixes

- Acquired & mapped new telemetry dataset

Project Progress

Project Demo

Live Mapping Server

Next Steps

- iOS & Android App Development

- Full scale batch processing

- Containerization

- Further testing & end user documentation

- Development for real world customer
  - Ontology / performance
- Continuation of development over summer
  - Partnership with U of T / Mohamed

Backbone & Testing

- Load Tests

- Performance Tests

- Integration Tests

- Division of responsibility

Group Reflection

- Do you feel you are on track?
  - Yes, we are completed the majority of the project. After we implement the final features, we are looking to refine our infrastructure using containerization.

- Do you feel there are barriers to your success (if any)?
  - Kafka configuration problems are blocking completion of telemetry streaming component, but we are working through this

- Do you need any help going forward?
  - Nope

- Any other questions or concerns?
  - Nope