

Train Service Real Time Pattern Matching

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Api Hasthanasombat

Axel Goetz

Daniel Gavrilov

Overview

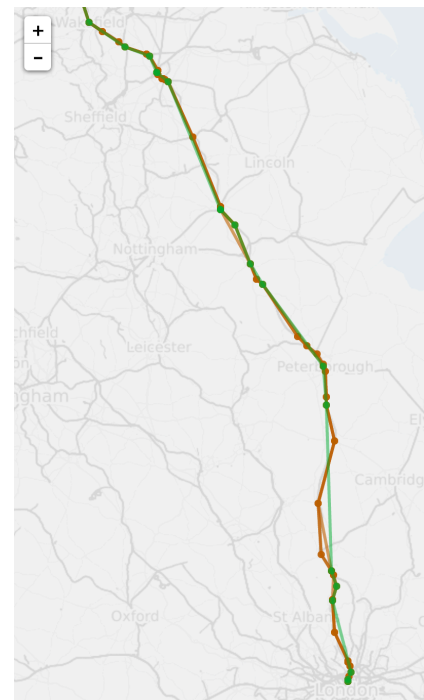
Progress

For this weekly report (as the last report was due one week ago) we have managed to automatically combine segments that have a few discrepancies but are likely to be a part of the same service.

We have also exposed the segments on our API and built a quick visualisation from the data, which shows the segments on a map.

Success

- We wrote more tests to increase code coverage, including testing the API endpoints that served data
- Debugged deadlock issues in the simulation
- Interpolated some of the segments after they have been generated
- Visualised segments on a map
- Using the diagram data in the segments



Problems

- Some of the segments contain non matching gps and trust reports

Summary of meetings

Client Meetings

We didn't have any face to face meetings with our client.

Team meetings

We discussed our next priorities now that the real time simulation and the segments are calculated. We decided we needed to interpolate between each segments that has small enough errors, visualize these segments on a map, which in order to do so we needed to expose the segments to the API. We also decided since we'll be adding more features in the coming weeks we should write tests to cover the existing main functionality so we don't break anything. We then divided up these tasks.

Tasks completed

- Expose segments API
- Wrote tests for all the data endpoints
- Visualise the segments
- Interpolate between segments

Problems to be resolved before the next report

- Finding a more efficient way of debugging parts of the algorithm

Plan for next 2 weeks

- Complete more tests for the real time simulation code
- Improve the algorithm that generates the segments
- Combine old visualisation of stop & stop names with the current map

Tasks completed

Api

- Wrote report
- Expose segments to API
- Wrote tests for endpoints

Axel

- Wrote report
- Wrote interpolation
- Debug deadlock

Daniel

- Wrote report
- Visualise the segments