RateIT

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CORE PROBLEM ADDRESSED

Bus operators have no way to quickly identify and address customer issues. RateIT solves this by collecting and disseminating crowd sourced passenger-to-passenger information in real-time (See figure 1 for initial concept) to enable transport operators to capture, interact and respond to information provided by passengers about service quality and passenger experience. This will also give valuable information to researchers.

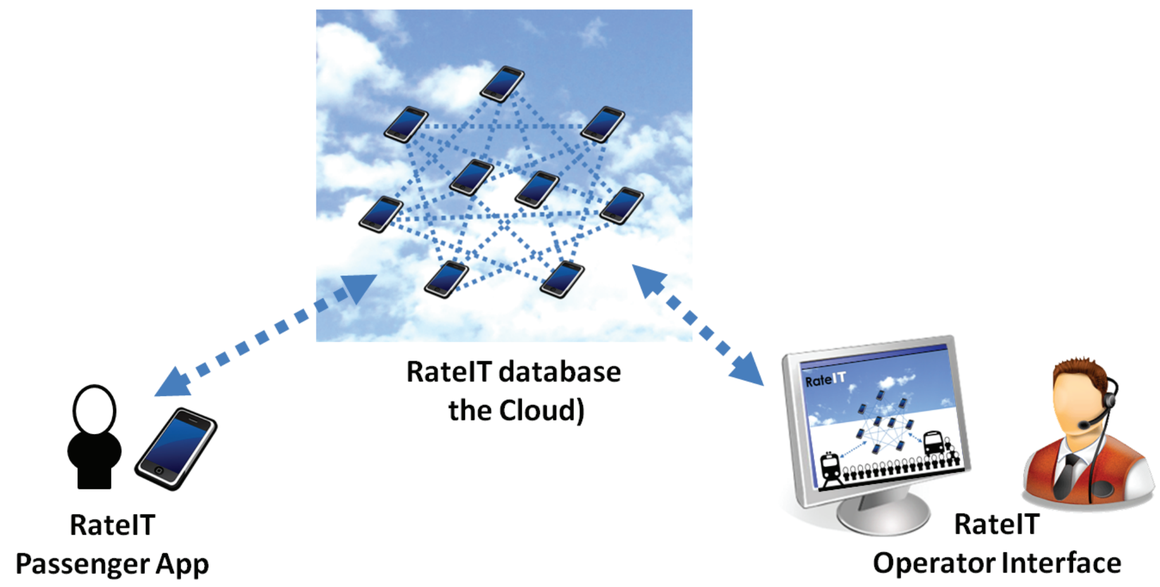

Figure 1: Interaction between the passengers and operators.

RateIT will allow bus operators to:
• Increase responsiveness of public transport providers to customer concerns.
• Improve passenger experience and mitigate risks that reduce patronage.
• Develop an evidence base to advocate on behalf of customers for land-use improvements.

APPROACH

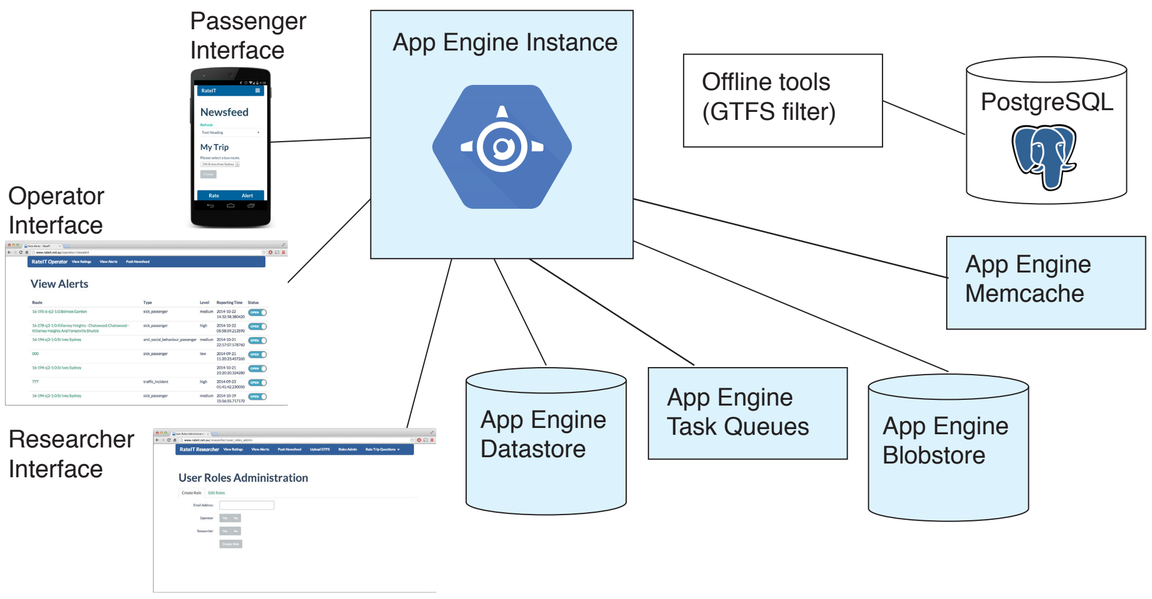

Figure 2: RateIT Architecture Diagram

The passenger, operator and researcher interfaces are implemented using HTML with Bootstrap, jQuery and Select2 using server side templates with Jinja2.
The server uses Google App Engine with the Python 2.7 runtime and App Engine's related services, Datastore, Task Queues, Blobstore and Memcache (Shown in blue in figure 2).
PostgreSQL was used as an offline tool to filter GTFS (General Transit Feed Specification) data, specifically Forest bus data, before uploading to the server (Shown in figure 2).

ACHIEVEMENTS

Three interface have been developed to cater for three types of users, passengers (Figure 3), operators (Figure 4) and researchers (Figure 5). The interfaces allow users to communicate. Passengers are able to leave feedback, quickly notify operators of issues and view newsfeed items. Operators and researchers can view feedback, view alerts and push newsfeed items for passengers to see. Researchers additionally have the ability to change the questions shown to the passenger when they are rating a trip and have admin privileges to manage GTFS data and user roles so only people who are approved can access the operator and/or researcher interfaces.

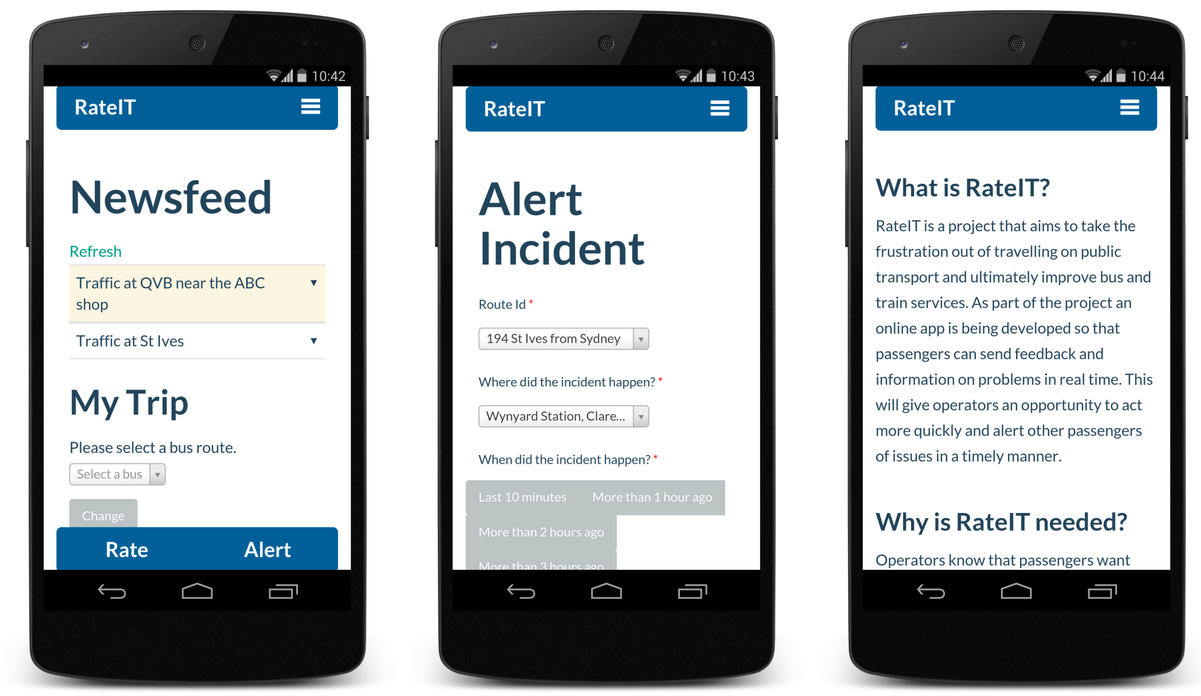

Figure 3: Screenshots of Passenger Interface

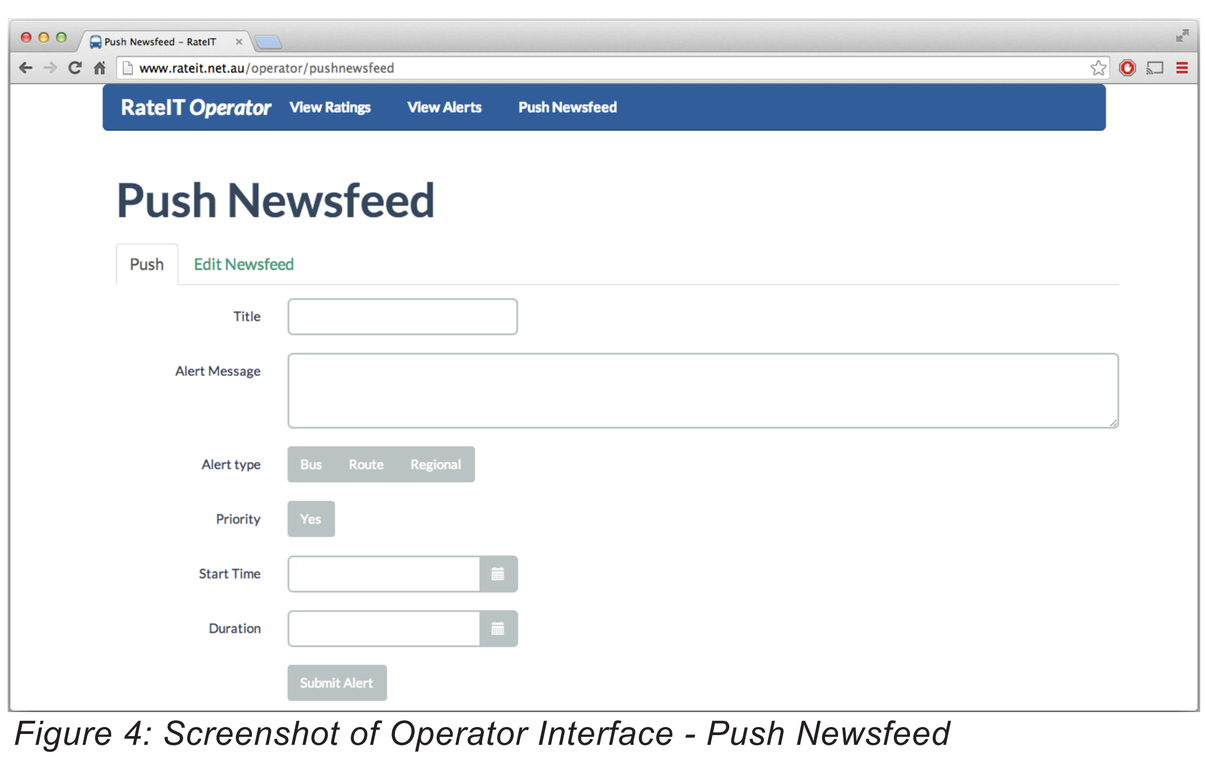

Figure 4: Screenshot of Operator Interface - Push Newsfeed

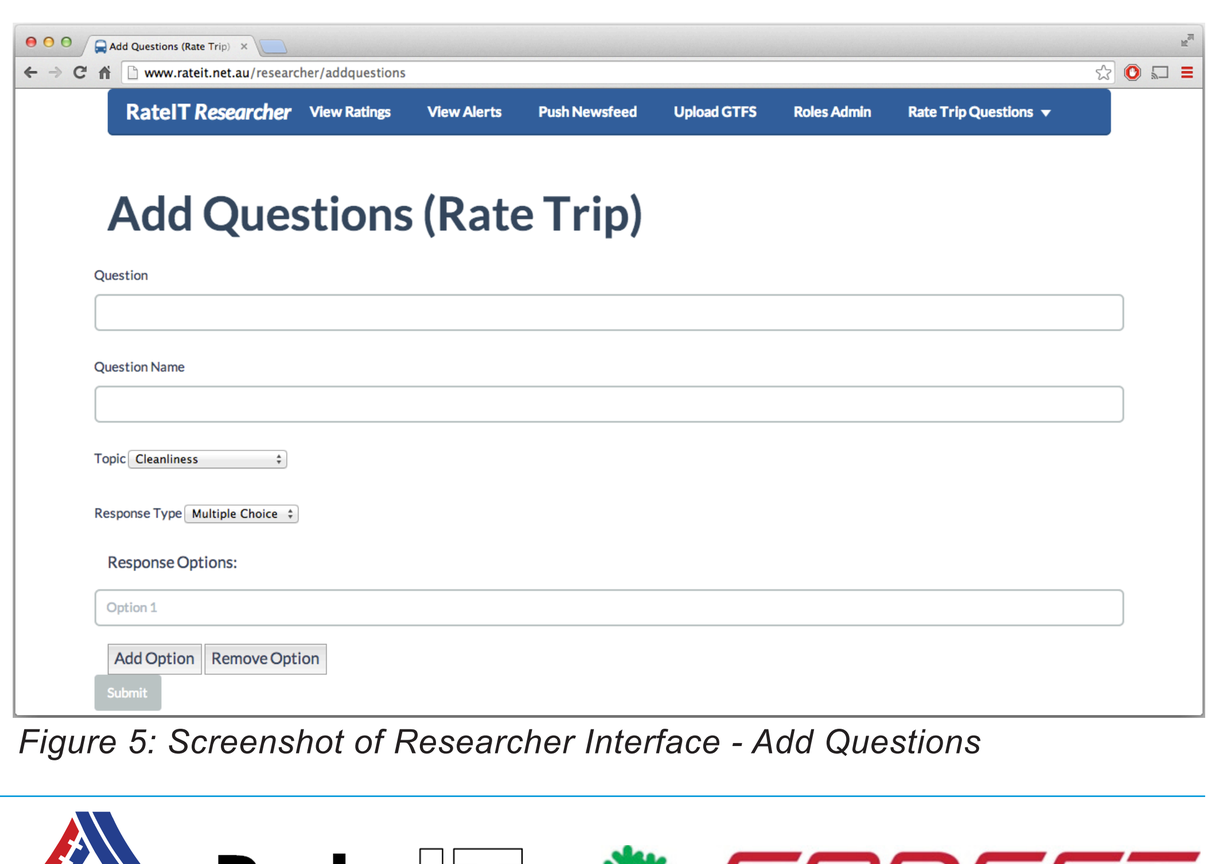

Figure 5: Screenshot of Researcher Interface - Add Questions

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