**GA Project   
Demo App Prototyping Plan**

2018.10.23   
based on ver. of 2018.10.19

**Introduction**

* Abstract
  + TBD
  + iOS App?
* Demo App’s Usecase
  + Note: Write down some user scenarios want to test in UK
    - e.g. When a user arrives at the station, the information about train service will be pushed to the user.
      * Information want to push: focused on the train service information related to the station
    - When some kinds of disruption occurs, the disruption information will be pushed to the user
      * Information want to push: focused on train service disruption where you usually use
* Schedule
  + TBD

**Request**

1. **Web API Research**
   1. Research APIs which could retrieve UK’s train service information. Paid methods are also in the scope.
   2. Deep dive and compare each Web APIs in the point of provided data
      * train operation
        1. what platform number the train will stop at certain station
        2. time table
        3. which station to stop
        4. number of carriages
      * train distruption
        1. delay
           1. how much delay
           2. why it delays
           3. new time table
           4. new “which station to stop”
           5. estimaiton of when it will back to the normal operation
        2. short carriage
           1. number of carriages
   3. Deep dive and compare each web APIs in the point of how to aquire the new information when the train distruptions happen
   4. Make comparison chart of each Web APIs. Even same data, there might be difference in how: e.g. timing of refreshing data or method of getting data.

dead line: Nov.6th

1. **demo app design**
   1. QUANTUM team will make specs
   2. Based on the spec(spec will be reviewed with DAN team before fix), make demo app’s software design
2. **Implementation/Test**
   1. Implementation of demo app
   2. Make test case for the demo app’s functional check.
   3. Pass the test case above.
3. **Preparation for demo**
   1. Install the app on Smartphone.

**1. API Research**

At the moment, we found out APIs as follows. (not checked yet)

* National Rail Enquiries - <http://www.nationalrail.co.uk/46391.aspx> <- Darwin: Maybe this is primary option
* transportapi - <https://www.transportapi.com/plans/>
* travelfusion - <https://www.travelfusion.com/corporate/page/tf-rail-api>
* citimapper - <https://citymapper.com/api>
* Realtime Trains - <http://www.realtimetrains.co.uk/api/pull>

**2. Design**

TBD

**3. Implementation/Test**TBD

**4. Preparation for demo**

TBD