

# Assessment 2 Live Data App

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## First Essay

This document is an essay of a real-time bus information app for Dublin city centre which subject is get information about next bus stop.

The problem which the application will solve is to keep the user, who is commuting in the Dublin area using public transport, updated with live information on the estimated travel times for the route that the user chose.

The application being developed is a mobile application created using jQuery which will let the system to be converted into mobile application for multiple mobile platforms (Android, iOS, Windows Phone).

Technologies used to implement are web technologies:

- HTML5,
- CSS,
- JavaScript,
- Fetch,
- JavaScript frameworks: [jQuery](#), jQuery Mobile.

The Application use an external API

(<https://data.smartdublin.ie/cgi-bin/rtpi/busstopinformation?jsoncallback=?>)

The application will be user friendly and intuitive and will deliver relevant information to the user in the shortest time possible. In few clicks/taps information of all possible route options will be displayed and user will be able to take informed decision on the next step on his/her way to the destination point.

The application will provide the user with the following functionality's: Browse found route options, On Demand refresh the list of possible route options for route and View route option details.

## Descriptive Use case Scenario

user	"Real-time Bus Information" App
1. User turns on the App	
	2. App turns on. Welcome screen is displayed
3. User enters bus number	
4. User presses "Search" button	5. App gets required information from external APIs
	6. App show the bus route information
<p><b><u>Alternate flow:</u></b> No Alternative flows available.</p> <p><b><u>Exceptional flow(s):</u></b> No network connection; external API information is not available</p> <p><b><u>Post condition:</u></b> The system goes into a wait state</p>	

<b>Method</b>	<b><code>https://data.smartdublin.ie/cgi-bin/rtpi/realtimebusinformation?format=json&amp;maxresults=\${maxResults}&amp;stopid=\${stopId}&amp;routeid=\${routeId}</code></b>
<b>Description</b>	<b>Method to retrieve real time bus information for given stop number and route</b>
<b>Parameters</b>	<ul style="list-style-type: none"> <li>- <b><i>stopid</i></b> - required, existing bus stop id -</li> <li>- <b><i>routeid</i></b> – optional, route identifier</li> <li>- <b><i>maxresults</i></b> – optional, maximum number of results, if not provided system will limit number of results depending on server configuration</li> <li>- <b><i>format</i></b> – optional, valid values: xml, json; if not provided JSON format is used by default.</li> </ul>

## Second Essay

Further development of the system could include implementation of the features planned during the analysis and design phase, which were not implemented due to the time constraints. Also add the geo-location in the app, which could be the area of further development. Popup notification of changing conditions could be included. For example delays, diverted traffic or to show another faster route.