Feasibility study

Journey Organizer

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1. Project Description

The project will deliver a multimodal transport search engine that will be capable of trip planning in the United Kingdom. Users will be able to input any address, town or landmark as the origin and destination and *Journey Organiser* then searches a database of train, bus, coach and driving routes to present route and price options for travelling to that destination.

Business/project name "Journey Organiser" is easy to remember and quite clearly indicates that this is about organising a journey, logo has been made also with the idea of association to traveling – the compass sign is just perfect for that.



End results that are expected for this project are two basic but very important things: fully functional android application and website, both of them needs to meet high standards requirements, be easy in use and contains all supporting documentation.

2. Project Goals

2.1 Short term

- Make sure that the android app and the website are fully functional before releasing
- Create application for iOS (Apple devices users)
- Add airplane routes into the service
- Add live traffic feature for travellers

2.2 Long term:

- To be able to expand the business and add other countries of the Europe

3. Timeline:

| Project starts: 01.10.2015 | |
|----------------------------|-----------------------------------|
| 30.10.2015 | Database implementation (v 1.0) |
| 07.12.2015 | Design Planning |
| 10.12.2015 | App user interface (v 1.0) |
| 16.12.2015 | Website user intervace (v 1.0) |
| 16.12.2015 | Feasibility study document |
| 17.12.2015 | Project planning |
| 31.12.2015 | Test plan |
| 31.12.2015 | Pricing system |
| 25.01.2016 | (Basic) Android functionality |
| 17.02.2016 | Website user interface (v 2.0) |
| 19.02.2016 | Add map to webstie and app |
| 19.02.2016 | Poster (12) |
| 29.02.2016 | App user interface (v 2.0) |
| 07.03.2016 | (Basic) Website implementation |
| 07.03.2016 | User accounts |
| 18.03.2016 | (Advanced) Website implementation |
| 18.03.2016 | Website user interface (v 3.0) |
| 24.03.2016 | (Advanced) App implementation |
| 31.03.2016 | App user interface (v 3.0) |
| 31.03.2016 | User interface testing |
| 31.03.2016 | Systern testing |

Project ends: 31.03.2016

Please note that the timeline shows rough dates, these may be changed. More accurate dates will be regularly updated in the project plan.

4. Finances:

At the moment we are treating this project as a univeristy subject which means we do not suffer any loss in case of money and we do not need any budget. We are using freeware software and university resources which are also free.

5. Market study:

There are loads of services that helps travellers to find their route, however from my own experience neither of them are good enough to search for more than three types of transport routes and then compare them all to result with the best one.

Our service will be the best on the market, it will include all types of transport and their routes. We want to provide with the service that will show not only routes and style of transport but also with the details of the bus or train number and its timetabling. The Journey Organiser will suggest the best option to choose, it will take under consideration features such as price and distance. Such options will give us advantage over the other services with similar purpose

The service is aimed for anyone who is travelling, so we do not have any age limitations – if someone wants to travel and he wants to get some info about how to get from point A to point B then our service is for him.

Initially we are going to cover only United Kingdom, so that is the only limitation. However the service is planned to cover rest of the EU countries in relatively short period of time.

6. Resources:

Eclipse – is an integrated development environment (IDE) for Java and other programming languages. Eclipse is required to set up and maintain the server which is written in Java, it is free to use. Eclipse is freely available under the Eclipse Public License (EPL)

Android Studio – is an integrated development environment (IDE) for the Android platform. It is required to write the android application source code and maintain it. Android Studio is freely available under the Apache License 2.0

Notepad++ – is a text and source code editor. It is used to write website source code which includes: PHP, JavaScript, CSS and HTML. Notepad++ makes that code writing is much faster and easier mostly because of the language distinguish feature. Notepad++ is freely available under the General Public License (GNU)

Host – a machine that hosts and runs our server. It will keep all the server and database files. One of the team members' private personal computer will be hosting the server.

Smartphone – needed to test the app, so it has to work on the Android . It is not a problem to perform the test because most of contributors owns a smartphone with Android.

Computer – needed to develop and design the app and the website, to run all the programs mentioned above. Additionally required for testing the website and source code.

Graphic editor – needed to create a poster, logo or website and app background etc. For project needs we can use trial version of Adobe Photoshop or free to use GIMP.

7. Project Process:

Project will use agile project management. Project Manager will produce and update Project Plans every two-three weeks and when a major part of the system has been implemented. All members of the group are required to take their own responsibility for particular parts of the project that they have been tasked with, however, if anyone is struggling, project manager should delegate other resources to that part of the project. Project members are required to complete their tasks on time and upload their work on GitHub regularly.

Roles within the project has been divided as follows:

Team lead is responsible for facilitating the team, obtaining resources for it, and protecting it from problems. This function will belong to group supervisor

Team member, is responsible for the creation and delivery of a system. This includes modelling, programming, testing, and release activities etc. This function will belong to everyone within the group except the team lead. Team will include generalizing specialists which means that each member got one or more technical specialities (e.g. Java programming, php programming, postgreSQL database etc.) so that they can contribute something of direct value to the team.

8. Project Team and Management:

The project team will consist of five persons that will be managed by a supervisor:

- 1. Group manager Mateusz Maly (mfm9@kent.ac.uk)
- 2. Software Engineer Jan Gucwa (jg404@kent.ac.uk)
- 3. Quality Assurance Filip Borowiak (fb225@kent.ac.uk)
- 4. Test analyst Karol Baran (kb440@kent.ac.uk)
- 5. Documentation Dawid Janelli (ddj4@kent.ac.uk)

Supervisor

1. Mr. Peter Rogers (P.J.Rodgers@kent.ac.uk)