Feasibility Study

Journey Organiser
<3.0>

University of Kent

Version	Date	Author	Approved by	Description
1.0	03/11/2015	Dawid Janelli	-	First version of the document
2.0	12/11/2015	Dawid Janelli	-	Updated Version
3.0	20/12/2015	Mateusz Maly	-	Rewrote most of the document due to irrelevant content. Checked for Spelling and Grammar errors.

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1. Project Description

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

Project name, *"Journey Organiser",* is easy to remember and clearly indicates what the project is about.

2. Project Goals

2.1 Short term

- Functional and easy to use Website as well as an android app.
- Server able to collect all the information from the user and return route results.

2.2 Long term

- To be able to expand the business and add other countries of the Europe
- IOS app.
- Add airplane routes into the service
- Add live traffic feature for travellers

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 interface (v 1.0)

16.12.2015 Feasibility study document

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

The current selection of free software and already available hardware dissmisses all the costs associated with the project.

5. Market study

Currently there is a wide selection of similar applications which will enable the user to find related routes for his journey. However there is a limited amount of the ones that offer prices altogether with the route information.

One of our goals is to implement a sorting algorithm which will enable the user to sort his route search by distance, time or cost.

The application is aimed at anyone who has access to the internet and is interested in finding the best way of getting from point A to B.

The initial plan is to cover the UK only due to difficulties in finding reliable APIs and parsing foreign signs. However, a future goal is to expand it to the rest of the world.

6. Resources

Eclipse – 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. Eclipse is freely available under the Eclipse Public License (EPL)

Android Studio – 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++ – 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 – it has to be an Android phone. Every member is in possession of one or more. These are of different screen sizes, which will be useful during testing.

Computer – needed to develop and design the app and the website. Additionally required for testing the website and source code.

Graphics editor – will be used to create backgrounds, logos and images. Free trial of adobe Photoshop can be used or GIMP, which has a free license.

7. Project Process

Project will be implementing agile software development. 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 have been divided as follows:

Team member, is responsible for the creation and delivery of a particular part of the application. This includes designing, modelling, programming, testing, and release activities.

8. Project Team and Management

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

1. Project manager – Mateusz Maly (mfm9@kent.ac.uk)
2. Chief 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