Project Proposal for LAPD

Amadeu Pereira
up201605646@fe.up.pt

João Ferreira
up201605330@fe.up.pt

Nuno Lopes
up201605337@fe.up.pt

March 11, 2020

Abstract

The objective of this article is to describe our Project Proposal for the LAPD project.

It will be a software application that has been developed specifically for use on smaller devices, such as smartphones and tablets, and that can be used by travellers to manage their travel whilst on the move.

We will also include in this article some similar apps, data sources, a brief calendar of the development and, in the end, some conclusions.

1 Introduction

It is known that the Travel and Tourism sector has been growing globally [1]. With this growth it is more and more in need of an application that can guide and help in the trip of the tourists that just want to visit new cultures and ways of life that people have in the many corners of the world.

We aim to deliver a way of solving this recurrent problem to the major masses.

Firstly we need to make the market research, this step is explained in Section 2, where we go through a list of competitors, analyze their strengths and weaknesses and take our conclusions.

Next we will go through some steps of analysing the type of data that we want to fetch and the several providers of this data. This is explained in more detail in the Section 3.

We pretend to follow the plan described in Section 4 to ensure and efficient and optimal time management.

1.1 Motivation

This problem is really relevant for all of us. We all faced this problem some time in our life and felt that something needed to be done.

With this being said we decided that this would be the perfect opportunity for us to develop a software application that goes along with our needs that we strongly believe are the same as other travellers.

1.2 Objectives

For this project we pretend to develop a mobile application that fuses all the main and most attractive features of our competitors' apps, while adding more value to it.

2 State-of-the-art

This application will not revolutionize the world, but it will turn it better and easier for any person that wishes to travel and always have a pleasant trip. The reason for this is that, nowadays, there are already in the market some apps that do what we are proposing to do, but their problem is that they are indeed very good at certain aspects, but lack functionalities in other aspects of the trip. Taking this into account, we are aiming to specialize in everything.

For example, *I Love Aveiro* [2] is an application that focuses too much in promoting the city itself. *YOGO* [3] is an example of an app that is overly attached to the social aspect of your trips. *TripScout* [4] is another typical travel guide application that emphasizes on giving the user places and activities that they might enjoy, when sometimes everything the user wants is to be himself searching and finding things to do.

3   Data source

To develop this application we need to get information from various sources, from the mobile sensors to public APIs.

3.1   Mobile Position Sensors

The positions sensors from the mobile phone will be used to locate the user in the map so that the application can better advise the user with places to visit near him.

3.2   Weather API

The application will have access to public weather platforms to inform and recommend the user, based on weather forecasts, which places he should and should not visit. For example, if rain is expected on the day of the travel, the application will suggest the user to avoid visiting open spaces.

3.3   Restaurants API

A restaurant API will be used to fetch information from near restaurants such as the name, location, rating, average cost, type of cuisine and availability for reservations.

3.4   POI API

The mobile application will also use an API to search for points of interest in the user selected destination or the current location and suggest them with the top tourist attractions they can visit, for example museums, monuments, gardens...

4   Development plan

In order to develop this project, we defined several checkpoints based on the course deadlines. This information can be found in the Table 1.

Task	Deadline
Project Proposal	11.03.2020
Project setup, integration	25.03.2020
Architecture and prototype	15.04.2020
Development	24.05.2020
Final handout	27.05.2020

Table 1: *Project checkpoints deadlines*

5   Conclusions

In this article the project theme in which the work will focus on was presented, as well as the objectives of the application. All the sources of data from which the group will retrieve information were described in its convenient section and also all the steps needed to obtain a successful application in the end of this course.

References

[1] World Travel and Tourism Council. Travel and tourism continues strong growth above global gdp. https://www.wttc.org/about/media-centre/press-releases/press-releases/2019/travel-tourism-continues-strong-growth-above-global-gdp. 27/2/2019.

[2] I Love Aveiro. https://www.behance.net/gallery/83473811/Mobile-App-I-Love-Aveiro.

[3] YOGO - Trip Planner App. https://www.behance.net/gallery/78632553/YOGO-Trip-Planner-App.

[4] TripScout. https://tripscout.co/.