Architectural Design

Closest Car Parking – Macedonia

Software Design and Architecture – FCSE

Summary

1. Introduction

1.1 Purpose

- To depict different aspects of the system this document will provide architectural overviews of the system using different architectural views.

1.2 Scope

- The goal of the project is to make it easier, more convenient and effortless for drivers in Macedonia to find parking around the country. We are hoping that with this app we can reduce traffic and help with the carbon emissions.

2. Conceptual Design

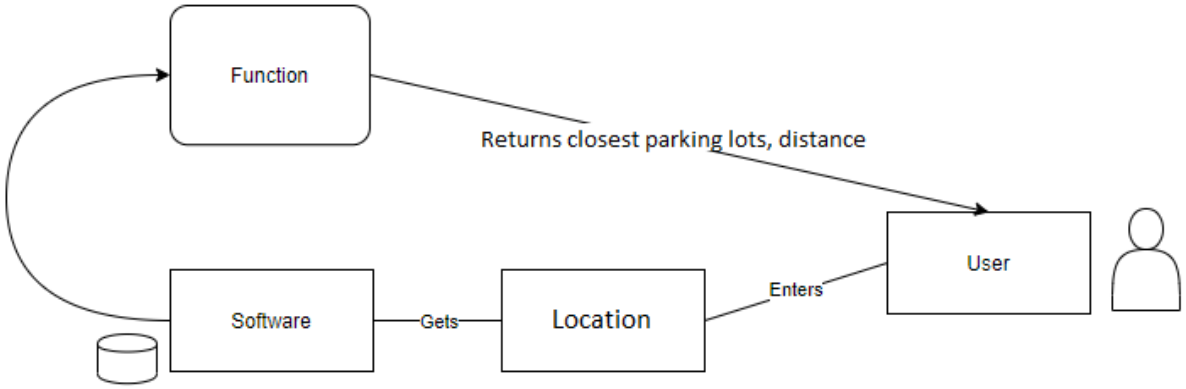
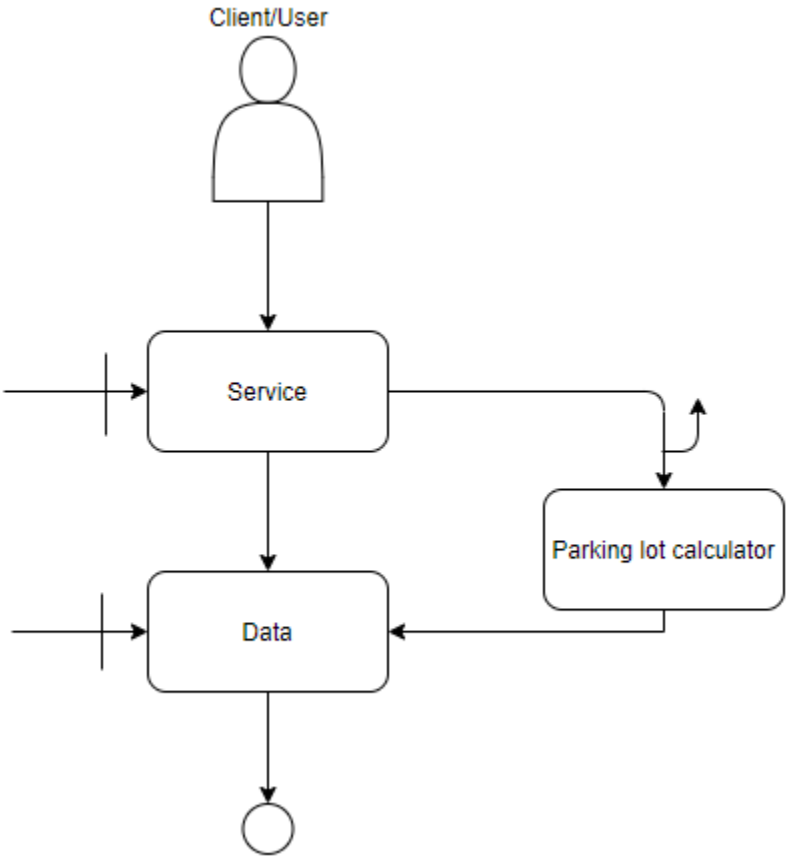


Figure 1. Conceptual design

- The conceptual design of the project is shown on the Figure 1. The user enters a location, after which the software will execute the function to return the closest parking lots and distance according to the entered location.

3. Executional design



- The executional designs of the software are shown on Figure 2 and Figure 3. It shows how the system interacts with the user and processes data. The user enters to the webpage to enter a location in Macedonia. The software then calculates the closest parking lots and returns it to the user with additional information such as the distance between location and the parking lots.

Figure 2. Executional design 1

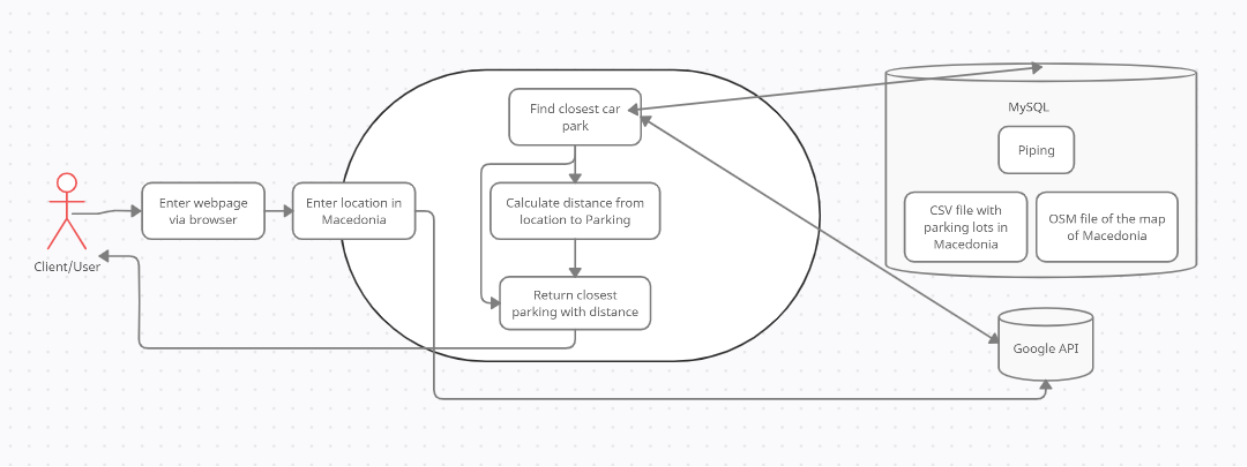


Figure 3. Executional design 2

4. Implementation

- The implementation of the software is shown on the Figure 4. The database is acquired with the help of MySQL while the app will be built in React.

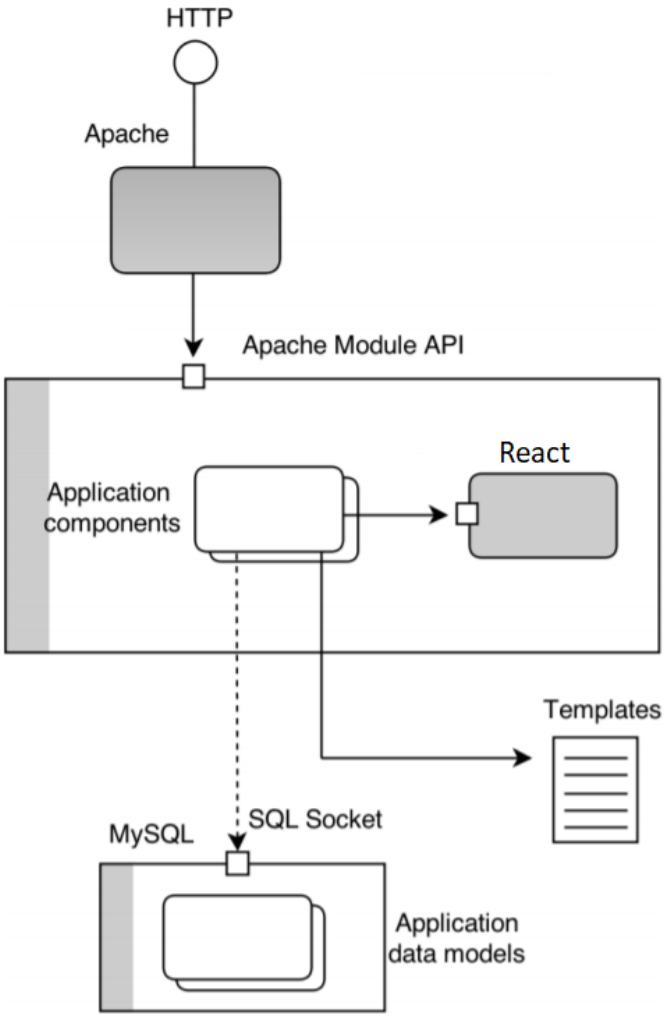


Figure 4. Implementation