

Mobile Development

Module Title:	Mobile Development
Assignment Type:	Individual Practical Project
Project Title:	Travel Pal
Project Date:	25 th February 2019
Assignment Compiler:	Amilcar Aponte
Weighting:	50%
Due Date:	28 th April 2019
Method of Submission:	Moodle Submission

Assignment Introduction

A company has come to you as a developer and asked you to develop a mobile application that will work on multiple platforms. They know it is a very difficult task to install all the different libraries and SDKs to do this, so they have told you that using a Cloud based compiling tool is the best option.

Design and build a mobile application that will use the geolocation of your phone to show the city and country where you are, the weather at the current location, and the currency exchange rate to the local money.

Technologies

Adobe Phonegap – PhoneGap is a tool which allows you to write applications in HTML and JavaScript and deploy them to any phone.

Front end JavaScript Framework – You can use any HTML/CSS/JavaScript based user interface library such as jQuery Mobile, Framework7 or Bootstrap.

External APIs – In order to be able to access real time data, you will need to connect to external API to request weather, currency exchange rate and name of the city/country where you are located. You could use the APIs used in class, or explorer different options.

Specific Requirements

Start with a template source code, the following modifications should be made:

- The application should have a welcome screen that displays the name of the city/country based on the data collected by the GPS sensor of the phone.
- A section should exist in the application that allows the user to enter in a certain amount of USD to convert to the local currency and viseversa.

- Another section should exist in the application to check the weather of the current location of the user.
- Finally, there must be button for the user to save automatically the current location and data collected from the different API's to be retrieved later, this way the user can keep record of places where they have been.
- This is an individual assignment.

Deliverables

- Upload a single zip file which contains:
 - Source code for your application
 - Document containing screenshots of your application in action, screenshots of the Adobe cloud compiling process, and justification for your design decisions (graphic and logic).
 - Binary Android package which can be downloaded from the Adobe Cloud website once compiled (APK file).

Extra marks

If you would like to achieve a distinction, consider to add some extra layers of functionality, such as, but not limited to, saving a picture of the place with the record of the visit.

Marking Scheme Summary

Description	Weighting
User interface set up correctly and modified for this application.	15
The application interacts with different APIs correctly.	15
The program interacts correctly with the hardware	10
Adobe cloud based compiling for different phone vendors is working correctly, and native application packages can be downloaded.	10
Location data and data from APIs, such as the current weather is saved correctly and can be retrieved next time the application runs.	10
Documentation is clear and well-presented, and includes a coherent justification for the design decisions.	10
Extra features are implemented (as long as they are relevant to the context)	30
TOTAL	100