

Component Name and Code:	Mobile Technologies (5N0580)
Assessment:	Skills Demo 2
Weighting/Marks:	40%

Teacher:	Ray O'Connor
Course(s):	SD
Issue Date: 9-3-2016	Deadline: 12-4-2016

### Guidelines/Instructions to Candidates:

You are required to create an Android mobile app which contains/performs the following

- the app is a Car Park app which allows the user enter car reg, select a date, enter number of minutes and calculates cost of parking
- contain text/images and suitable colour scheme to enhance the user interface
- allow the user to navigate through multiple activities
- display a calendar and Toast message showing the date selected by the user
- link UI to a database to store a Car Registration Number and number of minutes representing duration of car in car park
- allow the user to add/delete/search for details for any car using its registration (eg 11C7121)
- calculate the car parking cost based on a rate of 3 cent per minute
- contain a Google map with a marker pointing to Dublin city centre
- play a video clip (eg motor safety, cars, etc)

Evidence of the following must also be provided with your app:

- Write a project plan addressing the on-going planning, maintenance and upgrading of mobile platforms and technologies
- Evidence of design phase (eg sketches, wireframe diagram, evidence of API key, ..)
- Printout of Java source code which calculates car parking cost and xml source code for corresponding layout XML file
- Screenshots of each activity and functioning part of the app running in an emulator or on a device
- Generate an APK file and give a copy of this file to your teacher in class

### Assessment:

Description	Marks
Participate in the execution of a project plan addressing the on-going planning, maintenance and upgrading of mobile platforms and technologies (eg. clear evidence of a plan for maintain and upgrading Android)	5
Demonstrate a basic mobile application development lifecycle, including API description for various operating systems, user interface considerations and deployment requirements (eg UI created and designed effectively)	10
Explore the use of programming concepts in mobile application development (eg. Java/XML code)	10
Demonstrate an understanding of mobile app development concepts and working with APIs (eg. Google Map API)	5
Use local and networked data and data stores (eg. Database integrated and functioning correctly)	5
Use a mobile application development environment to install, configure, test, and deploy a prescribed basic mobile application (eg. APK file supplied)	5

**Ensure you staple this cover sheet to your printout**

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You must present the following in class to your teacher on or before deadline

- printout containing paragraphs of texts for each assessment description above including screenshots clearly demonstrating each working stage of the app

**DECLARATION:** I \_\_\_\_\_, confirm that everything I am submitting for assessment is my own original work.

BLOCK CAPITAL LETTERS

Signed: \_\_\_\_\_

Date: \_\_\_\_\_