Faculty of Engineering, Environment and Computing

A202SGI Android Development Skills

Assignment Brief 2018/19

Module Title Android Development Skills	Ind/Group	Cohort Sept	Module Code A202SGI
Coursework Title (e.g. CWK1) Assignment			Hand out date: 1st October 2018
Lecturer Xin Lu			Due date: 18:00pm 11th December 2018
Estimated Time (hrs): Word Limit*: 1,500	Coursework type: Assignment		% of Module Mark 100%

Submission arrangement online via CUMoodle:

The report must be submitted through Turnitin on Moodle. You must clearly mark the link to your Coventry University GitHub repository on the cover page of the report. ***Failing to submit the Coventry University GitHub repository link will result in a zero mark for this assessment.***

File types and method of recording: PDF for the report
Mark and Feedback date: 3 weeks after submission
Mark and Feedback method: written feedbacks using CUMoodle

Module Learning Outcomes Assessed:

1. Demonstrate familiarity with the Java Programming language and the Android Studio IDE.
2. Design applications suitable for Android devices.
3. Use the Android software development kit and emulator to develop applications for the Android platform.
4. Make use of the main modes of interaction available on a smartphone platform.

Task and Mark distribution:

You need to write a reflective report (max 1,500 words) on an Android app you have developed targeting at recent versions of Android platform. You are free to choose your own ideas to design the app.

1. Your app should solve a practical problem e.g. module enrolment, library item booking etc.
2. Your app should offer novel solutions compared to existing apps. In order to achieve this, you'll need to survey Google Play for similar apps.
3. Your app should use only Java language and Android SDK. 3rd party SDKs and libraries are not allowed.

4. Your report should demonstrate programming/design skills you have learnt and developed during the module.
5. Your report should contain illustrative examples such as screencasts and code snippets.
6. . You should create a Coventry University GitHub repository using your student id as its name (Host the repository within the **A202SGI-1819OCTJAN** organization and not your personal space) that contains all source code for the app you created. You should include the URL of your repository on the cover page of your report and make sure that your lab tutor can access your code.

Your report will be marked against the following four criteria, a detailed rubric is on the next page.

1. **App design and report writing (25%)** – Does your app solve a practical problem? Does it offer distinct solutions to existing apps? Does it document well?
2. **Interface (25%)** – is the user interface of a professional standard, including the use of custom colours and graphics? How close does the app adhere to the official Android Design Principles?
3. **Data (25%)** – how is the app storing and manipulating data?
4. **Coding (25%)** – Is the code easy to follow with sensible variable names, correct data types and clear comments to explain how the app works? Is the code modular? Have you used functional programming paradigms? This will be checked on the Coventry University GitHub repository.

Notes:

1. You are expected to use the CUHarvard referencing format. For support and advice on how this students can contact Centre for Academic Writing (CAW).
2. Please notify your registry course support team and module leader for disability support.
3. Any student requiring an extension or deferral should follow the university process as outlined here.
4. The University cannot take responsibility for any coursework lost or corrupted on disks, laptops or personal computer. Students should therefore regularly back-up any work and are advised to save it on the University system.
5. If there are technical or performance issues that prevent students submitting coursework through the online coursework submission system on the day of a coursework deadline, an appropriate extension to the coursework submission deadline will be agreed. This extension will normally be 24 hours or the next working day if the deadline falls on a Friday or over the weekend period. This will be communicated via email and as a CUMoodle announcement.

Marking Rubric

The following rubric will be applied to your submission. The scores are automatically collected using Moodle. ***Failing to submit the Coventry University GitHub repository link will result in a zero mark for this assessment.***

	≤ 4 points	≤ 8 points	≤ 12 points	≤ 16 points	≤ 20 points
App design	The app offers similar functions to existing apps.	The app shows an effort in solving a practical problem.	The app shows a genuine and novel idea.	The app offers novel solutions to practical problems.	The design compares favorably with apps receiving 4 or 5 star ratings
Interface	Basic UI. App lacks some functionality.	App is functionally complete. Basic UI controls with no customisation.	App is fully functional. Some elements of the UI have been customised.	The app contains additional functionality not taught during the module. The UI has been fully customised.	The custom UI has been created to a professional standard. It compares favourably with apps receiving 4 or 5 star ratings.
Data	Data is displayed with errors.	The correct data is displayed in the app but nothing is persisted if the app is fully closed and opened.	Data is persisted locally when the app is closed fully.	Data includes complex relationships and is persisted locally	Data is both persisted locally and shared between users via a custom API
Coding	There is limited functionality using existing code. The student does not fully understand the code used.	The application is fully functional and the explanation of the code is clear.	The application makes full use of the range of structures and APIs covered in the worksheets.	The app makes use of additional APIs and techniques not explicitly covered in the worksheets.	The app makes appropriate use of advanced, cutting-edge APIs and techniques not mentioned during the course.
Report writing	The report contains lots of grammar mistakes and errors.	The report contains some grammar mistakes.	The report makes proper use of screenshots and illustrations.	The report is clear with proper use of references.	The report is clearly structured and well written.