Mobile App Development 1

Assignment 2019
Your Own Android App

In this assignment, you are tasked with creating an App of your own design for Android devices. You are free to explore any area or theme you wish within the context of this Assignment such as games, utilities, news, etc. You should aim to deliver a functionally complete experience for the user. Your App should exhibit the following characteristics:

- CRUD (Create, Retrieve, Update, Delete) functionality for some type of recorded information
- Persistence so that data isn't lost every time you open/close the app
- Perform appropriate validation on data entered

Beyond that, it is recommended that you:

- Store your project on a remote code repository (such as GitHub) which develops incrementally (i.e. not published in one single burst)
- Adopt appropriate User Experience guidelines
- Adhere to Best Practices where possible

Other than that, you are free to indulge your own interests. Bear in mind that this is something you must complete before the end of the semester, so don't overreach. Also, you should be aware that the App paradigm does not reward cramming functionality into the software. It's about doing one thing really well. A good approach is to think of the App as a device the user has in their pocket, as opposed to a piece of software.

As well as developing the App, you must also write a short report (circa 1000 words) outlining the motivation for creating your App, architectural concerns, an object model, the context of your App with respect to other similar Apps in the Store (if they exist), and a roadmap for future development.

Marks will be awarded for adhering to the guidelines as well as expressing originality and creativity. If you have access to an Android device, it is strongly recommended you test on it.

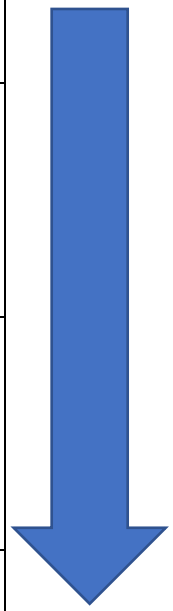
Final Delivery:

You must upload a .zip file containing your entire project folder and report to Moodle by 9am on Monday 8th April (Week 12). Your report should contain a direct link to your hosted repository (if using). You will be required to do a short demo of your App during your lab hours that week. The demo is mandatory. No demo, no grading.

Interim Deliveries/Milestones:

It is expected that you informally describe your project to your lab supervisor around Week 5-6.

You are also expected to give a short "status-update" demo during your lab in Week 8. During this demo, your lecturer will provide you with some formative feedback. Prior to this demo, you must upload a .zip file of your entire project folder containing your work-to-date. Both this upload and demo is mandatory. No upload and demo, no feedback.

Standard	Functionality (40%)	Persistence (17.5%)	Data Validation (7.5%)	Repository (7.5%)	User Experience (7.5%)	Creativity & Originality (10%)	Report (10%)
Baseline (40%)	Full CRUD	Simple local persistence (e.g. Shared Preferences)	Simple data validation				Description of project, motivations and context.
Good (50%)	Additional functionality (e.g. searching, filtering)	Local DB or framework (e.g. SQLite or Realm)	Use of appropriate UI components (e.g. DatePicker)	Simple remote hosted repo with staged commits	Adherence to UI Guidelines		Object model
Very Good (60%)	Additional complex functionality (e.g. integration with 3rd party API)	Cloud-based persistence (e.g. Firebase)	Automated Testing	Well defined README and appropriate commenting	Documented requirements analysis, user testing & feedback		Detailed analysis
Excellent (70+)	Additional advanced functionality	Additional advanced features	Additional advanced features	Additional advanced features	Additional advanced features		Additional information