THOMPSON RIVERS UNIVERSITY

Computing Science Department

Course:	COMP 3160	**Course Project**
Due Date:	March 29, 2019 – 11:55 PM **(Firm Deadline)**	Mobile Application Development II
Weight:	20%	

1. Getting Started

For this project, you are expected to work alone or in a group of two. You can use Android Studio or any other IDE for this project.

2. Overview

This project will be a large project that demonstrates few important concepts from our COMP 3160 - Mobile II course. Naturally, some concepts from Mobile I will also be included. You can choose any application you want, but try to choose one that lets you demonstrate your skills and covers the concepts learned in this course. You will present your project at the end of the semester. You have to give a 15-minute presentation and answer all technical questions during your public presentation. This is part of the project requirements.

3. Detailed Instructions

It may be difficult to find an application that allows you to implement everything we've learned. However, do your best to choose something that implements as many concepts as possible. For your convenience, the main concepts are listed below:

1. Database access with SQLite or Firebase
2. Content providers
3. Speech input and output
4. Maps, GPS, Geocoding
5. Networking, Bluetooth, NFC, WiFi, WiFiP2P
6. Game development basics
7. 2D and 3D graphics
8. Animation
9. Sound and music
10. Sensors

4. How to Submit

After you complete the lab project, submit the following to Moodle

1- Project Report (App description, List of features, Use case, Test scenarios, Known bugs, etc.)
2- .apk file
3- Workspace directory (zipped)
4- A professional demo video of your App
5- A link to your App on GooglePlay store

5. Late Submission of the Project

The course project is due on a designated due date and must be submitted to the course Moodle LMS. Late submission will NOT be accepted and will receive a mark of zero unless a legitimate medical excuse is received. **Individual submission is required.**

6. Marking

- Your marks will be determined based on the following evaluation criteria

Component	Marks	Description
Presentation/Documentations	30	Code must be clearly commented and documented. Full marks will be given for adequate commenting and professional presentation of deliverables. A complete project report should include the following sections: functional description, market survey and comparison with similar Apps, code description, spec-sheet (technologies used), list of features, test cases, performance evaluation, justification of permissions, Marketing strategy, known bugs.
Basics functionality	30	All the basic requirements of an app that covers the target course concepts must be satisfied and basic functionality is working perfectly with no bugs. One of the basic requirements is to develop an accessible application by using the speech engine in your App. This could be done by using TTS, SR, or adding a Content Description feature.
Usable App., User Interface quality and contents administration	30	A basic and complete App. In addition to above, includes: • Covering corner cases such as time-out, transition between activities, activity management, and handling wireless connection. • Has excellent design and a friendly user interface. • Adapts/scales reasonably to changes in device screen size and orientation. • Efficient resource management during the life cycle of the project • A "settings" screen of some sort: e.g. can set sensor accuracy and power level. • Adherence to best practices • Disclaimer/Agreement window when app starts for first time and copyright information • Contact window for reporting bugs to the developer.
App Publishing/Marketing	10	The App should be published on Google Play store. You are expected to design some art work and prepare a demo video for your App. The link to your App home page on Google Play store should be submitted to Moodle. The quality of published materials and marketing effort, which is reflected by the number of downloads and ratings, will be reviewed and evaluated.