HUMBER

Humber College
School of Applied Technology
CENG 319 – Software Project
Class Plan for Fall 2018

Course Description:

This course is about learning how to create a software application. Building on the programming and design skills learned in each of the previous semesters, students will work in groups using Android in an integrated development environment (IDE). No previous experience with Android App development is required. Prior experience in Java development is required for this course.

Students will learn to analyze, design, document, implement and test a project. Emphasis will be placed on creating a modular object oriented design. Whereas the final project should work at some level, incomplete features can contribute positively towards the student's final mark. Portions of each lecture are given over to the students to make presentations on the current stage of the project. Problem solving and an exchange of ideas are encouraged in this forum. This is a writing intensive course.

Students are expected to attend all classes, submit all the assignments and lab/project reports, and perform all laboratory work. Students work will be evaluated through assignments, lab projects, quizzes, and exams.

Pre-requisites: CENG 216 - Introduction to Software Engineering
CENG 212 – Programming Techniques in Java
CENG 254 - Database with Java
WRIT 220 – English

Course Outline:

Read and get familiar with the course outline on the blackboard. Pay special attention to detailed course description, learning outcomes, student evaluations, course content, academic integrity, and policies and procedures.

Class Schedule:

Lecture	Wednesday	11:40 AM-1:25 PM	N 210
Lab	Wednesday	2:25 PM to 6:00 PM	J 217 (Section 0NC)
	Thursday	9:50 AM to 1:25 PM	J 217 (Section 0ND)

Professor: Austin Tian
E-mail: Austin.Tian@humber.ca
Office Hour: Wednesday 10:30 AM to 11:30 AM
Thursday 1:30 PM to 2:30 PM
(For other times, please make appointment via E-mail)

Classroom Policies

- Please be polite and respect others.
- Please keep quite in the classroom; if you distract or disturb others, you could be asked to leave the room.
- Please take your seat quietly when you arrive late.
- It is your responsibility to catch up any missed material.

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Textbook: **"Android 6 for Programmers: An App-Driven Approach".**
by Deitel et al, Prentice-Hall. 2015

Reference: https://developer.android.com/

Evaluation Plan (Tentative):

In-Class Exercises/Quizzes	10%
Midterm Exam	25%
Assignments	15%
Projects	50%
Total	**100%**

Academic Procedures and Guidelines:

- A passing grade for this course is **50%**. To get an overall passing grade in this course, students must independently pass the Project and the (Midterm Test/ In-Class Exercises / Quizzes/Assignments) portions of the course. If one or more of these sections is less than **50%** then the final grade for the course will be the **lower of the two marks**.
- A **10%** per day penalty will be applied to the late assignment/lab report submissions. No assignment/lab will be accepted after **5 days** of the due date.
- There is NO makeup for any missed assignments/quizzes/exams/projects.
- Students are encouraged to participate various class activities such as group discussion, brainstorming, Kahoot! quizzes, surveys, etc.
- If you have a medical condition, please provide documentation in advance.
- Students must be present at the lab class and perform the lab to be able to submit a lab assignment for evaluation.
- Please check blackboard website for the announcements, assignments and exams/quizzes schedules.
- If students missed a lab session, the students will get zero for the lab report.
- Students are expected to use course texts, lecture notes and reference texts for independent study. The content of any evaluation component (assignments, quizzes, tests, etc.) may include references from these sources.
- **For the lab sessions:**
  - ✓ Please sign the attendance before you start the lab.
  - ✓ Normally, if student arrives late for more than 20 minutes, he/she would NOT be allowed to do the lab.
  - ✓ Students must attend the lab class and perform the lab to be able to submit in-class assignments for evaluation.
- **For the assignments:**
  - ✓ Students are expected to finish and submit the assignments on time to get the marks.
  - ✓ Some of the assignments would be due in class as the group discussion/submission.
- **For Exams and Quizzes:**
  - ✓ If you arrive late, you will only be allowed the remaining time.
  - ✓ If you leave the room in any situation during the quiz/exam, you need to hand in your quiz/exam.
  - ✓ If you arrive late, and someone has left the room, you may not enter.

Academic Integrity Policy:

It's a bad idea, and it's not worth the risk. All breaches of academic integrity will be penalized the maximum extent possible according to college policy.

HUMBER

CENG 319 – Software Project

Fall 2018 Class Schedule (Tentative)

Week	Starting Date	Topics	Lab (50%)
1	Sept. 3, 2018	Introduction to Course and Android: Course Introduction; History of Android; Android Studio IDE; Review of Java; Android Applications.	Introduction to Project Requirements and Android Studio; Form Project Group
2	Sept. 10, 2018	Android Applications: Main Files in Android Application; Activities and Views; Life Cycle of Activities.	Develop a VTOC diagram outlining the functionality of Application
3	Sept. 17, 2018	Introduction to UI Design: Linear/Relative/Constraint Layouts Design; Android Resources; Android Manifest File.	Present the project topic and interview with the instructor; ***Project topic in word document due***
4	Sept. 24, 2018	UI Controls: Button, TextView, EditText, RadioButtons, CheckBox etc.	***Milestone 1 of Project Due*** (Check Lab Instructions for Details)
5	Oct. 1, 2018	UI Controls Programming: Adding code/event listeners to GUI controls.	Continue with development, weekly development meeting.
6	Oct. 8, 2018	Multiple Activities App, SharedPreferences Editor, Fragment.	Continue with development, weekly development meeting
7	Oct. 15, 2018	Introduction to build in dialog boxes: Alerts, Password Dialogs, Datepicker, etc.	***Milestone 2 of Project Due*** (Check Lab Instructions for Details)
8	Oct. 22, 2018	***Midterm Exam***	Continue with development, weekly development meeting
9	Oct. 29, 2018	Data Storage and File I/O: SQLite, Reading/Writing XML, Review for Midterm Exam	Continue with development, weekly development meeting
10	Nov. 5, 2018	Working with Devices and sensors: location, orientation, camera, etc.	***Milestone 3 of Project Due*** (Check Lab Instructions for Details)
11	Nov. 12, 2018	Database Access, Introduction to Android Support Libraries; Navigation DrawerLayout, ActionBar and Toolbar.	Continue with development, weekly development meeting
12	Nov. 19, 2018	Geocoding information: locations and Google Maps; Handling asynchronous background tasks.	Continue with development, weekly development meeting
13	Nov. 26, 2018	Sound: recording, saving and playback; Application States Recovery.	***Milestone 4 of Project Due*** (Check Lab Instructions for Details) ***Project Demo Due***
14	Dec. 3, 2018	Services and Broadcast Receivers; Incorporating SMS.	Project Enhancements and Report
15	Dec. 10, 2018	New Features of Android (TBD)	***Final Report and Presentation Due***

Notes:
1. Lectures may cover some additional material based on the projects requirements.
2. Schedule may change in the semester based on the progress of the studies.
3. Please refer to Humber College academic calendar for key academic deadlines.
4. Additional course information is available on blackboard website.
5. In-class assignments/quizzes need to be submitted during the lab/lecture classes.

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