MOBI 3002

MOBILE APPLICATION DEVELOPMENT - ANDROID

Things to be discussed

1. Welcome to the course

2. Course Description

3. Learning outcomes

4. Resources

5. Tentative Work Schedule

6. Assignments and Evaluations

Welcome to the Course

MOBI 3002 – Mobile application development - Android

Faculty Details

Name: Kalpana Samaraweera Mudalige

Location: Room 114 – B, COGS

Email: Kalpana.Samaraweeramudalige@nscc.ca

Meetings : By appointments only

Course Description

In this course, you will learn how to create Android apps using Android Studio. You will go through the full app development process, from designing the interface to writing code, testing, and debugging. You'll also explore how to use Android's SDK and APIs to access device features. By the end of the course, you will be ready to build and publish your own Android apps.

Learning Outcomes

1. Explore the life cycle of an Android application.

2. Design and develop usable and responsive mobile user interfaces.

3. Demonstrate various approaches to achieve data persistence in Android applications

4. Deploy Android applications on virtual devices and explore the approaches to distribution.

Resources & Tools

Brightspace course page

Android Studio

Android Developer Learning Materials

TENTATIVE SCHEDULE

Week/Unit	Topics/Description	Relevant Learning Outcome(s)	Value/Evaluation/ Due Dates (if applicable)

Week 1
Sep 2-6
	Orientation Day (3rd)
	• Introduction to MOBI 3002 - mobile development with Android
	    o Android and its architecture.
	• Environment set up
	    o Android studio and SDK
		1	

Week 2 Sep 9-13	• Introduction to Android components o Activities, intents, Manifest, XML o Develop a Simple Android program **Individual Assignment 1 – Build your first Mobile application**	1,4	

Week 3
Sep 16-20
	• Mobile User Interface Design
	    o Mobile interface design considerations
	    o Android interface components
	    o Layouts, Buttons, Text areas
		1,2,4	Assignment #1 (15%)

Week 4 Sep 23-27	• Mobile User Interface Design Continued **Individual Assignment 2 – Mobile UI design – Calculator Application**	1,2,4	
Week 5 Sep 30- Oct 4	**National Truth & Reconciliation Day (30th) - College Closed** • Android Navigations and views o Multi activities and Fragments • **Individual Assignment 3**	1,2,4	Assignment #2 (15%)
Week 6 Oct 7-11	• Android Navigations Continued	1,2,4	

Week 7
Oct 14-18
	Thanksgiving Day (14th) – College Closed
	
	• Working with Data
	    o Data persistence in android
	    o Working with SQLite
	
	• **Individual Assignment 4**
		1,2,3,4	Assignment #3 (15%)

Week 8 Oct 21-25	• Working with Data Continued	1,2,3,4	
Week 9 Oct 28 – Nov 1	• Working with API • **Individual Assignment 5**	1,2,3,4	Assignment #4 (15%)
Week 10 Nov 04-08	• Working with Fire base • **Group Project Initiation**	1,2,3,4	Assignment #5 (15%)
Week 11 Nov 11-15	• Testing and debugging	1,2,3,4	
Week 12 Nov 18 - 22	• Android Paly Store Requirements	1,2,3,4	
Week 13 Nov 25 -29	• Project Discussions and Project work	1,2,3,4	
Week 14 Dec 02 - 06	• Project Discussions and Project work	1,2,3,4	
Week 15 Dec 09 - 12	• **Project submission and Presentation** **Semester work ends- Course Wrap-Up**	1,2,3,4	Group Project (25%)

Assignments and Evaluations

Assignments: 5 @ 15% each..75%
Final Group Project 25%
Total 100%

- All coursework must be completed and submitted on or before the specified due date.

- Detailed instructions for each assignment will be provided with the assignment specifications.

- Grading will be completed, and results will be posted in Brightspace within five working days

Expectations from Students

1. **Active Participation:** Jump into discussions and group activities—your input makes a difference!

2. **Your Attendance matters :** If you can't make it to class, just let me know ahead of time.

3. **Timely Submission of Assignments:** If you're having trouble meeting a deadline, reach out early, and we can work something out.

4. **Respect and Professionalism:** Be respectful to everyone in class and keep it professional.

5. **Collaboration and Teamwork:** Work well with your team and be open to feedback.

6. **Academic Integrity:** Keep it honest and original—avoid plagiarism and do your own work.

7. **Continuous Improvement:** Take charge of your learning and ask for help if you need it.