ASSIGNMENT 2
Section 1

Start Date: 16 March Time: 9:00 am
Due Date: 30 March Time : 9:00 am

Android Wear Task Manager
Total Mark: 10

1. Overview:
This document specifies the functional, non-functional, and deliverable requirements for the **Android Wear Task Manager App** development assignment.

2. Scope: This assignment is designed to allow you to master the implementation of the Android Wear specific notifications.
You need to create only the wearable module.

3. Functional Requirements:
The following functional requirements must be implemented to complete the assignment. Create a new Android Wear project. Application should be named in the format **'Gp#Assignment2' (Example: Gp12Assignment2)**.

3.1 Add Task:
- Design a screen for adding the task optimized for different watch shapes.
- Task details such as Task Id, Task Name, and Due Date & Time should be added for each task.
- Task Id should be unique for each task.
- Implement a way to persistently store tasks
  (Hint: SharedPref), so they are not lost when the app is closed, or the device is restarted.

3.2 List Tasks:
- Show the list of each newly added task in a WearableRecyclerView.
- Each RecyclerView item should display the Task Id, Task Name, and Due Date & Time.

3.3 Trigger Notification:
- Implement a mechanism for triggering notifications for tasks that are due within the next one hour.
- The Wearable device notification should include the Task ID, Task Name.
- The notification should also include an action which will load a new screen.
- This new screen should show all the tasks that are due within the next one hour.

4. Non-Functional Requirements:
The following non-functional requirements must be implemented to complete the assignment.

4.1 User Interface:
- The app's user interface (UI) should be designed for small Wear OS screens to ensure readability and usability.
- Buttons should be sized and spaced appropriately for touch interaction.
- When buttons are tapped or disabled, the UI should provide clear visual feedback.

4.2 Compatibility: The app should work with Wear OS devices running Android 11 or higher.

4.3 Usability:
- The app should have an easy-to-use interface that requires little user intervention.
- User interactions should be quick and without noticeable lags.

5. Deliverable Requirements

5.1 Comment the Code: You must provide meaningful comments to every class, method, and every and any significant code segment.

5.2 Source Code: You must submit YOUR OWN WORK via DropBox.

- You may not source answers from anywhere other than your own independent work.
- No communication from other group members.
- You may not share these instructions or any solutions with anyone else.
- Failure to follow any of the above notes (or any other expectations for academic integrity) will result in an academic offence being filed.

5.3 Screen Shots: Include all relevant screenshots of your running application and commented Java code in a Word document. ***Do not zip this document***. **Commented code should be pasted as text.**
Submission will not be considered for evaluation if commented code is pasted as an image and a grade of 0 (zero) will be awarded.
Name this file as 'Gp#Assignment2.docx' (Example: Gp12Assignment2.docx)

5.4 Export your Android Wear application as a zip file. (Choose File -> Export -> Export to Zip File)

5.5 Upload the Word document and the zip file of the application package on e-Conestoga into the folder '**Assignment 2'**

5.6 For late submission: marks will be deducted per day as specified below.

5.7 Please check the marking sheet in the next page for the distribution and deduction of marks.

6. Reference Materials:

You can refer to the below materials for getting an in-sight into the task, but not limited to.

1. ToDoWearApp that we have completed in the class.
2. Chapter 19, 20 & 21

Marking Sheet

Description	Marks Allocated	Marks Achieved
UI design optimized for small wear OS screens	2	
Implementation of all functionalities as per requirements	4	
Demo	4	
Deduction		
Non submission of the zip of the application	100%	
Non submission of the Word documents with the screenshots and meaningfully commented Java code (Java code should be pasted as text)	100%	
Non implementation of ViewBinding	90%	
Non implementation of Listener interfaces	60%	
Hardcoded text found in the UI	50%	
Hardcoded color found in the UI	50%	
Hardcoded styles found in the UI	50%	
Hardcoded dimensions found in the UI	50%	
No show on Demo	50%	
Assignment Standards Violation (proper project name, submission docs name etc)	10% x --------	
Programming Standards Violation	10% x --------	
Late Submission (softcopy)	5% each day	
Bugs (including missing requirements mentioned in this specification)	5 to 10% based on severity	
Total		