App of your choice

Course	INFO-5126 Mobile Development Advanced
Professor	Lianne Wong
Due	Project Proposal: Oct 19th, 2025 at Midnight (group sign up sheet along with topic- see last page). One submission per group Project Completion: Dec 8th, 2025 at Midnight
Weight	15% of your grade
Student Name	

Project Description

This project may be done in groups up to 5 people per group.

The topic of the application is your choice however you must use AL or ML in Android. Examples of what you can use are below, but not limited to:

1. Vision API's: Optical Character Recognition (OCR), Barcode Scanning, Face Detection, Image labeling, object detection, Document Scanner
2. GenAI with Gemini Nano: Summarization, Proofreading
3. Natural Language API's : Language Identification, translation, smart reply, entity extraction
4. Any other AI-ML API provided by Google. Please note that if you would like to use another library not provided by Google, then you should send me the link to the documentation in your project proposal.

   https://developers.google.com/ml-kit

   In addition: your application must use the following techniques.

1. Use of MVVM
2. Use of ViewBinding
3. Use of Coroutines

Create an android application using all the items above. The app could do anything but should use all the components taught in class

Core features:

1. One activity describes what the app does and a list of all the people in your group.
2. Your application may be focused on anything except examples done in class

Grading Criteria:

This project will be graded using the following criteria.

Use of MVVM	15%	
Use of ViewBinding	5%	
Use of coroutines	10%	
Use of AI or ML	15%	
Look and feel of the program (UI/UX)	15%	
How well your app utilizes the above technologies	20%	
An activity that lists what this app does, and the group members creating the app	5%	
In the Word document, explain what your application does, explanation where you used the above 3 requirements, and a paragraph on what you learned	10%	
All activities have layouts that is visually appropriate in portrait and landscape mode. You may also lock the orientation.	5%	
Total:	100%	
Source code not submitted	-100%	
Word document Screen shot of each activity not submitted	-10%	
Movie of app showing the functionality not submitted	-40%	

Submission

1. Submit entire Android Studio project directory to Fanshawe Online in a .ZIP or .RAR archive file. If you have referenced any source code posted on the Internet, you must cite the source in your word document. You must also submit the following in separate files
    a. The source code compressed
    b. A Word document with the screenshots of all activities and citations of any work used to build your application.
    c. The movie of the app showing all the functionality in landscape and portrait.

INFO 5216 Final Project SignUp Sheet:

(Submit this page for Project Signup (3% of grade))

Team (Up to 5 people) List all team members name, student number and section number:

Name	Student Number	Section
Kelly Yoon	1132723	C
Ryan Sweet	1144634	C
Anh Duc Vue	1057322	C
Kulvir Hira	1040481	A

Project Topic Title:

Smart Whiteboard Scanner

Project Topic Description:

1) Which AI or ML library API will be used:

Google ML Kit — Text Recognition API

2) Goal of app:

Our goal is to build an Android app that lets students scan whiteboards or printed pages and automatically recognize text using ML Kit's Text Recognition API. The recognized text will be saved as digital notes, which can be organized into folders by class or subject.

The app will include three key features powered by AI/ML:

Searchable Notes — All extracted text is stored in a local Room database, allowing users to search across all their scanned notes instantly. This makes it easy to find specific topics or keywords from past lectures without scrolling through dozens of images.

Summarization with Gemini — Users can tap a "Summarize" button to generate a condensed version of their scanned notes using Gemini. This helps students quickly review key points before exams or catch up on lengthy lecture content.

Translation — Using ML Kit's Translation API, users can translate their scanned notes into different languages. This is useful for international students or for studying foreign language materials.

The app will follow the MVVM architecture, use ViewBinding for handling layouts, and run background work (like image processing, OCR, and database queries) using Kotlin Coroutines to keep the UI smooth.

We're aiming for a simple, clean design that's easy to use and works offline for core features like scanning and searching.

3) Uniqueness:

This project is different from a regular scanner or note-taking app because it combines text recognition with map-based organization.
Instead of just saving notes as plain text, users can also visualize where their notes were created.

It’s a realistic project that uses what we learned in class — MVVM, Coroutines, and ML Kit — but still feels creative and useful for students.
The app doesn’t rely on heavy AI models or cloud services, so it stays lightweight and practical to build within our timeframe.