



## FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGIES

SUMMER 2025

### FINAL EXAMINATION SETTING A

<b>COURSE TITLE:</b>	Introduction to Mobile Application Development
<b>COURSE CODE:</b>	CS 3410
<b>INSTRUCTOR:</b>	Dr. Nkandeu Pascal
<b>DATE:</b>	Summer 2025
<b>DURATION:</b>	3 Weeks (Project Submission & Presentation)

## Final Examination – Mobile App Development

**Total Marks:** 70

**Instruction:** Students must develop **one complete mobile application** using **either**:

1. **Xcode with Swift**
2. **Android Studio with Kotlin**
3. **Flutter with Dart**

### General Requirements

- Application must have a **clear purpose** and target audience.
- Must implement **at least 5 core functionalities** relevant to the app's theme.
- Must follow **good UI/UX practices**.
- Must integrate **local or remote data storage** (e.g., SQLite, Core Data, Firebase, Hive, REST API).
- Must have **error handling** and **user feedback mechanisms** (e.g., toast, snackbar, alert).
- Must work on a **physical or virtual device** without crashes.
- **Documentation and presentation are compulsory.**

### Part A – Project Development (40 Marks) (*Compulsory*)

Task	Description	Marks
<b>App Idea &amp; Scope</b>	Clear problem definition, objectives, and user requirements.	<b>5</b>
<b>UI/UX Design</b>	Wireframes, navigation flow, responsiveness, and accessibility.	<b>10</b>
<b>Core Functionality Implementation</b>	At least 5 working features (e.g., authentication, CRUD, media handling, API integration).	<b>15</b>
<b>Data Storage Integration</b>	Correct and secure storage of user data (local or cloud).	<b>5</b>
<b>Error Handling &amp; Testing</b>	Bug-free execution, edge case handling, and usability testing.	<b>5</b>

### Part B – Documentation (15 Marks)

Section	Description	Marks
<b>Architecture &amp; Tech Stack</b>	Explanation of chosen platform, libraries, and structure (MVC, MVVM, etc.).	<b>5</b>
<b>Feature Description</b>	Step-by-step breakdown of implemented features with screenshots.	<b>5</b>
<b>Challenges &amp; Solutions</b>	Key development challenges faced and how they were solved.	<b>5</b>

### Part C – Presentation & Demonstration (15 Marks)

Criteria	Description	Marks
<b>Live Demo</b>	Functional app demonstration without major errors.	<b>5</b>
<b>Clarity &amp; Communication</b>	Presenting features, workflow, and design decisions clearly.	<b>5</b>
<b>Q&amp;A Response</b>	Ability to answer technical and design-related questions.	<b>5</b>

### Part D – Innovation Bonus (Optional, up to 5 Marks)

- Creative features beyond basic requirements.
- AI integration, unique design patterns, or novel user experience.
- Deployment to **App Store** or **Google Play** (with proof).

### Submission Guidelines

- **Due Date:** 3 weeks from exam release.
- **Submission Package:**
  1. Source code folder.

2. PDF documentation.
3. APK/IPA file or Flutter build for installation.
4. 5–10 min recorded demo video (in case of presentation absence).