Mobile App Development II – Group Project Guideline

Group Formation

- Each group must consist of **4, 5, to 6 members**.
- Groups must finalize and submit their **member list by Week 2**

Technology Stack

Each group must choose **one** of the following:

Option A: Native Android (Kotlin)

Mandatory tech stack:

- **Kotlin**
- **Jetpack Compose** for UI
- **MVVM architecture**
- **Coroutines** for async operations
- **Dependency Injection (Hilt)**

Option B: Flutter

Mandatory tech stack:

- **Flutter**
- **Dart**
- **Clean Architecture** or **MVVM**
- **State Management** (e.g., Provider)

Project Type – Choose One

1. App Replication (No Figma required)

- Select an **existing app from any store** (Google Play / App Store).
- Define a **feasible scope** that can be realistically built in 3 months.
- You are **allowed and encouraged** to improve the UI/UX.

- Design inspiration can be taken directly from the existing app.

2. New Project Idea

- Create your own **original app concept**.
- Must include **UI design using Figma** (keep it simple and minimal).
- Your design should reflect core screens and workflows of the app.

Mandatory Project Documentation (Both options)

Each group must prepare:

1. **Problem Statement**
   Clearly define the problem your app is solving or the purpose of the app.
2. **Features List**
   List out the core features your app will implement.
3. **User Stories**
   Use this format:
   As a [user], I want to [do something] so that [reason]
   (E.g. As a user, I want to favorite a recipe so I can find it later easily.)
4. **Backend Integration**
   Your app **must be connected to a backend**.
   o You may use Firebase, Supabase, or build your own backend using Node.js, Python, php, Json-Server etc.
5. **GitHub Repository**
   o Use GitHub for version control and collaboration.
   o Project must include:
     ▪ Branching strategy (feature branches, main/dev)
     ▪ Commit history with meaningful messages

Project Timeline

Step 1: Topic Presentation to Lecturer

Deadline: Week 3
Each group must present:

- App category and type (replication or new idea)
- Chosen tech stack
- Initial feature list

- Problem statement
- (If new idea: Figma mockup – Simple layout is enough. No need fancy design)

Feedback will be given for feasibility and scope adjustment.

Step 2: Final Presentation + Demo

Deadline: Week 13
Each group will:

- Slide presentation on
  - Problem statement
  - Features
  - Technology Stack
  - UI Design
- Walk through core features
- Show backend interaction
- Demonstrate collaboration via GitHub

Tips for Success

- Split features into **modules** early.
- Do **weekly check-ins** within the team.
- Focus on building **something complete**, even if it's small.