

SOFE 4640U

Mobile Application Development

Fall 2025

Instructor: Dr. Nasim Beigi-Mohammadi

Assignment 1

Note: This assignment is to be completed individually.

Objective

Practice Android application development, specifically layouts, views, and intents.

Description

Many people find it hard to balance mortgage Equated Monthly Installment (EMI), monthly income, and expenses. A single miscalculation can affect their ability to save or even meet essential needs. To solve this, design an app that helps users calculate EMIs, track expenses, and plan savings.

The app should calculate EMI, add monthly expenses and income, and show the user the amount they are saving monthly or the monthly deficit.

Core Features:

- EMI calculator
 - Input: loan amount, interest rate, tenure
 - Output: monthly EMI
- Income and Expense input
 - Users can enter their monthly income

- Users can enter their monthly expenses (adding daily, recurrent expenses is recommended but optional)
- Budget Balance
 - After subtracting EMI + expenses, the app should show the remaining savings/deficit
- The UI
 - The app should have a simple and user-friendly UI that effectively cover the above aspects

For more on mortgage calculator, please visit: <https://ix0.apps.td.com/en/mortgage-payment-calculator>

General Guidelines

Throughout the lectures, we have explored best practices for mobile app development, particularly those specific to the Android platform. A portion of your grade will reflect how effectively you apply these practices. Additionally, you are expected to follow general coding standards, such as using clear and appropriate names for variables and methods and writing sufficiently documented code. This does not mean every line needs a comment, but key functionalities should be explained at a high level.

Submission

Submit a zip file in canvas containing the following:

- 1) Folder containing the app source code.
- 2) A maximum two-page report explaining how layouts, views and intents are used and please provide the GitHub reference in the report, if any.

Rubric

When marking, the TA will use the following rubric:

Report	3
The App reflects the assignment's objectives	3.5
The source code correctness	3.5
Total	10