

CSCI 4176 & 5708 – Fall 2022

Lab Assignment 02 – Due 16/10, 11pm

Please start this assignment early; programming and logic take time - if you leave it to the last minute, you might not have enough time to finish or might make silly mistakes that you otherwise could avoid. Note that TAs and Instructors will not be able to answer last-minute questions!

All work is to be handed in on GitLab, main branch; other branches will be ignored.

Your repo is located at: https://git.cs.dal.ca/courses/2022-fall/csci4176_5708/assignment-2/<csid>

The goal of this assignment is to get you familiar **with the basics of Fragments and Navigation**

An excellent resource for Kotlin is their docs: <https://kotlinlang.org/docs/home.html>

This assignment is not meant to be technically challenging but you will have to do some reading on the docs. **There is more than one way to solve this assignment.**

You can find the starter code on your repo on GitLab. **Your solution must be in Kotlin**

Your code **must compile**. If it does not compile, you will receive a 0 (zero), and no partial marks will be given.

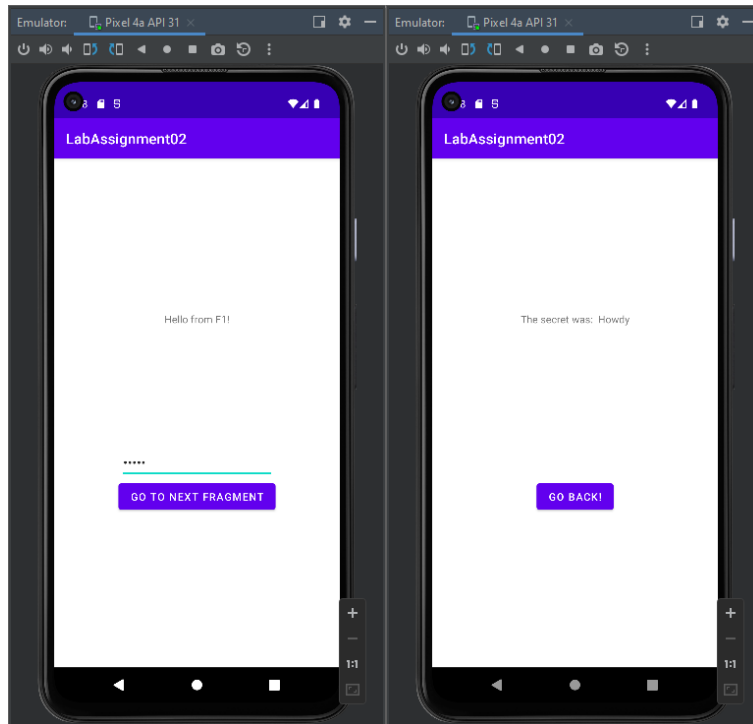
Coding Style: You must have proper names and comments. Please follow the guidelines on <https://kotlinlang.org/docs/coding-conventions.html#naming-rules>

Public methods and classes should be documented. Please note that different than Java, Kotlin does not encourage the use of @params, @return tags: <https://kotlinlang.org/docs/coding-conventions.html#documentation-comments>

Git Rules for A2: You are always expected to have a README.md file with your name, banner, and any other information you might like to add (such as references); you can use the one from A1. The started code already has a .gitignore

The Assignment

A2 is about Single Activity applications with fragments and navigation. Your goal is to create an app that has **two Fragments** (three if you count the nav holder) as per the example below:



The first fragment (home/start) contains a hello message, a password box, and a button. Once pressed, the application must switch to the second fragment. See:

<https://developer.android.com/guide/navigation/>

The second fragment receives the "password" or secret from the first fragment and displays it in plain text. This fragment also contains a button to return to the previous fragment.

The user should be able to perform this operation as many times as they want. If the user inputs no secret, the message on F2 should be "The secret was: no secret."

There are multiple ways to pass information between fragments: Bundles, Companion Objects, ViewModels, SafeArgs, etc. Please take some time to investigate the different methods and their advantages/disadvantages. Some examples:

<https://developer.android.com/guide/navigation/navigation-pass-data>

The starter code is as barebone as you can expect. **Do not use another app template** from Android Studio. Use A2 to understand how to set up fragments and the navigation component. **Please note** that there is no Navigation Top Bar in this assignment.