Mobile Computing–COMP–2430
Assignment–2
Due by 1:00 pm Tuesday, October 29

October 13, 2019

1. Task

Develop and deploy an Android mobile application that receives user credentials (Username and Password) to log into a system (e.g., an online bank account. This assignment does not require the internal part of the system and leaves it blank). The development is to carry out on Android SDK with Kotlin programming language.

The application must have the following features:

i. **Target hardware** – Moto G6
ii. **Layout** – Linear layout
iii. Contains **two activities** – a login screen and a blank activity that simulates an internal system, like a bank account.

Login UI: It receives username and password from the user via keypad. When the credentials are matching with internally hardcoded pairs, it must bring out a blank activity on the click of a button. The blank activity has a text view widget.

The name of the button is "**Login**" (**a sentence case format**). UI should have **floating hints** for user inputs and the password field should have a **show/hide** option as well. In the case of wrong credentials, an appropriate **Toast** message must be displayed for a **long period**.

Note: The user credentials must be stored internally using Kotlin's key–value pairs called *Map* (refer to this link – https://kotlinlang.org/docs/reference/collections-overview.html for more detail).
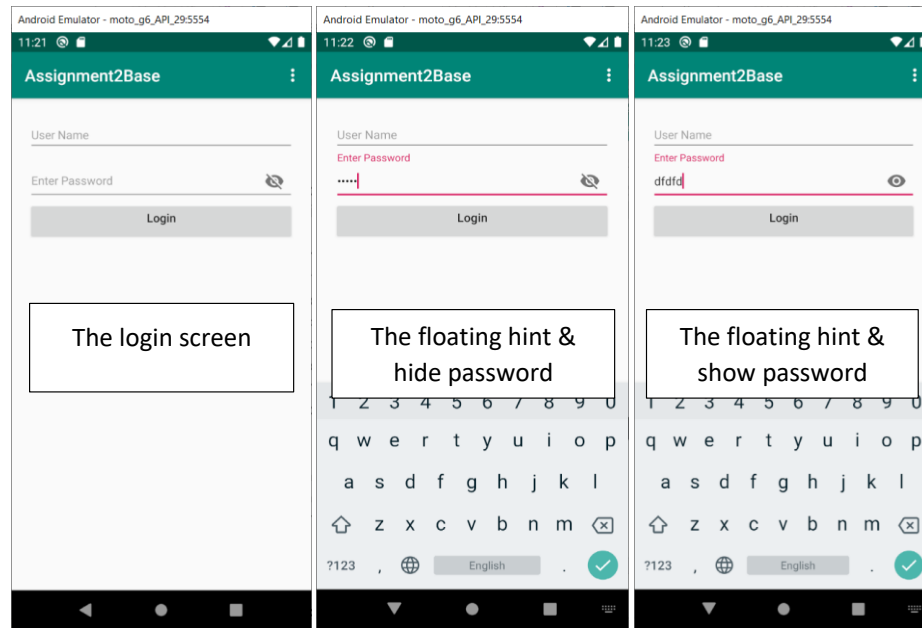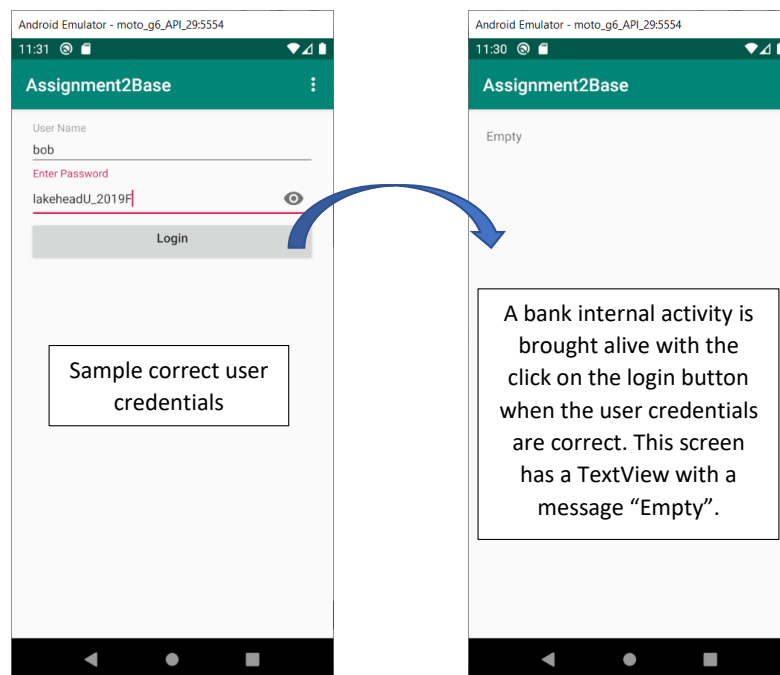
Figure 1: The login activity GUI.

Figure 2: The login activity GUI and the blank internal system.

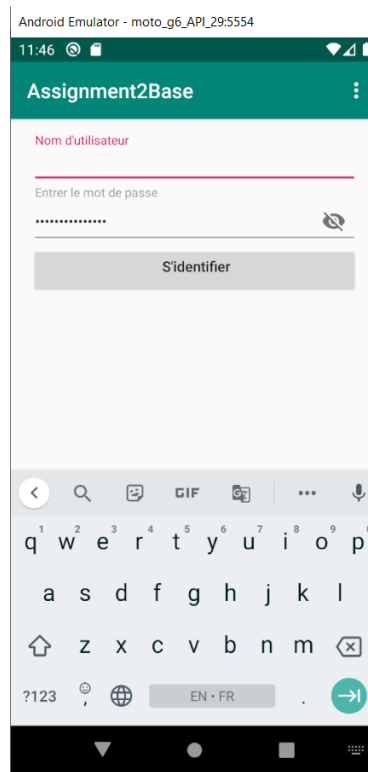iv. **App translation** – The App's GUI appearance should support for **French** language.

Figure 3: The App's GUI supports French translation.

v. **Build variant** – The application is to have two variants: one with "Empty" message on the second activity and another with a message reading "This is a free version" (**Font color blue and font size 40**) on the second activity (refer to Fig. 4).
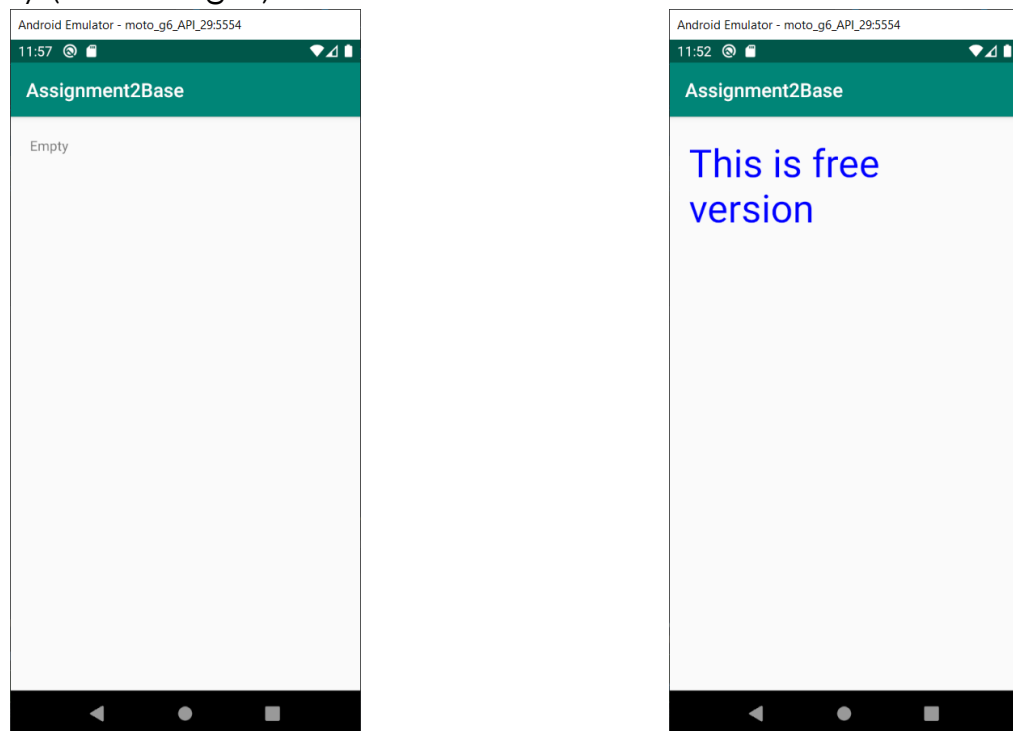

Figure 4: Effect of build variant in the second activity.

2. <u>Deliverables</u>

   i. A fully functional application that satisfies all the above requirements. An installable .apk file and the entire project exported as .zip.

   ii. An elaborate formal report that includes all the important key points discussed in "**Report Submission FAQ"** posted earlier. Every step must be explained with the help of utilized functions (built-in and custom), configurations, the source files involved, and the interactions made.

   iii. All the above files must be attached individually.

3. <u>Submission</u>

A soft-copy must be submitted on the D2L before the deadline, and a hard-copy must be handed in to the instructor at the beginning of lecture.