**ICP – 8**

**ICP GROUP:** 38

**ICP 8**

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**ICP8 Repository:**  <https://github.com/UMKC-APL-WebMobileProgramming/ICP8-AnilkumarreddyNandikonda>

**ICP8 source code link:** [**https://github.com/UMKC-APL-WebMobileProgramming/ICP8-AnilkumarreddyNandikonda/tree/main/Source**](https://github.com/UMKC-APL-WebMobileProgramming/ICP8-AnilkumarreddyNandikonda/tree/main/Source)

**My Partner**

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**Partner Repository:** <https://github.com/UMKC-APL-WebMobileProgramming/ICP8-YAbhinay>

**Source Code Link:** <https://github.com/UMKC-APL-WebMobileProgramming/ICP8-YAbhinay/tree/main/Source/ICP%208/app/src/main>

**ICP8 video:** <https://umsystem.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=5e86c32d-ac24-4b38-a3d9-adcc007a5cbd>

**Lesson Overview:**

Android is a mobile platform/OS that uses a modified version of the Linux kernel. It was initially

developed by Android Inc., a firm later purchased by Google. It allows developers to write managed code in the Java language, controlling the device via Google-developed Java libraries. Today, we will learn how to create, build, run, and debug an Android Studio program.

**Programming elements:**

Basics of Android (Activity)

**In Class Programming (ICP):** Simple Login: Create a basic login application to understand the starter code given for text view, button view, and make a simple login application with the following requirements.

a. The main activity should look as below (make suitable changes for the login app!).

b. Create the 'Login' button on the login screen

c. When clicked on the 'Login' button, the screen should navigate to the welcome screen if the login credentials are valid. Otherwise, the app should display an appropriate message to the user.

d. Create the 'LOGOUT' button on the welcome screen

e. When clicked on the 'LOGOUT' button, the screen should navigate to the login screen

Steps to follow:

1. Creating a new Android application

2. Selecting the SDK, type of device to deploy the application

Device Type: Phone and Tablet and API: Latest one

3. Select blank activity

To make a basic login application, you'll need two text fields: one for the username and one for the password. It should also include the button activity, which should authenticate the username and password before redirecting to the main home page.

The login page layout file is as follows to meet the above requirement:

Text

Description automatically generated

Validation process for login is as follows

Text

Description automatically generated

After the user has been validated, the main page displays the following text and a logout button:

A screenshot of a computer

Description automatically generated

When a user clicks the logout button, the page must be redirected to the login page, which is done using the code below:

Text

Description automatically generated

OUTPUT:

The main page to enter the username and password

Graphical user interface, application, Teams

Description automatically generated

Graphical user interface, application, Teams

Description automatically generated

After entering the username and password it will validate and allows to welcome page.

A screenshot of a cell phone

Description automatically generated with medium confidence

If the username and password are not validating, a message will be shown up as follows:

Graphical user interface, application, Teams

Description automatically generated