

University of Central Florida

CEN 4360 Mobile Device Software Development

Assignment 1

Due, Sunday, September 3, 2023 for 100% credit

Monday, September 4, 2023 for 90% credit

Tuesday, September 5, 2023 for 80% credit

Wednesday, September 6, 2023 for 70% credit

Assignment scope

This assignment is focused on installing Android Studio, creating a simple application, configuring the emulator, and running the application in the Preview and emulator.

Resources

1. Install Android Studio

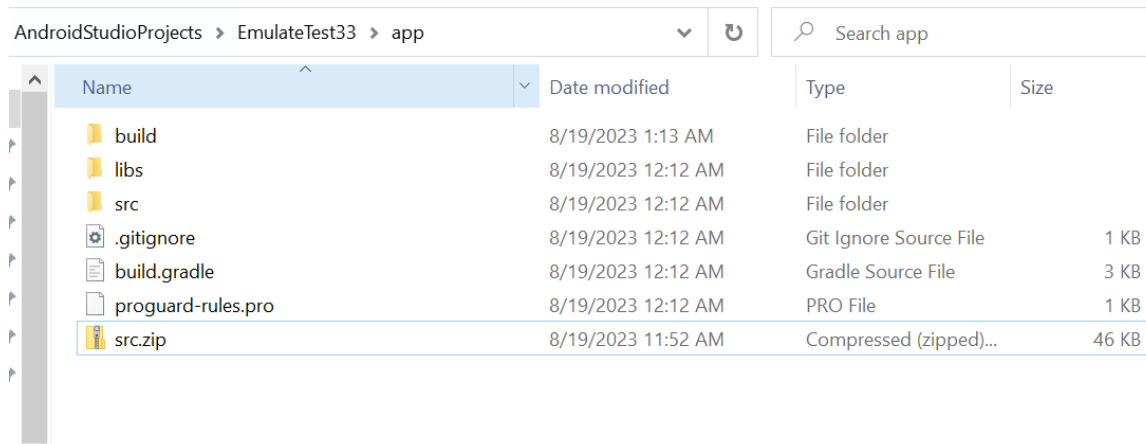
- https://developer.android.com/studio?gclid=Cj0KCQjw0IGnBhDUARIsAMwFDLIDjHK5z1Gw5cdyEq0_Xfj5e8RhcVAkn6Tf5-TRhFm7gGhdh1XGAo0aAnEnEALw_wcB&gclsrc=aw.ds
- Alternatively, use a search engine for “download Android Studio”

2. Configure the emulator

- <https://developer.android.com/studio/run/emulator?hl=en>

Assignment deliverable

- In a file browser, browse to the application source code folder. The **src** folder is located in `..\AndroidStudioProjects\<application name>\app`. See example image.
- Right click the **src** folder and compress.
- Submit the **src.zip** to the Webcourses assignment.



Tasks

Activity	
Create project Assignment1 (no spaces)	<ol style="list-style-type: none"> 1. Create an Android project with the following attributes <ol style="list-style-type: none"> a. Ensure Phone and Tablet tab is selected b. Select Empty Activity c. Ensure directory location has NO spaces d. Name field: Assignment1 e. Package name: leave intact f. Save location: leave intact g. Minimum SDK: API 33: Android 13.0 (Tiramisu)
MainActivity.kt	<ol style="list-style-type: none"> 1. Update the calls to function Greeting() with your first name
	<ol style="list-style-type: none"> 2. Update function Greeting(), change the text from “Hello” to “Hello CEN 4360, my name is”
	<ol style="list-style-type: none"> 3. Change the background color by surrounding the text with a Surface container <ol style="list-style-type: none"> a. Highlight the line of text b. Press (Alt+Enter for Windows or Option+Enter on Mac), and then select Surround with widget c. Select Surround with container d. Change the default Box container to Surface e. To the Surface container add a color parameter, set it to Color (i.e., add parenthesis after Surface, color = Color in the parenthesis) f. Update the import statements to include class Color <ol style="list-style-type: none"> i. import androidx.compose.ui.graphics.Color g. Resolve the error associated with the class Color by adding a ‘.’ after Color then select a color from the list provided h. Add padding around the text by updating modifier on the right side of the equal sign (i.e., modifier = modifier) to use modifier padding function passing 30.dp as the argument i. To resolve the errors, update the import statements to include <ol style="list-style-type: none"> i. import androidx.compose.ui.unit.dp ii. import androidx.compose.foundation.layout.padding j. Optimize the import statements by clicking Code→Optimize Imports
Test Cases	
Test Case 1	Rendered Preview looks similar to Figure 1
Test Case 2	Rendered app in emulator looks similar to Figure 2
	Source builds with no warnings
	Source builds with no errors
	Source runs with no warnings
	Source runs with no errors
	Source includes comments

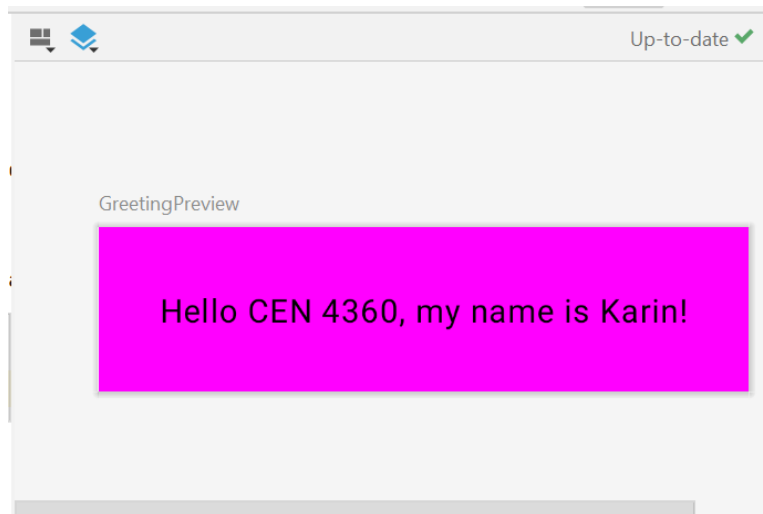


Figure 1 Preview



Figure 2 Emulator