

Activities and Intents

Due Date: Sunday, September 20th 2020 @11:59pm

Project Details:

Design and implement an app with the following functionality. The app starts off with a main activity containing a welcome text, empty text field and two buttons. Upon pressing the first button, your app displays a second activity containing a read-only text field and an edit text field. The read-only text field prompts the device user to enter a person's phone number in the edit text field. Some examples of a valid phone number are:

3124568907

(312) 456 8907

For more information on valid phone number formats see this link:

<http://tools.ietf.org/html/rfc3966>

When the user is done entering the phone number, she/he will press the done or return key in the soft keyboard. The activity must now check whether a legal phone number was entered by the user. In this case, the activity will set a result code of "RESULT_OK"; otherwise, the activity sets a result code of "RESULT_CANCELED". Either way, the second activity terminates itself, thereby causing the first activity to become visible again.

Upon returning from the second activity, the first activity will display the number entered in the second activity and checks whether the result code was "RESULT_OK". In this case, the user may press the second button in the first activity causing the device to display the dialer activity, **without dialing the phone number**. You must use an existing Phone app pre-installed in your device when displaying the "dialer" activity. (You are not allowed to specify what app should be used for the "dialer" activity.) However, if the result code was "RESULT_CANCELED", when the user presses the second button, the first activity displays a toast message informing that device user that she/he entered an incorrect phone number and includes the number in the toast.

Note that the second activity must return automatically to the first activity after a user enters a name and presses the return or done key.

Implementation Details:

Your app has no knowledge of the specific app to be invoked for dialing the phone number. You are not responsible for coding or downloading additional apps; you may assume that a suitable phone app is already installed on your device even though you don't know what that app is.

Use an intent extra to pass the phone number from the second activity to the first activity.

Create an instance of the Toast class with the static message `makeText()`, which takes as input 3 arguments. You can then display the toast by calling method `show()` on the instance. See the online documentation for additional details.

Android platform:

For this project use a Pixel 3 XL AVD running Pie API 28, that you downloaded for Homework 1. You are not required to provide backward compatibility with previous Android versions.

Submission Details:

Submission instructions. *You must work alone on this project.* Submit the entire Studio project as a zip archive using the submission link in the assignment's page on Blackboard. No late submissions will be accepted.

Academic Integrity:

Unless stated otherwise, all work submitted for grading **must** be done individually. While we encourage you to talk to your peers and learn from them, this interaction must be superficial with regards to all work submitted for grading. This means you **cannot** work in teams, you cannot work side-by-side, you cannot submit someone else's work (partial or complete) as your own. The University's policy is available here:

<https://dos.uic.edu/conductforstudents.shtml>.

In particular, note that you are guilty of academic dishonesty if you extend or receive any kind of unauthorized assistance. Absolutely no transfer of program code between students is permitted (paper or electronic), and you may not solicit code from family, friends, or online forums. Other examples of academic dishonesty include emailing

your program to another student, copying-pasting code from the internet, working in a group on a homework assignment, and allowing a tutor, TA, or another individual to write an answer for you. It is also considered academic dishonesty if you click someone else's iClicker with the intent of answering for that student, whether for a quiz, exam, or class participation. Academic dishonesty is unacceptable, and penalties range from a letter grade drop to expulsion from the university; cases are handled via the official student conduct process described at <https://dos.uic.edu/conductforstudents.shtml>.