

CS478: Software Development for Mobile Platforms

Project #1

Due time: 9:00 pm on 2/10/2020

Submit using Blackboard web site

Total points: 80

Instructor: Ugo Buy

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Project functional specification. Design and implement an app with the following functionality. The app starts off with a main activity containing a welcome text 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 name in the edit text field. A legal name consists at least of a first name and a last name, each containing a sequence of alphabetical characters and separated by one or more space characters. Leading and trailing white space characters should be ignored. When the user is done entering the name, she will press the done or return key in the soft keyboard. The activity must now check whether a legal name 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 checks whether the result code was "RESULT_OK". In the case, the user may press the second button in the first activity causing the device to display the contacts activity, while displaying the name that was entered in the second activity in the "Edit Contact" activity. You must use an existing *Contacts* app pre-installed in your device when displaying the "edit contact" activity. (You are not allowed to specify what app should be used for the editing the contact 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 entered an incorrect name and includes the name 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 notes. Your app has no knowledge of the specific app to be invoked for editing the contact. You are not responsible for coding or downloading additional apps; you may assume that a suitable contacts app is already installed on your device even though you don't know what that app is.

Use an intent extra to pass the name 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.

Use an *EditText* widget to enter the name in the second activity. When defining a listener for the edit text, implement Java interface *TextView.OnEditorActionListener*. Read the Android documentation on the *TextView* class in order to define the listener.

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 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.