

CS478: Software Development for Mobile Platforms

Project #1

Due time: 9:00 pm on 2/5/2017
Submit using Blackboard web site

Total points: 60

Instructor: Ugo Buy

TAs: Venkat Sathyanarayanan and Jennifer Jesuraj

Design and implement an app implementing the following functionality. The app starts off with a main activity containing a welcome message and two buttons arranged vertically below the welcome message. The functionality of the two buttons is explained below.

1. If the user selects the top button, your app uses an explicit intent to start a child activity, which contains a text editor window and a button. The text editor window is initially empty. The user then types some text. Embedded in the text could be a phone number in one of the following formats: “yyy-zzzz”, “(xxx) yyy-zzzz” or “(xxx)yyy-zzzz”. (All formats must be supported by your app.) When the text (possibly containing a phone number) is complete, the user will press the button. Now your app will look for a phone number embedded in the text typed by the user. If a phone number conforming to one of the above formats is found, your app will use an implicit intent to open the predefined dialer activity in the *Phone* app of your emulator, *without dialing the number*. If no phone numbers are found in the text typed by the user, no action is taken. If, however, there are multiple phone numbers in the text, only the first such number is chosen. In addition, before exiting the child activity sets a result code to be sent to the main activity. The main activity uses this result code to display a message indicating whether the child activity was successful in finding a phone number or not.
2. If the user selects the bottom button, your app will use an implicit intent to start an activity in a browser contained in your emulator and open the Android documentation page:
<https://developer.android.com/index.html>

An app user should be able to use the predefined “back” button in the bottom left of the emulator’s window in order to navigate back from an app screen to previous app screens or the device’s home screen.

Implementation notes. For this project use an Nexus 5 device running Marshmallow (API 23 that you downloaded for Homework 1). You are not required to provide backward compatibility with previous Android versions.

Hints. Use the `android:onClick` attribute of the button tag to define the method executed when the user selects the button. Use the `getText()` method of the `TextView` class and its subclass `EditText` to obtain the text typed in an editor widget.

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.