CMPSC 591
Principles of Mobile Applications
Fall 2014

Laboratory Assignment Three: Integrating Tasker Automation Tasks

Introduction

The last laboratory assignment introduced Tasker, a "total automation system for Android". Since we will continue to use Tasker in this laboratory assignment, you may want to continue to learn more about it by visiting `http://tasker.dinglisch.net/`. Moreover, in the first laboratory assignment we saw that it was possible to customize the Android mobile operating system by installing programs such as DashClock and Power Toggles. In this laboratory assignment, we will learn more about how to invoke automation tasks from mobile apps such as DashClock.

Integrating Tasker and DashClock

If you want to invoke Tasker automation tasks directly from DashClock, you will need to go to the Google Play Store and install the app called "DashClock Tasker Extension". Once you have installed this app, you can click DashClock's configuration icon and start to add extensions that follow the naming convention "Tasker #1" through "Tasker #3".

After you have placed a Tasker extension in the DashClock, you need to implement a Tasker automation task that can use it properly. Now, you should run the Tasker app and create a new task that uses the new DashClock Tasker plugin. You will need to click the "Edit" button for this task and configure it with an appropriate widget number, name, removal preference, Tasker task, and icon. Upon saving this task, you need to create a profile that will trigger this task.

What type of Tasker automation task would you like to integrate into the DashClock? As an example, you could add a new DashClock feature that will display an icon and the label "Turn off the Screen". When the user of the tablet clicks this label after turning on the tablet, it will turn off the screen, thereby reducing the number of times that it would be necessary to press the power button. To ensure that this type of integration works correctly, you will need to add a profile and a task to Tasker, following the previous instructions. You can start this process by creating a profile that will trigger a task when the display state is "on". What must you do to finish this example?

Integrating Tasker and Power Toggles

After running the Power Toggles app, you will notice that it has an icon called "Notification Widget". As you will remember from the first laboratory assignment, you can use this icon to customize the notification area of the Android operating system. Next, please click the "Add Toggle" button and, after clicking the "Custom" tab, pick the "Tasker toggle". At this point, you should see a listing of all of the Tasker tasks that you have already programmed. Take some time and implement a Tasker automation task that you can run from the notification area.

To complete the assignment, you should turn in signed printouts of the: (i) list of at least four ways in which you could integrate Tasker, DashClock, and Power Toggles, (ii) screen shots and descriptions that show one way to integrate Tasker with each of DashClock and Power Toggles.