

CSCI 188 Project Proposal

Droid Silencer

August 30, 2011

By Ian Kenley

Project Abstract

The program will allow the user to store recurring events for a given time and day of the week. It will then automatically silence the phone and restore the volume back in the background. As an extension to this program, it will allow for the marking of certain events as urgent, so that when a user receives a call, the system would catch it and automatically text an “away message”.

Strategy

This application, as the name implies, will run on the Android platform. Except for the possible addition of the “away message” intercept feature, there should not be anything that would not run in an emulator. It will be tested primarily on a Droid X phone.

As for the design, a Service will serve the core functionality of changing the ringer settings based on stored events. There will need to be at least two Views, one for creating new events, and another for viewing/updating/deleting old events. These events will be stored and accessed using the SQLite library. To catch incoming calls during “urgent” events, a Broadcast Receiver will be used.

Unknowns & Problems

Right now, I do not have much experience working with Services, so it is not clear how or how often the app would need to poll for the time to update the ringer settings. Moreover, this could be a drain on the battery if it is used too often. Another potential source of trouble could be testing the incoming call feature, if only because it will require borrowing another phone for extended periods of time.

Implementation Plan

Milestones

- Write the SQLite classes
- Create the “view events” View (UI 1), populated with dummy data
- Create the main Service that toggles the ringer settings
- Create the “create new” View (UI 2)
- Create the “call catch” Broadcast Receiver; add a reply mechanism

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UI 1

View Events

Sunday ***

NAME	START	END

Monday ***

NAME	START	END



Hold event to edit. Flick to scroll.

UI 2

Create New

Day

Start Time

End Time

Description

Urgent

Add

Project Proposal

[Describe how you will complete your application, what steps will you need to follow. Include a simple milestone chart showing what you need to have done. Include how you will eliminate any unknowns and test your software components. Is there any critical path that you need to be conscious of? What classes will you need to implement? Take a stab at a preliminary class diagram for you application. Sketch the major parts of the User Interface.]