Senior Project Proposal

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# Scripture

Ether 3:4 And I know, O Lord, that thou hast all power, and can do whatsoever thou wilt for the benefit of man; therefore touch these stones, O Lord, with thy finger, and prepare them that they may shine forth in darkness; and they shall shine forth unto us in the vessels which we have prepared, that we may have light while we shall cross the sea. And if my people build it not according to the pattern which I shall show unto their presidency, I will not accept it at their hands.

# Abstract

The focus of this project is development on a mobile phone. This project will allow the user of an Android phone to schedule when their ringtone will turn on and off so that no further user involvement will be needed to change the ringtone. For example, all teachers I have had have requested that we turn off or set our cell phones to silent while in their class. This project will allow a student to create a schedule to set their phone to silent when class starts and turn the ringer back on once class is over. This way they don’t have to remember every time.

# Background

## Definitions

* Ringtone –
* Notification -
* Media volume –
* Chron – Derived from Chronos the Greek personification of time. A program that is run on a predetermined schedule.

## Why this topic is of interest

I have always (since I first owned a cell phone) wanted the ability to schedule when a cell phones ringer turns on and off. However this option wasn’t easily available to me until I purchased my cell phone. The reason that I have wanted this feature is that cell phones have a tendency to ring at the most inconvenient times, such as in class or in the middle of Sacrament meeting. This program is designed to allow the user to set specific times when the mobile phones ringer is turned on or off so the user doesn’t have to remember to silence during these times.

## Prior work by others

Currently there are several programs on the Android market that aim to do the same thing as my project is proposed to do. However, according to my knowledge none of these other programs are open source.

## Prior work by me

I am familiar with creating Android applications from my previous senior project. This project is different in that I need have both a service and an activity where previously I only needed an activity.

# Description

## Description of my project

## What Defines a Successful Project

## Tasks Required

# Scope

# Tasks and Schedule

The schedule that I will follow for this project will be as follows.

|  |  |  |  |
| --- | --- | --- | --- |
| Task | Start Date | End Date | Hours to Completion |
| Preliminary Research and Proposal Preparation | 01/03/11 | 01/14/11 | 12 |
| Research | 01/12/11 | 01/29/11 | 30 |
| Requirements Specification | 01/29/11 | 02/02/11 | 8 |
| Design | 02/02/11 | 02/23/11 | 36 |
| Coding | 02/24/11 | 03/14/11 | 31 |
| Testing | 03/14/11 | 04/06/11 | 40 |
| Total Time spent on project |  |  | 157 |

# Deliverables

The following are items that will be provided throughout and upon the completion of this project.

* Proposal
* Requirements Specification
* Design Documentation
* Source Code

# Applicability

This project incorporates a bit of the current curriculum of the BYU-Idaho Computer Science program. The ways in which this project incorporates the current curriculum is that it will be written in Java which is reminiscent of Software Design and Development. This project will also require a client server architecture which relates to the curriculum taught in the networking class.

This project is also exclusive of the Computer Science curriculum in that most of the processing will be done on a mobile device; also the most of the processing involves image manipulation.

# Required Resources with Costs

The following is a list of resources that I will need for this project.

* Use of one of the computers in the Linux lab for a server (not exclusive).
* An Android mobile phone.
* Reference material to learn how to code and decode QR Codes.
* Reference material about image manipulation and processing.

# References