Project Specification

For the Girl Scouts of America Badge Tracking Application

By

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Change Log

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| Revisions | Change Note(s) |
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1. Introduction

1.1. Business and Domain Description

We are Team Cookie Council, We choose this project to improve the organization for troop leaders in the Girl Scouts of America. The domain of this project is our client Jennifer Melton and her Girl Scout troop. This application will cover badge tracking, event tracking, and financial tracking processes carried out by the client. This project will streamline the processes used by Girl Scout leaders to manage their troop.

1.2. Purpose

The Business result should be to replace the paper documentation system currently used in favor of a digital format.

1.3. Concept and proposed system

The software being produced is a Girl Scout Leader tracking application. This software will keep track of the badges, events, and financial situations associated with managing a Girl Scout troop. The goal of this application is to benefit the troop leaders by easing the way in which they manage their troop information. Must be an application that can make changes that will be reflected across interfaces.

1.4. Product Overview

1.4.1. Product Perspective

This system will have no relationship with any related products. The system will interface with a server; the user will interface with either the web or potentially a mobile app. There is no direct hardware interaction in this system; the application will be interfacing between our two potential software platforms. This software will require a server.

1.4.2. Product Functions

The major functions that this application will perform are badge tracking, financial tracking, event tracking and coordination, and shopping list creation.

1.4.3. User Characteristics

The users of this application will be local leaders for the Girl Scouts of America. This means that a variety of people all with different levels of education and technical skills will be using the application. This means that the application will have to be easy functioning and not require much technical skill.

1.4.4. Limitations

A limited budget may not allow for a server if needed and a license to upload mobile applications.

1.5. Definitions

* Earned: Scout has earned badge but not yet awarded.
* Awarded: Scout has earned and accepted their physical badge.
* Daisy: Initial level kindergarten thru first grade.
* Brownie: Second thru third grade.
* Junior: Fourth thru fifth grade.
* Cadet: Sixth thru eighth grade.
* Senior: Ninth thru tenth grade.
* Ambassador: Eleventh thru twelfth grade.
* Completed: Scout has finished a step on process to badge or award.
* Bronze Award: Must be Girl Scout junior and completed junior journey where scouts form a team and perform some form of community outreach.
* Silver Award: Must be a Girl Scout cadet and completed cadet journey. Scout may form a team or go solo for silver award project.
* Gold Award: Must be in high school, and must alone perform a gold award project.
* Council: A geographical region associated with scout troop.

1.6. Stakeholders

The stakeholder for this application is Jennifer Melton.

2. References and other standards  
<http://www.gsofsi.org/fo_leaders.html> this site has a collection of PDF files which are used by Girl Scout leaders to organize information relating to their troops.

3. Specific Requirements

3.1 External Interfaces

The item being developed is an application to help the stakeholders increase efficiency in their process of keeping track of the Girl Scout troop. The input depends on what the client wants to do whether it is badge tracking, financial tracking, health information or etc. The application should be as instantaneous as possible given technological standards. The output should be given in multiple readable formats.

3.2 Functions

The function of the program is primarily badge tracking, financial tracking, event tracking and coordination, and shopping list creation. Badge tracking will require the user to be able to update badge completion records. The system will output the badges completion or awarded status. Financial tracking will require the user to be able to input financial records for various expenditures. The system will output a list of paid and unpaid dues. Event tracking will require the user to input event attendance records. The system will output a list of scouts in attendance. The system will generate a shopping list based on earned badges.

3.3 Usability Requirements

The application should be usable by the client and easy to understand. The client will define the usability of the application through testing.

3.4 Performance Requirements

The application should be able to handle many users at once. Application should be able to handle a generous amount of data entries from user.

3.5 Logical Database Requirements

The database must be able to:

* look up by scout across all levels
* look up by girl per rank
* have a badge overview of all scouts per troop
* have badge requirements stored into the database
* track events with attendance and payment status per scout
* create new user and have login functionality
* create user generated fun patch and event entrees
* generate a shopping list for the badge from badges earned but not yet awarded
* store emergency contact information securely for intended troop leader
* interact with webpage and possible mobile application

3.6 Design Constraints

The mobile app puts constraints on platforms used (android, ios). The software licensing for iOS will come with a potential fee and user agreement. Available time will constrain the amount of application functionality.

3.7 Software System Attributes

Emergency contact info must be secured for their troop leader only and password/login security. Having meaningful error reports will be added to database for added maintainability.

3.8 Supporting Information

At this time there is no supporting information

3.9 Course-specific Content

Semi-Agile Software Engineering (SAGE) Process Specification – Revision 2.2.0  
4. Verification

There is no specific testing requirements given by the client, however we plan to test each requirement as such:

* External Interfaces – Test using simple navigation through the pages, and overall ease of use.
* Functions – Unit tests will be used to verify for correct outputs.
* Usability Requirements – Propose interfaces to client for revision in later versions.
* Performance Requirements - Multiple users will attempt to log on and modify the same data to assure consistency. A generous amount of data will be input to assure database performance.
* Logical Database Requirements – Test for data consistency across database tables.
* Software System Attributes – login authentication will be tested, and database will be intentionally accessed incorrectly to test error reports.

5. Appendices

5.1 Assumptions and Dependencies

We are assuming that we will be doing this project with a web browser and a mobile application. We are also assuming that the Girl Scouts will not change their method of ranking up or achieving badges.