Project Specification

For the Girl Scouts of America Badge Tracking Application

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Change Log

Revisions	Change Note(s)
1.0	Creation of document
1.1	Major overhaul of the document

Reviewed and Approved by:		Signature	Date
Matt Eck	<Database Architect>	_____	_____
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1. Introduction

1.1. Business and Domain Description

This application is under the development of Team Cookie Council, the application was chosen to improve the organization for troop leaders in the Girl Scouts of America. The Girl Scouts of America are an organization devoted to helping young girls develop important life skills while building courage, confidence, and making the world a better place. The troop leaders are the people who teach and lead the young girls in developing those skills. 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 of proposed system

The software being produced is a Girl Scout Leader tracking application. This software will keep track of and organize 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.

1.4. Product Overview

1.4.1. **Product Perspective**

The system will interface with a server; the user will interface with either the web application or potentially a mobile app. The application will be interfacing between two potential software platforms.

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. Thus the application will have to be easy to use 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**

- Ambassador: The sixth and final level of scouts, Eleventh through twelfth grade.
- Awarded: When a scout has earned and accepted their physical badge.
- Bronze Award: An award given to a Girl Scout who is at least in the Junior level after they have formed a team and completed some sort of community outreach project.
- Brownie: The second level of scouts, second through third grade.
- Cadette: The fourth level of scouts, sixth through eighth grade.
- Completed: The scout has finished one of the many steps in the process to a badge or award.
- Council: A geographical region associated with a scout troop.
- Daisy: The initial level of scouts, kindergarten through first grade.

- Earned: When a scout has completed all the necessary steps to get a badge but the physical badge has not been awarded yet.
- Fun Patch: A badge made by a troop leader to be used within their specific troop and not an official Girl Scout badge.
- Gold Award: An award given to a Girl Scout who is a senior or Ambassador that have completed a solo community outreach project, totaling at least 50 hours of work
- Junior: The third level of scouts, fourth through fifth grade.
- Scout: A member of the Girl Scouts of America who is not a troop leader, aged 5-17.
- Senior: The fifth level of scouts, ninth through tenth grade.
- Silver Award: An award given to a Girl Scout who is at least at the Cadette Level after they have done a community outreach project either alone or in a group which doesn't benefit the Girl Scouts specifically.
- Troop Leader: An adult supervisor who teaches and guides the scouts through their Girl Scout activities.

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

User will interface through a browser or potential mobile application. A troop leader will update a scout's badge information and the system will output an updated chart of badge information. The system will output a shopping list with all earned but not awarded badges. A troop leader will enter a name, amount, and purpose for a payment and the system will output an updated

list of dues and financial statement. A troop leader will enter in event information and the system will output an updated event description.

3.2 Functions

All inputs from user will be validated to prevent overflow and invalid inputs. The inputs from the troop leader will update the badge, financial, and event records within the system. Unique data from the database will update the shopping list records. In the case an error an error message will inform the user of the problem and suggest solutions.

3.3 Usability Requirements

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

3.4 Performance Requirements

The application must be able to handle many users at once. The application must be able to make changes that will be reflected across interfaces.

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

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. This software will require a server.

3.7 Software System Attributes

Emergency contact info must be secured and accessible for their troop leader only using password/login security. Meaningful error reports will be added to system for added maintainability.

3.8 Supporting Information

The Semi-Agile Software Engineering Process Specification will be used as a reference as well as additional documentation created by the development team.

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

This application will be using a web browser and a mobile application. The software will have to be updatable in the event that the method for ranking or achieving badges is changed.