**Whoop-Txt Software Design Document**

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Table of Contents

[1. Introduction 1](#_Toc306642838)

[1.1 Purpose 1](#_Toc306642839)

[1.2 Scope 2](#_Toc306642840)

[1.3 Overview 2](#_Toc306642841)

[1.4 Reference Material 2](#_Toc306642842)

[1.5 Definition and Acronyms 2](#_Toc306642843)

[2. System Overview 2](#_Toc306642844)

[2.1 System Evolution Description 2](#_Toc306642845)

[3. System Architecture 2](#_Toc306642846)

[3.1 Architectural Design 2](#_Toc306642847)

[3.2 Decomposition Description 2](#_Toc306642848)

[3.3 Design Rationale 2](#_Toc306642849)

[4. Data Design 3](#_Toc306642850)

[4.1 Data Description 3](#_Toc306642851)

[4.2 Data Dictionary 3](#_Toc306642852)

[5. Component Design 3](#_Toc306642853)

[6. Human Interface Design 3](#_Toc306642854)

[6.1 Overview of User Interface 3](#_Toc306642855)

[6.2 Screen Images 3](#_Toc306642856)

[6.3 Screen Objects and Actions 4](#_Toc306642857)

[7. Requirements Matrix 4](#_Toc306642858)

[8. Appendices 4](#_Toc306642859)

# 1. Introduction

## 1.1 Purpose

This software design document describes the architecture and system design of Whoop-Txt. This document is intended for a technical audience and, in particular, for developers, project managers, and testers. Both high and low-level technical aspects for this project will be discussed in full detail and will focus on the functionality of each system layer.

## 1.2 Scope

Whoop-Txt is being developed to run on all major mobile devices and will integrate social networking and mobile platforms such as Google+, Facebook, and Google Maps to create an alternative method for text-sharing. Our goal is to introduce a user friendly mobile web application that offers features such as geo-location awareness and social network sharing.

## 1.3 Overview

This document will describe the architectural design of both the back-end and front-end interfaces for the Whoop-Txt software. Firstly, the functionality and modules required for the group creation/management, whoop sharing, and whoop-txt conversations listing will be described in full detail for the back-end interface. Then, the architectural design for the user-interfaces which include the authentication, message, menu, new message, and groups pages will be explained in more detail and screenshots and objects will be provided.

## 1.4 Reference Material

## 1.5 Definition and Acronyms

# 2. System Overview

## 2.1 System Evolution Description

This project is being designed using an incremental approach. There are three primary stages to the design development including in Phase 0, due October 19, 2011; Phase 1, due the week of November 10, 2011; and Phase 2, due the week of November 28, 2011. Phase 0 consists of the creating a concrete design of the system and user interface and cementing all preliminaries needed to start implementation. Phase 1 will involve implementing the database as well as including log-in as well as online group creation fully functioning. Lastly, Phase 2 will be the final stage in which API’s will be fully incorporated and the final touches on the web-design will be made. The final product will be delivered to the customer the week of December 2, 2011.

# 3. System Architecture

## 3.1 Architectural Design

The Whoop-Txt software will be partitioned into subsystems based on functionality.

## 3.2 Decomposition Description

## 3.3 Design Rationale

# 4. Data Design

## 4.1 Data Description

## 4.2 Data Dictionary

# 5. Component Design

# 6. Human Interface Design

## 6.1 Overview of User Interface

The main authentication page on the Whoop-Txt website is where users log in using their Facebook account. If the user does not have a Facebook account, our website will have the capability for a user to create a Facebook username and password by having a create account pop-up message on the main authentication page. After logging in, the user is navigated to the Home page which is a message stream page where Whoop-Txt conversations will be listed in most-recent order. The user can either scroll/read through the conversations listed or can navigate to the Menu page by pressing the Menu button located at the top of the screen. Once at the Menu page, the user can be directed to three different web pages: Home, New Message, or Groups. At the New Message page, the user will be able to texts to their Whoop-Txt groups, tagged individuals, and/or Whoop-Txt users within a locational range. The Groups page lists the groups that the user has either been added to, or has created. Here, the user will have the option to remove themselves from a group, add more friends to an existing group, or to create a new group. A high-level view of these Whoop-Txt pages is as follows:



## 6.2 Screen Images

Authentication Page

Home Page

Menu Page

New Message Page

Groups Page

## 6.3 Screen Objects and Actions

# 7. Requirements Matrix

|  |  |  |  |
| --- | --- | --- | --- |
| **Requirement #** | **Name** | **Description** | **SDD Section #** |
| 3.1.2a | Group Creation and Management | Create groups |  |
| 3.1.2b | Group Creation and Management | Invite friends |  |
| 3.1.2c | Group Creation and Management | Accept/decline invites |  |
| 3.1.2d | Group Creation and Management | Unsubscribe from group |  |
| 3.2.2a | Whoop Sharing | Select tags to share posts |  |
| 3.2.2b | Whoop Sharing | Select groups to share posts |  |
| 3.2.2c | Whoop Sharing | “Public” tag option |  |
| 3.2.2d | Whoop Sharing | “Nearby” tag option |  |
| 3.3.2a | Whoop-Txt Conversations Listing | View list of available posts |  |
| 3.3.2b | Whoop-Txt Conversations Listing | Select post and view content and members |  |
| 3.3.2c | Whoop-Txt Conversations Listing | Share a reply to a post |  |
| 3.3.2d | Whoop-Txt Conversations Listing | Re-share posts |  |
| 4.1.1 | User Interface | Facebook log-in | 6.2 |
| 4.1.2 | User Interface | Home page contains message stream | 6.2 and 6.3 |
| 4.1.3 | User Interface | Menu page three navigation buttons: Home, New Message, Groups | 6.2 and 6.3 |
| 4.1.4 | User Interface | New message page: write texts and tag | 6.2 and 6.3 |
| 4.1.5 | User Interface | Groups page: lists subscribed groups | 6.2 and 6.3 |
| 4.3 | Software Interfaces | MySQL, PHP, Apache, and Facebook application management software |  |
| 4.4 | Communication Interfaces | Management console based on HTTP protocol running on an Apache server |  |
| 5.3 | Security Requirements | SSL Encryption |  |
| 5.4 | Software Quality Attributes | Error Handling |  |

# 8. Appendices