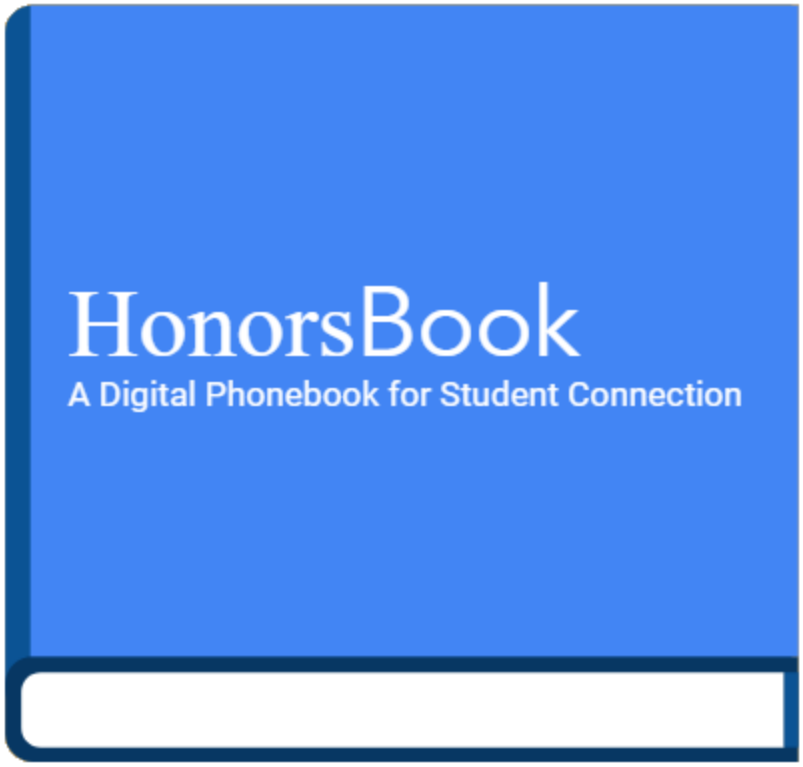

Honorsbook Software Requirements Specification

Version 1.0

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1. Introduction

1.1) Purpose

This document describes the purpose, features, and overall structure of the Honorsbook application.

The app, being built for the California State University, San Bernardino University Honors Program under the direction of program head Dr. David Marshall is intended to serve the students of the program in an effort to improve social relations among their group of peers.

The development of the app is also intended to serve the “Senior Project” requirements for Graduation with Honors for the Honorsbook development team, in addition to serving as real-world experience for work in the fields of Computer Science and Graphic Design, as appropriate for the chosen major of each member of the team.

1.2) Scope

This web application will allow students in the program to identify a collection of tags which will be associated with their account, and search the system for other students based on the tags they have selected.

The app is not a social media platform, and is not built for the purpose of direct communication. Instead, the app may allow users to request provided contact information of other students so that communication can occur on other platforms.

As the current development cycle is intended only to provide a demonstrative prototype, many features may not be available at the time of the project’s completion, but may be implemented by future development teams in future years.

By prototype delivery on 5/14/21, the following features are expected to be implemented:
1) Navigable user interface created by graphic design and web design team.
2) Functioning login system which determines what information the user is allowed to access. Example accounts may be used for demonstrative purposes.
3) An exemplary set of tags which a logged-in user is able to select from and associate with their account.
4) A search system which allows a logged-in user to see a list of all users in the

database which have associated at least one selected tag with their respective accounts.

Features of future versions of the app, which are not expected to be delivered in the immediate future, include:
1) Expansion and optimization of previous features.
2) Ability for a user to modify their account's public and hidden information, including but not limited to a brief self-written biography and contact information other than student email addresses.
3) Ability for a user to "introduce yourself" to another user, including a request to see hidden contact information which can be granted or denied by the user who receives the request.
4) Ability for a user to request that a tag be added to the database, which can be granted or denied by an administrator.
5) A tag hierarchy to make discovering accurate tags more straightforward and enjoyable for users.

1.3) Definitions, Acronyms, and Abbreviations

- **CSUSB** - California State University, San Bernardino
- **UHP** - the CSUSB University Honors Program
- **HB** - Honorsbook, the application being developed.
- **HTML** - Hypertext markup language, a coding language used primarily for web development which defines the positions and formatting of various HTML objects on the page.
- **Javascript** - a coding language integrated with HTML that allows for dynamic access to information and modification of webpage layout.
- **Firebase/Firestore** - proprietary software of Google which allows for creation and modification of databases which can be accessed through HTML/Javascript.
- **Login** - a software system in which a user can enter account information including a username/email address and password in order to gain access to the functions of the application.
- **Account** - the context of the app in which the user is able to log in. This context defines what information the user is able to see, and the format in which their data is stored by the app.
- **Tag** - one of a list of predefined items in the app's database relating to a person's interest or involvement, any number of which can be associated with a user's account in order to identify a sum total of that user's interests.
- **Search** - the ability for a user to view a list of other users filtered and/or sorted based on some number of input tags.

- **Social disconnect** - a phenomenon experienced by many high-achieving college students in which a difficulty in identifying and interacting with other students of similar interests is experienced.

1.4) References

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1.5) Overview

High-achieving students like those in the UHP often have trouble making connections with their peers. This social disconnect stands against the program's goal of creating a welcoming academic cohort. To address this issue, the idea of Honorsbook, a web app created for honors students, was posed. The application aims to create an environment where UHP students can be connected with peers of similar interests. A team was assembled to accomplish the separate aspects of imagery and design, and of programming and data management. The design philosophy aims for a layout that is intuitive, and creates a feeling similar to being in a library or coffee shop. Using CSUSB colors and design as a basis, further decisions behind color palettes and typographic elements were inspired by the designs used in competing social media websites and other forms of digital media. For the development of the application, HTML/Javascript is as the primary languages, allowing for straightforward implementation of the design team's ideas. Additional research was required to accomplish data storage with Google Firebase, as well as the development of key features such as user profiles, and a searchable tag system. In addition to the approximation of real-world job experience for the team, the app will have a significant impact for UHP students once deployed, and well into the future. With a tailored platform for high-achieving students, it is hoped that the social disconnect experienced by many of these students can be greatly reduced.

2. Overall Description

2.1) Product Perspectives

The app will create a working database of student interests by requiring all first-time users to select some number of tags before being allowed to continue with other features of the app. The user may continue to select tags until they feel their interests are fully reflected, or choose the most important and add more at a later time. Then, the user will be allowed to search for other users who have identified similar tags.

2.1.1.System Interfaces (deployment diagram)

2.1.2.User Interfaces

Upon accessing any page for the first time, the user will be prompted to log in. On the home page, the user will be able to see buttons for different options, including “Tag Your Interests,” “Find a Friend,” and “View/Edit Profile.” Detailed examples of each screen will be provided in Section 3.1.1 below.

2.1.3.Software Interfaces

CSUSB Academic Hosting - for webspace occupied by the app
Google Firebase - for database and login functionalities of the app

2.1.4.Memory

The web app is expected to use only minimal amounts of memory on the user’s device, in order to keep track of the user’s login session so that they don’t have log in again on every page. Account information will instead be stored on the app’s database, hosted on Google Firebase servers. So long as the app remains used in its local scope, the maximum size of the database is assumed to be arbitrarily larger than the app will ever need. Future versions of the app may migrate to University servers, with the potential for even more maximum space.

2.1.5.Operation

The first delivered prototype of the app will operate exclusively through a web browser. Its availability will depend on the availability of the greater CSUSB Academic Hosting platform, as well as the Google Firebase platform, both of which are outside the scope of the app itself. So long as both platforms are available, the app can operate at any time that the user has a network connection.

2.2) Product Functions

This app allows a student user to tag their profile, search for students using tags, request to view the contact information of other students, modify their profile in other ways, and suggest new tags. The app allows administrator accounts to approve suggested tags and manage student accounts.

On the home screen, after logging in, the user will be able to:

- Tag Your Interests - By selecting this option, the student will be able to browse through a sorted list of predefined tags, and select any number tags which align with the student’s self-defined interests. These selections will be saved to the database until the student chooses to modify or delete them, or until the student is removed from the system.
- Find a Friend - By selecting this option, the student will be presented with a sorted list of other students in the database, in descending order based on number

of shared interests and/or classes, including contact information. This list can be filtered by particular tags. Earlier prototypes of the app may instead have the user search manually for individual tags.

- Propose a New Tag - This will allow students to contribute towards correcting and adding to the initial, non-exhaustive predefined list of tags. The proposed tag will await Administrator approval before being added to the list.
- Edit Profile - This will allow the student to add additional units of contact information to be associated with their account, besides their Coyote email. The student can also add a character-limited bio describing themselves.

Details regarding the interface for each use case are available in Section 3.1.1 below.

Use Case Diagrams

Signature:_____

David Marshall (*Client)*

Date:_____