Software Requirements Specification

for

HCGBST Tracking System

Version 0.1.1 approved

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March 8-9, 2025

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Table of Contents

Revision History

Name	Date	Reason For Changes	Version
Creation	3/8/25	Created the initial document	.01
Modification	3/9/25	Modification of document for presentation	.01.1

1. Introduction

1.1 Purpose

HCGBST is a system meant for storing scholarships, as well as their applications to streamline the application process for students and simplify the application processing for the organization. The system also acts as a database to manage and use the applications and quickly access information for applicants.

1.2 Document Conventions

The document follows the number scheme 1.1, 1.2, 1.3 to help anyone reading follow the flow of the document

1.3 Intended Audience and Reading Suggestions

The intended audience for this document is for the employees of the organization *Humboldt County Farm Bureau* and acts as the documentation for use of the software.

1.4 Product Scope

The scope of this product is to allow for the storage of scholarships offered by the *Humboldt County Farm Bureau* and act as the application portal for their provided scholarships. Additionally, the portal functions as a space to moderate the scholarships and applicants by the organization.

2. Overall Description

2.1 Product Perspective

This product is the application portal and tracker for the organization. It is to be associated with the organization itself, and acts in tandem with the websites homepage

2.2 Product Functions

- Application Form
  - Interface for applicants to submit scholarship forms
  - Interface for applicants to view submitted and in-progress scholarship forms
- Student Management
  - Interface for admins to manage students within the database and their related data
- Scholarship Management
  - Interface for admins to manage scholarships, applicants for said scholarships, scholarship history and data

2.3 User Classes and Characteristics

The main user class for this product will be students applying to scholarships

2.4 Operating Environment

The product will be created using html, css, javascript, mongodb, and react.

2.5 Design and Implementation Constraints

The sole constraint of this project is the time limit imposed by the nature of the Cal Poly Humboldt Hackathon.

2.6 User Documentation

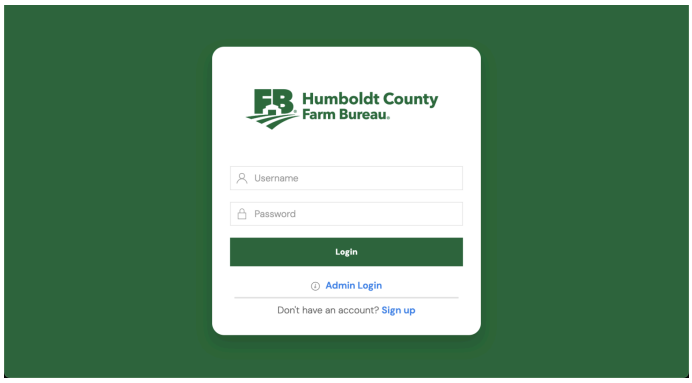
Outside documentation will be provided to allow for the upkeep of the program. This will include documentation regarding the frontend, backend, and database. Additionally visualization of the schema will be available

2.7 Assumptions and Dependencies

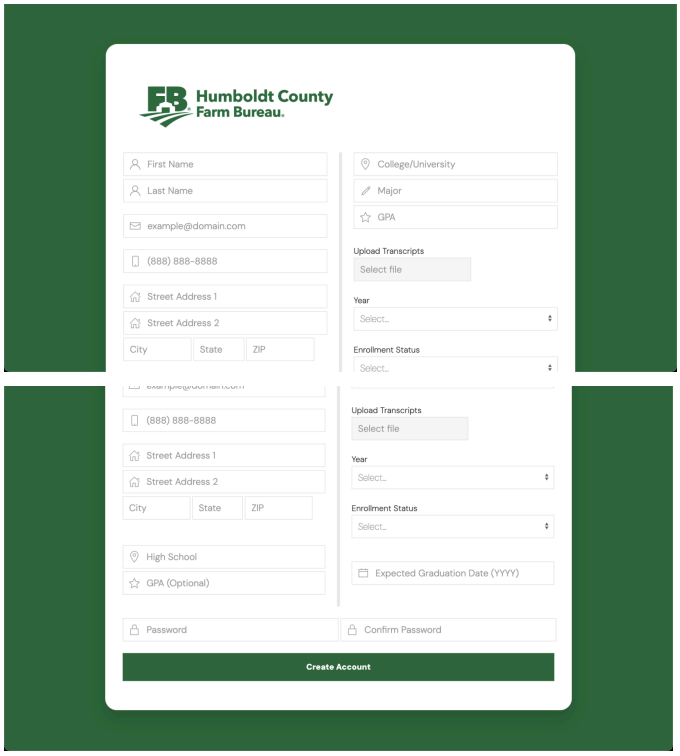
Unaware of any at this time.

3. External Interface Requirements

3.1 User Interfaces



- Example of log-in page, with admin login link, sign-up links



- Example of sign-up page

3.2 Hardware Interfaces

No hardware interfaces at this time

3.3 Software Interfaces

There will be a connection between the front-end and the back-end of the product. The front-end will contain the search features for the applicant to access different scholarships, while the back-end will store and process this data. The administration users will be able to view all of the data associated with the applicants and be able to quickly process applications

3.4 Communications Interfaces

This product will require a web browser and an internet connection in order to properly function.

4. System Features

4.1 Applicant Account Creation/Login

4.3.1 Description:

Applicant:

- Applicant is able to create and log in to an account
- Applicant must provide correct email and password in order to log in; invalid password will prompt a message to the user

4.3.2 Stimulus/Response Sequences:

Applicant:

- Applicant clicks login or create account
- Applicant either enters login information or information to create an account
- Applicant is then logged into that account registered to them

4.2 Displaying applicant data

4.1.1 Stimulus/Response Sequences:

Applicant:

- Applicant can view their personal information such as:
    - First Name, Last Name, Email, etc.

Admin:

- Admin can view applicant data
- Admin can view application data
- Admin can edit applicant data
- Admin can edit application data

Reviewer:

- Reviewer can view applicant data
- Reviewer can view application data

4.1.2 Functional Requirements:

- P0: Basic Scholarship Database
    - P0.1.1: Schema for storing scholarship details (name, amount, criteria)
    - P0.1.2: CRUD (Create, Read, Update, Delete) operations for managing scholarships

4.3 Managing applicant data

4.2.1 Description:

Applicant:

- Applicant can view their stored data (personal) and view their applications
- Applicant can edit their stored data (personal)

Admin

- Admin can view applicant accounts
- Admin can view applications

4.2.2 Stimulus/Response Sequences:

Applicant:

- Applicant selects “My applications” or application goes to the Profile Icon

Admin:

- Admin selects the button to show Applicant data and is directed to a web document containing the overall Applicant information along with the Application data

4.2.3 Functional Requirements:

- P0.3.1: Overview of all applicants
- P0.3.2: Overview, which includes basic reporting of applications
- P0.3.3: Simple user management
- P0.3.4: Ability to print applicant data

4.4 Managing admin data

4.2.1 Description and Priority:

Admin:

- Admin can view personal information such as First Name, Last Name, and Email of the applicants. The Admin can see how many applicants have applied for the scholarships.

4.2.2 Stimulus/Response Sequences:

Admin:

- After someone creates an account, the super admin can give them permissions (read-write or just read) by clicking the new admin button and filling out the prompted modal. On this modal, it will tie permissions to an entered email.

4.2.3 Admin Creation:

- Super User can create Super User, Admin, and Reviewer Accounts
- Super User can add related data to created Admin, Reviewer Accounts

4.2.3 Admin Management:

- Super user can delete Admin and Reviewer Accounts
- Super user can delete/modify related data to created Admin, Reviewer Accounts

4.2.3 Functional Requirements:

- P0.3.3: Simple user management to for simple admin data accessing and modification

4.5 User Authentication

4.5.1 Description and Priority:

Applicant:

- Applicant is able to create and log in to an account.

Admin:

- Super user is able to create and log in to an admin account and/or reviewer account
- Admin can check during authentication to see if the email registered to an account is registered to an admin account. If it's registered to an admin account, verify the associated password through a hash key. If the key is correct, proceed to the administrator menu

4.5.2 Stimulus/Response Sequences:

Applicant:

- Applicant clicks login or create account
- Applicant either enters login information or information to create an account
- Applicant is then logged into that account registered to them

5. Other Nonfunctional Requirements

5.1: Mobile responsive design

5.1.1 Focus on mobile-responsive design as students often apply via phones

5.2: Data Validation

5.2.1 Implement strong data validation to prevent application errors

5.3: Accessibility Requirements

5.3.1 Ensure accessibility compliance for all users

5.4: Security Requirements

5.4.1 Build with security in mind (data encryption, secure file storage)

5.5: User Guidance

5.5.1 Create clear error messages and user guidance

5.6: Documentation

5.6.1 Document setup process for future maintenance

6. Appendix

6.1 Team Roles

- **Lead Designer: Rachel Brower**
- **Technical Designer: Chan Rain**
- **Security Specialist: Blake Culbertson**
- **Quality Assurance, Documentation: Enrique Lopez**
- **Team/Backend Manager: Garret Willis**