|  |
| --- |
| SPECIAL TOPICS  PERIOD 4  Functional Specification Document  <The Zucc> |

**AUTHORS**

|  |  |
| --- | --- |
| **Name** | **Role** |
| Maggie Khuu | Frontend |
| Bernard Patry | Frontend and Backend |
| Sean Nguyen | Backend |

**Table of Contents**

[1. Introduction 2](#_Toc345929872)

[1.2 Project Scope 2](#_Toc345929874)

[2. System/ Solution Overview 2](#_Toc345929879)

[2.1 Work Breakdown Structure 2](#_Toc345929880)

[3. Functional Specifications 2](#_Toc345929883)

[3.1 Log-In Screen 2](#_Toc345929884)

[3.2 Drawing Interface 3](#_Toc345929884)

[4. Data Storage 5](#_Toc345929888)

# Introduction

*The Zucc is a web application developed to address the growing field of drawing and design applications.*

## Project Scope

*The drawing app allows an easy way to create art, joining the many current art and drawing applications like Sketchbook and Procreate.*

# System/ Solution Overview

*The application requires a frontend and backend, with the frontend being designed and easily usable by the user. The backend will work with the account manager and the data storage of user’s work.*

## 2.1 Work Breakdown Structure

A diagram of a company

Description automatically generated

# Functional Specifications

## 3.1 Log-in Screen

### 3.1.1 Purpose/ Description

*The Login Screen allows users to log in to existing accounts and navigates to a create account page if they do not have an existing account.*

### 3.1.2 Use case

|  |  |
| --- | --- |
| **UC-1** | **Login** |
| **Trigger** | *Navigating to the website* |
| **Main Success Scenario** | 1. *Visit Website* 2. *Enter Username* 3. *Enter Password* 4. *Log in* 5. Redirected to drawing interface |
| **Priority** | *High* |

**Form Elements:**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Field Label** | **UI Control** | **Mand?** | **Editable** | **Data Type** | **Data Example** | **Data Source** | **Validation** | **Error Messages** |
| User name | textbox | Yes | Yes | String | yayausername | User entry | Valid user name | “Invalid Username” |
| Password | Textbox | Yes | Yes | String | Password123 | User entry | Valid password | “Invalid Password” |
| Show Password | Checkbox | No | Yes | n/a | Checked/unchecked | User select | none | none |

**Buttons, Links and Icons:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Button, Link, Icon Label** | **Click Event** | **Other Event** | **Visible** | **Enabled Vs Disabled** | **Navigate To** | **Validation** |
| *Login* | *Verify if user name and password are correct. If yes, log the user into the system.* | *none* | *Always* | *N/A* | *Drawing Interface* | *Verify if user name and password match with registry data.* |

## 3.2 Drawing Interface

### 3.2.1 Purpose/ Description

*The drawing interface allows the user to draw, erase, and save their drawing as an image.*

### 3.2.2 Use case

|  |  |
| --- | --- |
| **UC-1** | **Drawing** |
| **Trigger** | *After Logging in* |
| **Main Success Scenario** | 1. *Logged in* 2. *Draw* 3. *Save drawing as image* |
| **Priority** | *High* |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Field Label** | **UI Control** | **Mand?** | **Editable** | **Data Type** | **Data Example** | **Data Source** | **Validation** | **Error Messages** |
| Canvas | Click and Drag | No | Yes | PNG | n/a | User entry | none | none |

**Form Elements:**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Button, Link, Icon Label** | **Click Event** | **Other Event** | **Visible** | **Enabled Vs Disabled** | **Navigate To** | **Validation** |
| *Brush* | *Brush tool is selected, user is able to draw* | *On hover turns the button into a different color* | *Always* | *Initially Enabled* | *none* | *none* |
| *Eraser* | *Eraser tool is selected, user is able to erase* | *On hover turns the button into a different color* | *Always* | *Initially disabled* | *None* | *None* |
| *Size slider* | *Dragging the slider controls the size of the tool* | *None* | *Always* | *Enabled* | *None* | *None* |
| *Colors* | *Selected color will be drawn with the brush tool* | *None* | *Always* | *Enabled* | *None* | *None* |
| *Color picker* | *User will be able to pick a RBG value color, including a dropper tool* | *None* | *On click* | *Enabled* | *None* | *none* |
| *Clear Canvas* | *The entire canvas is erased* | *None* | *Always* | *Disabled* | *None* | *None* |
| *Save as Image* | *Saves the drawing as a PNG* | *None* | *Always* | *Disabled* | *None* | *None* |

**Buttons, Links and Icons:**

# Data Storage

*The Username and password will be saved as well as the image that is saved when the user clicks the (Save as Image) button. The user can then add to their existing works or create new ones on their account.*