Requirements Document for Meme Generator Application

Introduction

The Meme Generator application is a web-based platform that allows users to view, download, and interact with wholesome memes. Users can access the platform without the need for authentication, but they also have the option to sign up and log in for additional features. The application integrates an external API to fetch and display memes, with options for users to download, navigate between different memes, and interact with basic authentication features.

Functional Requirements

1. **User Authentication:**
    - The application must provide a sign-up form allowing users to register with an email address, phone number, and password.
    - The password must meet the criteria of having at least one capital letter and one special character from '@#$%' and be at least 6 characters long.
    - The sign-up details should be stored in session storage for future use.
    - The application should also offer a login form for users to access the additional features.
2. **Meme Display:**
    - Upon opening the application, the page should automatically fetch and display a meme from the 'https://meme-api.com/gimme/wholesomememes' API.
    - The meme should be displayed prominently on the screen, with a minimalist and classy user interface.
3. **Meme Interaction:**

- Users should be able to navigate through different memes using the "Previous Meme" and "Next Meme" buttons.
- A "Go to Meme Page" button should take the Users to the page of the meme.
- The “Next Meme” Button should take the user to the next meme and “Previous Meme” Button should take the users to the previous meme.

4. **Error Handling:**
    - The application must validate user input for the sign-up and login forms.
    - Proper error messages should be displayed for incorrect login attempts and password formats.
    - Appropriate error handling should be implemented for any issues related to API calls or data retrieval.

Non-Functional Requirements

1. **Usability:**
    - The user interface should be intuitive, user-friendly, and have a minimalist design.
    - All buttons and forms should be appropriately labeled for easy understanding and navigation.
2. **Performance:**
    - The application should load and display memes quickly and efficiently from the external API.
    - User interactions such as navigating between memes and downloading should be responsive and seamless.
3. **Security:**
    - User passwords should be securely stored in session storage.
    - All user inputs, especially sensitive information, should be handled securely to prevent any potential security breaches.

Assumptions

- The application will be accessed through modern web browsers that support HTML5, CSS3, and JavaScript.
- The user's internet connection is stable and capable of making API requests.
- The user's device supports the basic requirements for web browsing and image downloading.

Constraints

- The application's functionality will be limited to the features specified in the requirements document.
- The external API may have occasional downtimes or limitations that could affect meme retrieval.
- The application will not store user data persistently and will rely solely on session storage for the current session.

This document outlines the necessary functional and non-functional requirements, as well as assumptions and constraints, for the development and testing of the Meme Generator application.