

Software Requirements Specification (SRS) for GitHub User Information Web Application

1. Introduction

1.1 Purpose

The purpose of this document is to provide a detailed description of the requirements for the GitHub User Information Web Application. This application retrieves data from the GitHub API, including user details such as name, followers, and following, and dynamically displays it on an HTML page.

1.2 Scope

The GitHub User Information Web Application is designed to provide a user-friendly interface for retrieving and displaying GitHub user data. It aims to enhance the user experience by dynamically updating the content based on the data fetched from the GitHub API.

2. Functional Requirements

2.1 User Features

2.1.1 User Authentication

The application should allow users to input a GitHub username to retrieve information. No authentication is required to access the basic information.

2.1.2 Display User Information

The application shall display the following information on the HTML page:

- ☐ User's full name
- ☐ Number of followers
- ☐ Number of users following

2.2 System Features

2.2.1 GitHub API Integration

The system shall integrate with the GitHub API to fetch user data based on the provided username.

2.2.2 Dynamic Web Page

The web page shall be dynamically updated to reflect the fetched GitHub user data without requiring a page refresh.

2.2.3 Error Handling

The system shall provide appropriate error messages if the GitHub API request fails or if the entered username does not exist.

3. Non-Functional Requirements

3.1 Performance

The application should have a response time of less than 3 seconds when fetching data from the GitHub API.

3.2 Usability

The user interface should be intuitive and user-friendly, providing clear instructions for entering a GitHub username and understanding the displayed information.

3.3 Compatibility

The application should be compatible with modern web browsers, including Google Chrome, Mozilla Firefox, and Microsoft Edge.

4. Constraints

- ☐ The application is limited to fetching data from the public GitHub API.
- ☐ The application should comply with GitHub API usage policies and rate limits.

5. Assumptions and Dependencies

- ☐ The application assumes a stable internet connection for accessing the GitHub API.
- ☐ The application is dependent on the availability and reliability of the GitHub API.

