**Software Requirements Specification (SRS)**

**1. Introduction**

**1.1 Purpose**

The purpose of this document is to outline the requirements for the "Form Data Storage Test" web application, which allows users to input and save their username, email, and age in a form. The application will utilize the browser's local storage to persist the data across page reloads.

**1.2 Scope**

This application will be a simple web form that:

* Collects user input for username, email, and age.
* Saves the entered data to the browser's local storage.
* Displays the saved data on the page.
* Allows users to reset the form and clear the stored data.

**1.3 Definitions, Acronyms, and Abbreviations**

* **SRS**: Software Requirements Specification
* **UI**: User Interface
* **HTML**: HyperText Markup Language
* **CSS**: Cascading Style Sheets
* **JavaScript**: A programming language for web development

**2. Overall Description**

**2.1 Product Perspective**

The "Form Data Storage Test" application will be a standalone web application built using HTML, CSS, and JavaScript. It will run in a web browser without any external dependencies.

**2.2 Product Functions**

The main functions of the application include:

* User input for username, email, and age.
* Save button to store data in local storage.
* Reset button to clear the form and remove data from local storage.
* Display area to show the retrieved data from local storage.

**2.3 User Classes and Characteristics**

* **End Users**: Individuals who will use the form to submit their data. They should be comfortable with basic web forms.

**2.4 Operating Environment**

The application will be accessible on modern web browsers (e.g., Chrome, Firefox, Safari, Edge) on desktop and mobile devices.

**3. Functional Requirements**

**3.1 User Input**

* **Requirement 3.1.1**: The user must be able to input a username, which is a required field.
* **Requirement 3.1.2**: The user must be able to input an email address, which is a required field and must be in a valid email format.
* **Requirement 3.1.3**: The user may input an age, which is an optional field that must be between 0 and 120.

**3.2 Data Storage**

* **Requirement 3.2.1**: When the "Save" button is clicked, the application must store the entered username, email, and age in the browser's local storage.
* **Requirement 3.2.2**: The application must retrieve and display the stored data on page load.

**3.3 Form Reset**

* **Requirement 3.3.1**: When the "Reset" button is clicked, the application must clear all input fields and remove all stored data from local storage.
* **Requirement 3.3.2**: The application must clear the displayed data after resetting.

**4. Non-Functional Requirements**

**4.1 Performance Requirements**

* The application should retrieve data from local storage and display it without noticeable delay.

**4.2 Usability Requirements**

* The user interface must be intuitive and easy to navigate, with clear labels for all input fields and buttons.

**4.3 Security Requirements**

* Sensitive user data should not be transmitted over the network since the application relies on local storage.

**4.4 Compatibility Requirements**

* The application should be compatible with the latest versions of major web browsers.

**5. Interface Requirements**

**5.1 User Interface**

* The application will have a clean layout with:
  + A header containing navigation links.
  + A form with input fields for username, email, and age.
  + Buttons for saving and resetting data.
  + A section to display retrieved data.

**5.2 Error Handling**

* The application should display appropriate messages if the input data does not meet validation requirements (e.g., invalid email format).

**6. Testing Requirements**

The application must undergo testing for:

* Input validation
* Data storage and retrieval functionality
* Form reset functionality
* Usability across different browsers and devices

This SRS document outlines the key aspects and requirements of your form data storage application, ensuring a clear understanding of its purpose and functionality. Let me know if you need any modifications or additional sections!