System Architecture Document Web-Based Word Processor

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# Introduction

This document provides an overview of the system architecture for the web-based word processor developed for my final project. The application serves as a platform for creating, editing, and saving text documents.

# System Overview

The web-based word processor is designed to provide a user-friendly interface for text editing Key features of the system include text formatting options (e.g., bold, italic, underline), color customization, and the ability to save and retrieve documents.

# System Architecture

## Frontend

The frontend of the application is developed using HTML, CSS, and JavaScript. It includes a user-friendly text editor with a toolbar that enables users to format text and manage documents. Key frontend components include:

* **HTML (HyperText Markup Language):** Used to structure the user interface.
* **CSS (Cascading Style Sheets):** Provides styling for the application, including the toolbar and editor.
* **JavaScript:** Manages user interactions and implements functionality such as bold, italic, underline, and color selection.

## Backend

There is no backend involved in this application. The system relies on client-side scripting for text editing and document management.

# Key Components

* **Toolbar:** Provides buttons for formatting text, changing text color, saving documents, and opening files.
* **Text Editor:** The main content area where users create and edit text documents.
* **Color Picker**: Allows users to select text color.
* **Save Button:** Initiates the process of saving the document.
* **File Input:** Allows users to open and load existing documents.

# Data Storage

The system which I have developed does not implement server-side data storage. Documents are stored locally on the user's device and can be saved as text files.

# User Interface

The user interface is designed to be intuitive, providing a comfortable text editing experience. The toolbar allows users to apply formatting and save their work.

# Functionalities

Key functionalities include text formatting (bold, italic, underline), text color customization, saving documents, and opening existing files. The system provides a basic text editing environment.

# Deployment

The application can be deployed as a static website. Users can access it through a web browser without the need for server-side processing.

# Maintenance and Support

Maintenance includes ensuring the application remains compatible with modern web browsers and addressing any potential bugs or issues. Support for users may involve providing guidance on using the application effectively.

# Conclusion

This System Architecture Document provides an overview of the web-based word processor application developed for my final project. The application's frontend architecture, key components, data storage, user interface, functionalities, deployment, and maintenance aspects are detailed herein.