**Software Requirements Specification (SRS) for Notepad with Spell Check**

**1. Introduction**

1.1 Purpose

The purpose of this document is to specify the requirements for a Notepad application with integrated spell check functionality. This document is intended for use by developers, project managers, and stakeholders to ensure a clear understanding of the software's functionalities and constraints.

1.2 Scope

The Notepad application will provide basic text editing features along with spell check capabilities. It will support common text formatting options and the ability to save and load text files. The spell check feature will identify and suggest corrections for spelling errors.

1.3 Definitions, Acronyms, and Abbreviations

- Notepad: A simple text editor for creating and editing text files.

- Spell Check: A feature that identifies and suggests corrections for misspelled words.

- UI: User Interface.

**2. Overall Description**

2.1 Product Perspective

The Notepad with Spell Check is a standalone application that will run on Windows, macOS, and Linux operating systems. It will integrate spell check functionality to enhance the text editing experience.

2.2 Product Functions

- Text Editing: Create, edit, format, and save text files.

- Spell Check: Automatically check spelling as text is entered and provide suggestions for corrections.

- File Manage: Open, save, and close text files.

2.3 User Classes and Characteristics

- General Users: Individuals who need a simple text editor with basic functionality and spell check.

- Power Users: Users who require advanced text editing features and customization.

2.4 Operating Environment

- Operating Systems: Windows, macOS, Linux

- Hardware Requirements: Minimum hardware requirements to support text editing and spell check functionalities.

2.5 Design and Implementation Constraints

- Compatibility with existing file formats (e.g., .txt, .docx)

- Compliance with accessibility standards.

2.6 User Documentation

- User manual with instructions for using the text editor and spell check features.

- Online help and support resources.

**3. External Interface Requirements**

3.1 User Interfaces

- Main Window: A window for text entry, including menu bar, toolbar, and status bar.

- Spell Check Interface: An interface for displaying spelling errors and correction suggestions.

3.2 Hardware Interfaces

- Keyboard: For text entry and shortcut commands.

- Mouse: For navigation and selection.

3.3 Software Interfaces

- Operating System APIs: For file management and text rendering.

- Dictionary API: For spell check functionality.

**4. Functional Requirements**

4.1 Text Editing

- Users must be able to create a new text file.

- Users must be able to open existing text files.

- Users must be able to edit text within the file.

- Users must be able to format text (e.g., bold, italic, underline).

- Users must be able to save changes to the file.

4.2 Spell Check

- The application must automatically check spelling as text is entered.

- The application must highlight misspelled words.

- The application must provide a list of suggested corrections.

- The application must allow users to accept or ignore suggested corrections.

4.3 File Management

- Users must be able to save files in different formats (e.g., .txt).

- Users must be able to open files from various locations (e.g., local storage, network drives).

**5. Non-Functional Requirements**

5.1 Performance Requirements

- The application must respond to user input within 1 second.

- Spell check operations must be performed with minimal delay.

5.2 Reliability

- The application must handle large text files without crashing.

- The spell check feature must provide accurate and relevant suggestions.

5.3 Usability

- The application must have an intuitive user interface.

- Help documentation must be available for users unfamiliar with the spell check feature.

5.4 Security

- The application must handle user data securely and comply with privacy regulations.

**6. Other Requirements**

6.1 Compatibility

- The application must be compatible with various versions of Windows, macOS, and Linux.

6.2 Localization

- The application must support multiple languages for the spell check feature.