**SRS Document (Software Requirements Specification)**

1. **Introduction**

This document outlines the **Software Requirements Specification (SRS)** for the **Email Ticketing System** that will automate the process of detecting customer issues sent via email, including email attachments, and creating a ticket for the issue automatically.

1. **Purpose**

The purpose of this system is to:

* Automatically process incoming customer support emails.
* Detect the content and attachments.
* Create a corresponding ticket for the support team in the ticketing system
* Automate email parsing, ticket creation, and issue tracking.

1. **Scope**

This system will be able to:

* Connect to an **IMAP server** to fetch emails.
* Parse email content and attachments (e.g., **PDFs**, **Docs**).
* Detect specific keywords or issues described in the email body.
* Create a support ticket in a designated ticketing system.

The system will:

* Use **Python** and libraries such as imaplib, email, msal, PyPDF2, and python-docx.
* Implement basic error handling and logging.
* Be designed to scale with multiple incoming emails.

1. **Functional Requirements**

* **Email Fetching**: Connect to an **IMAP server** (e.g., **Outlook IMAP**).
* **Email Parsing**: Parse email content and handle attachments.
* **Ticket Creation**: Automatically create a ticket using the **Jira API** or **Zendesk API**.
* **Error Handling**: Provide feedback in case of failed login, connection errors, or failed ticket creation.
* **Logging**: Detailed logs for monitoring email processing and ticket creation.

1. **Non-Functional Requirements**

* **Performance**: The system should process emails efficiently and within a reasonable timeframe.
* **Scalability**: The system should be able to handle a large number of incoming emails.
* **Security**: Use secure methods for storing and handling credentials (e.g., environment variables, OAuth tokens).
* **Maintainability**: The system should be easy to update with new ticketing systems or additional email protocols.

1. **Assumptions and Dependencies**

* The IMAP server for the email account is properly configured.
* The ticketing system is accessible via API.
* The required Python libraries are installed and configured correctly.
* **Two-factor authentication (2FA)** is handled if applicable.