Functional Requirements Document (FRD) for Ticketing System

1. Introduction

1.1 Purpose

The purpose of this document is to outline the functional requirements for the Ticketing System, detailing its features, user roles, and interactions.

1.2 Scope

This document encompasses the functional aspects of the Ticketing System, focusing on the features provided to users and the interactions they can perform.

1.3 Document Conventions

- Bold Text: Indicates section headings.
- `Monospace Text:` Indicates code snippets or technical terms.

2. System Features

2.1 User Authentication and Authorization

Description: The system allows users to log in, sign up, and manage their accounts securely.

Functional Requirements:

- Requirement 2.1.1: Users must be able to log in with valid credentials.
- Requirement 2.1.2: New users must be able to create accounts.
- Requirement 2.1.3: Users must have different access levels based on roles (customer, support staff, admin).

2.2 Ticket Creation

Description: Users can create support tickets for their issues or inquiries.

Functional Requirements:

- Requirement 2.2.1: Users can create new tickets providing details about the issue.
- Requirement 2.2.2: Tickets must be timestamped upon creation.

- Requirement 2.2.3: Users can attach relevant files or images to the tickets.

2.3 Ticket Status Checking

Description: Users can check the status and progress of their submitted tickets.

Functional Requirements:

- Requirement 2.3.1: Users can view a list of their submitted tickets.
- Requirement 2.3.2: Users can click on a ticket to view its current status and any updates.

2.4 Support Team Interaction

Description: Support staff can view, respond to, and manage user tickets.

Functional Requirements:

- Requirement 2.4.1: Support staff can view a list of all submitted tickets.
- Requirement 2.4.2: Support staff can respond to tickets with comments or solutions.
- Requirement 2.4.3: Support staff can close tickets after resolving the user's issue.

3. User Roles and Responsibilities

3.1 Customer

Responsibilities:

- Create and submit new tickets.
- Check the status of submitted tickets.
- Provide accurate and detailed information when creating tickets.

3.2 Support Staff

Responsibilities:

- View and manage user-submitted tickets.
- Respond to tickets promptly and professionally.
- Escalate tickets to higher authorities if required.

3.3 Admin

Responsibilities:

- Manage user accounts and roles.
- Monitor the performance and efficiency of the support staff.
- Configure system settings and preferences.

4. User Interactions

4.1 User Interaction: Creating a Ticket

Description: Users create a new support ticket.

Steps:

- 1. Step 1: User logs in to the system.
- 2. Step 2: User navigates to the "Create Ticket" section.
- 3. Step 3: User fills out the ticket form, providing necessary details.
- 4. Step 4: User submits the ticket.
- *Expected Output:* The system displays a confirmation message, and the ticket is added to the user's ticket list.
- 4.2 User Interaction: Checking Ticket Status

Description: Users check the status of their submitted tickets.

Steps:

- 1. Step 1: User logs in to the system.
- 2. Step 2: User navigates to the "My Tickets" section.
- 3. Step 3: User selects a specific ticket to view its status.

Expected Output: The system displays the ticket status, including any support staff comments or resolutions.

4.3 Support Staff Interaction: Responding to a Ticket

Description: Support staff responds to a user's ticket.

Steps:

- 1. Step 1: Support staff logs in to the system.
- 2. Step 2: Support staff navigates to the "Ticket Queue" section.
- 3. Step 3: Support staff selects a ticket to respond to.
- 4. Step 4: Support staff adds a comment or solution to the ticket.

5. Step 5: Support staff marks the ticket as resolved if the issue is resolved.

Expected Output: The system updates the ticket status and notifies the user of the response.

5. Non-Functional Requirements

5.1 Performance

- The system should handle a minimum of 1000 simultaneous users without performance degradation.
- Response time for user interactions should be within 3 seconds.

5.2 Security

- User passwords must be securely stored using industry-standard encryption techniques.
- Access to sensitive data should be restricted based on user roles and permissions.

6. Glossary

- User: A person who interacts with the ticketing system.
- Support Staff: Employees responsible for addressing user tickets.
- Admin: System administrator with elevated privileges for system management.

7. Conclusion

This Functional Requirements Document outlines the features, user roles, and interactions of the Ticketing System. It serves as a guideline for system development, ensuring that the intended functionalities are implemented as specified.