SYSTEM ANALYSIS DOCUMENT

Customer Support Ticketing System

High-Level System Context & Data Flow

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1. Document Purpose

The purpose of this document is to provide a **high-level system analysis** of the Customer Support Ticketing System.

This document focuses on:

- system context and boundaries,
- involved systems and actors,
- high-level data flows,
- IT-relevant considerations supporting technical discussions.

This is **not a technical design** and does not include implementation details.

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2. System Overview

The Customer Support Ticketing System is an **internal application** designed to support customer support operations.

The system acts as a **central point** for:

- capturing customer issues,
- managing ticket lifecycle,
- supporting operational reporting.

It is primarily used by internal stakeholders and may be integrated with other enterprise systems in later phases.

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3. System Actors

Human Actors

- **Support Agent** – creates, updates, and closes tickets
- **Support Manager** – assigns tickets and reviews reports
- **Management** – consumes reporting outputs

External Systems (Future / Conceptual)

- **Email System** – source of incoming customer requests
- **Reporting / BI Tool** – consumption of ticket data for analytics

These systems are considered **out of scope for implementation**, but relevant for system context.

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4. System Boundary

The Ticketing System is responsible for:

- storing ticket-related data,
- managing ticket status and assignments,
- providing basic reporting data.

The system is **not responsible for**:

- customer communication channels,
- advanced analytics,
- external integrations (in this phase).

Clearly defining the system boundary helps avoid scope creep.

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5. High-Level Data Objects

The following core data objects are identified:

- **Ticket**
  - Ticket ID
  - Status
  - Priority
  - Creation and closure dates
- **User**
  - User ID
  - Role (Agent / Manager)
- **Report Data**
  - Ticket volume
  - Resolution time
  - Status distribution

This level of abstraction is sufficient for early system discussions.

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6. High-Level Data Flow Description

6.1 Ticket Creation Flow

1. Customer issue is received (external source)
2. Support Agent creates a ticket in the system
3. Ticket data is stored in the system database

6.2 Ticket Processing Flow

1. Ticket is assigned to a support agent
2. Ticket status is updated during work
3. Changes are persisted and visible to stakeholders

6.3 Reporting Flow

1. Ticket data is aggregated
2. Management accesses summary reports
3. Reports support operational decision-making

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7. Non-Functional Considerations (High-Level)

- **Usability:** system should support daily operational work
- **Availability:** system should be accessible during business hours
- **Data integrity:** ticket status and history must be reliable
- **Scalability:** solution should support future growth

These considerations guide future technical decisions.

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8. Assumptions and Constraints

Assumptions

- Users access the system through a web interface
- Data volume is manageable in the initial phase

Constraints

- No real-time integrations required in phase one
- Limited reporting scope

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9. Relationship to Other Artefacts

This system analysis:

- builds on the **Business Requirements Document (BRD)**,
- supports the **User Stories and Acceptance Criteria**,
- complements the **BPMN process model**.

Together, these documents form a **complete BA-level project view**.

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10. Summary

This document provides a structured, high-level system perspective that supports:

- business–IT alignment,
- scope clarity,
- informed technical discussions without overengineering.