# **Software Requirements Specification (SRS) Document**

# **Project: CDR Creation Application**

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### **1. Introduction**

### 1.1. Purpose

The purpose of this document is to provide a comprehensive overview of the requirements for the CDR Creation Application. It outlines the functionalities, interfaces, and constraints needed for the successful development and implementation of the application.

### 1.2. Scope

The CDR Creation Application is designed to allow users to create Call Detail Records (CDRs) based on the provided input parameters. The application will generate CDR files incorporating account information, usage ID, jurisdiction, rate period, date, duration, and other relevant data required for billing.

### 1.3. Document Conventions

* **SRS Document Structure**: This document follows a standard structure to present information in a clear and organized manner.

### 1.4. References

* **Author/Owner**: Vijay Ram
* **Project Name**: CDR Creation

### **2. System Overview**

### 2.1. System Description

The CDR Creation Application is a tool that allows users to input account information, usage ID, jurisdiction, rate period, date, duration, and other relevant data to generate CDR files. The application will provide a user interface for ease of use.

### 2.2. Overall Description

The application will be a full-stack solution. It will encompass the necessary functionalities to capture user input, process the data, and generate CDR files in accordance with the provided parameters.

### **3. Functional Requirements**

### 3.1. User Interfaces

The application shall provide a user interface that allows users to input the necessary data for CDR generation.

### 3.2. Use Cases

### **3.2.1. Create CDR**

* + **Description**: The user shall be able to create CDR files by providing input parameters including account information, usage ID, jurisdiction, rate period, date, duration, etc.
  + **Preconditions**: User authentication and authorization.
  + **Postconditions**: CDR file generated with provided information.

### 3.3. User Roles

* **Admin:** Authorized to create CDR files.

### **4. Non-Functional Requirements**

### 4.1. Usability

* The user interface shall be intuitive and easy to navigate.
* The application shall provide appropriate error messages and notifications to guide the user in case of incorrect input or system errors.

### 4.2. Reliability

* The application shall maintain a backup of generated CDR files for data integrity and recovery purposes.

**5. Technology Stack**

* UI Framework: Angular
* Middle-ware: Java Spring
* Back-end database: MySQL
* Server: Apache Tomcat
* Build tool: Maven

### **6. Other Requirements**

### 6.1. External Interfaces

* The application shall interact with the billing platform to fetch necessary data for CDR generation.
* The application may integrate with other systems for authentication and authorization purposes.

### 6.2. Legal and Compliance Requirements

* The application shall comply with all relevant legal and regulatory requirements regarding data privacy and security.

### 6.3. Testing Requirements

* The application shall undergo rigorous testing to ensure functionality, usability, and performance meet specified requirements.

This Software Requirements Specification (SRS) document provides a comprehensive overview of the requirements for the CDR Creation Application. It serves as a reference for the development team, ensuring the application is built to meet the specified functional and non-functional requirements.