# SOFTWARE REQUIREMENTS SPECIFICATION

For

#### **Customer Relationship Management system**

#### 1. Introduction

#### 1.1Purpose

The purpose of this document is to provide a comprehensive guide to the software requirements for the development of a robust and feature-rich Customer Relationship Management (CRM) system. This system aims to enhance customer interactions, streamline business processes, and ultimately contribute to the overall efficiency and success of the organization.

#### 1.3Scope

The CRM system will be an integrated, web-based solution designed to meet the diverse needs of our organization. It will encompass a wide range of features, including customer management, sales and opportunity tracking, communication logging, reporting, and analytics. The system's scope extends to user roles and permissions, ensuring secure and controlled access to sensitive customer data.

1.4 Definitions, Acronyms, and Abbreviations

CRM: Customer Relationship Management

UI: User Interface

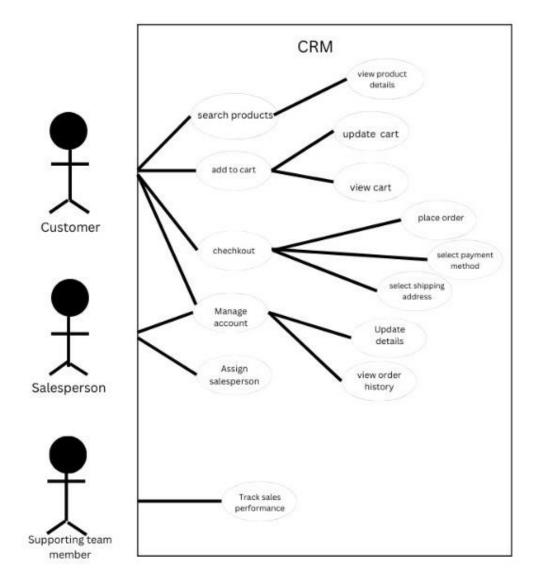
API: Application Programming Interface

SRS: Software Requirements Specification

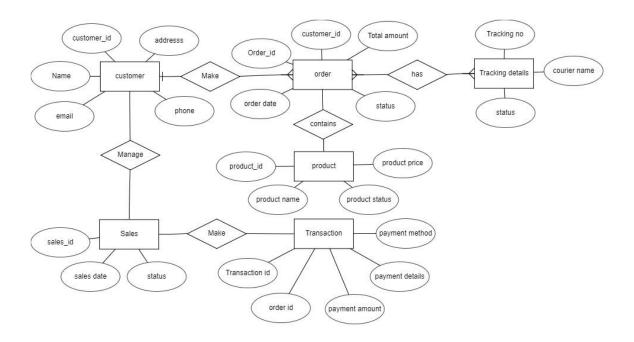
## **2 Overall Descriptions**

## 2.1 Product Perspective

# Use Case Diagram of Customer Relationship Management System



2.2 Product Function Entity Relationship Diagram of Customer Management System



#### 2.3 User Classes and Characteristics:

In a Customer Relationship Management (CRM) system, various user classes contribute to the efficient management and optimization of customer interactions. Administrators serve as the system overseers, wielding control over configurations, permissions, and data security. Sales representatives leverage the CRM to meticulously update customer information, track sales opportunities, and generate insightful performance reports. Customer support representatives engage with customers directly, managing inquiries and resolving issues, while documenting interactions for future reference. Marketing professionals utilize CRM data to plan and execute targeted campaigns, analyze performance, and generate leads. Each user class plays a distinctive role, collectively fostering a comprehensive and collaborative approach to customer relationship management within the system.

#### 2.4 Operating Environment:

the operating environment for a CRM system in a dress company involves selecting and implementing the right technology, aligning it with the business strategy and culture, and designing processes that support the customer journey. It also involves training employees, collecting and analyzing customer data, ensuring data security, collaborating with suppliers and partners, and continuously monitoring and optimizing performance. By creating an optimal operating environment for CRM, a dress company can improve customer satisfaction, loyalty, and revenue.

#### 2.5 Assumptions:

- 1. The dress retailer has a clear understanding of its target customers, including their preferences, needs, and behaviors. 2. The dress retailer has a customer-centric culture that prioritizes delivering exceptional customer experiences.
- 3. The dress retailer has aligned business processes that integrate CRM technology with other applications and systems.
- 4. The dress retailer empowers its employees with the necessary training and resources to deliver exceptional customer experiences.
- 5. The dress retailer fosters collaborative partnerships with suppliers, manufacturers, and logistics providers to co-create value and deliver mutual benefits.
- 6. The dress retailer has a culture of continuous improvement that fosters experimentation, innovation, and agility.

#### **Dependencies:**

- 1. Selection and implementation of the right CRM technology to meet the specific needs of the dress retailer.
- 2. Alignment of CRM technology with the overall business strategy and culture.
- 3. Design of processes that support the customer journey and optimize performance.

- 4. Training of employees on how to use the CRM system effectively.
- 5. Collection and analysis of customer data to inform decision-making and improve performance.

#### 2.6 Requirement:

Requirement Software Configuration:- This software package is developed using java as front end which is supported by sun micro system. Microsoft SQL Server as the back end to store the database. Operating System: Windows NT, windows 98, Windows XP Language: Java Runtime Environment, Net beans 7.0.1 (front end) Database: MS SQL Server (back end) Hardware Configuration:- Processor: Pentium(R)Dual-core CPU Hard Disk: 40GB RAM: 256 MB or more

#### 2.7 Data requirements:

Data requirements for a customer relationship database for dress include storing customer information such as name, contact details, and purchase history. Additionally, it should track dress preferences, sizes, and style preferences.

The database should also have the capability to generate reports on customer trends and personalized recommendations.

#### 3 External Interface Requirement:

3.1 External Interface Requirement for customer relationship management system for dress:

In order to effectively manage customer relationships and enhance the dress shopping experience, the customer relationship database for dress should meet certain data requirements. These requirements encompass various aspects of customer information, dress preferences, and reporting capabilities.

First and foremost, the database should be able to store essential customer information such as names, contact details, and purchase history. This will enable the CRM system to have a comprehensive understanding of each customer, facilitating personalized interactions and targeted marketing strategies.

Furthermore, the database should also capture dress preferences, sizes, and style preferences. By storing this information, the CRM system can provide tailored recommendations and suggestions to customers, increasing their satisfaction and loyalty.

In addition to storing customer data, the database should possess the capability to generate reports on customer trends. This will allow businesses to gain valuable insights into customer behavior, enabling them to make informed decisions and improve their overall dress offerings.

Moreover, the CRM system should be able to provide personalized recommendations based on the customer's purchase history and preferences. By analyzing the data stored in the database, the system can suggest relevant dresses and accessories, creating a more personalized and enjoyable shopping experience for customers.

#### **4 System Features:**

- 1. Storage of essential customer information such as names, contact details, and purchase history.
- 2. 2. Capture of dress preferences, sizes, and style preferences.
- 3. 3. Generation of reports on customer trends.
- 4. 4. Personalized recommendations based on purchase history and preferences.

These features will enable businesses to effectively manage customer relationships and enhance the dress shopping experience by providing personalized interactions, tailored recommendations, and valuable insights into customer behavior.

#### 1. Performance:

- The system should respond to user interactions within a maximum of X seconds to ensure a seamless user experience.
- It should be able to handle a minimum of X concurrent users without a significant decrease in performance.

#### 2. Scalability:

• The system should be scalable to accommodate an increase in the number of users, customer data, and transactions over time.

#### 3. Reliability:

- The system should be available and operational at least X% of the time to ensure uninterrupted service.
- It should have a backup and recovery mechanism in place to prevent data loss in case of system failures.

#### 4. Security:

- Customer data, including personal and payment information, should be encrypted during transmission and storage.
- The system should have user authentication and authorization mechanisms to control access to sensitive information.

#### **User Requirement:**

A Customer Relationship Management (CRM) system designed for a dress business must prioritize user needs to enhance customer interactions and streamline business processes. The system should provide secure user authentication with role-based access, ensuring that sales representatives, managers, and other personnel have appropriate permissions. Users should easily manage customer profiles, update product information, and track orders seamlessly within the CRM interface. Effective communication features, including logging interactions and scheduling follow-ups, are paramount for nurturing customer relationships.

#### **Other Requirements:**

In addition to user-specific requirements, a comprehensive Customer Relationship Management (CRM) system for a dress business should address various other functional and technical aspects. The system should be capable of seamlessly integrating with existing business processes and third-party applications, ensuring a cohesive and interconnected operational environment. This integration extends to e-commerce platforms, enabling real-time updates on inventory and customer data.

#### **5.1 Business Rules:**

A business rule is anything that captures and implements business policies and practices. A rule can enforce business policy, make a decision, or infer new data from existing data. This includes the rules and regulations that the System users should abide by. This includes the cost of the project and the discount offers provided. The users should avoid illegal rules and protocols. Neither admin nor member should cross the rules and regulations.

#### 6 Appendix A:

Admin, Abbreviation, Acronym, Assumptions; B: Books, Business rules; C: Class, Client, Conventions; D: Data requirement, Dependencies; G: GUI; K: Key; L: Library, Librarian; M: Member; N: Non-functional Requirement; O: Operating environment; P: Performance, Perspective, Purpose; R: Requirement, Requirement attributes; S: Safety, Scope, Security, System features; U: User, User class and characteristics, User requirement;

# 6.1 Glossary The following are the list of conventions and acronyms used in this document and the project as well:

¬ Administrator: A login id representing a user with user administration privileges to the software ¬ User: A general login id assigned to most users ¬ Client: Intended users for the software ¬ SQL: Structured Query Language; used to retrieve information from a database ¬ SQL Server: A server used to store data in an organized format ¬ Layer: Represents a section of the project ¬ User Interface Layer: The section of the assignment referring to what the user interacts with directly ¬ Application Logic Layer: The section of the assignment referring to the Web Server. This is where all computations are completed ¬ Data Storage Layer: The section of the assignment referring to where all data is recorded ¬ Use Case: A broad level diagram of the project showing a basic overview ¬ Class diagram: It is a type of static structure diagram that describes the structure of a system by showing the system's cases, their attributes, and the relationships between the classes ¬ Interface: Something used to communicate across different mediums ¬ Unique Key: Used to differentiate entries in a database

#### 6.2 Class Diagram:

In the context of a Customer Relationship Database System designed for a dress business, the class diagram serves as a visual blueprint depicting the essential entities and their interconnections. At the core of the system is the "Customer" class, capturing vital attributes such as CustomerID, FirstName, LastName, Email, Phone, and Address. This class encapsulates methods like GetFullName(), enabling the retrieval of a customer's full name, and UpdateContactInfo() to facilitate the modification of contact details. Additionally, the PlaceOrder() method is crucial for initiating customer transactions.

