

## Project Design Phase-II

### Solution Requirements (Functional & Non-functional)

Date	29 October 2025
Team ID	NM2025TMID06238
Project Name	CRM Application for Jewel Management - (Developer)
Maximum Marks	4 Marks

### Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub-Requirement (User-Level / Feature Detail)
FR-01	Customer Management	FR-01.1: The system shall allow users to create new customer records with details such as Name, Email, Phone, and Address.  FR-01.2: The system shall allow editing and deletion of existing customer records.  FR-01.3: The system shall automatically link customer details with their Orders and Billings.
FR-02	Inventory (Item) Management	FR-02.1: The system shall allow the admin to add, edit, or delete jewelry items.  FR-02.2: Each item record shall contain Item Type, Ornament Name, Weight, Metal Type, and Price.

<b>FR No.</b>	<b>Functional Requirement (Epic)</b>	<b>Sub-Requirement (User-Level / Feature Detail)</b>
		FR-02.3: The system shall automatically update inventory levels after an order or billing.
<b>FR-03</b>	<b>Order Management</b>	<p>FR-03.1: The system shall allow users to create customer orders with one or more jewelry items.</p> <p>FR-03.2: The system shall calculate the total amount automatically based on selected items and quantity.</p>
<b>FR-04</b>	<b>Billing Management</b>	<p>FR-04.1: The system shall automatically generate a Billing record when an order is created or updated.</p> <p>FR-04.2: The Billing record shall include Invoice Number, Billing Date, Amount, and Status.</p> <p>FR-04.3: The system shall allow users to view, edit, or cancel Billing records.</p>
<b>FR-05</b>	<b>Payment Processing</b>	<p>FR-05.1: The system shall integrate with a payment gateway to process online payments.</p> <p>FR-05.2: The system shall record payment transactions with Transaction ID, Date, and Amount.</p>
<b>FR-06</b>	<b>Email &amp; Notification Automation</b>	<p>FR-06.1: The system shall trigger an email notification when a Billing record is created or updated.</p> <p>FR-06.2: The email body shall include Item Type, Ornament, Weight, and Amount using a text template.</p>

## Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

NFR No.	Non-Functional Requirement	Description
NFR-01	Performance	The system shall respond to user actions (save, update, view) within <b>3 seconds</b> under normal load conditions.
NFR-02	Scalability	The system shall support at least <b>100 concurrent users</b> without significant performance degradation and allow future scalability through modular architecture.
NFR-03	Reliability	The system shall ensure that all transactions (Orders, Billings, Payments) are <b>error-free and consistent</b> , with rollback mechanisms in case of system failure.
NFR-04	Security	The system shall enforce <b>role-based access control</b> and encrypt sensitive data both at rest and in transit using <b>HTTPS / SSL</b> protocols.
NFR-05	Usability	The user interface shall be <b>responsive</b> , intuitive, and consistent across desktop and mobile devices, ensuring ease of navigation and input validation.
NFR-06	Availability	The system shall maintain <b>99.5% uptime</b> , excluding scheduled maintenance, and provide automatic recovery from critical failures.