A CRM APPLICATION FOR WHOLESALE RICE MILL

A Detailed Document of my project

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ABSTRACT

1. **Introduction**

   a. **ProjectTitle**: CRM Application for Wholesale Rice Mill
   b. **Objective**: To streamline the wholesale rice mill's customer relationship management, enhancingsales, service efficiency, and customer engagement through a Salesforce-based CRM system.
   c. Technology Used: Salesforce CRM, Apex, Visualforce, Lightning Web Components (LWC), Data Loader, Reports, and Dashboards.

2. **Problem Statement**

   a. Wholesale rice mills often face challenges in managing customer data, sales processes, order tracking, inventory management, and customer service due to the lack of centralized systems. The need for better visibility and customer interaction prompted the development of a CRM solution tailored for this industry.

3. **Project Scope**

   a. Develop a customized Salesforce CRM application for wholesale rice mill operations.
   b. Enable efficient customer management, ordertracking, inventory control, and sales forecasting.
   c. Integrate sales, service, and marketing processesfor smooth operations.
   d. Automate repetitive tasks to improveefficiency.
   e. Provide detailedreporting and dashboards to track business performance.

4. **Requirements Analysis**

   a. Functional Requirements:

      i. Customer Database: Capture customer information, interaction history, and preferences.
      ii. Order Management: Create and track orders, deliveryschedules, and payment statuses.
      iii. Inventory Management: Manage stock levels and providealerts when inventory is low.
      iv. Sales Automation: Track sales opportunities and follow up on leads automatically.

      v. Service Management: Handle customer inquiries, complaints, and support tickets.
      vi. Reporting and Analytics: Providereal-time insights on sales trends, inventory levels, and customer satisfaction.

   b. Non-Functional Requirements:

      v. Security: Ensure data privacyand access control.

      vi.   Scalability: Supportthe expansion of the rice mill with new customers and larger inventories.

     vii.   Usability: Intuitive interface for non-technical users.

5. **Design and Development**
   a. Data Model:
      i. Customer Object:Stores customer detailssuch as name, address, contact info, etc.
      ii. Order Object:Tracks order detailslike product type, quantity, and delivery status.
      iii. Inventory Object:Monitors the rice mill's stock levels and product availability.
      iv. Opportunity Object:Manages the sales pipeline, trackingleads and closing deals.
   b. Business Logic:
      i. Automation of tasks like lead assignment, order creation, and inventory reordering using   Salesforce automation tools like Workflow Rules, Process Builder, and Flows.
   c. User Interface:
      i. Customized layoutsusing Salesforce LightningApp Builder.
      ii. Lightning Web Components (LWC) for a user-friendly and modern interface.
   d. Integration:
      i. Data integration with third-party systemssuch as accounting and payment platforms.
      ii. API integration for external customerportals and supplier management.

6. **Implementation Plan**
   a. Phase 1: Requirement Gatheringand Business Analysis.
   b. Phase 2: Design and Customization of Salesforce Objects,Fields, and Relationships.
   c. Phase 3: Development of Apex Triggers,Validation Rules, and Workflows.
   d. Phase 4: UI Designwith LWC and Visualforce.

   e. Phase 5: Integration with External Systems.
   f. Phase 6: Testing, Bug Fixing, and Data Migration.
   g. Phase 7: Training Users and Final Deployment.

7. **Testing**
   a. Unit Testing:Ensure that each component (Apex classes, LWC, etc.) functions correctly.
   b. System Testing:Verify that the entire CRM system worksas expected.
   c. User Acceptance Testing (UAT): Allow end-users to validate the system against their requirements and business needs.

8. **Deployment**
   a. Deployment of the CRM application to the production environment using Salesforce's Change Sets or Salesforce DX.
   b. Training providedto end-users (sales teams, customerservice representatives, and managers) on how to use the CRM system effectively.

9. **Post-Deployment Support**
   a. Maintenance: Provideongoing support for bug fixes, performance optimization, and new feature requests.
   b. User Feedback and Iteration: Gather user feedback and continuously improvethe system by adding more custom featuresor enhancements.

10. **Results and Benefits**
    a. Improved CustomerManagement: A centralized customer database providing easy access to   customer details, order history, and communication logs.
    b. Increased Sales Efficiency: Automated lead tracking, order management, and opportunity handlingimproved sales performance.
    c. Better Inventory Management: Real-time monitoring of stock levels, ensuringoptimal inventory controland timely reorders.
    d. Enhanced CustomerService: Faster issue resolution with automated case management and improved service response times.
    e. Data-Driven Decisions: Detailed reports and dashboards providing insights into sales trends, inventory status, and customer behavior.

11. **Challenges**

    a. Resistance to adopting new technology from staff used to manual processes.
    b. Data migration complexities from legacysystems to Salesforce.
    c. Customization of Salesforce objectsto align with specific business needs of the wholesale rice mill industry.

12. **Conclusion**
    a. The CRM application for the wholesale rice mill was successfully developed and implemented on the Salesforce platform. It has improved operational efficiency, enhanced customer relationships, and provided management with the insights needed   to   make   informed   decisions.   This project demonstrates how a tailored CRM solution can have a significant impact on business outcomes.

<u>INDEX</u>

INTRODUCTION:

The Rice Mill CRM Application is a comprehensive solution designed to
streamline and simplify how much rice per day,howmany were sold that
rice and which type of rice all reports send to owners daily wise. It leverages the power of
customer   relationship management (CRM) to
eenhance customer experiences, optimizestore operations, and improve overall efficiency in the rice mill
factory. This project aims to develop a user-friendly and feature-rich application that addresses the specific
needs of a rice mill factory.

TASK-1:Creating the Developer AccountAnd Its Activation...

TASK-2:Creating the objects for suppliers,consumers,rice mill and ricedetails.
 Salesforce objects are database tables that permit you to store data
 that is specificto an organization. What are the types of Salesforce objects

 Salesforce objects are of two types:

1. Standard Objects: Standard objects are the kind of objects that are provided by
   salesforce.com such as users, contracts, reports, dashboards, etc.
2. Custom Objects: Custom objects are those objects that are created by users. They supply
   information that is unique and essential to their organization. They are the heart of any
   application and provide a structure for sharing data.

TASK-3:Creating the tabs For Consumer,Supplier,Rice mill and Rice Details
A tab is like a user interfacethat is used to build records for objects and to view the records in the objects
Types of Tab:

1. Custom Tabs

2. Web Tabs

3. Visualforce Tabs

4. Lightning Component Tabs

5. Lightning Page Tabs

TASK-4:Create a Lightning App Builder

An app is a collection of items that work together to serve a particular function. In Lightning Experience,
Lightning apps give your users access to sets of objects, tabs, and other items all in one convenient bundle in
the navigation bar.
Lightning apps let you brand your apps with a custom color and logo. You can even include a utility bar and
Lightning page tabs in your Lightning app. Members of your org can work more efficiently by easily switching
betweenapps.
TASK-5:Create fields for Consumer, Supplier, ricemill and rice details When we talk about Salesforce,
Fields represent the data storedin the
columns of a relational database. It can also hold any valuable information that you require for a specific
object. Hence, the overall searching, deletion, and editing of the records become simpler and quicker.
Types of Fields

1. Standard Fields

2. Custom Fields

Standard Fields:

As   the   name   suggests,   the   Standard   Fields   are   the   predefined   fields
in Salesforce that perform a standard task. The main point is that you can't simply delete a Standard

Field until it is a non-required standard field. Otherwise, users have the option to delete them at any point from the application freely. Moreover, we have some fields that you will find common in every Salesforce application. They are,

1. Created By

2. Owner

3. Last Modified

4. Field Made During objectCreation

Custom Fields:

On the other side of the coin, Custom Fields are highly flexible, and users can change them according to requirements. Moreover, each organizer or company can use them if necessary. It means you need not always include them in the records, unlike Standard fields.Hence, the final decisiondepends on the user, and he can add/remove Custom Fields of any given form.

1. Creating Validation rules for objects

Improve the quality of your data using validation rules. Validation rules verify that the data a user enters in a record meets the standards you specify before the user can save the record. A
validation rule can containa formula or expression that evaluates the data in one or more fields and returns a value of "True" or "False".
Validation rulesalso include an error messageto display to the user
when the rule returns a value of "True" due to an invalid value.

TASK-6:Creating the page Layout for objects

Page Layout in Salesforce allows us to customize the design and organize detail and edit pages of records in Salesforce. Page layouts can be used to control the appearance of fields, related lists, and custom links on standard and custom objects' detail and edit pages.

TASK-7:Creating Profilesof Owner, worker,and Employee

A profile is a group/collection of settings and permissions that define what a user can do in salesforce. Profile controls "Object permissions, Field permissions, User permissions, Tab settings, App settings, Apex class access, Visualforce page access, Page layouts,
Record Types, Login hours & Login IP ranges.You can define profiles by the user's job function. For example System Administrator, Developer, Sales Representative.

Types of profiles in salesforce

    a. Standard profiles:

By defaultsalesforce provides belowstandard profiles.

    i. Contract Manager

    ii. Read Only

    iii. Marketing User

    iv. Solutions Manager

    v. Standard User

    vi. System Administrator.

We cannot deleted standardones

Each of these standard ones includes a default set of permissions for all of the standard objects available on the platform.

b. Custom Profiles:

Custom ones defined by us.

They can be deleted if there are no users assigned with that particular one.

TASK-8:Creating Roles

A role in Salesforce defines a user's visibility access at the record level. Roles may be used to specify the types of access that people in your Salesforce organization can have to data. Simply put, it describes what a user could see within the Salesforce organization.

TASK-9:Creating Users

A user is anyone who logs in to Salesforce. Users are employees at your company, such as sales reps, managers, and IT specialists, who need access to the company'srecords. Every user in Salesforce has a user account. The user account identifies the user, and the user account settings determine what features and records the user can access.

TASK-10: Creating OWD settings

A permission set is a collection of settings and permissions that give users access to various tools and functions. Permission sets extend users' functional access without changing their profiles and are the recommended way to manage your users' permissions.

TASK-11.Creating the app reportsAnd Dashboards

Dashboardshelp you visuallyunderstand changing business conditions so you can make decisions based on the real-time data you've gathered with reports. Use dashboards to help users identify trends, sort out quantities, and measure the impact of their activities. Before building, reading, and sharing dashboards, review these dashboard basics.

TASK-12:Creating apex Class and apex Triggers

Apex is a strongly typed, object-oriented programming language that allows developers to execute flow and transaction control statements on the Lightning platform server in conjunction with calls to the Lightning Platform? API. Using syntax that looks like Java and acts like database stored procedures, Apex enables developers to add business logic to most systemevents, including buttonclicks, related record updates, and Visualforce pages. Apex code can be initiated by Web service requests and from triggers on objects.
It is as similar as java i.e, it also supports OOP(Object oriented programming) like Classes, objects, methods.