

**A CRM APPLICATION FOR WHOLESALE**

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**PROJECT REPORT**

Submitted by

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**BONAFIDE CERTIFICATE**

Certified that this project report **“Application to make the gas filling station**

**easy using CRM”** is the bonafide work of **“NITHEESH KUMAR V (620120104070), SANJAY B(620120104082), VIGNESH C(620120104108), MOORTHI P(620120104065) ”** who carried out the project work under my supervision.

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**CHAPTER-1**

**PROJECT SPECIFICATION**

* 1. **Project Goal**

The primary goal of this project is to streamline operations at our gas filling station by implementing a CRM system to::

* + Enhance customer service and experience by offering personalized services, special promotions, and improved communication.
  + Optimize inventory management to prevent shortages and surpluses, thereby reducing operational costs and improving product availability.
  + Increase overall operational efficiency through automated sales processes and better task management.
  1. **Project Scope**

This project encompasses a comprehensive range of activities. It includes the assessment of our current operational challenges and customer service deficiencies. We will explore and evaluate various CRM solutions to select the one best suited to our gas station's unique requirements and budget. The selected CRM will be customized to meet our specific needs, encompassing data fields, workflows, and reporting capabilities:

* Needs Assessment: Identifying and documenting current operational challenges and customer service deficiencies.
* CRM Selection: Thoroughly researching and evaluating CRM solutions to find the best fit for our station's needs and budget.
* Customization: Configuring the selected CRM system to meet the specific requirements of our gas filling station, including data fields, workflows, and reporting.
* Data Migration: Migrating existing customer data into the CRM system and ensuring data accuracy.
* Staff Training: Providing comprehensive training to station staff to ensure they are proficient in using the CRM system.
* Change Management: Developing a change management plan to address any potential resistance to the new system and to promote user adoption.
* Ongoing Support and Maintenance: Implementing a plan for continuous support, system maintenance, and potential future enhancements.
  1. **Problem Statement Definition**

|  |  |  |  |
| --- | --- | --- | --- |
| **Problem for** | **Trying to** | **But** | **Which makes** |
| **Employee** | I'm an employee at our gas filling station, and I'm striving to effectively manage customer records, streamline fuel orders, and implement loyalty programs for our diverse customer base. | However, the manual and time-intensive nature of these tasks, coupled with the potential for errors, has created operational challenges. | This inefficiency not only makes our tasks overwhelming but also hinders our ability to provide a seamless and efficient customer experience at the station. |

* 1. **Empathy Map Canvas**

An empathy map is a simple, easy-to-digest visual that captures knowledge about a user’s behavior and attitudes.

It is a useful tool to helps teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it.

The exercise of creating the map helps participants consider things from the user’s perspective along with his or her goals and challenges.

Continuing from the previous section, the empathy map canvas will provide a more comprehensive insight into the needs, emotions, pain points, and goals of customers, employees, and stakeholders. It will also explore potential solutions to address their concerns effectively.

They say that inventory management could be more efficient.

They anticipate that automated processes will reduce errors and save time.

Staff thinks that a CRM system will help streamline operation

They believe that centralized customer data will enhance customer service.

They suggest that automation can improve sales processes.

Employees express the need for better customer data management.

They are frustrated with manual tasks and errors.

Staff feels the current processes are overwhelming.

Current actions are time-consuming and error-prone.

Staff manually manage customer data and inventory.

* They are motivated to improve customer service and efficiency.

They use paper records for sales processes.

* 1. **Empathy Map Canvas**

|  |  |  |
| --- | --- | --- |
| **S. No** | **Parameter** | **Description** |
| 1. | **Says** | In this section, you document what the stakeholder says. This includes their statements, comments, and feedback related to the project. It helps you understand their verbal expressions and concerns. |
| 2. | **Thinks** | Here, you explore what the stakeholder might be thinking. This includes their thoughts, concerns, or goals that may not be openly expressed. It helps uncover their underlying motivations. |
| 3. | **Pains** | Document the pain points or challenges that the stakeholder experiences. This could include frustrations, obstacles, or difficulties they encounter in the context of the project. |
| 4. | **Gains** | This aspect highlights the potential benefits, desires, and goals that individuals or groups hope to achieve or experience as a result of the situation or project. |
| 5.. | **Feels** | This parameter addresses the stakeholder's emotional state. It helps you identify their emotions, such as joy, frustration, or anxiety, related to the project or situation. |
| 6. | **Does** | This section describes the actions or behaviors of the stakeholder. It helps you understand their practical actions, routines, or interactions related to the project. |

* 1. **Functional & Technical Requirements**
     1. Functional Requirements

|  |  |
| --- | --- |
| **Requirement** | **Description** |
| **Customer Data Management** | The CRM system should allow for the centralized management of customer information, including contact details, purchase history, and preferences. |
| **Personalized Customer Service** | The system should support the ability to create and manage customer profiles, enabling us to provide personalized services, special promotions, and targeted offers. |
| **Inventory Management** | Real-time inventory tracking and automated restocking processes should be integrated to optimize inventory management. This should prevent shortages, reduce operational disruptions, and control inventory costs.. |
| **Automated Sales Processes** | The CRM system should facilitate automated sales processes, including order processing and payment, to ensure a smooth and error-free customer experience. |
| **Reporting and Analytics:** | Comprehensive reporting and data analytics features should be available to provide insights into customer behavior, sales trends, and inventory management. This will support data-driven decision-making. |
| **Integration Capabilities** | The CRM system should offer integration options with other systems used at the gas filling station, including accounting and financial software. Seamless integration will ensure a cohesive operational environment. |

* + 1. Technical Requirements

|  |  |
| --- | --- |
| **Requirement** | **Description** |
| **Scalability:** | The CRM system should be scalable to accommodate the potential growth of our business. It should handle an increasing volume of customer data and transactions without performance degradation. |
| **Data Security** | Robust data security measures, such as encryption and access controls, should be in place to protect sensitive customer information and transaction data. |
| **Data Backup and Recovery** | The CRM system should have a reliable data backup and recovery mechanism to safeguard against data loss in case of system failures or errors. |
| **Cloud-Based or On-Premises** | The choice between a cloud-based or on-premises CRM system should be evaluated based on our specific infrastructure and data management requirements. |
| **User-Friendly Interface** | The system should feature a user-friendly interface to ensure ease of use and rapid adoption by our staff.. |
| **Technical Support and Updates** | Ongoing technical support, system maintenance, and regular updates should be provided to keep the CRM system up to date and secure. |

**1.7 Project Road Map**

1.7.1 Data Flow Diagram

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.­

1.7.2 Technical Architecture

**CHAPTER-2**

**PREPARATION DATA MODELING**

**2.1 Salesforce Developer Org**

In Salesforce, a Developer Sign Up or Developer Edition is a special type of Salesforce environment that is primarily used for development, testing, and learning purposes.

**Account Activation**

Activation tracks information about devices from which users have verified their identity.

**2.2 Object Creation**

Salesforce objects are database tables that permit you to store data that is specific to an organization. Salesforce objects are of two types: Standard Objects: Standard objects are the kind of objects that are provided by salesforce.com such as users, contracts, reports, dashboards, etc. Custom objects: Supplier Object,Rice Mill, Others.

**Create the Supplier Object &Rice Mill Object:**

**Create the Others Object**

**2.3 The Lightning App**

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.

**To create a lightning app page**

**Fields:**

When we talk about Salesforce, Fields represent the data stored in 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 simple.

**Page Layout:**

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.

**CHAPTER-3**

**USERS & DATA SECURITY**

**3.1 Profile**

A profile is a group/collection of settings and permissions that define what a user can do in salesforce. A 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.

**Creating a Profiles**

**3.2 Role & Role Hierarchy:**

Salesforce roles are record-level access controls that define what data a user can see in Salesforce.

**Creating a Role**

**3.3 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's records.

**Creating A Users:**

**3.4 User Adoption & Approval**

It is the interaction with database and their records.

**Create Permission Sets:**

**CHAPTER-4**

**AUTOMATION**

**4.1 APEX:**

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 system events, including button clicks, related record updates, and Visualforce pages. Apex code can be initiated by Web service requests and from triggers on objects.

**CHAPTER-5**

**REPORTS & DASHBOARD**

**5.1 Reports**

A Salesforce report is a list of data generated based on filter criteria. Salesforce Reports helped us predict trends and gives us the advantage to increase profits. The report builder provides a drag-and-drop interface to easily build and customize your reports.

**View Report**

**5.2 Dashboard**

A dashboard provides an interactive visual display of key metrics and trends. Multiple dashboard components can be shown together on a single dashboard layout, creating rich visual displays of multiple reports that have a common theme.

View Dashboard

**CHAPTER-6**

**CONCLUSION**

Implementing a Customer Relationship Management (CRM) system for result tracking of a candidate's internal marks can be a transformative and highly beneficial step for educational institutions. In conclusion, this technology-driven approach offers numerous advantages for both educational institutions and candidates alike.

First and foremost, a CRM system streamlines the process of tracking a candidate's internal marks. It centralizes and organizes data, making it easily accessible to relevant stakeholders, such as instructors, administrators, and candidates themselves. This centralized system enhances efficiency, reduces administrative burdens, and minimizes errors, ensuring the accuracy of mark tracking.

Moreover, a CRM system provides valuable insights into a candidate's academic journey. It allows educational institutions to analyze data over time, identify trends, and detect areas where additional support may be required. This data-driven approach can help educators tailor their teaching methods to meet individual candidate needs, ultimately improving the learning experience.

For candidates, CRM implementation enhances transparency and engagement. They can access their internal marks, performance feedback, and progress reports in real-time. This access empowers candidates to take ownership of their education, set goals, and track their performance, fostering a sense of responsibility and accountability.

Additionally, a CRM system supports effective communication between educational institutions and candidates. Notifications, alerts, and reminders can be automated, ensuring candidates stay informed about important deadlines, examinations, and academic events. Open lines of communication also allow candidates to seek assistance when needed, fostering a supportive learning environment.

In conclusion, implementing a CRM system for result tracking in an educational setting is a strategic move that benefits educational institutions and candidates alike. It streamlines administrative processes, provides valuable insights into academic performance, enhances transparency and engagement, and supports effective communication. By leveraging this technology, educational institutions can improve the overall learning experience, helping candidates succeed in their academic journey.

**CHAPTER-7**

**PROJECT DEMONSTRATION**

**GITHUB LINK:**

<https://github.com/9786643/Nitheeshkumar_BE0BC790571D73F87B34A349C9B8F18A>

**DEMO LINK:**

<https://drive.google.com/file/d/1m9XeQMs8H3gAn4N5jdCiW2oEBFnbpbuB/view?usp=drivesdk>