Customer Relationship Administration

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Abstract—This research project is made to make easier for professional to create invoicing, filing and managing client with one click. On other side, the client can view all things which make the process transparent and easier. Company software where they can make invoice with taxation. The invoice will include the GST rate as per the project. We can send invoice via email or download the pdf or send the link to the client for digital payment (it includes digital payment gateway) Once the project is completed. We can upload the files on the software and client can have access to them throughout the year with their login credit anials. Client can download the files or even delete it. Client can open up the ticket for support on this software and easily communicate with the support them. Everything will be recorded in real time. Admin can track the project in real time and allocate the project to employee or department or the team as per the urgency defined by the client.

Keywords - customer relationship administration, time saving, my sql , data base, big data analytics

I. INTRODUCTION

There are many CRM software available in market which can be used by paying their fees. We wanted to do something different. We invented this CRM software for services industries like Advocate, CA, Tax professionals, Accountants, Advertising agency, Software companies and etc. This normal CRM was extended to upload and download the files as per client's account. User can access their files anytime (Similar to digital locker).Of-course client can make payment online via CRM but another unique feature is client can view their project progress on this crm and can upload requirement document to make the project more transparent and easier.The professional who use this CRM can also make their GST calculation easy.

Here the creation of invoicing has been made very easy to use. HR module has also been added in this software. So that professional can allocate the work in real time to their team members. They can see how many total project is completed by their each team member and even they have completed in given timeline.

II. LITERATURE REVIEW

Business Card Scanner Systems, leveraging Optical Character Recognition (OCR) technology, have emerged as valuable tools in managing and organizing business contacts. The following literature review provides in-sights into key aspects and findings regarding the implementation and impact of Business Card Scanner Systems:[2]

A. Big data analytic techniques:

In this research we have identified major issues in Big Data Analytics in Customer Relationship Management such as storage issues, quality issues, process issues and cost issues. And discussed how we can use Big Data Analytics in Customer Relationship Management successfully overcome this problems.(W.K.R.Perera,2018)

B. Efficiency in Contact Management:

Research emphasizes the efficiency gains associated with Customer relationship administration in contact management By automating the tedious process of manual data entry, these systems contribute to time savings, reduced errors, and improved overall productivity for individuals and businesses.

C. Reggration analysis for Customer Satisfaction:

Regression analysis is useful for identifying the main factors associated with, the problem or more independent variables that affect any of the dependent variable. According to our theoretical framework in which the dependent variable, job performance affected by independent variables, that is organizational commitment and its three dimensions. (Aneeb nawaz., 2020)

D. Integration with Third-Party Platforms:

Studies highlight the importance of seamless integration with third-party platforms. Customer relationship administration that facilitate the exchange of contact information via email contribute to enhanced networking and communication between users and their professional contacts (Brown and Patel, 2017).

III. RESEARCH METHODOLOGY

The research methodology for implementing the Customer Relationship Administration involves a systematic approach to achieve the defined goals. This includes principles and procedures that guide the organization in problem-solving, decision-making, and project management. The methodology is structured as follows:

A. Research Design:

This study adopted a mixed methods approach combining quantitative and qualitative research. This allows for a comprehensive exploration of the technical functionalities, user experiences, and the broader implications of Customer Relationship Administration System.

B. Data Collection:

a). Quantitative Data:

Surveys and questionaires are administer to users and organizations that have implemented Customer Relationship Administration Systems. The surveys aim together quantitative data on user satisfaction, efficiency gains, and the impact on business processes. Key metrics include time savings, error reduction and overall system effectiveness.

b). Qualitative Data:

Conducting in-depth discussions with users, IT professionals, and business owners to gather qualitative insights into the user experience, challenges faced during implementation, and the perceived benefits of Customer relationship administration Systems. These interviews provide announced understanding of the human and organizational aspects associated with these systems.[10]

C. Continuous Improvement and User Feedback:

Monitor system performance; analyze user feedback, and Identify areas for improvement. Keep up with new technologies and business trends so system can be adapted accordingly.

D. Conclusion:

There are many CRA software available in market which can be used by paying their fees. We wanted to do something different. We invented this CRA software for services industries like Advocate, CA, Tax professionals, Accountants, Advertising agency, Software companies and etc. This normal CRA was extended to upload and download the files as per client's account. User can access their files anytime (Similar to digital locker).

E. Project Scope:

Categories to discuss may include: Customer Interaction Complexity, Organizational Effectiveness, Persona-Based Offerings, Competitive Differentiation, Messaging and Positioning, Demand Generation, Sales Process, Customer Acquisition and Lead Generation, Customer Retention, and CRM Database Management.
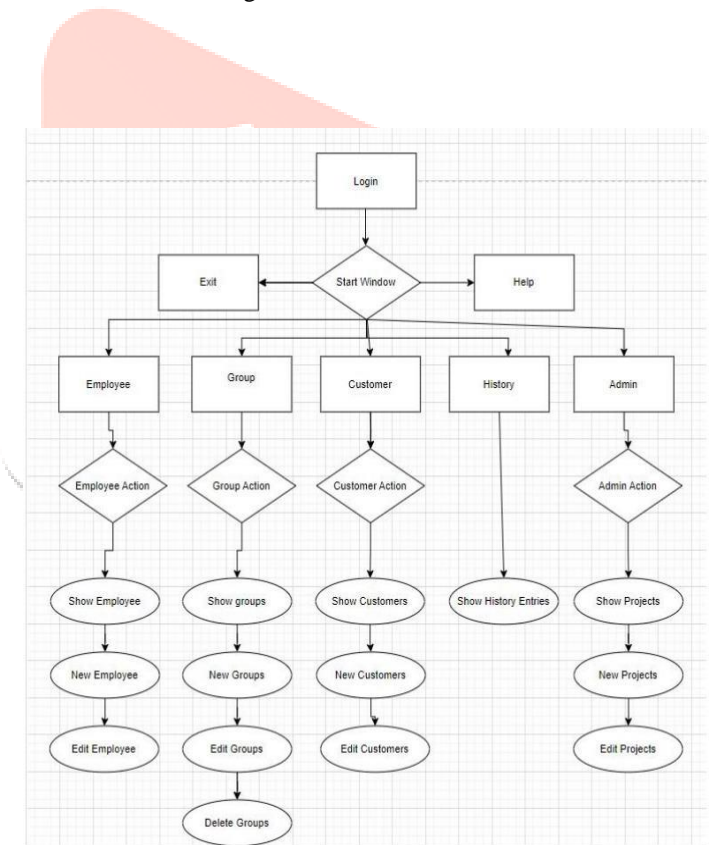

Figure1 System Working Flow

IV. REAL-TIME FIREBASE DATABASE

MySQL is an free open source relational database management system (RDBMS). It is free open source software under the terms of the GNU General Public License are also available under various specific license. It has a proxy that allows users interact directly with MySQL databases using SQL; however, it is often used in conjunction with other programs to use application that require consistent information. functionality. Easy to store and store information, suitable for applications.

MySQL is free, open source software and can be freely used under the terms of GUN General Public License. Under a variety of proprietary licenses. MySQL is owned and supported by the Swedish company MySQL AB, It was acquired by Sun Microsystems. (Now Oracle Corporation). [8]In 2010, Oracle acquired Sun, we forked the open source MySQL project to create Wideni-MariaDB.

V. SYSTEM DESIGN

A. Centralized Database:

Choose a robust database system (e.g. MySQL, MongoDB) to store data securely. Design the database schema to include tables for storing extracted details, along with additional fields for user added data. Implement index ingand efficient data retrieval mechanisms for quick and effective searches.

B. Security Measures:

Employ industry-standard encryption techniques for secure data transmission between web applications and the backend database. Implement secure authentication mechanisms, such as user login credentials and access tokens, to control access to sensitive data.

C. Continuous Improvement and User Feedback:

Implement mechanisms for users to provide feedback on the accuracy and usability of the web technology. Monitor system performance, analyze user feedback, and identify areas for improvement and optimization.

VI. PROJECT SCOPES

Enable the company to identify, contact attract and acquire new customers. Obtains a better understanding of the customers: their wants and needs. Defines the appropriate product and service offering and match it to the unique needs of the customer.

VII. IMAPCT, SIGNIFICANCE AND CONTRIBUTION

CRM systems offer a significant advantage in facilitating personalized interactions with customers. With a 360-degree view of each customer, sales teams can tailor their approach and offerings to match individual needs and preferences. CRM systems enable sales representatives to address customers by their names, recommend products based on previous purchases, and send targeted messages, thereby eliminating generic sales pitches. CRM systems streamline sales processes by helping teams manage leads, track opportunities, and automate routine tasks. Sales representatives can prioritize their efforts by focusing on high-value prospects and nurturing leads with the most potential. This efficiency not only saves time but also results in more closed deals. ustomer retention and loyalty are critical to sales success. Retaining existing customers is as important as acquiring new ones. CRM systems play a crucial role in customer retention by sending reminders for follow-ups, special occasions, and anniversaries. These thoughtful touches keep the business top of mind for customers and strengthen the relationship over time.

VIII. METHODOLOGY

A. Function Requirement:

1) login Module:
   This module allows users to login to security application.
2) Customer Module:
   We import customer and customer contact in this we can see the detail about customer.
3) Staff Module:
   In the staff module, we can see the detail about staff member.
4) Project Module:
   Project module allows user to see project, add projects and get the detail about the project.

B. Feature of System:
- Customer needs
- Customer response
- Customer satisfaction
- Customer loyalty
- Customer services
- Customer complaints

C. Hardware and Software Requirement:
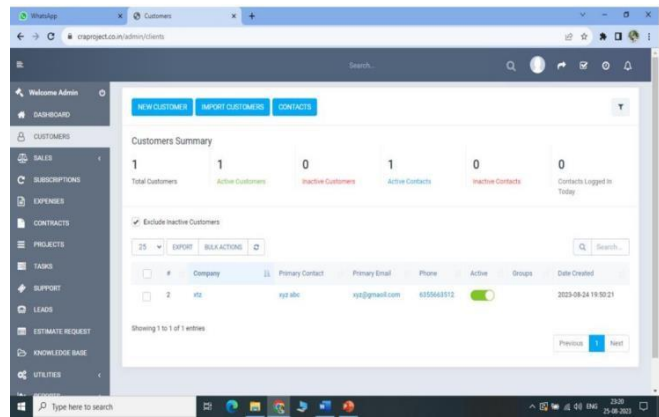
1 Hardware requirements:

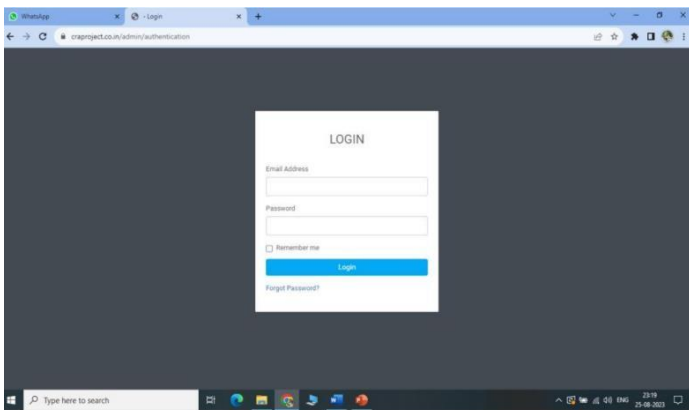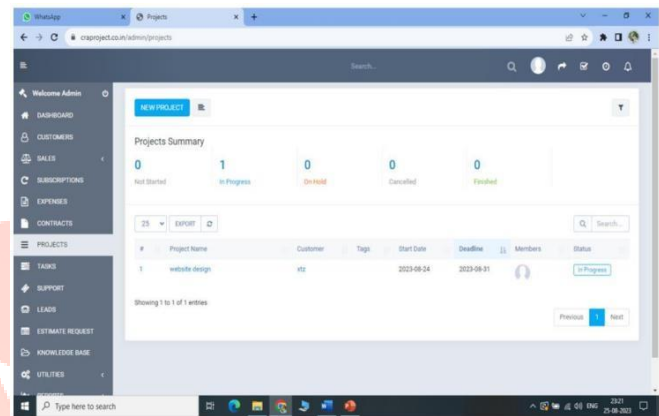| 1.2 GHz dual core. 1GB RAM. 200 MB of internal storage space(used space depends on the size of the database) |
|---|
| Internet connectivity |

2 Software requirement:

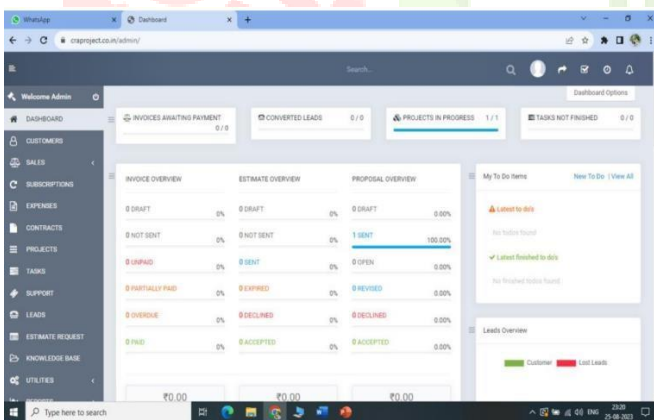| MySQL (Database) |
|---|

IX.   IMPLEMENTATION
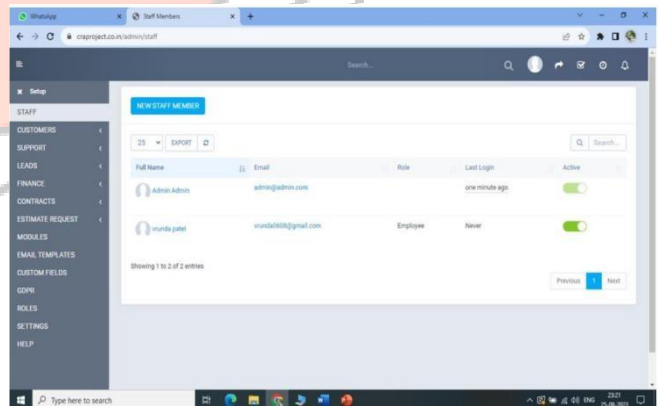
a) Login Page:

b) Dashboard:

c) Customer:

d) Project:

e) Staff:

X. CONCLUSION

Customer Relationship Administration (CRA) has been an important system for businesses of all sizes for many years. It enables salesforce automation and management, but it has evolved to capture customer end-to-end journeys, drive customer relationships, retention, and revenues. Emerging technologies and the fourth industrial revolution have shaped the future of CRA. Social media integration is a must-have in today's business world. Almost all companies have some sort of online presence across multiple platforms, whether they are proactive or reactive in that. Networking through social media will keep customers engaged with the brand, and it will also help in influencing customers. It can help in better anticipating and providing appropriate response to customer queries in customer relationship administration.

XI. FUTURE WORK

Customer Relationship Administration(CRA) has been an important system for businesses of all sizes for many years. It enables salesforce automation and management, but it has evolved to capture customer end-to-end journeys, drive customer relationships, retention, and revenues. Emerging technologies and the fourth industrial revolution have shaped the future of CRA. Social media integration is a must-have in today's business world. Almost all companies have some sort of online presence across multiple platforms, whether they are proactive or reactive in that. Networking through social media will keep customers engaged with the brand, and it will also help in influencing customers. It can help in better anticipating and providing appropriate responses to customer queries.

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