JOB APPLICATION PORTAL (JAP) USING CLICKS NOT CODE

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ABSTRACT: This project presents a novel application namely job application portal using clicks not code, developed to conquest the growing needs of the job seeker and the companies by closing the gap between them by providing featured sets of operational benefits and diverse services to the multiple users. Currently during the job recruitment process recruiters are collecting all the documents manually which is relentlessly a very big and difficult task to manage all the work. We came up with an idea of developing an app with no code by using the salesforce cloud platform which will help the recruiters in such a way that they can handle the applicant data more efficiently in a digital format by having all means of control on the data. This app will mainly focus on the handling data from applicants without any misplace of data with outstanding flows and automations with lesser user involvement.

KEYWORDS: Salesforce, Objects, Cloud, Reports and Dashboards, Flows, Automations

1 INTRODUCTION

1.1 A Subsection Sample

The traditional job application process has changed significantly in the fast-paced digital environment we live in today. The development of technology has completely changed how businesses find talent and how job seekers approach the hiring process. But a lot of the current job application portals still rely a lot on coding, which makes for complicated and frequently ineffective solutions.

Unemployment is one of the serious social issues faced by both developing and developed countries. For example, in Europe the rate of unemployment has been increasing rapidly since the 1970's. Dorn and Naz [1], one of the causes of this issue is the unequal distribution of employment prospects or a lack of knowledge about them, which prevents people from learning about new job openings. It indicates that while

certain jobs are available, job searchers are not aware of them. A thorough internet search could be beneficial to job searchers in their pursuit of employment. Some employment portals provide applicants an effective way to search the internet for information about open positions they might not cover up the gap between them. [2]

1.2 History and Evolution of CRM based models

CRM has developed into a complete business management solution from its humble beginnings as a sales force management tool in the 1970s. CRM, which at first concentrated on automating internal sales procedures, has expanded to include a more comprehensive goal of comprehending and managing client data to enhance organizational performance. CRM helps businesses develop productive customer relationships and improve business outcomes by combining procedures, people resources, and technology.[3]

1.3 The Need for a User-Centric Solution

To address the challenges faced due to the traditional web application and provide a more efficient and equitable job application experience, a new approach is required. This paper presents a novel solution: a job application portal developed using clicks, not code. By leveraging a no-code platform like Salesforce, this portal aims to streamline the recruitment process, enhance user experience, and promote fairness.

1.4 The Power of Salesforce

Salesforce, a leading cloud-based CRM platform, offers a powerful set of tools for building applications without the need for extensive coding knowledge. Its intuitive interface and drag-and-drop functionality make it accessible to a wide range of users, including those with limited technical expertise. As it is a cloud based platform we can easily maintain and manage the whole database efficiently and we can also extend the storage based on user interest and needs. Everything developed in the salesforce is considered as objects and they can be customized to opt for the user needs.

2 LITERATURE REVIEW

One of the major problems that both developed and emerging nations must deal with is unemployment. For instance, since the 1970s, the unemployment rate in Europe has been rising quickly. According to Dorn et al. [1], one of the factors contributing to this problem is the unequal distribution of job opportunities or a lack of awareness of them, which keeps people from finding out about new positions. It suggests that even while some positions are open, job seekers are not aware of them. Job seekers may find that a comprehensive online search helps them find work. While some job portals offer candidates a useful means of searching the web for information about available positions, they may not bridge the gap between them. [2]

Edirisinghe, S.M., developed a, Collab Infinite is a web-based platform that offers a full solution for career development and recruitment management, thereby addressing the important gap between the supply and demand of IT workers. Collab Infinite automates the entire recruitment process, from job posting and candidate matching to interview scheduling and offer administration. It is specifically designed for IT university students and recent graduates. All users may access it with ease because to its user-friendly design and simple navigation, and its cloud-based architecture guarantees scalability and dependability. Collab Infinite helps people start prosperous careers in the IT sector by matching them with appropriate work opportunities and providing resources for professional development. [4]

V. Pavani et al, (2022) introduced a feature-based online job portal designed to facilitate efficient job searching and recruitment. The portal aims to connect job seekers with suitable opportunities by considering factors like educational qualifications and preferences [5], V. Yadav et al proposes an online job board system specifically designed for college students. The system aims to bridge the gap between students and career opportunities by providing services like job recommendations based on skills and candidate filtering for companies.[6]

3 EXISTING SYSTEM

Job application portal which are present at the time are mainly developed based on focusing the coding languages like full stack and other programming languages like flutter, python, and frame works like Django, flask etc. There are some platforms like Indeed, Glassdoor, and Monster are providing these kinds of services to the company and the recruiters to which facilitate connection between the job seekers and employer to collecting the details of the job seekers when there is a job opening. While these portals are convenient and accessible, they have notable demerits. They can lead to an overwhelming number of applications for employers, making it difficult to identify the best candidates. Job seekers may experience frustration with the lack of personalized feedback, and the prevalence of automated screening can sometimes filter out qualified candidates. Existing systems have some limitations where we find the scope for developing this application.

Ponnekanti et al, mentioned that existing platforms often makes difficult for job seekers, employers, and investors, blocking efficient collaboration and hindering growth opportunities. This proposed system aims to bridge this gap by creating a unified platform where all stakeholders can interact, share information, and collaborate effectively. The platform offers a comprehensive solution for businesses to connect with potential clients and talent, while also giving investors transparent information about their investments and job seekers targeted opportunities. This innovative approach has

the potential to revolutionize the way businesses operate and individuals advance their careers. It integrates sales management, job searching, and investment features. [7]

A. Mohamed et al, presents a new candidate recommendation system called Smart Applicant Ranker. Designed for IT recruitment firms, the system uses ontology to match candidate resumes with job requirements.[8] H. Kim and J. Hahm, initiated a lightweight cloud-based job management system for data-intensive scientific applications. It is a cloud-based solution offers scalable and effective computing resources, making it suitable for handling large scientific datasets. [9]

Limitations in the Existing system

Impersonal Experience: Most of the resumes are being selected based on the screening and ATS (Application Tracking System) which relies on matching the keywords used in the resume to qualify the candidate for this reason qualified candidates may never show up because their resumes do not match which lakes in personal touch in the selection of worthy candidate for the job role.

Complexity and user experience issues: Complicated interfaces and tricky forms of some of these sites make the user to think as it's a long and complicated process and finds it's as difficult to deal with out vert extended forms which is really time-consuming and frustrating to upload the details and the documents forcing applicants to input similar information time after time saying work history and education even when the uploaded resume contains the same information.

Bias and inequity: Many ATS and other automated system are developed has algorithmic bias as they are being shortlist the candidates based on the keywords having tendency to favour applicants who fit into certain demography such as from those who graduated from prestigious university and those who developed resume based on the keyword play which makes it bias and inequity.

Volume of applications: Enormous applications are very difficult to handle and going through all the applications to select candidate is a pretty difficult task for the companies instead they depend on the automated tools to shortlist the applicants where most of the capable resumes are fleshed out and managing overwhelming number of applications is a difficult task.

Application time consumption: Lengthy application procedure freaks out the applicants which indifferently discourage top talent just because of either less time or patience to bear the lengthy application and its difficult even for the companies to check out on the whole lot of information.

Privacy concerns & Maintenance: Privacy concerns and maintenance issues are significant challenges for job application portals. Data security and transparency are

crucial to protect sensitive information and ensure trust between applicants and employers. Maintaining portals can be resource-intensive, especially when dealing with large volumes of traffic. The risk of data loss or system failures can be costly and disruptive to the recruitment process.

As for the matter of fact it is necessary to uphold and meet the requirements along with the digital world, we have to close the gaps to be the best. So, we bilevel that our project will serve the needs for the growing needs of the users and provide valued services to the users and make it personalized.

4 PROPOSED SYSTEM

As per the evolving needs and the context of upgrading to next level to conquer the digital world and its advancements in the technology everyone needs to adopt for the new technology in the markets which might help to upgrade and push your limits. In this process of adapting to the new technologies in order to be the one to standout we propose this job application system developed based on without using coding in a advancing domain called salesforce.

Salesforce is a cloud-based application development tool which allows you to develop applications of your requirement in a most effective and no code manner. It allows you to use a diverse set of objects to accomplish the tasks same as the job portals presently available in a more dependable and secured manner.

As the existing system have its limitations of its own and its even difficult to depend on using coding to develop and maintaining the portal is difficult. The proposed system is built in such a way it will help to the applicant to apply for the job and keeps the candidate updated regarding his tasks and for the employers it provides a diverse set of operational and centralized management of the applications with advanced cloud database management and CRM based application system.

To avoid all these challenges faced by the recruiters and applicants we have developed a user friendly and maintainable solution for the companies as well as the users. In this job application portal, its mainly focused on the user experience and operational efficiency.

Flexible and customizable objects: The ability to create objects that are both flexible and customizable is essential for systems that need to serve diverse user needs and evolving requirements. This flexibility ensures that objects can be developed for specific contexts, allowing for more personalized user experience while maintaining the core functionality and different use-cases.

Dependable operational flows: Reliable and efficient operational flows are fundamental to ensuring that systems operate smoothly under different conditions. By

establishing dependable workflows, systems can minimize downtime and errors, ensuring consistent performance and enhancing user trust.

Integrated relationships between objects: In complex systems, the integration of relationships between objects is for maintaining coherence and ensuring that data flows seamlessly across different components. These integrated relationships allow to have a strong view of the system's operations, and enables more accurate data analysis and decision-making.

Automations: Automation is a key element of efficiency in modern systems. By automating routine tasks, systems can reduce the need for manual involvement, thereby increasing productivity, minimizing errors, and clearing the resources for more complex tasks. Automation also contributes to scalability, allowing systems to handle larger volumes of work without a increase in the amount of efforts.

Personalized rating system: A personalized rating system is crucial for delivering flawless experiences to users. By analysing user behaviour and preferences, the system can assign ratings that reflect individual needs and expectations, thereby enhancing user satisfaction and engagement. Such systems are particularly valuable in environments where user feedback and preferences play a critical role in shaping service delivery.

Data integrity and security: The integrity and security of data are paramount in any system. Ensuring that data is accurate, consistent, and protected from unauthorized access is essential for maintaining user trust and complying with regulatory requirements. Effective data security measures, combined with robust data integrity protocols, help to safeguard sensitive information and prevent data breaches, ensuring that the system operates within a secure framework.

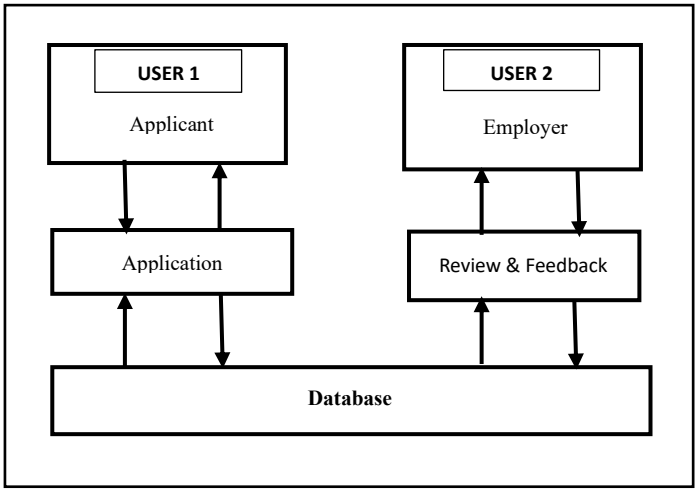

Fig. 1. Proposed system architecture

5 IMPLEMENTATION

User object:

Creating two types of user objects, Candidates and employers:
Employers who are providing the job opportunities will be using the application for posting the job opportunities and tracking the candidates until the end from scrutinizing to selection will be provided user access to do so. Candidates can apply job through an external portal which is separately provided for all the user where they can directly have access to application for the jobs and know the status and notified with new job postings, events and activities related in the organization. Employer object includes all the related objects and attributes to create a new application a role, tracking the candidates, identifying the candidates suitable for the role and maintaining the vast amount of records and data from the application portals. Candidate are external users who are dose not require any authentication and access for the portal and can apply for the roles through web-applications provided for the company. Attribute for the candidates portal are: Application forms, Events and task pop-ups, notification of new posts, tracking of their application. Application for the job role are created by the employer users and accessed by the candidate users through portal it include all the related fields like name educational background contact details resume and other document fields to upload.

Position object:

Allow employers to create custom objects for Job Posting, Candidate, and Application to store relevant data and manage job postings. Defines the specific job openings and positions weather technical or non-technical. Attributes: New to create a new position in the list of vacant positions, position name, record type, closing date for application, minimum pay and description, minimum pay for the position and different views like tabular, kanban, split views to provide better tracking for the position. Provide different views like recently viewed position minimum pay greater than 50,000 all records and pinned list. And also provided with delete and edit option to modify the position change owner and edit labels in the position object and custom actions for labels and clean user interface. Including features for searching and filtering jobs and access records from the list quickly and updated time of records. Description and details of position and its related objects are clearly defined includes attributes like record type opening and closing date for application status type position name skills required job description details, pays, relate file uploads, activities tab, chatter box and notes etc.

Job application object:

Create custom objects for the job application and tracking candidate, Job Application Id, and Rating. Establish relationships between objects (e.g., one-to-many between

Candidate and Job Application), tracks individual candidate applications. Allow HR to create new candidates, job applications, and ratings. Utilize Salesforce's built-in search capabilities to enable users to search for candidates based on various criteria. Create custom list views to provide different views of candidate data (e.g., "All Candidates," "Candidates by Job Application," "Candidates by Rating"). Define rating criteria and scoring scales. Implement a mechanism for HR to assign ratings to candidates based on their performance in interviews, assessments, or other criteria. Attributes: Job Application number, candidate name, Position of the job applied for and rating of the candidate after review by the HR along with dynamic search and view facilities to the hold a greater ease to access records of every candidate.

Review Object:

Create a custom object named "Review" with the necessary fields. Use a Lookup field to link to the "Candidate" object and "Job Application" object. Use a Number field to store the rating score for the candidate review by the hr and hr will rate the candidate based on the skill levels and the performance of the job seekers. Reviewers rate the candidate and the candidate who meats the average requirements will be forwarded to the recruitment processes. Create custom fields to capture rating criteria and comments.

Candidate object

A customizable object is created namely “Candidate object” to store candidate’s details and to track the candidate. Number of fields are created to store candidate related details and lookup fields are also included to link all the objects flows and related workflows. User field includes candidate identification number and related fields like name, education, contact fields, and current employment details are groped in the candidate related fields. It allows employers to manage candidate details and contact points to keep track and communicate with the candidate.

Job posting object

Create custom object named “job posting” to create and add new posts or vacancies and post the position details to be filled. It includes fields like position and employment websites from where the jobs can be applied and on which platforms they are available. It is also embedded with the features like notes and file uploads to tracks and posts and activities.

Employment website

Create an object with name employment website. In this companies store records of employability websites where they were listed and promoted along with their name, website address, and price per post is listed in the records of employment website

object. It will help the employers to track and maintain their company advertisement strategies and posts related to new vacant job positions in the organization.

Dynamic Search and View Facilities:

Utilize Salesforce's built-in search capabilities to enable users to search for candidates based on various criteria. Create custom list views to provide different views of candidate data, such as "All Candidates," "Candidates by Job Application," and "Candidates by Rating

Customization and Enhancements

Workflow Rules and Approvals: Automate processes like sending confirmation emails or routing applications for approval. Custom Reports and Dashboards: Visualize candidate data and recruitment metrics to make informed decisions. Database: It is a cloud based web application which stores and process huge amount of data and the storage can be extended on the employer needs which provide great amount of flexibility.

Send E-Mail

An email dashboard is created to communicate with the candidates and notify them timely about their process and keep track of the recruitment process. Emails are automated by using the dashboard created, employer can send auto generated mails to the candidates which reduces the human effort to write and notify the candidate through the mail.

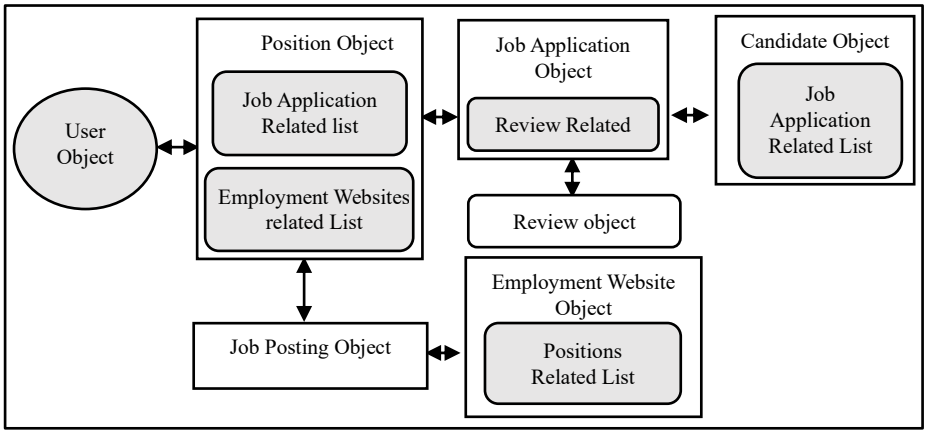

Fig. 2. Work flows of the JAP

6 RESULTS

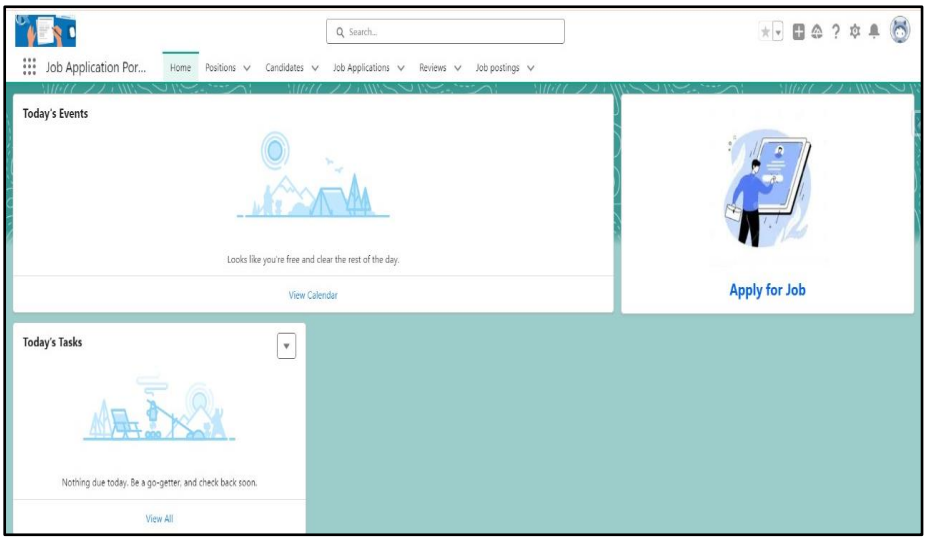

Fig. 3. Home page of the application

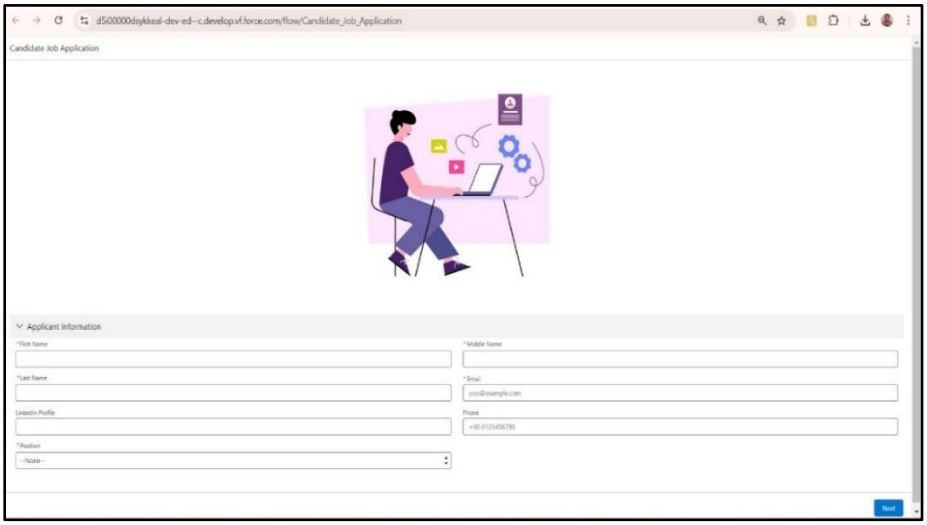

Fig. 4. Job Application UI

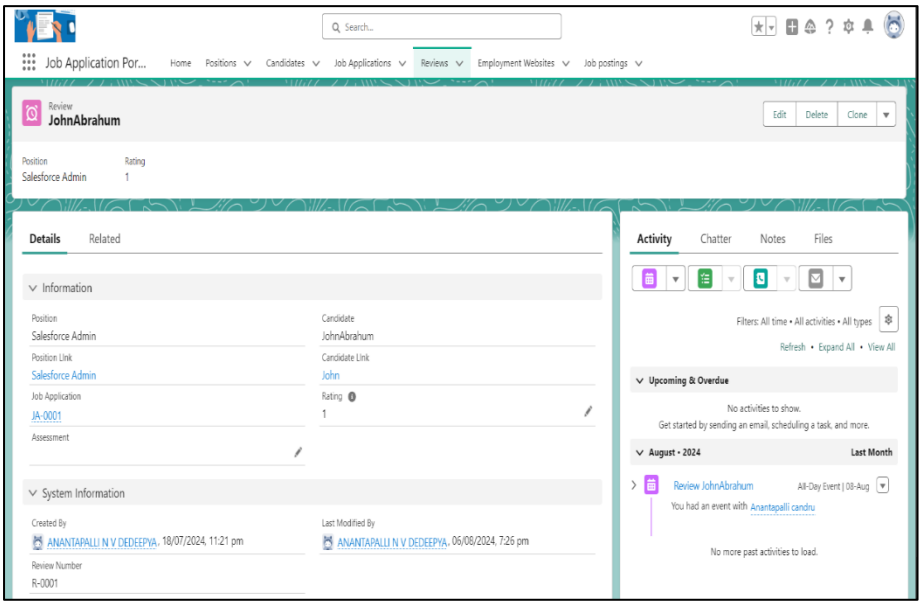

Fig. 5. Review object record details view

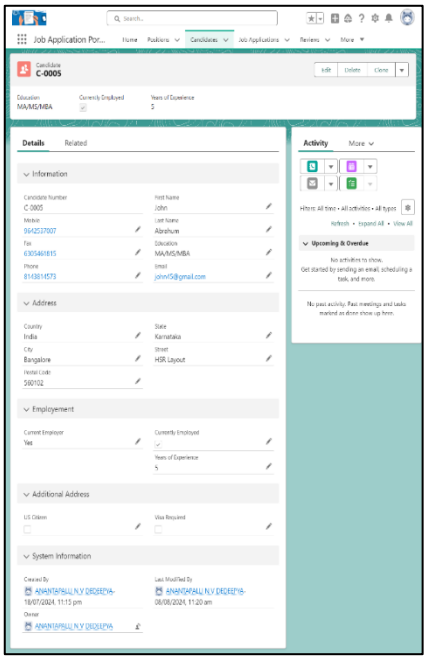

Fig. 7. Candidate object record view

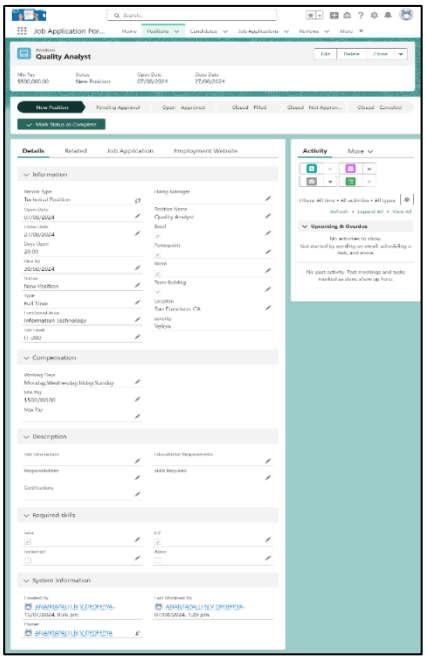

Fig. 8. Position object record view

7 CONCLUSION AND FUTURE SCOPE

This is a Salesforce CRM project where a job application framework is created without using any code with the aid of declarative objects, flows, automations, and email notifications that use the equivalent of validation rules and formulas. Data concerning available and filled positions, as well as candidates, are handled through custom objects, and a structure of employees submitted by the application holds the progress of application processes and simulates actions like status change and interviews ordering. Validation rules are in place to allow data to be correct, while formulas make it possible to calculate and show vital data. System automated mails make sure that at every point in the process, both applicants and recruiters are constantly updated. With this approach the system is rather simple and is possible to expand without any programming, being limited to only standard offerings of Salesforce.

The objective of this project is to develop a no-code application that empowers users, particularly those with no coding experience, to build applications quickly and intuitively. By leveraging Salesforce CRM, this initiative aims to create a user-friendly environment where end users can easily understand the application architecture, thereby enhancing their development skills. Ultimately, this project will provide a rewarding and accessible experience for users, fostering innovation and collaboration within the Salesforce ecosystem.

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