

Salesforce Administrator Guided Project Report

On

CRM Application For Schools/Colleges

Done By:

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INTRODUCTION

Overview

The CRM Application for Schools/Colleges in Salesforce is our software solution designed to streamline and enhance the customer relationship management processes within educational institutions. Built on the Salesforce platform, this application offers a range of features and functionalities tailored specifically to meet the unique needs of schools and colleges.

Key features of the CRM Application for Schools/Colleges include:

1. **Student Information Management:** The application allows schools/colleges to maintain detailed records of students, including personal information, academic history, attendance, and disciplinary records. It enables easy tracking of student progress and supports personalized communication.
2. **Communication and Engagement:** Schools/colleges can leverage the CRM application to improve communication with students, parents, and alumni. It offers tools for sending targeted emails, managing mailing lists, and tracking interactions. Integration with other communication channels like SMS and social media enables comprehensive engagement strategies.
3. **Schools Management:** Educational institutions may more easily and effectively manage their employees and resources, and they can readily make changes inside the application to easily update the data in accordance with their requirements.
4. **Reporting and Analytics:** The CRM application provides robust reporting and analytics capabilities, allowing schools/colleges to generate insights into student performance, admissions trends, engagement metrics, etc. Customizable dashboards and reports help in data-driven decision-making.
5. **Integration and Scalability:** As a Salesforce-based application, it offers seamless integration with other Salesforce products and third-party tools, enabling schools/colleges to leverage additional functionalities. It can scale as per the growing needs of educational institutions.

Purpose

The purpose of this project is to create a CRM application for schools and colleges by creating a customized system for managing many areas of a school's operations using the Salesforce platform. It provides capabilities such as student information management, attendance monitoring, grade management, scheduling, and reporting, all of which are connected into the Salesforce CRM. Schools can utilize this technology to simplify administrative operations, improve communication between staff and students, and improve the overall learning experience for students.

LITERATURE SURVEY

Existing problem

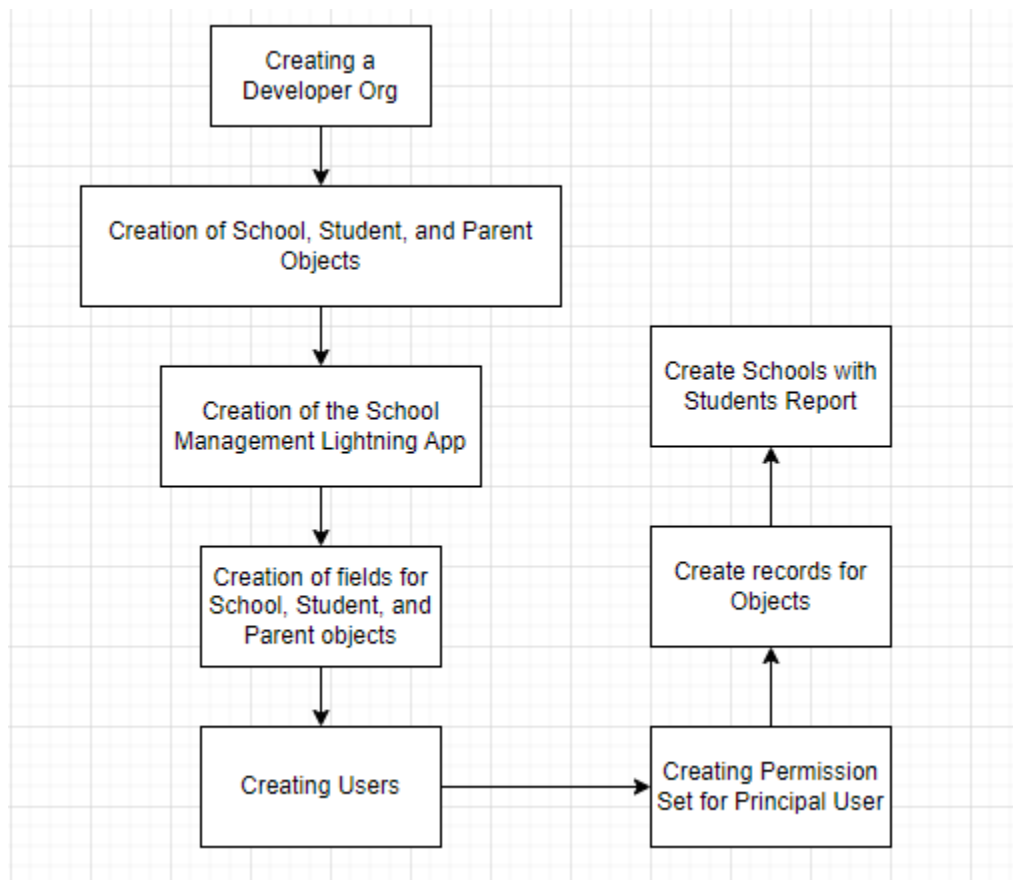
The current issue with school and college management is that everything is done on-premises. From the admissions process to recording student information, grades, staff information, classes, courses offered, finances, and so on, everything is handled on the premises, either through physical records or through local school servers. This is acceptable but difficult to manage effectively because data can be easily lost/corrupted and servers and databases require regular maintenance and can be quite expensive to fix if damaged. The servers are also vulnerable to damage in the event of an accident or natural disaster. Once lost on the premises, the data is difficult to recover. Another difficulty with the current system is that data may be readily created, edited, and deleted by anyone. This presents security concerns for the institution because only those with access permissions should be able to make changes to the data. In order to address this problem, we have provided the following solution for school/college management.

Proposed solution

The proposed solution for the Salesforce CRM Application for Schools/Colleges is to migrate school and college management to Salesforce via a CRM application. With the help of this solution, we can design an application specifically for schools and colleges and use it to handle student records. Because the application is totally run on the Salesforce platform, there is no need to maintain physical servers and databases. The application's data is easy to manage. There is also no concern about data loss due to accidents or calamities. More features can be simply added, and the application can be easily modified to meet the demands of the organization. With the aid of platform features like users, roles, profiles, permission sets, groups, etc., security is also successfully managed. This guarantees that the application's data may only be accessed and modified by authorized users. The application offers features like managing student information, keeping track of attendance, managing grades, scheduling, and reporting, all of which are integrated with Salesforce CRM, making management of schools and colleges more effective and efficient.

THEORETICAL ANALYSIS

Block diagram



Hardware / Software designing

Hardware and software requirements for the CRM Application for Schools/Colleges in Salesforce can vary depending on factors such as the scale of the institution, the number of users, and the complexity of the implementation. Here are the general hardware and software requirements:

Hardware Requirements:

1. **Computers:** Sufficient desktop or laptop computers for administrators, educators, and staff members who will be using the CRM application.

2. **Networking Equipment:** Reliable network infrastructure, including routers, switches, and internet connectivity, to ensure smooth communication between users and the Salesforce cloud environment.
 3. **Storage:** Adequate storage capacity to handle the CRM application's data requirements, including student information, communication logs, and analytics.
- Software Requirements:

Software Requirements:

1. **Salesforce Licenses:** The educational institution will need to acquire appropriate licenses for Salesforce, including Salesforce CRM licenses for administrators, educators, and staff members who will be using the CRM application.
2. **Operating System:** Computers should have a compatible operating system, such as Windows, macOS, or Linux, to access the Salesforce platform via web browsers or dedicated Salesforce applications.
3. **Web Browsers:** Supported web browsers, such as Google Chrome, Mozilla Firefox, Microsoft Edge, or Safari, to access the Salesforce platform and use the CRM application's features.
4. **Mobile Devices:** Mobile devices (smartphones or tablets) may require compatible operating systems and Salesforce mobile applications for users who need access to the CRM application on-the-go.

EXPERIMENTAL INVESTIGATIONS

Analysis or the investigation made while working on the solution :

During the analysis and investigation phase of developing a CRM application for schools/colleges in Salesforce, several key areas are typically explored to ensure the solution meets the institution's requirements. These include:

1. **Needs Assessment:** Conducting a thorough needs assessment involves engaging with key stakeholders such as administrators, educators, students, parents, and alumni. This process helps to identify pain points, challenges, and desired outcomes for the CRM application. Gathering requirements from these stakeholders ensures that the solution aligns with their specific needs.

2. **Process Mapping:** Analyzing existing workflows and processes within the educational institution is essential to understand how the CRM application can streamline operations. This involves mapping out the current processes, identifying bottlenecks or inefficiencies, and proposing improvements to be implemented within the CRM solution.
3. **Data Analysis:** Examining the institution's data requirements is crucial for designing an effective CRM application. Analyzing data structures, sources, and integration points helps determine how student information, admissions data, communication logs, and other relevant data will be captured, stored, and utilized within the CRM system.
4. **Integration Analysis:** Assessing integration needs involves identifying existing systems (such as SIS, LMS, finance systems) and determining how the CRM application will integrate with them. This analysis focuses on data synchronization, sharing, and ensuring a cohesive flow of information across systems.
5. **User Experience Analysis:** Understanding the user experience requirements involves considering the needs and preferences of various user groups interacting with the CRM application. This analysis may include evaluating usability, accessibility, and customization options to create a user-friendly and intuitive interface.

ADVANTAGES & DISADVANTAGES:

Advantages of the CRM Application for Schools/Colleges in Salesforce:

- i) **Centralized Data Management:** The CRM application allows for centralized storage and management of student information, admissions data, communication logs, and other relevant data. This enables easy access, efficient data organization, and improved data accuracy.
- ii) **Streamlined Processes:** By automating administrative tasks and workflows, the CRM application simplifies and streamlines various processes such as student enrollment, admissions, event management, and communications. This leads to increased efficiency, reduced manual effort, and improved productivity.

iii) Enhanced Communication and Engagement: The CRM application facilitates effective communication and engagement with students, parents, alumni, and other stakeholders.

iv) Data-Driven Decision Making: The CRM application provides reporting and analytics capabilities, allowing educational institutions to generate valuable insights and make data-driven decisions. Administrators can track student performance, analyze admissions trends, measure engagement metrics, etc.

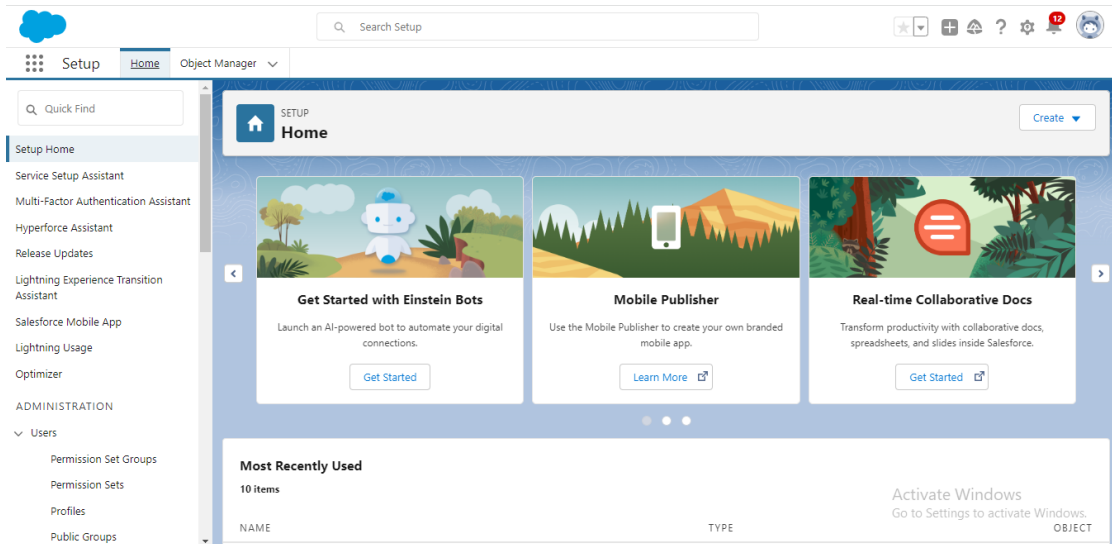
Disadvantages of the CRM Application for Schools/Colleges in Salesforce:

- **Implementation Complexity:** Implementing the CRM application can be complex and time-consuming, requiring proper planning, configuration, and training. Educational institutions may need to invest in professional services or hire Salesforce experts for a successful implementation.
- **Cost:** The implementation and licensing costs associated with Salesforce CRM can be significant, especially for large-scale deployments. Educational institutions should carefully consider the financial implications and ensure that the benefits outweigh the investment.
- **User Adoption:** User adoption can be a challenge, particularly if the CRM application introduces significant changes to existing processes. Proper training, change management strategies, and ongoing support are crucial to encourage user acceptance and maximize the benefits of the CRM solution.
- **Data Security and Privacy:** Storing sensitive student and personal data within a CRM system requires robust security measures and compliance with relevant data protection regulations. Educational institutions must ensure that appropriate security protocols are in place to safeguard data and protect privacy.

RESULT:

Task1: Creation of developer org:

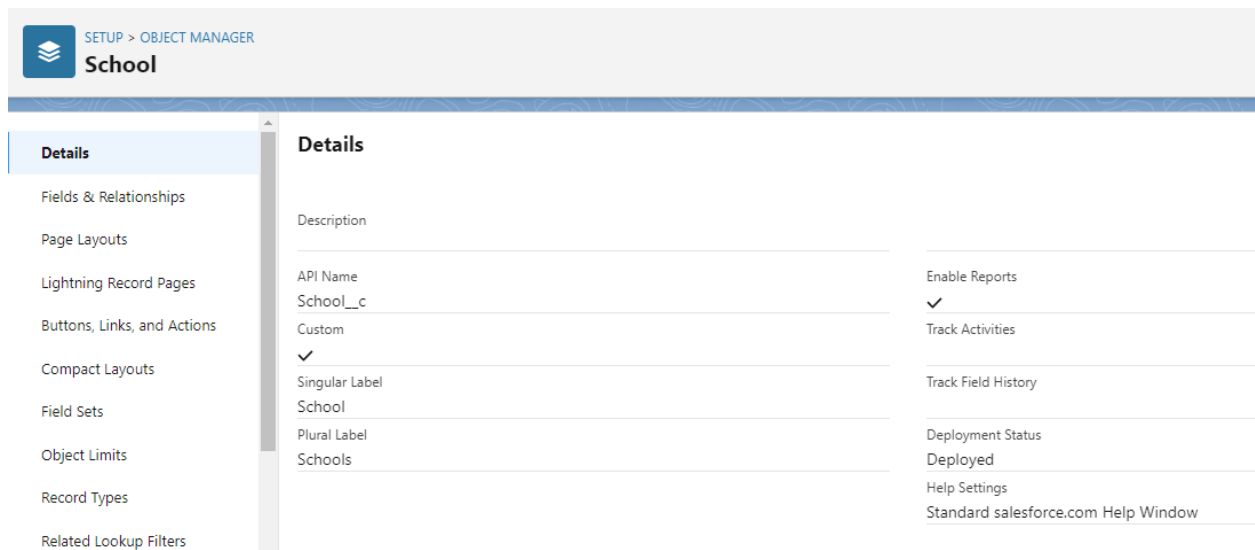
Here we have created a new standard developer org for this project from the salesforce signup page.



Task2: Creation of Objects

- School object

Here we have created the School Object from the Object Manager by clicking on create new custom object.



- **Student object**

Here we have created the Student Object from the Object Manager by clicking on create new custom object.

The screenshot shows the Salesforce Object Manager interface for the 'student' object. The breadcrumb trail is 'SETUP > OBJECT MANAGER'. The left sidebar contains a list of configuration options: Details (selected), Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'Details' and contains the following fields:

Details	
Description	
API Name	students__c
Custom	✓
Singular Label	student
Plural Label	students
Enable Reports	✓
Track Activities	
Track Field History	
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

- **Parent Object:**

Here we have created the Parent Object from the Object Manager by clicking on create new custom object.

The screenshot shows the Salesforce Object Manager interface for the 'parent' object. The breadcrumb trail is 'SETUP > OBJECT MANAGER'. The left sidebar contains a list of configuration options: Details (selected), Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, and Related Lookup Filters. The main content area is titled 'Details' and contains the following fields:

Details	
Description	
API Name	parents__c
Custom	✓
Singular Label	parent
Plural Label	parents
Enable Reports	✓
Track Activities	
Track Field History	
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

Task3: Create School Management App:

Here we have created the School Management Application through the New Lightning App option in the App Manager. We have given the available tabs as the Students, Schools, Parent, Reports and Dashboards, and given the access to the System Administrator user.

The screenshot shows the 'students' list in the 'School Management' application. The list is sorted by 'students Name' and filtered by 'All students'. It contains 15 items. The table has columns for a checkbox, the student's name, and a dropdown menu. The names listed are: Abhinav, Ajay, Bhargav, Dipesh, Jaswanth, Jitesh, Kalpana, Priya, Santosh, Sashank, Sreya, Suresh, and Swathi.

	students Name ↑	
1	<input type="checkbox"/> Abhinav	
2	<input type="checkbox"/> Ajay	
3	<input type="checkbox"/> Bhargav	
4	<input type="checkbox"/> Dipesh	
5	<input type="checkbox"/> Jaswanth	
6	<input type="checkbox"/> Jitesh	
7	<input type="checkbox"/> Kalpana	
8	<input type="checkbox"/> Priya	
9	<input type="checkbox"/> Santosh	
10	<input type="checkbox"/> Sashank	
11	<input type="checkbox"/> Sreya	
12	<input type="checkbox"/> Suresh	
13	<input type="checkbox"/> Swathi	

Task4: Fields and relationships

• School object

We have created the fields for the School object which is Address, District, State, and phone number. The Address, District and state are Text data type, while the Phone number is number data type.

The screenshot shows the 'Fields & Relationships' configuration for the 'School' object. The left sidebar lists various configuration options, with 'Fields & Relationships' selected. The main area displays a table of 11 fields, sorted by Field Label. The fields are: State, Schoolwebsite, School Name, Phone Number, Owner, Number of students, Last Modified By, and Highest Marks. Each field has a corresponding field name and data type.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING
State	State__c	Text Area(255)	
Schoolwebsite	Schoolwebsite__c	URL(255)	
School Name	Name	Text(80)	
Phone Number	Phone_Number__c	Phone	
Owner	OwnerId	Lookup(User,Group)	
Number of students	Number_of_students__c	Roll-Up Summary (COUNT student)	
Last Modified By	LastModifiedById	Lookup(User)	
Highest Marks	Highest_Marks__c	Roll-Up Summary (MAX student)	

• Student object

We have created the fields for the Student object which is School, class, Marks, Result, Highest marks, Number of students, and phone number. The Class, Marks, and phone are Number data type, while the result is a picklist of pass/fail. The school field is a master-detail relationship with the school, whereas the number of students and Highest Marks are roll-up summary fields of count and max respectively.

SETUP > OBJECT MANAGER

student

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Search Layouts

Fields & Relationships

7 Items, Sorted by Field Label

Quick Find

New

Deleted Fields

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD
Class	Class__c	Number(18, 0)	
Created By	CreatedById	Lookup(User)	
Last Modified By	LastModifiedById	Lookup(User)	
Marks	Marks__c	Number(18, 0)	
Results	Results__c	Picklist	
School	School__c	Master-Detail(School)	
students Name	Name	Text(80)	

- **Parent Object**

We have created the fields for the Parent object which is Address, and phone number. The Address is Text data type, while the Phone number is number data type.

SETUP > OBJECT MANAGER

parent

Details

Fields & Relationships

Page Layouts

Lightning Record Pages

Buttons, Links, and Actions

Compact Layouts

Field Sets

Object Limits

Record Types

Related Lookup Filters

Fields & Relationships

6 Items, Sorted by Field Label

Quick Find

New

Deleted Fields

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD
Created By	CreatedById	Lookup(User)	
Last Modified By	LastModifiedById	Lookup(User)	
Owner	OwnerId	Lookup(User,Group)	
Parent Address	Parent_Address__c	Text Area(255)	
Parent Number	Parent_Number__c	Phone	
parents Name	Name	Text(80)	

Task5: Creating Profile:

We have created a new profile for the use of School by cloning the Standard user profile. We have given the name as the School profile and given read and view permissions to all the 3 custom objects created to the profile.

Profile Edit
Save Save & New Cancel

Name
School Profile

User License
Salesforce
Custom Profile
☒

Description

Custom Object Permissions

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
parents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Basic Access				Data Administration	
	Read	Create	Edit	Delete	View All	Modify All
students	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Task6: Creating Users:

We have created 3 users namely Parents, Principal and Teachers through the new user option in users tab. We have given the profile as the School profile for all the 3 users we have created.

General Information

First Name
Last Name
Parents
Alias
pare
Email
sashankottha@gmail.com
Username
sashankottha@gmail.com
Nickname
User1687929924192745860
Title
Company
Department
Division

Role
<None Specified>
User License
Salesforce
Profile
School Profile
Active
☐
Marketing User
☐
Offline User
☐
Knowledge User
☐
Flow User
☐
Service Cloud User
☐
Site.com Contributor User
☐


First Name
Last Name
principals
Alias
prin
Email
sashankottha@gmail.com
Username
sashank172@salesforce.cor
Nickname
User1687930835538524008
Title
Company
Department
Division

Role
<None Specified>
User License
Salesforce
Profile
School Profile
Active
☒
Marketing User
☐
Offline User
☐
Knowledge User
☐
Flow User
☐
Service Cloud User
☐
Site.com Contributor User
☐

First Name		Role	<None Specified>
Last Name	Teachers	User License	Salesforce
Alias	teac	Profile	School Profile
Email	sashankkotha@gmail.com	Active	<input type="checkbox"/>
Username	sashank17@salesforce.com	Marketing User	<input type="checkbox"/>
Nickname	User1687930339055570951	Offline User	<input type="checkbox"/>
Title		Knowledge User	<input type="checkbox"/>
Company		Flow User	<input type="checkbox"/>
Department		Service Cloud User	<input type="checkbox"/>
Division		Site.com Contributor User	<input type="checkbox"/>

Task7: Creating Permission set

We have created a new permission set labeled Principal Permission through the permission sets tab. We have given all the access permissions to this permission set and assigned this permission set to the principal user.


SETUP

Permission Sets

Permission Set
Principal permission
[Video Tutorial](#) | [Help](#)

Permission Set Overview

Description	API Name	Principal_permission
License	Namespace Prefix	
Session Activation Required <input type="checkbox"/>	Created By	Sashank Kotha, 28/06/2023, 11:13 am
Last Modified By	Sashank Kotha, 28/06/2023, 11:28 am	

Apps

Assigned Apps
Settings that specify which apps are visible in the app menu


Assigned Connected Apps
Settings that specify which connected apps are visible in the app menu

Object Settings
Permissions to access objects and fields, and settings such as tab availability

Task8: Creating Records:


- School records**

We have created new test records for the School object in the School Management Application. We have clicked on the new button in the school tab and filled in the details, and clicked save to save the record.

 Schools All		New Import Change Owner Printable View	
9 items • Sorted by School Name • Filtered by All schools • Updated a few seconds ago		<input type="text" value="Search this list..."/>	
<input type="checkbox"/>	School Name ↑		
1	<input type="checkbox"/> Chaitanya		
2	<input type="checkbox"/> FIITJEE		
3	<input type="checkbox"/> Manipal Institute of Technology		
4	<input type="checkbox"/> Narayana		
5	<input type="checkbox"/> SRM		
6	<input type="checkbox"/> VIT AP		
7	<input type="checkbox"/> VIT Bhopal		
8	<input type="checkbox"/> VIT Chennai		
9	<input type="checkbox"/> VIT Vellore		


● Student records

We have created new test records for the Student object in the School Management Application. We have clicked on the new button in the student tab and filled in the details, and clicked save to save the record.

 students All		New Import Printable View	
15 items • Sorted by students Name • Filtered by All students • Updated a few seconds ago		<input type="text" value="Search this list..."/>	
<input type="checkbox"/>	students Name ↑		
1	<input type="checkbox"/> Abhinav		
2	<input type="checkbox"/> Ajay		
3	<input type="checkbox"/> Bhargav		
4	<input type="checkbox"/> Dipesh		
5	<input type="checkbox"/> Jaswanth		
6	<input type="checkbox"/> Jitesh		
7	<input type="checkbox"/> Kalpana		
8	<input type="checkbox"/> Priya		
9	<input type="checkbox"/> Santosh		
10	<input type="checkbox"/> Sashank		
11	<input type="checkbox"/> Sreya		
12	<input type="checkbox"/> Suresh		

● Parents records

We have created new test records for the parent object in the School Management Application. We have clicked on the new button in the parent tab and filled in the details, and clicked save to save the record.

 parents All		New Import Change Owner Printable View	
9 items • Sorted by parents Name • Filtered by All parents • Updated a few seconds ago		<input type="text" value="Search this list..."/>	
<input type="checkbox"/>	parents Name ↑		
1	<input type="checkbox"/> Arun		
2	<input type="checkbox"/> Dinesh		
3	<input type="checkbox"/> Kishore		
4	<input type="checkbox"/> Kumar		
5	<input type="checkbox"/> Lakshmi		
6	<input type="checkbox"/> Mounika		
7	<input type="checkbox"/> Preethi		
8	<input type="checkbox"/> Rakesh		
9	<input type="checkbox"/> Sakthi		

Task9: Creating Schools with students report

We have created a new report Called as Schools with students. We have selected the report type as Schools with students for the creation of this report, and have selected all Time and All Schools as the filters. We have given the columns for the report as school name and students name, and saved the report in the private folders.

REPORT ▾
Schools with Students Report ✓ Schools with students

⏮ ⏭ ⚙ Add Chart Save & Run Save ▾ Close Run

Outline Filters

Previewing a limited number of records. Run the report to see everything. Update Preview Automatically ☒

Groups

GROUP ROWS

Add group...


Columns

Add column...


School: School Name x

student: students Name x

	School: School Name	student: students Name
1	VIT AP	Sashank
2	Narayana	Ajay
3	FIITJEE	Sreya
4	VIT Chennai	Dipesh
5	Manipal Institute of Technology	Kalpna
6	SRM	Varun
7	VIT Vellore	Abhinav
8	Chaitanya	Jitesh
9	Narayana	Swathi
10	FIITJEE	Bhargav
11	SRM	Priya
12	Manipal Institute of Technology	Suresh
13	VIT Chennai	Vidhi
14	Narayana	Santosh

 Search...

School Management students ▾ parents ▾ Reports ▾ Dashboards ▾ Schools ▾

 Report: Schools with students
Schools with Students Report

Total Records
15

	School: School Name	student: students Name
1	VIT AP	Sashank
2	Narayana	Ajay
3	FIITJEE	Sreya
4	VIT Chennai	Dipesh
5	Manipal Institute of Technology	Kalpna
6	SRM	Varun
7	VIT Vellore	Abhinav
8	Chaitanya	Jitesh
9	Narayana	Swathi
10	FIITJEE	Bhargav
11	SRM	Priya
12	Manipal Institute of Technology	Suresh

APPLICATIONS

Within educational institutions, customer relationship management procedures are streamlined and improved with the help of this Salesforce CRM Application for Schools/Colleges. Because it is based on the Salesforce platform, this application offers a variety of features and functionalities that are especially suited to fulfill the special requirements of schools and colleges, such as Student Information Management, Communication and Engagement, School Management, Report Analytics, etc. This programme can be used by any schools and colleges that want to switch from an on-premises setup to a cloud-based CRM platform for improved management and more effective education delivery.

CONCLUSION

In conclusion, we have created a salesforce application for the Schools and colleges and created the custom objects, fields and relationships. We have created a school profile and used it for our users. We have also created a permission set for the principal user granting all object permissions to the 3 custom objects. Finally we have created sample records for all the objects in the application and created a report that shows each student and their respective school details. We have built this Salesforce CRM application for the schools and colleges to streamline their administrative processes, improve communication between staff and students, and enhance the overall learning experience for students.

FUTURE SCOPE

Since this CRM application was created in the cloud using the Salesforce platform, it has a wide range of potential uses and can be customized for the various academic institutions that have adopted it. With more users and permissions, more objects can be added, aiding in the organization's growth. As the number of users increases and security is needed, the organization-wide settings can be changed to suit its needs, and new permission sets can be formed. To organize faculty and students for the various courses, numerous groups can be formed. Because this application is still in its early stages, the future scope of the application will be determined by the organizations that will utilize it.

THANK YOU