

CREATION OF AN APPLICATION FOR SCHOOL MANAGEMENT SYSTEM

TEAM ID-5885



Submitted by

TEAM LEADER

N.SRIDHAR - 20T91A0429

TEAM MEMBERS

P.RAHUL - 20T91A0433

P.CHAITANYA KRISHNA - 20T91A0434

R.TEJAAKASH - 20T91A0435

M.SATYASAI PAVANI - 20T91A0445

1.INTRODUCTION

In this paper we present a creation of an application for School Management System. This project helps us to maintain and manage the school related problems which further can be modified based on the requirements.

1.1-OVERVIEW

A Student Management System is a must-have, indispensable tool for educational systems. It serves to streamline communication and data coordination between administrative staff, faculty, parents, and students. The system helps to easily track student information and manage scheduling to take the organizational complexity out of the process. In addition, it allows parents the option of staying connected 24/7 with school notifications and their child's activities. The system makes it simple and practical for administrative staff to better understand their school's operations as a whole. Bottom line of a smart investment in this technology will reap rewards across any organization when it comes to improved student management and efficiency.

1.2-PURPOSE

The purpose of school management is to ensure the effective and efficient operation of educational institutions, from primary schools to higher education institutions. It involves planning, organizing, coordinating, and controlling various aspects of the school's functioning to create a conducive environment for teaching, learning, and overall development of students.

❖ Here are some key purposes of School Management -

Academic Excellence: School management aims to provide a high-quality education that fosters academic excellence. This includes setting curriculum standards, ensuring appropriate teaching

methodologies, and promoting an environment that encourages learning.

Student Development: The management of a school is responsible for creating an environment that nurtures the holistic development of students. This involves not only academics but also their physical, emotional, social, and ethical growth.

Resource Management: School management oversees the allocation and utilization of resources such as finances, infrastructure, human resources, and educational materials to optimize their use and benefit the entire school community.

Creating a Safe Environment: It is crucial for school management to ensure a safe and secure environment for both students and staff. Implementing safety measures, addressing concerns promptly, and promoting a positive school culture are part of this purpose.

Staff Development: School management supports the professional development of teachers and staff to enhance their teaching skills and overall effectiveness in the classroom.

Policy Implementation: School management implements educational policies and guidelines set by education boards or governing bodies. This ensures compliance with educational standards and legal requirements.

Performance Assessment: Regularly evaluating the performance of students, teachers, and the overall school is essential for identifying strengths and weaknesses and making data-driven decisions for improvement.



2.LITERACY SURVEY

2.1-EXISTING PROBLEM

In the present School Management System, it is uneasy to store the information related to students, faculty and parents on the paper. As there is too many information when someone tries to access any of stored information it becomes a difficult and time-consuming task.

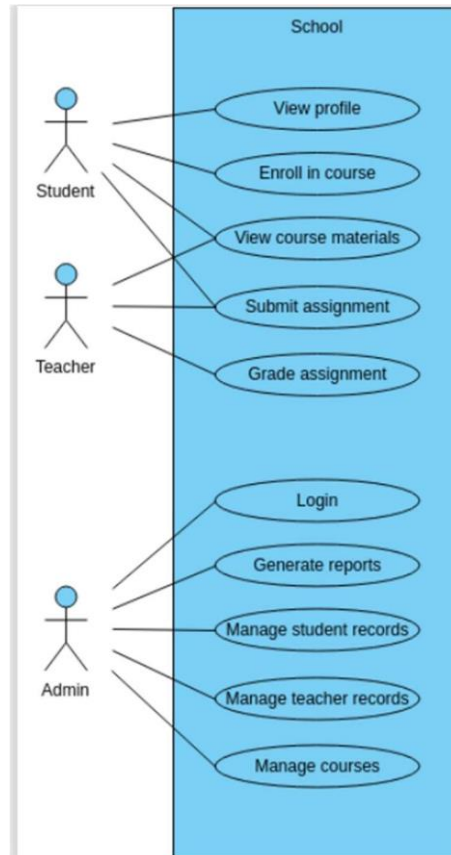
While these days parents and faculty have more work than just take care of students it is difficult for both parents and faculty to monitor them. Whereas the storing and retrieving an information is a difficult task, it also requires much amount of unnecessary worker to do the task.

2.2-PROPOSED SYSTEM

The school management system will manage all the work in any school in particular order so that the time requirement and complexity of the system will be reduced, at first it will focus on student related information. As a student gets the admission in the school system will start managing the details regarding the students. It will manage the fee details, and if the full payment has not done, then it will notify about the fee to a staff of the school. School Management System will then display the date of the test and when the test completes it will display the results of the students. While the parents can use it to monitor their children's performance, also they can contact with the teachers.

3.THEORITICAL SURVEY

3.1-BLOCK DIAGRAM



Object: Salesforce Objects are database tables that allow you to store data specific to an organization. There are 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: Custom objects are those objects that are created by users

Creation of school object:

The screenshot shows the Salesforce Object Manager interface. The browser address bar displays the URL: `facebook-ef-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/home?0.source=alohaHeader`. The page title is "Object Manager" with a subtitle "1 Items, Sorted by Label". A search bar contains the text "school". Below the search bar is a table with the following data:

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
School	School_c	Custom Object		03/08/2023	✓

The Windows taskbar at the bottom shows the date and time as 08:22 on 09-08-2023.

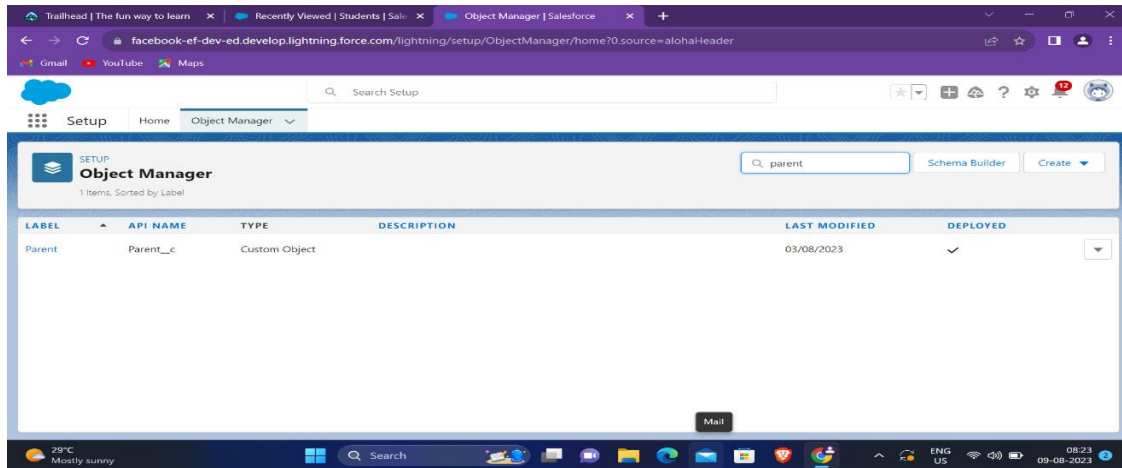
Create student object:

The screenshot shows the Salesforce Object Manager interface. The browser address bar displays the URL: `facebook-ef-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/home?0.source=alohaHeader`. The page title is "Object Manager" with a subtitle "1 Items, Sorted by Label". A search bar contains the text "student". Below the search bar is a table with the following data:

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Student	Student_c	Custom Object		03/08/2023	✓

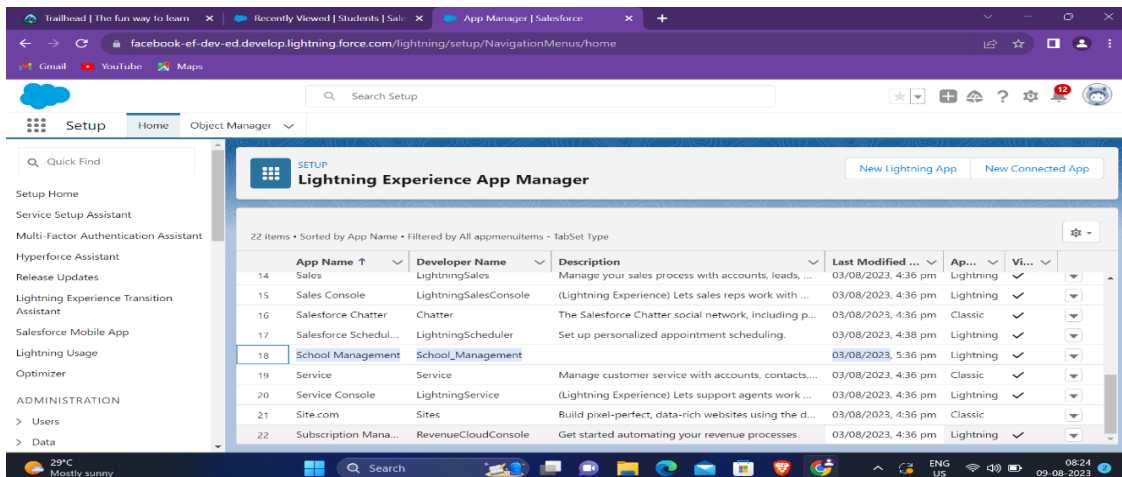
The Windows taskbar at the bottom shows the date and time as 08:23 on 09-08-2023.

Create parent object:



Lightning App: It is a component-based framework for Salesforce app development. Salesforce Lightning aims to simplify the Salesforce app development processes for business users, who typically do not have programming experience.

Create the School Management App:



Fields And Relationship: Salesforce Relationship is a 2- way association between 2 objects. By creating relationship fields, we can link objects with each other and we can make connections and display data about other related objects.

Creation Of Fields for The School Object:

The screenshot shows the Salesforce Setup interface for the 'School' object. The 'Fields & Relationships' section is active, displaying a list of 11 fields. The fields are sorted by Field Label. The table below lists the fields:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text Area(255)		
Created By	CreatedBy	Lookup(User)		
District	District__c	Text Area(255)		
Highest Marks	Highest_Marks__c	Roll-Up Summary (MAX Student)		
Last Modified By	LastModifiedBy	Lookup(User)		
Number of students	Number_of_students__c	Roll-Up Summary (COUNT Student)		

Creation Of Fields for The Student Object:

The screenshot shows the Salesforce Setup interface for the 'Student' object. The 'Fields & Relationships' section is active, displaying a list of 8 fields. The fields are sorted by Field Label. The table below lists the fields:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Class	Class__c	Number(18, 0)		
Created By	CreatedBy	Lookup(User)		
Last Modified By	LastModifiedBy	Lookup(User)		
Marks	Marks__c	Number(18, 0)		
Phone Number	Phone_Number__c	Phone		
Results	Results__c	Picklist		

Creation Of Fields for The Parent Object:

The screenshot shows the Salesforce Setup interface for the 'Parent' object. The 'Fields & Relationships' section is active, displaying a table of fields. The table has columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are: Created By (Lookup(User)), Last Modified By (Lookup(User)), Owner (Lookup(User,Group)), Parent Address (Text Area(255)), Parent Name (Text(80)), and Parent Number (Phone). The 'Parent Name' field is highlighted.

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

Profile: A profile is a group/collection of settings and permissions that define what a user can do in salesforce. Profiles provide access control of CRED (create, read, edit, delete) records of the users.

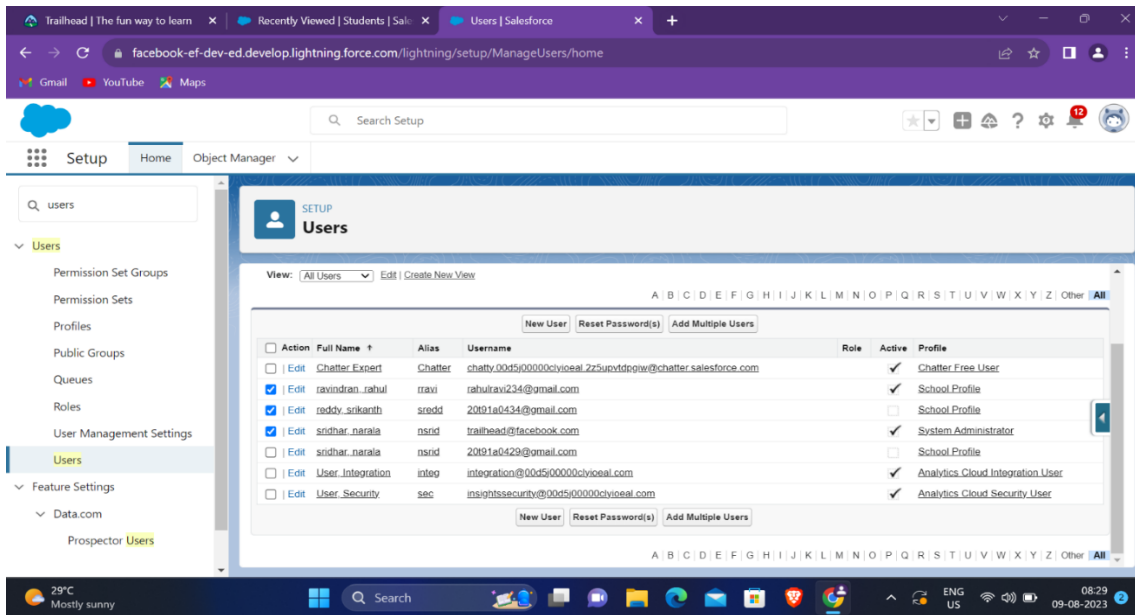
Creation On Profile:

The screenshot shows the Salesforce Setup interface for the 'Profiles' section. The 'Profiles' table is displayed, showing a list of profiles. The 'School Profile' is highlighted. The table has columns: Action, Profile Name, User License, and Custom. The 'School Profile' is selected, and the 'Custom' checkbox is checked.

Action	Profile Name	User License	Custom
<input type="checkbox"/> Edit Clone	Marketing User	Salesforce	<input type="checkbox"/>
<input type="checkbox"/> Edit Clone	Contract Manager	Salesforce	<input type="checkbox"/>
<input type="checkbox"/> Edit Clone	Standard User	Salesforce	<input type="checkbox"/>
<input checked="" type="checkbox"/> Edit Del ...	School Profile	Salesforce	<input checked="" type="checkbox"/>
<input type="checkbox"/> Edit Clone	Salesforce API Only System Integrations	Salesforce Integration	<input type="checkbox"/>
<input type="checkbox"/> Edit Clone	Standard Platform User	Salesforce Platform	<input type="checkbox"/>
<input type="checkbox"/> Edit Clone	Silver Partner User	Silver Partner	<input type="checkbox"/>

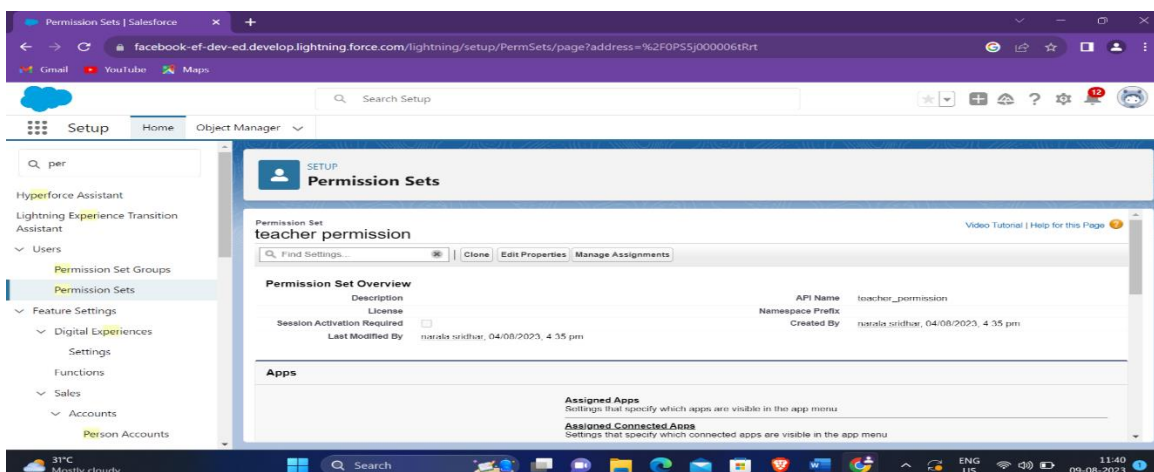
Users: A user is anyone who logs in to Salesforce. Every user in Salesforce has a user account.

Creating A User:

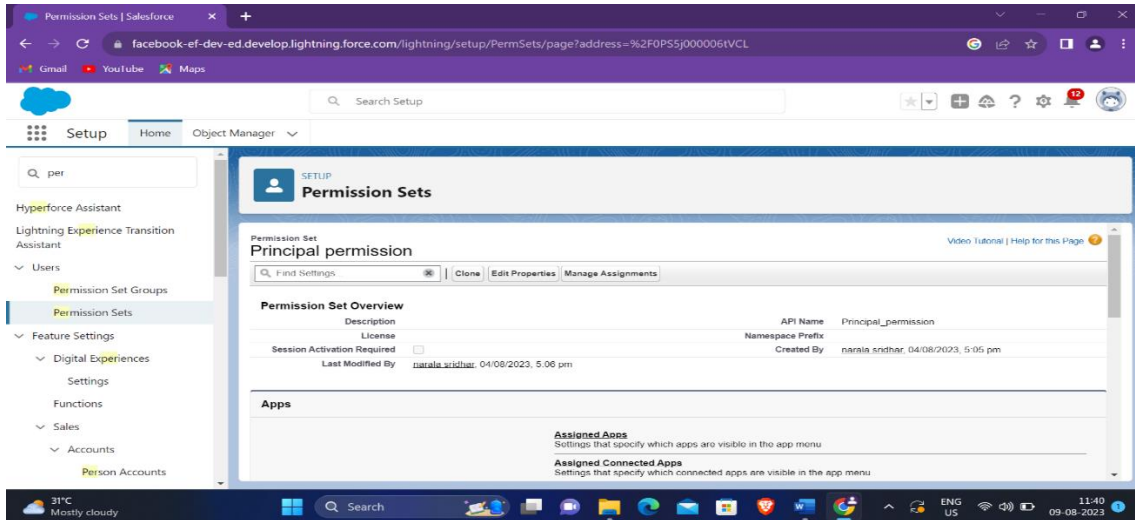


Permission Sets: A permission set is a collection of settings and permissions that give users access to various tools and functions. With permission set groups, you create a single group based on the tasks that your sales employees regularly perform.

Permission set as teacher permission:



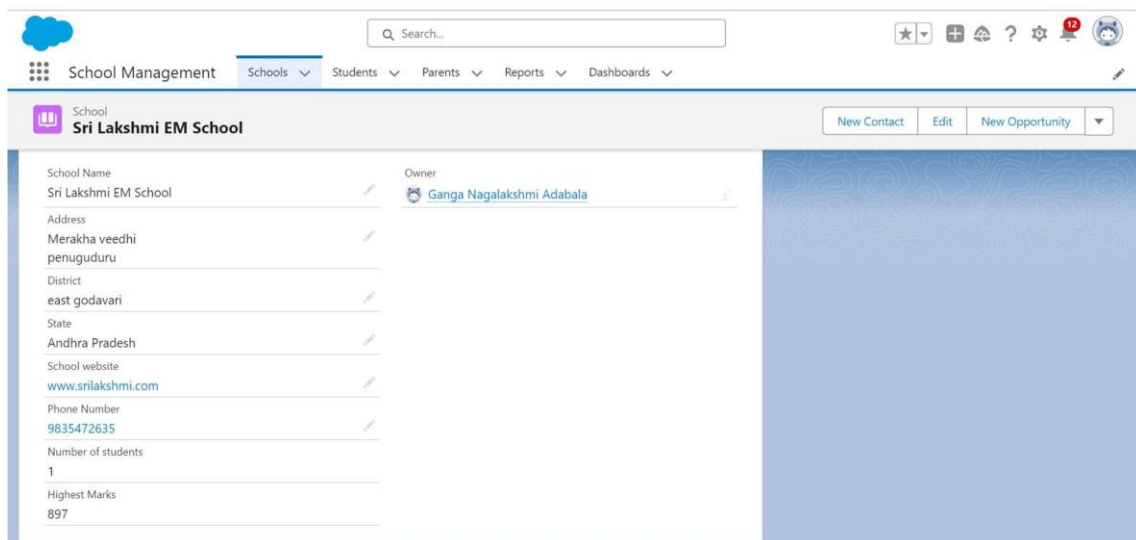
Permission set name as Principal permission:



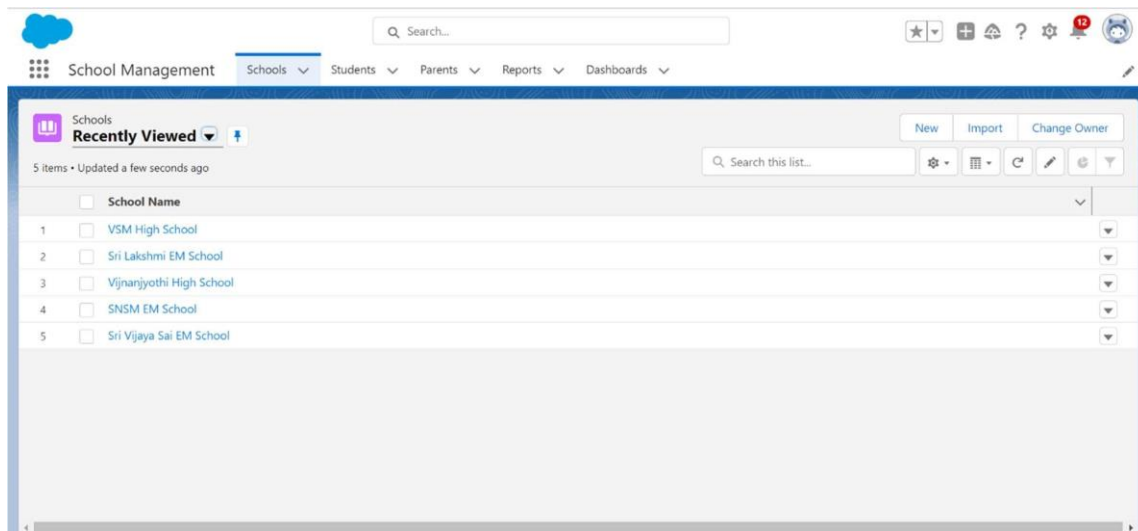
User Adoption: A record is row of field data within an object.

Records are collections of fields and data items of different data types, in a fixed number or series.

Create Record (School):



View Record (School):



3.2-SOFTWARE /HARDWARE DESINGING

School Management system software should come up with a section where exams can be scheduled on a monthly basis or small assessment tests on a weekly basis. This will reduce a lot of pressure on the teachers. The schedule should be made available to the students and their parents. In this way, they will be well-informed about the same which will help them prepare well for the upcoming test.

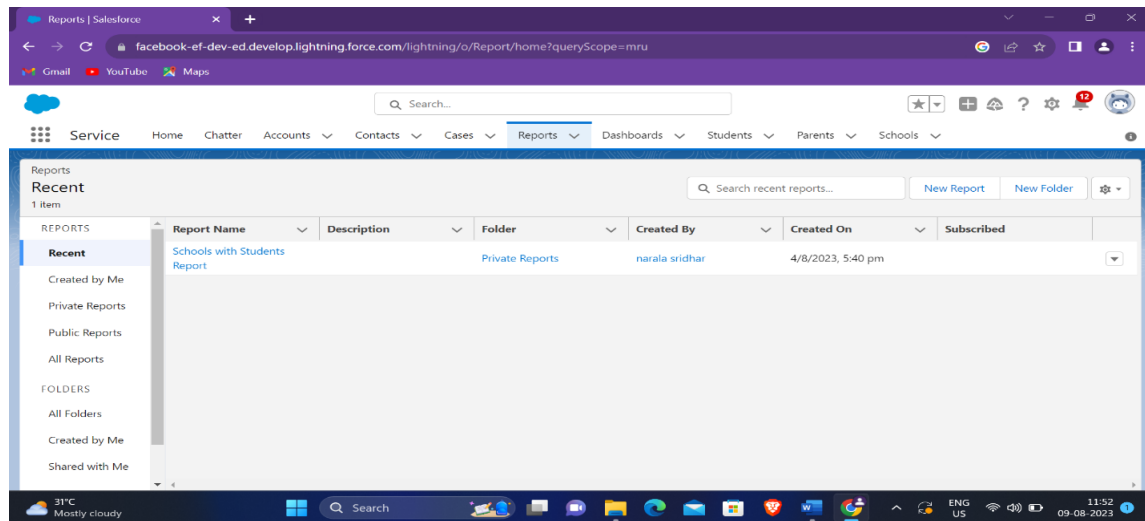
- Track student performance and progress
- Keep a check on student attendance etc...

4.RESULT

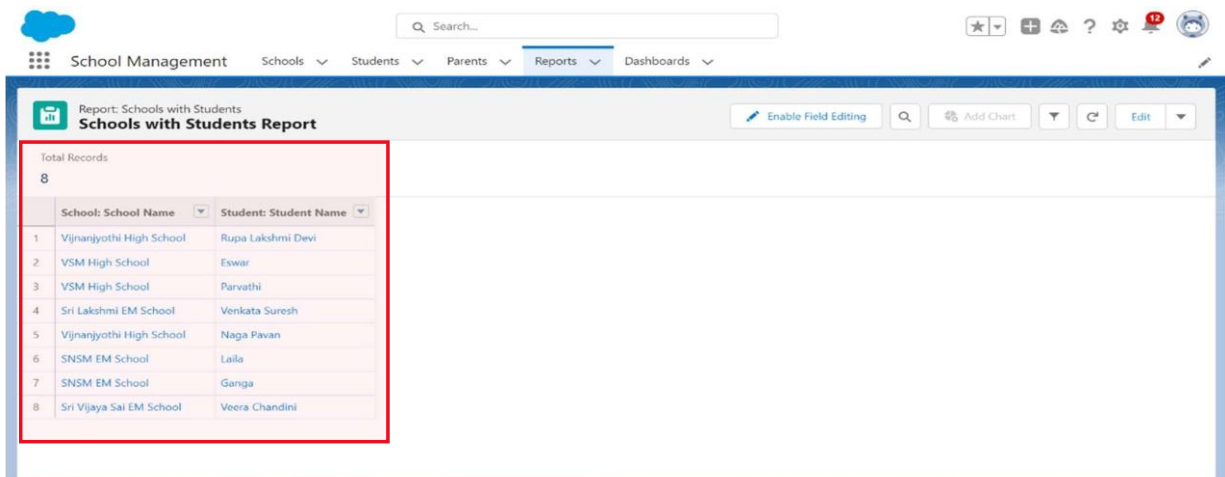
Reports:

Reports will provide clear picture to the management. Management uses the reports to track progress towards its various goals, control expenditure and increase revenue. Reports help to predict trends and this is advantage of increasing profits.

Create Report:



View Report:



5.ADVANTAGES

The following are the advantages of School Management Project –

- Engaging Classes
- Easy-to-Access Student details
- Comprehensive Digital Content
- Generating Assessments
- Quick Analysis of Tests
- Makes the Admission Management Process Seamless

6.APPLICATIONS

To build a comprehensive school management system, you would typically need to create several applications that work together to cover various aspects of school management. Here are some essential applications you might consider developing:

Student Information System (SIS): This application manages student data, including admissions, registrations, attendance, grades, and disciplinary records.

Teacher Portal: A platform for teachers to manage their classes, upload assignments, record grades, and communicate with students and parents.

Parent Portal: A portal for parents to access their child's academic progress, attendance, school announcements, and communicate with teachers and administrators.

Administrative Dashboard: An application for school administrators to oversee various aspects of the school, including managing staff, setting academic calendars, generating reports, and handling financial data.

Fee Management System: An application to handle fee collection, invoicing, and tracking of payments.

Transportation Management System: If the school provides transportation services, this application can be used to manage bus routes, schedules, and student ridership.

Examination and Grading System: An application to create and manage examinations, record results, and calculate final grades.

7.CONCLUSION

In conclusion, a School Management System can play a critical role in improving academic success. School management systems are increasingly being used by educational institutions as a way to streamline administrative tasks and improve communication between teachers, students, parents and providing access to valuable data, these systems can help create a more supportive and effective learning environment for students. This system is rapidly changing and creating greater opportunities for students, administrators, and educators to interact. School management system designed to meet the needs of modern-day educational institutions.

8.FUTURE SCOPE

The future scope of School Management is very vast. It includes everything regarding the efficient functioning of the educational institution securing the greatest benefit to the greatest number through an adoption of practical measures. It interprets and clarifies the functions and the activities of an educational programme in fruitful relationships and harmonizes their mutual action.

❖ The following are some of the future predictions that will shape school management systems in the upcoming years.

- The whole project will be made improved and faster processes.
- We can run the entire system in any operating system.
- More functionality can be added depending upon the user requirements and specifications.
- Global learning
- Streamlined processes
- Personalized learning paths
- Collaborative ecosystem