



## Project Title: Creation of an Application for School

### Management – Admin



**Presented By**  
**Team ID: LTVIP2023TMID06088**

#### TEAM DETAILS:

#### TEAM SIZE : 5

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## Our Trailblazer accounts

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## Introduction

Salesforce is game-changing technology, with a host of productivity-boosting features, that will help you sell smarter and faster. As you work toward your badge for this module, we'll take you through these features and answer the questions.

Salesforce is your customer success platform, designed to help you sell, service, market, analyze, and connect with your customers.

Salesforce has everything you need to run your business from anywhere. Using standard products and features, you can manage relationships with prospects and customers, collaborate and engage with employees and partners, and store your data securely in the cloud.

## Overview:

A school management system is an information management system for educational institutions to manage student data. It helps teachers get information about students faster, easier and reduces their workload.

Student databases in school management systems contain information about the students, such as their exam grades, parent information, medical history, tuition fees, etc.

## Purpose:

School management systems provide skills such as student registration, class documents, grades, analytical grades for students, and other assessment elements. In addition, school management systems are used to plan the curriculum of students, record their presence and manage the needs of students in the school.

School management solutions are web and mobile-based applications with centralized data storage structures that make it easier for administrators, students, teachers, and parents to access data from iPhone and Android devices

## LITERATURE SURVEY

### Existing Problems:

- **Inefficiencies:** Manual processes are time-consuming and error-prone. Spreadsheets can be difficult to manage and update, and they can be easily corrupted. Disparate software systems can lead to data silos, which makes it difficult to get a complete picture of a student's academic record.
- **Data inconsistencies:** When data is stored in multiple systems, it is easy for it to become inconsistent. This can lead to inaccurate reports and decisions.
- **Communication gaps:** When there is no central communication platform, it can be difficult for teachers, parents, and administrators to communicate with each other. This can lead to misunderstandings and delays.
- **Increased costs:** Schools may need to hire more staff to handle administrative tasks, or they may need to invest in expensive software.

- **Reduced productivity:** Teachers and administrators may spend a significant amount of time on administrative tasks, which takes away from time they could be spending on teaching and learning.
- **Poor student outcomes:** When students' academic records are inaccurate or incomplete, it can make it difficult for them to get the help they need.
- **Dissatisfied parents and guardians:** Parents and guardians may be frustrated with the lack of communication from the school, or they may be concerned about the security of their child's data.

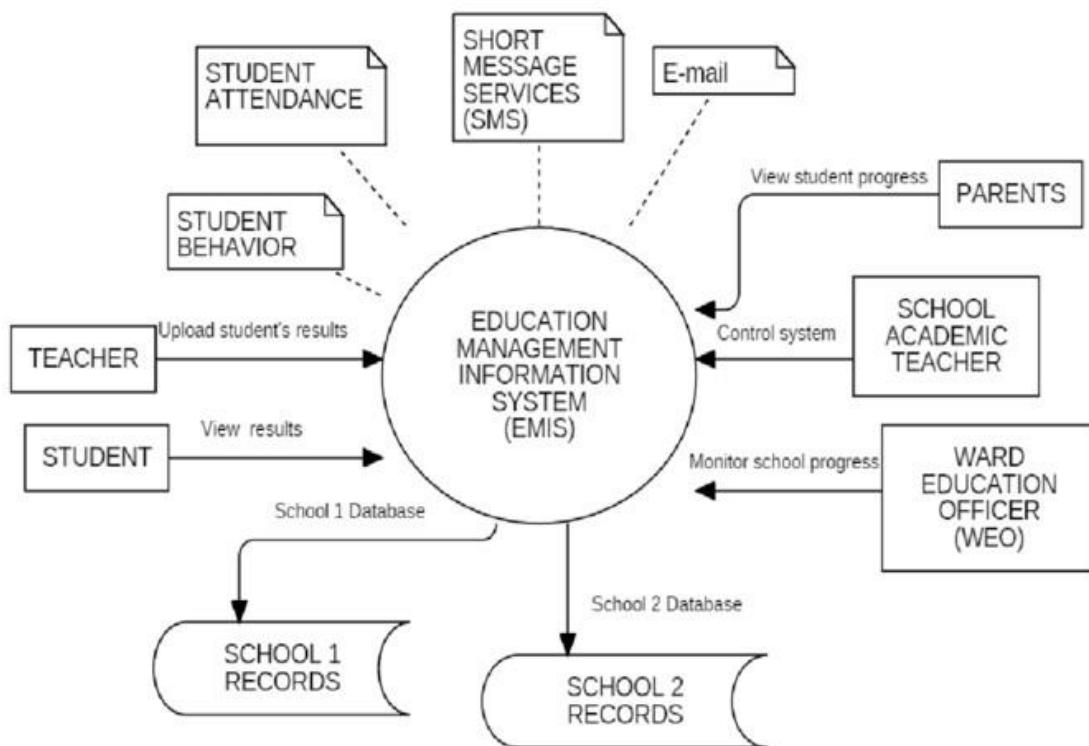
### **Proposed Solution:**

- A comprehensive cloud-based school management application will be developed.
- The application will have an intuitive interface, automation features, and seamless integration.
- It will facilitate efficient attendance tracking, academic management, and communication among teachers, parents, students, and administrators.
- The application will provide valuable insights through analytics and reports, ensuring data-driven decisionmaking.
- The application will have robust security measures and customization options, allowing schools to enhance overall efficiency and productivity, creating a more streamlined and effective learning environment.

Overall, the proposed solution is a comprehensive and innovative approach to school management. It has the potential to significantly improve the efficiency, productivity, and effectiveness of school operations.

## **THEORITICAL ANALYSIS**

### **Process Diagram:**



### **Hardware and Software Designing:**

In the Salesforce platform, the School Management Application would be developed as a cloud-based software solution, which means most of the hardware requirements would be taken care of by Salesforce itself. However, there are still some essential hardware and general requirements to consider:

#### **1. Hardware Requirements**

The following hardware requirements are essential for running the School Management Application on the Salesforce platform:

- A computer with a minimum of 4GB of RAM and 20GB of free disk space.
- A web browser that supports HTML5 and JavaScript.
- A reliable internet connection

## 2.Salesforce Platform Requirements

- Salesforce Account
- Edition
- Licenses

## 3.Salesforce Limits and Allocations

- API Limits
- Data Storage
- Custom Objects and Fields

## 4.Security and Compliance

- Data Privacy
- User Authentication

## 5.Customization and Development

- Development Environment
- Integration Requirements

## 6.User Training and Support

- User Training
- Technical Support

# PROCESS AND RESULTS

## 1.Creating Developer Org:

Creating a developer org in salesforce

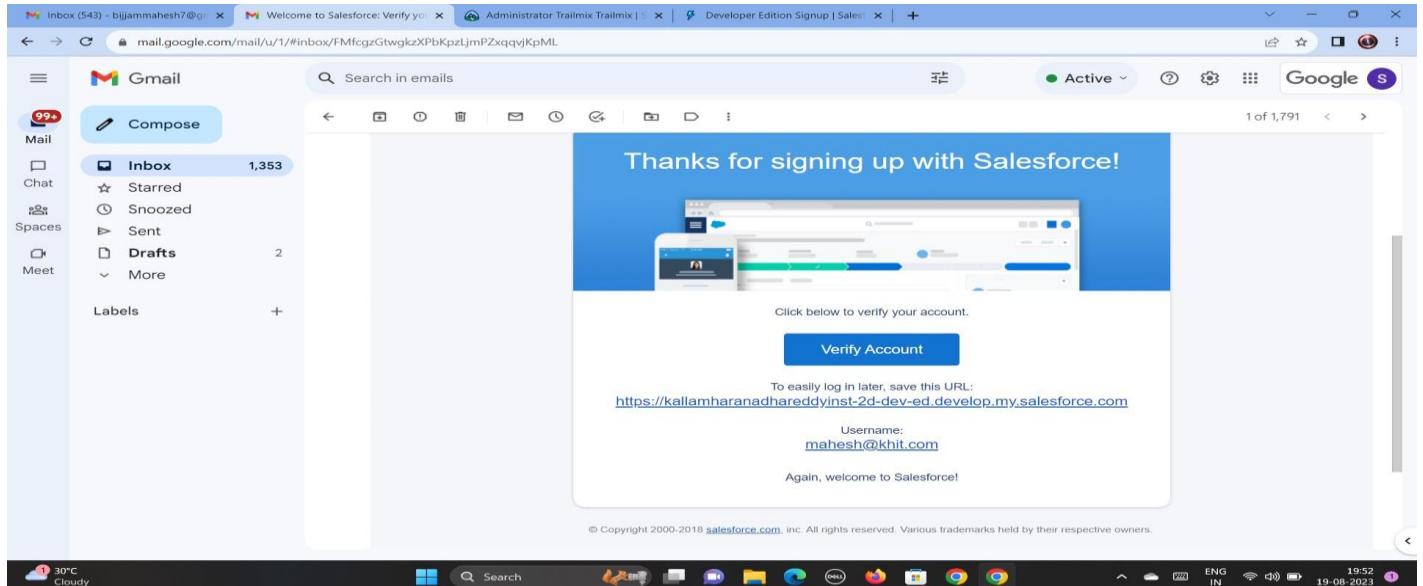
- Go to [developer.salesforce.com](https://developer.salesforce.com)
- Click on sign up.
- On the signup form, enter the following details
- First name & Last name
- Email
- Role – Administrator
- Company - College Name
- Country – India

- Postal Code - pin code

Username- should be a combination of your name and company

## Account Activation:

Go to the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins, as



## Login To Your Salesforce Account

- Go to salesforce.com and click on login.
- Enter the username and password that you just created.
- After login this is the home page which you will see.

The top part of the screenshot shows the 'Change Your Password' page where a new password has been entered. The bottom part shows the Salesforce Home page for user 'Hemant@khit.com'. The Home page features sections for 'Get Started with Einstein Bots', 'Mobile Publisher', and 'Real-time Collaborative Docs'. A sidebar on the left lists various setup and administration tools.

Here's a brief introduction to the key components of the Salesforce setup page:

**1.Home:** The central hub for Salesforce administrators to access and manage all setup options.

**2.Object Manager:** Customize and manage standard and custom objects, defining data structure and relationships.

**3.App Launcher:** Easily switch between Salesforce apps and custom-built applications.

## Object

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.

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:** Custom objects are those objects that are created by users. They supply information that is unique and essential to their organization. They are the heart of any application and provide a structure for sharing data.

## Creation Of School Object Creation of Objects for School Management

For this school management we need to create 3 objects School, Parents and Student. The below steps will assist you in creating those objects.

1. Click on the gear icon and then select Setup.
2. Click on the object manager tab just beside the home tab.
3. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.
4. On the Custom Object Definition page, create the object as follows:
  5. Label: School
  6. Plural Label: Schools
  7. Record Name: School Name
  8. Check the Allow Reports checkbox
  9. Check the Allow Search checkbox
10. Click Save.

Object Manager					
LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	Custom Object from Spreadsheet
Account	Account	Standard Object			
Activity	Activity	Standard Object			
Alternative Payment Method	AlternativePaymentMethod	Standard Object			
API Anomaly Event Store	ApiAnomalyEventStore	Standard Object			
Appointment Category	AppointmentCategory	Standard Object			
Appointment Invitation	AppointmentInvitation	Standard Object			
Appointment Invitee	AppointmentInvitee	Standard Object			
Appointment Topic Time Slot	AppointmentTopicTimeSlot	Standard Object			
Asset	Asset	Standard Object			
Asset Action	AssetAction	Standard Object			
Asset Action Source	AssetActionSource	Standard Object			
Asset Relationship	AssetRelationship	Standard Object			
Asset State Period	AssetStatePeriod	Standard Object			
Assigned Resource	AssignedResource	Standard Object			
Associated Location	AssociatedLocation	Standard Object			
Authorization Form	AuthorizationForm	Standard Object			
Authorization Form Consent	AuthorizationFormConsent	Standard Object			
Authorization Form Data Use	AuthorizationFormDataUse	Standard Object			
Authorization Form Text	AuthorizationFormText	Standard Object			
Business Brand	BusinessBrand	Standard Object			

<https://kallamharanadhaainstitutetech-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager?returl=/>

The screenshot shows the 'New Custom Object' configuration page. Key visible elements include:

- Record Name Label and Format:** Shows 'School Name' as the record name.
- Date Type:** Set to 'Text'.
- Optional Features:** Includes checkboxes for 'Audit Trail', 'Track Field History', 'Track Record Status', and 'Email (including L1)'.
- Object Classification:** Shows the object is classified as an 'Enterprise Application' object.
- Deployment Status:** Shows 'In Development'.
- Search Criteria:** Shows 'School Name' as the search criteria.
- Object Creation Options:** Shows 'Add Notes and Attachments related list to default page layout' and 'Launch New Custom Tab Wizard after saving the custom object'.

Now create a custom tab. Click the Home tab.

The screenshot shows the 'New Custom Object Tab' configuration page. Key visible elements include:

- Step 1. Enter the Details:** Shows 'School' selected as the custom object and 'Header' as the tab style.
- Note:** 'Select an existing custom object or create a new custom object now'.
- Optional:** 'Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.'
- Description:** A text input field for a short description.
- Buttons:** 'Next' and 'Cancel'.

## Create Student Object

- Click on the gear icon and then select Setup.
- Click on the object manager tab just beside the home tab
- After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.

- On the Custom Object Definition page, create the object as follows:
  - Label: Student
  - Plural Label: Students
  - Record Name: Student Name

- Check the Allow Reports checkbox
- Check the Allow Search checkbox
- Click Save.

Setup Home Object Manager

## New Custom Object

Content Name: Student Name Example: Account Name

Record Name: Student Name Data Type: Text

**Optional Features**

- Allow Reports
- Allow Activities
- Allow Chatter
- Allow in Chatter Groups
- Enable Licensing

**Object Classification**

When these settings are enabled, this object is classified as an Enterprise Application object. When these settings are disabled, this object is classified as a Light Application object. Learn more.

- Allow Sharing
- Allow Bulk API Access
- Allow Streaming API Access

**Deployment Status**

- In Development
- Deployed

**Search Status**

When this setting is enabled, your users can find records of this object type when they search. Learn more.

- Allow Search

**Object Creation Options (Available only when custom object is first created)**

- Add Notes and Attachments related list to default page layout
- Launch New Custom Tab Wizard after saving this custom object

Save Save & New Cancel

Now create a custom tab. Click the Home tab, enter Tabs in Quick Find and select Tabs. Under Custom Object Tabs, click New.

1. For Object, select Students.
2. For Tab Style, select any icon.
3. Leave all defaults as is. Click Next, Next, and Save.

Setup Home Object Manager

## Tabs

### New Custom Object Tab

Step 1. Enter the Details

Choose the custom object for this new custom tab. Fill in other details.

Select an existing custom object or [create a new custom object now](#).

Object: Student Tab Style: Laptop

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.

Home Page Custom Link: None

Enter a short description.

Description:

Next Cancel

## Create Parent Object

Click on the gear icon and then select Setup.

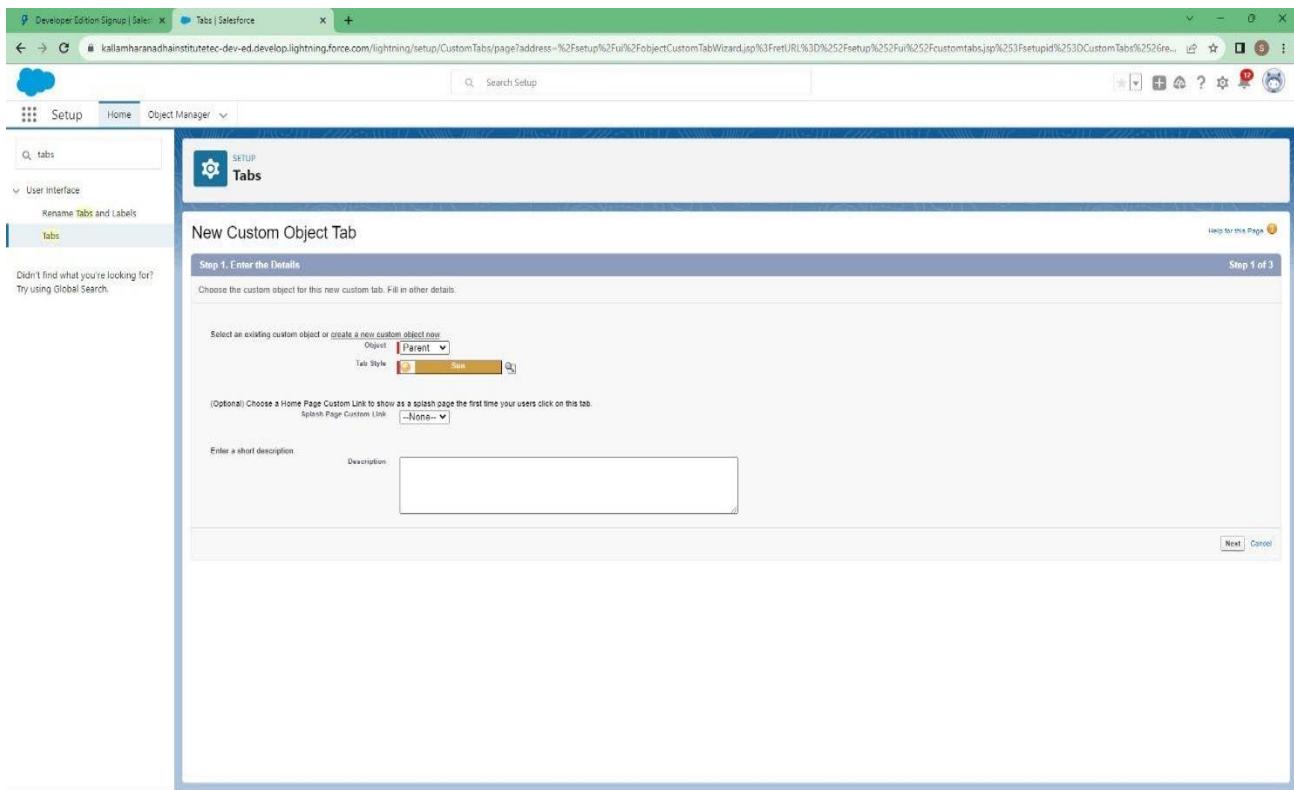
1. Click on the object manager tab just beside the home tab.
2. After the above steps, have a look on the extreme right you will find a Create Dropdown click on that and select Custom Object.

- On the Custom Object Definition page, create the object as follows:
- Label: Parent
- Plural Label: Parents
- Record Name: Parent Name
- Check the Allow Reports checkbox
- Check the Allow Search checkbox
- Click Save.

The screenshot shows the 'New Custom Object' page in the Salesforce Setup. The 'Record Name' field is set to 'Parent Name'. The 'Data Type' is 'Text'. Under 'Optional Features', 'Allow Reports' is checked. Under 'Object Classification', 'Allow Search' is checked. At the bottom, there are buttons for 'Save', 'Save & New', and 'Cancel'.

**Now create a custom tab. Click the Home tab, enter Tabs in Quick Find and select Tabs. Under Custom Object Tabs, click New.**

1. For Object, select Parents.
2. For Tab Style, select any icon.
3. Leave all defaults as is. Click Next, Next, and Save.



## Lightning App

- Apps in Salesforce are a group of tabs that help the application function by working together as a unit. It has a name, a logo, and a particular set of tabs. The simplest app usually has just two tabs.
- There are two types of app -
- Standard App: Standard apps come with every occurrence of Salesforce as default. Many features like Sales, Marketing, Community, call center, content, Salesforce Chatter, App Launcher, etc are present in it.
- Note: The description, Logo, and Label of standard app cannot be altered.
- Custom Apps: Custom apps are created according to need of user. Custom Apps are made by using standard and custom tabs together.
- Note: Logos for Custom Apps can be changed.

## Create The School Management App

1. From Setup, enter App Manager in the Quick Find and select App Manager.
2. Click New Lightning App.
3. Enter School Management as the App Name, then click Next.
4. Under App Options, leave the default selections and click Next.
5. Under Utility Items, leave as is and click Next.
6. From Available Items, select Schools, Students, Parents, Reports, and Dashboards and move them to Selected Items. Click Next.
7. From Available Profiles, select System Administrator and move it to Selected Profiles. Click Save & Finish.

Developer Edition Signup | Sales App Manager | Salesforce

kallamharanadha.institutetech-dev-ed.lightning.force.com/lightning/setup/NavigationMenus/home

Setup Home Object Manager

App Manager

Did you find what you're looking for? Try using Global Search.

Lightning Experience App Manager

21 items • Sorted by App Name • Filtered by All appmenuitems - TabSet Type

App Name	Developer Name	Description	Last Modified Date	App Type	Visible ...
All Tabs	AllTabSet	Build CRM Analytics dashboards and apps	18/08/2023, 8:50 pm	Classic	
Analytics Studio	Insights	Discover and manage business solutions designed for your industry.	18/08/2023, 8:50 pm	Classic	
App Launcher	AppLauncher	Salesforce CRM Communities	18/08/2023, 8:53 pm	Lightning	
Boil Solutions	LightningBoil	Salesforce CRM Content	18/08/2023, 8:50 pm	Classic	
Community	Community	Use Data Manager to view limits, monitor usage, and manage recipes.	18/08/2023, 8:50 pm	Lightning	
Content	Content	Manage content and media for all of your sites.	18/08/2023, 8:50 pm	Lightning	
Data Manager	DataManager	View Adoption and Usage Metrics for Lightning Experience	18/08/2023, 8:50 pm	Lightning	
Digital Experiences	SalesforceCMS	Best-in-class on-demand marketing automation	18/08/2023, 8:50 pm	Classic	
Lightning Usage App	LightningInstrumentation	The fundamental Lightning Platform	18/08/2023, 8:50 pm	Lightning	
Marketing	Marketing	Create and manage queues for your business.	18/08/2023, 8:50 pm	Lightning	
Platform	Platform	The world's most popular sales force automation (SFA) solution	18/08/2023, 8:50 pm	Classic	
Queue Management	QueueManagement	Manage your sales process with accounts, leads, opportunities, and more	18/08/2023, 8:50 pm	Lightning	
Sales	Sales	LightningSales	18/08/2023, 8:50 pm	Lightning	
Sales Console	LightningSalesConsole	LightningExperience Lets sales reps work with multiple records on one screen	18/08/2023, 8:50 pm	Lightning	
Salesforce Chatter	Chatter	Build pixel-perfect, data-rich websites using the drag and drop Site.com application, and manage content and published sites.	18/08/2023, 8:50 pm	Classic	
Salesforce Scheduler Setup	LightningScheduler	Set up personalized appointment scheduling.	18/08/2023, 8:53 pm	Lightning	
Service	Service	Manage customer service with accounts, contacts, cases, and more	18/08/2023, 8:50 pm	Classic	
Service Console	LightningService	LightningExperience Lets support agents work with multiple records across customer service channels on one screen	18/08/2023, 8:50 pm	Lightning	
Site.com	Sites	18/08/2023, 8:50 pm	Classic		
Subscription Management	RevenueCloudConsole	Get started automating your revenue processes	18/08/2023, 8:50 pm	Lightning	

New Lightning App

### App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.

**App Details** This name appears in the navigation bar so your users can see the name of the app they're currently using.

**App Branding**

**Primary Color Hex Value** #0070D2

**Image** School Management

**Description** Enter a description...

**Org Theme Options** Use the app's image and color instead of the org's custom theme

**App Launcher Preview**

**Navigation and Form Factor**

- Navigation Style: Standard navigation
- Supported Form Factors: Desktop and phone

**Setup and Personalization**

- Setup Experience: Setup full set of setup options
- App Personalization Settings: Disable end-user personalization of nav items in this app, Disable temporary tabs for items outside of this app

**Next**

New Lightning App

### Navigation Items

(which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.)

**Available Items** Create

Icon	Name
Schools	Schools
Students	Students
Parents	Parents
Reports	Reports
Dashboards	Dashboards

**Selected Items**

Icon	Name
	dash

**Available Profiles** System

**Selected Profiles** System Administrator

**Next** Save & Finish

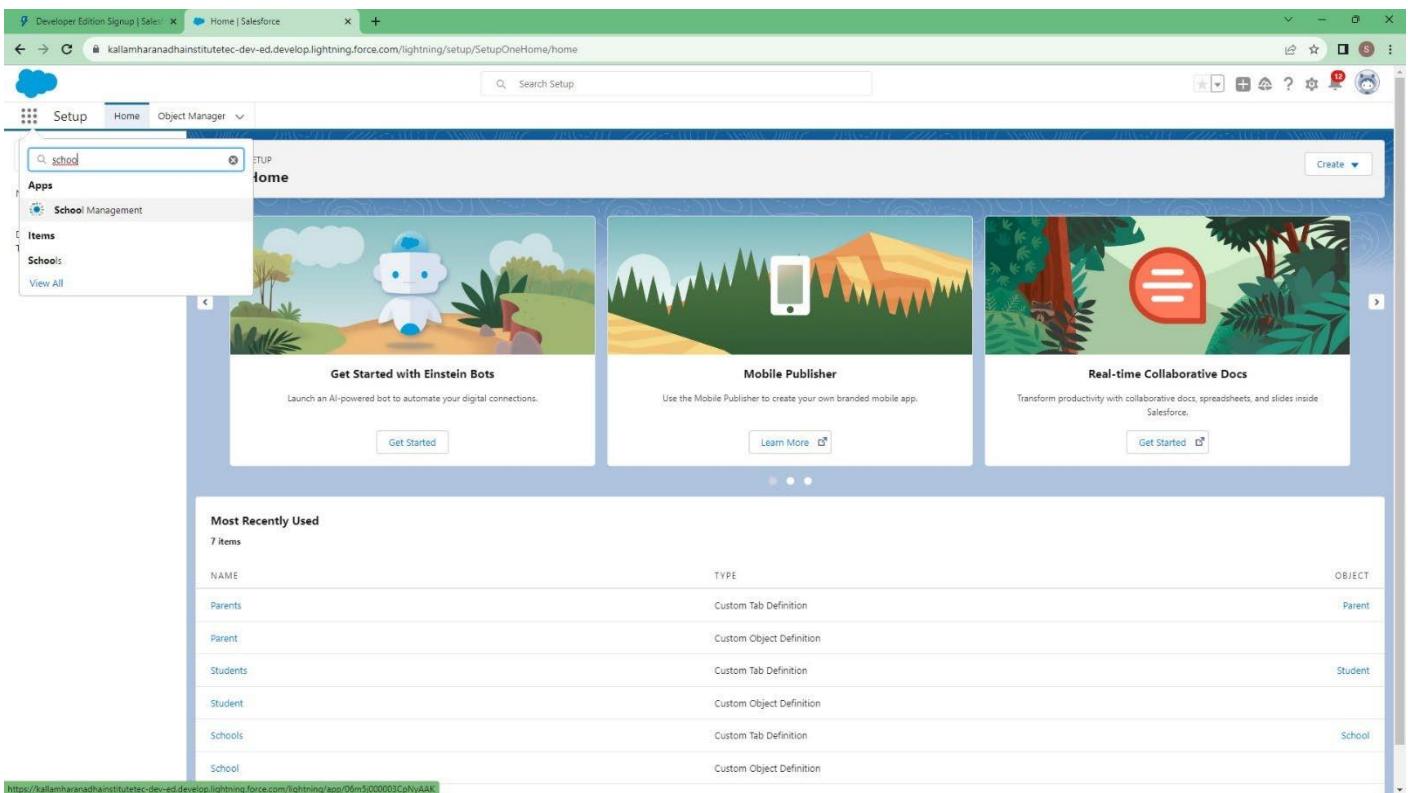
To verify your changes, click the App Launcher, type School Management and select the School Management app.

**Note:**

App Launcher-Displays available apps.

App Name-Displays the current selected app.

Navigation menu -Displays the tabs available inside the app.



## Fields And Relationship

An object relationship in Salesforce is a two-way association between two objects. Relationships are created by creating custom relationship fields on an object. This is done so that when users view records, they can also see and access related data.

## Creation Of Fields For The School Objects

1. Click the gear icon and select Setup. This launches Setup in a new tab.
2. Click the Object Manager tab next to Home.
3. Select School.
4. Select Fields & Relationships from the left navigation
5. Click New
6. Select the Text Area as the Data Type, click Next.
7. For Field Label, enter Address.
8. Click Next, Next, then Save & New.
9. Follow steps 1 to 3 and create two more Text type field - District & State.
10. Create URL type field & give School website as the field label.

Developer Edition Signup | Sales | Recently Viewed | Schools | Sales | School | Salesforce

kalamharanadainstitutetech-dev-ed.lightning.force.com/lightning/setup/ObjectManager/0115j000001kzor/FieldsAndRelationships/view

Setup Home Object Manager

Search Setup

SETUP > OBJECT MANAGER School

**Fields & Relationships**  
4 Items, Sorted by Field Label

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(UserGroup)		✓
School Name	Name	Text(80)		✓

Object Limits

SETUP > OBJECT MANAGER School

**New Custom Field**

Step 2. Enter the details Step 2 of 4

Field Label: Address

Field Name: Address

Description:

Help Text:

Required:  Always require a value in this field in order to save a record

Auto add to custom report type:  Add this field to existing custom report types that contain this entity

Default Value: Show Formula Editor

Use formula syntax: Enclose text and picklist value API names in double quotes ("the\_text"), include numbers without quotes (123), show percentages as decimals (0.10), and express date calculations in the standard format: (Today() + 7). To reference a field from a Custom Measure type record use: @CustomMeasureType\_\_r.RecordName.Field\_\_c

Previous Next Cancel

SETUP > OBJECT MANAGER School

**New Custom Field**

Step 2. Enter the details

Field Label: District

Field Name: District

Description:

Help Text:

Required:  Always require a value in this field in order to save a record

Auto add to custom report type:  Add this field to existing custom report types that contain this entity

Default Value: Show Formula Editor

Use formula syntax: Enclose text and picklist value API names in double quotes ("the\_text"), include numbers without quotes (123), show percentages as decimals (0.10), and express date calculations in the standard format: (Today() + 7). To reference a field from a Custom Measure type record use: @CustomMeasureType\_\_r.RecordName.Field\_\_c

Previous Next Cancel

**SCHOOL**

**SETUP > OBJECT MANAGER**

### New Custom Field

**Step 2. Enter the details**

Field Label	State
Field Name	State
Description	
Help Text	
Required	<input type="checkbox"/> Always require a value in this field in order to save a record
Auto add to custom report type	<input checked="" type="checkbox"/> Add this field to existing custom report types that contain this entry
Default Value	Show Formula Editor
<small>Use formula editor. Enclose text and picklist value API names in double quotes ("Name"). Include numbers without quotes (123). Show percentages as decimal (.123), and express date calculations in the standard format: Today() + 7. To reference a field from a Custom Metadata type record use: \$CustomMetadata__mdt__RecordAPIName Field__c</small>	

**Previous** **Next**

**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** **List View Button Layout** **Restriction Rules** **Scoping Rules** **Triggers** **Flow Triggers**

**SCHOOL**

**SETUP > OBJECT MANAGER**

### New Custom Field

**Step 2. Enter the details**

Field Label	URL
Field Name	URL
Description	
Help Text	
Required	<input type="checkbox"/> Always require a value in this field in order to save a record
Auto add to custom report type	<input checked="" type="checkbox"/> Add this field to existing custom report types that contain this entry
Default Value	Show Formula Editor
<small>Use formula editor. Enclose text and picklist value API names in double quotes ("Name"). Include numbers without quotes (123). Show percentages as decimal (.123), and express date calculations in the standard format: Today() + 7. To reference a field from a Custom Metadata type record use: \$CustomMetadata__mdt__RecordAPIName Field__c</small>	

**Previous** **Next**

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**SCHOOL**

**SETUP > OBJECT MANAGER**

### Fields & Relationships

9 items, Sorted by Field Label

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)		
Last Modified By	LastModifiedBy	Lookup(User)		
Phone Number	Phone_Number__c	Phone		
School	School__c	Master-Detail(Student)		✓
School Name	Name	Text(80)		✓
State	State__c	Text Area(255)		
URL	URL__c	URL(255)		

**Quick Find** **New** **Deleted Fields** **Field Dependencies** **Set History Tracking**

**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** **List View Button Layout** **Restriction Rules** **Scoping Rules** **Triggers** **Flow Triggers** **Validation Rules**

## Creation Of Fields for The Student Objects

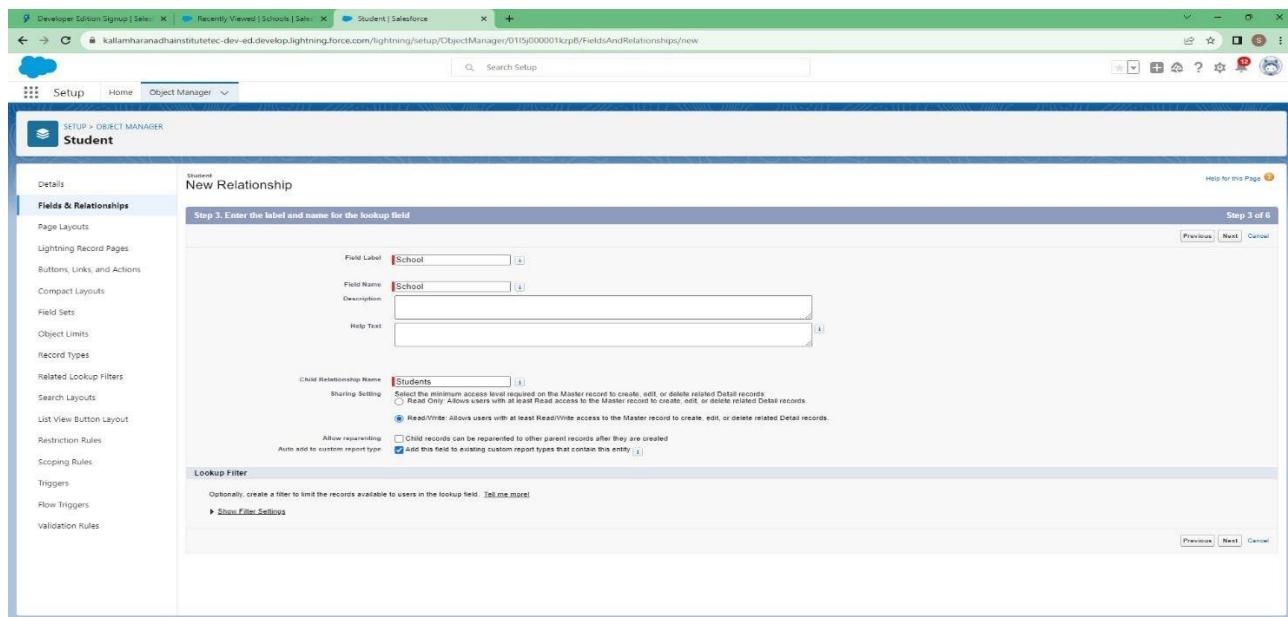
Note- Follow above steps 1 to 5 to create field and then follow below steps

1. Select the Phone as the Data Type, then click Next.
2. For Field Label, enter Phone Number.
3. Click Next, Next, then Save & New

## Let's create a master-detail relationship with School object

Note- Follow above steps 1 to 5 to create field and then follow below steps

1. Select Master-Detail Relationship as the Data Type and click Next.
2. For Related to, enter School.
3. Click Next.
4. For Field Label, enter School.
5. Click Next, Next, Next and Save.



## Let's create a Pick-List field:

Note- Follow above steps 1 to 5 to create field and then follow below steps

1. From Setup, click Object Manager and select Student.
2. Click Fields & Relationships, then New.
3. Select Picklist as the Data Type and click Next.
4. For Field Label enter Results.
5. Select Enter values, with each value separated by a new line and enter these values:  
Pass  
Fail
6. Click Next, Next, then Save & New

The screenshot shows the 'New Custom Field' page in the Salesforce Setup. The field label is 'Results', and the field type is 'Text'. The 'Values' section is set to 'Restrict picklist to the values defined in the value list' with a single value 'Pass/Fail'. Other settings include 'Always require a value in this field in order to save a record' and 'Add this field to existing custom report types that contain this entity'. The page title is 'Step 2 of 4'.

Let's create a Number field:

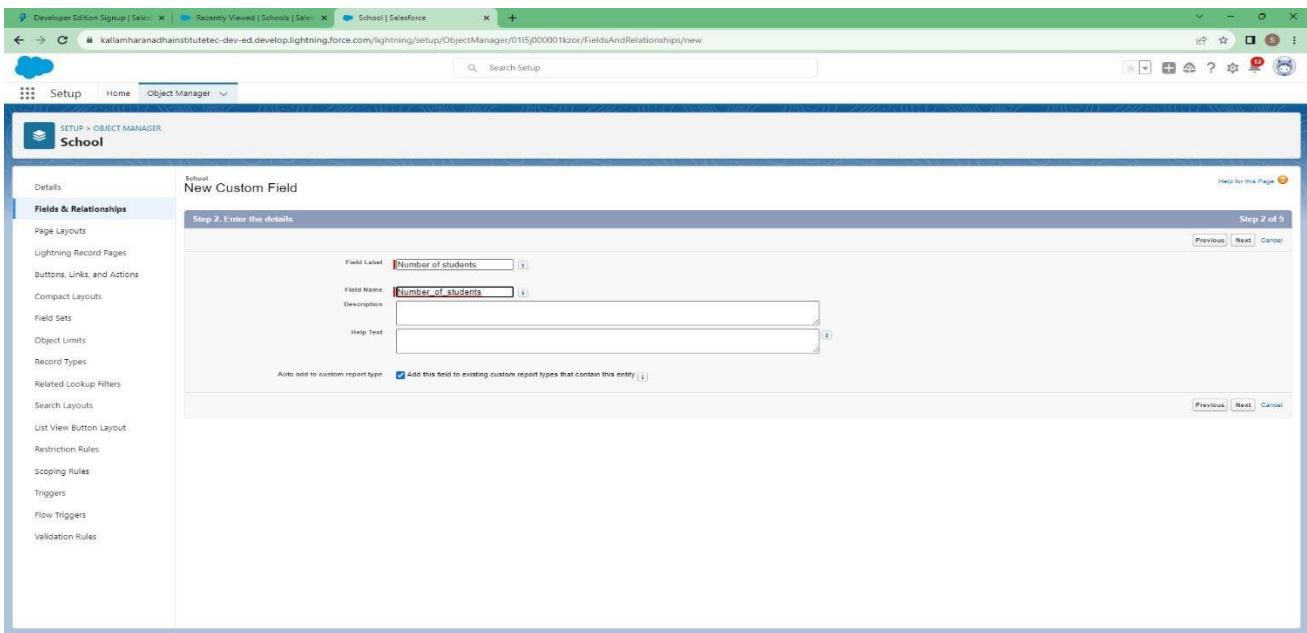
Note- Follow above steps 1 to 5 to create field and then follow below steps

1. Select the Number as the Data Type, then click Next.
2. For Field Label, enter Class.
3. Click Next, Next, then Save & New
4. Follow steps 1 through 3 and create one more number field with Marks as the field labels.

The screenshot shows the 'New Custom Field' page in the Salesforce Setup. The field label is 'Class', and the field type is 'Number'. The 'Length' is set to 18 and 'Decimal Places' is set to 0. Other settings include 'Always require a value in this field in order to save a record' and 'Add this field to existing custom report types that contain this entity'. The page title is 'Step 2 of 4'.

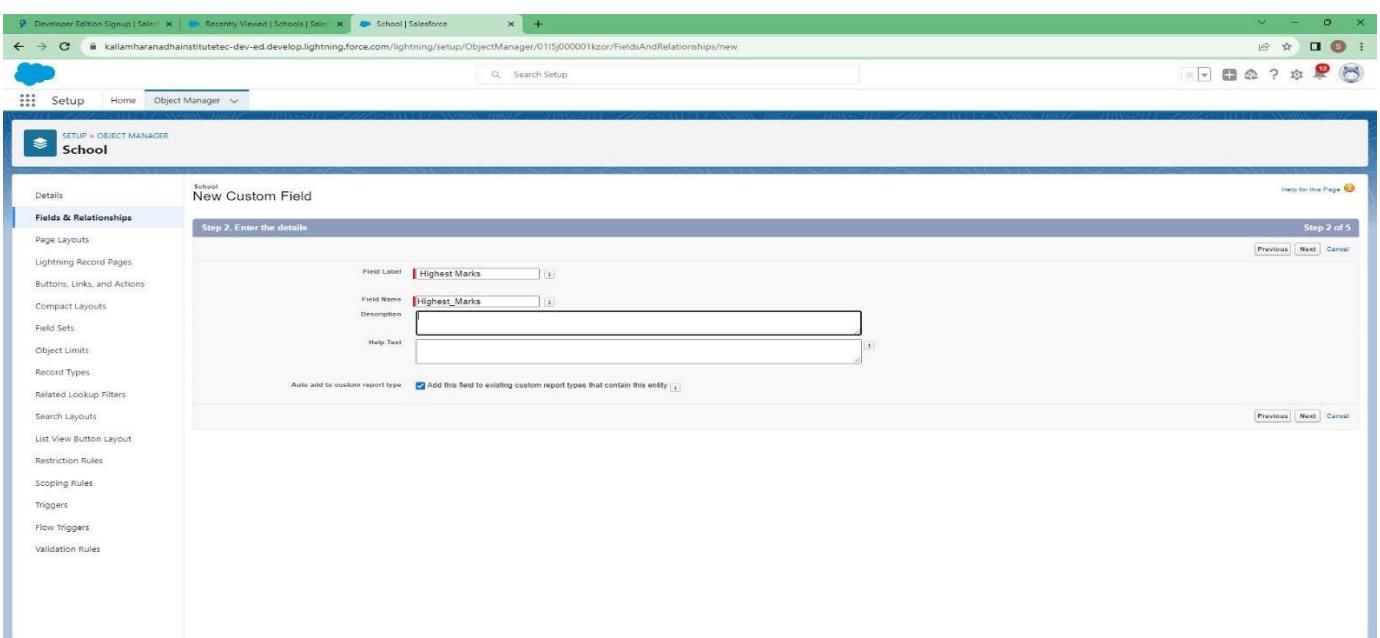
Let's create Roll-up summary fields on School Object to calculate the number of students

1. Click gear icon Select Setup, This launches Setup in a new tab.
2. click Object Manager
3. Select School.
4. Click Fields & Relationships
5. Click New.
6. Select the Roll-up summary field as data type
7. Enter the field label as Number of students
8. Click Next
9. Then select the master object summarized as students
10. Select count as roll-up and then click Next, Next and save.



## Create one more rollup summary field-

- From Setup, click Object Manager and select School.
- Click Fields & Relationships, then New.
- Select the Roll-up summary field as data type
- Enter the field label as Highest Marks
- Click Next
- Then select the master object summarized as students and then select Max as roll-up and then select Marks as field to aggregate.
- click Next, Next and save.



## Creation Of Fields for the Parent Objects

- Select the Text Area as the Data Type, then click Next.
- For Field Label, enter Parent Address.
- Click Next, Next, then Save & New.
- Select the Phone as the Data Type, then click Next.
- For Field Label, enter Parent Number.
- Click Next, Next, then Save & New

The image shows two side-by-side screenshots of the Salesforce 'New Custom Field' setup page. Both screens are titled 'Parent New Custom Field' and 'Step 2. Enter the details'.  
Left Screen (Parent Address):

- Field Label: Parent Address
- Field Name: Parent\_Address
- Description: (empty)
- Help Text: (empty)
- Required:  Always require a value in this field in order to save a record
- Auto add to custom report type:  Add this field to existing custom report types that contain this entity
- Default Value: Show Formula Editor  
Use formula editor. Enclose text and picklist value API names in double quotes ('The\_Text'), include numbers without quotes (.12), show percentages as decimals (.10), and express date calculations in the standard format: (Today) + 7. To reference a field from a Custom Metadata type record use @CustomMetadataType\_\_r.RecordName.FieldName

  
Right Screen (Parent Number):

- Field Label: Parent Number
- Field Name: Parent\_Number
- Description: (empty)
- Help Text: (empty)
- Required:  Always require a value in this field in order to save a record
- Auto add to custom report type:  Add this field to existing custom report types that contain this entity
- Default Value: Show Formula Editor  
Use formula editor. Enclose text and picklist value API names in double quotes ('The\_Text'), include numbers without quotes (.12), show percentages as decimals (.10), and express date calculations in the standard format: (Today) + 7. To reference a field from a Custom Metadata type record use @CustomMetadataType\_\_r.RecordName.FieldName

## 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

## Creation On Profile

- From Setup enter Profiles in the Quick Find box
- Select Profiles.
- Click new, From the list of profiles, find Standard User (profile to clone) • For Profile Name, enter School Profile
- Click Save.
- While still on the school profile page, then click Edit.

Scroll down to Custom Object Permissions and Give view all access permissions

The screenshot shows the Salesforce Setup Profiles page. The left sidebar has a search bar and navigation links for Home, Object Manager, and Profiles. The main content area is titled "Profiles" and contains a table with columns for Action, Profile Name, User License, and Status. The table lists numerous profiles, including Standard User, Salesperson, and various custom profiles like "Custom: Marketing Profile" and "Custom: Sales Profile". A status column indicates which profiles are active (checkmark) or inactive (empty box). The bottom of the page shows pagination with "1-25 of 39" and "0 Selected".

The screenshot shows the Salesforce Setup Clone Profile page. The left sidebar is identical to the previous screen. The main content area is titled "Clone Profile" and asks for the name of the new profile. It includes fields for "Existing Profile" (set to "Standard User"), "User License" (set to "Salesforce"), and "Profile Name" (set to "School Profile"). Below these fields are "Save" and "Cancel" buttons.

The screenshot shows the Salesforce Setup Edit Profile page for the "School Profile". The left sidebar includes a search bar and navigation links. The main content area is titled "School Profile" and contains sections for "Object Permissions", "Custom Object Permissions", "Session Settings", and "Password Policies". The "Object Permissions" section shows checkboxes for various objects like Ideas, Images, Incidents, Individuals, Invoices, and Leads. The "Custom Object Permissions" section shows checkboxes for Parents and Schools under categories like Basic Access, Create, Edit, Delete, View All, and Modify All. The "Session Settings" section includes a dropdown for "Session Times Out After" (set to "2 hours of inactivity") and a dropdown for "Session Security Level Required at Login" (set to "None"). The "Password Policies" section shows a dropdown for "User passwords expire in" (set to "90 days").

## 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. Every user in Salesforce has a user account.

# Creating A User

1. From Setup, in the Quick Find box, enter Users.
2. Select Users.
3. Click New User.
4. Enter the user's name Parents and (Your) email address and a unique username in the form of an email address. By default, the username is the same as the email address.
5. Select a User License as salesforce.
6. NOTE- As Salesforce license can only be used by 2 Users at a time in Dev Org, so If you don't find salesforce license then deactivate a user who has salesforce license or change the license type from Salesforce to any other.
7. Select a profile as a school profile.
8. Check Generate new password and notify the user immediately to have the user's login name and a temporary password emailed to your email.
9. Similarly follow the above steps and create 2 users as Teachers and principals.

The screenshot shows two screenshots of the Salesforce Setup interface. The top screenshot displays the 'All Users' list page, where four users are listed: Chatter\_Fred, Hemant\_Kumar\_Bandi, User\_Integration, and User\_Security. The bottom screenshot shows the 'New User' edit screen for a user named TEACHERS, with various configuration options like Role, Profile, and License selected.

**All Users**

Action	Full Name	Alias	Username	Role	Active	Profile
<input type="checkbox"/>	Chatter_Fred	Chatter	chatty.0d5000000chzcean.krebuuzzlo@chatter.salesforce.com		<input checked="" type="checkbox"/>	Chatter Free User
<input type="checkbox"/>	HEMANT KUMAR BANDI	BHEMMA	hemanth5@khtguntur.ac.in		<input checked="" type="checkbox"/>	System Administrator
<input type="checkbox"/>	User_Integration	Integ	integration@0d5000000chzcean.com		<input checked="" type="checkbox"/>	Analytics Cloud Integration User
<input type="checkbox"/>	User_Security	sec	insightssecurity@0d5000000chzcean.com		<input checked="" type="checkbox"/>	Analytics Cloud Security User

**New User**

User Edit

General Information

First Name	TEACHERS
Last Name	
Alias	teacher
Email	208x1a05d0@khtguntur.ac.in
Username	208x1a05d0@khtguntur.ac.in
Nickname	User1692379503794303608
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:

Site.com Publisher User:

WDC User:

Data.com User Type: <None>

Data.com Monthly Addition Limit: Default Limit (300)

Accessibility Mode (Classic Only):

High-Contrast Palette on Charts:

Load Lightning Pages While Scrolling:

Debug Mode:

Quick Access Menu:

Salesforce CRM Content User:

Receive Salesforce CRM Content Email Alerts:

Receive Salesforce CRM Content Alerts as Daily Digest:

Allow Forecasting:

Call Center:

Phone:

Extension:

## Permission Sets

A permission set is a collection of settings and permissions that give users access to various tools and functions.

Permission sets extend users' functional access without changing their profiles.

## Permission Sets 1

1. From Setup, enter Permission Sets in the Quick Find box, then select Permission Sets.
2. Click New.
3. Give the name of the Permission set name as teacher permission.
4. Under the object settings give the view create and edit permissions to all 3 custom objects (By click open the object)
5. Click on manage assignment
6. Click on add assignment.
7. Click on Teacher (user), Next, Assign.

Setup Home Object Manager

Q Search Setup

permission

Users

Permission Set Groups

**Permission Sets**

Custom Code

Custom Permissions

Didn't find what you're looking for? Try using Global Search.

Permission Set teacher permission

Description License API Name teacher\_permission Namespace Prefix

Session Activation Required Last Modified By RAVI HEMANTH KUMAR 18/08/2023, 10:59 pm Created By RAVI HEMANTH KUMAR 18/08/2023, 10:59 pm

Permission Set Overview

Apps

**Assigned Apps**

- Settings that specify which apps are visible in the app menu
- Assigned Connected Apps
- Object Settings
- Apex Permissions
- Apex Class Access
- Visualforce Page Access
- External Data Source Access
- Flow Access
- Named Credential Access
- External Credential Principal Access
- Custom Permissions
- Custom Metadata Types
- Custom Setting Definitions
- Organization-Wide Email Address Access

Setup Home Object Manager

Q permis

Users

Permission Set Groups

**Permission Sets**

Custom Code

Custom Permissions

Didn't find what you're looking for? Try using Global Search.

> PERMISSION SET 'TEACHER PERMISSION' > MANAGE ASSIGNMENT EXPIRATION

teacher permission

Select an Expiration Option For Assigned Users

No expiration date  Specify the expiration date

1 Day 1 Week 30 Days 60 Days Custom Date Time Zone Select a time zone...

Selected Users

Full Name	Role	Profile	Active	User License	Expires On
TEACHERS	School Profile	<input checked="" type="checkbox"/>	Salesforce	Never Expires	

Cancel Back Assign

Similarly, follow the above steps for the permission set 2.

## Permission Sets 2

- From Setup, enter Permission Sets in the Quick Find box, then select Permission Sets.
- Click New.
- Give the name of the Permission set name as Principal permission and then under the object settings give all permissions for the all 3 custom objects and assign them to the principal user.

## User Adoption

### Create Record (School)

1. Click on App Launcher on left side of screen.
2. Search School Management App & click on it.
3. Click on Schools tab.
4. Click new button
5. Fill all School record details.
6. Click on Save Button

New School

Information

- \*School Name: SRI KONDAVEEDU HIGH SCHOOL
- Address: REDLA BAZAR, SANGADIGUNTA
- District: GUNTUR
- State: ANDHRA PRADESH
- School website:
- Phone Number:

Owner: BANDI HEMANTH KUMAR

Cancel Save & New Save

## View Record (School)

1. Click on App Launcher on left side of screen.
2. Search School Management App & click on it.
3. Click on Schools Tab.
4. Click on any record name. you can see the details of the school.

Recently Viewed

1 item • Updated a few seconds ago

School Name
<input type="checkbox"/> SRI KONDAVEEDU HIGH SCHOOL

Search this list...

## Delete Record (School)

1. Click on App Launcher on left side of screen.
2. Search School Management App & click on it.
3. Click on Schools Tab.
4. Click on Arrow at right hand side on that Particular record.
5. Click delete and delete again.

The screenshot shows the Salesforce School Management interface. At the top, there are three tabs: 'Developer Edition Signup | Sales', 'Recently Viewed | Schools | Sale', and 'Recently Viewed | Schools | Sale'. The main area is titled 'Schools Recently Viewed'. It displays a single item: 'SRI KONDAVEEDU HIGH SCHOOL'. On the right side, there are buttons for 'New', 'Import', and 'Change Owner', and a search bar labeled 'Search this list...'. A context menu is open over the listed item, showing options: 'Edit', 'Delete', and 'Change Owner'.

## Reports

Reports in Salesforce is a list of records that meet a particular criterion which gives an answer to a particular question. These records are displayed as a table that can be filtered or grouped based on any field.

### There are 4 types of report formats in Salesforce:

#### 1. Tabular Reports:

This is the most basic report format. It just displays the row of records in a table with a grand total. While easy to set up they can't be used to create groups of data or charts and also cannot be used in Dashboards. They are mainly used to generate a simple list or a list with a grand total.

#### 2. Summary Reports:

It is the most commonly used type of report. It allows grouping of rows of data, view subtotal, and create charts.

#### 3. Matrix Reports:

It is the most complex report format. Matrix report summarizes information in a grid format. It allows records to be grouped by both columns and rows. It can also be used to generate dashboards. Charts can be added to this type of report.

#### 4.Joined Reports:

These types of reports let us create different views of data from multiple report types. The data is joined reports are organized in blocks. Each block acts as a sub report with its own fields, columns, sorting, and filtering. They are used to group and show data from multiple report types in different views.

#### Report types:

Report type determines which set of records will be available in a report. Every report is based on a particular report type. The report type is selected first when we create a report. Every report type has a primary object and one or more related objects. All these objects must be linked together either directly or indirectly.

A report type cannot include more than 4 objects.

Once a report is created its report type cannot be changed.

### There are 2 types of report types:

## **1. Standard Report Type:**

Standard Report Types are automatically included with standard objects and also with custom objects where “Allow Reports” is checked.

Standard report types cannot be customized and automatically include standard and custom fields for each object within the report type. Standard report types get created when an object is created, also when a relationship is created.

Note: Standard report types always have inner joins.

## **2. Custom Report Types:**

Custom report types are reporting templates created to streamline the reporting process. Custom Reports are created by an administrator or User with “Manage Custom Report Types” permission.

Custom report types are created when standard report types cannot specify which records will be available on reports.

In custom report types we can specify objects which will be available in a particular report. The primary object must have a relationship with other objects present in a report type either directly or indirectly.

## **There are 3 types of access levels of folders:**

### **1. Viewer:**

With this access level, users can see the data in a report but cannot make any changes except cloning it into a new report.

### **2. Editor:**

With this access level, users can view and modify the reports it contains and can also move them to/from any other folders they have access level as Editor or Manager.

### **3. Manager:**

With this access level, users can do everything Viewers & Editors can do, plus they can also control other user’s access levels to this folder. Also, users with Manager Access levels can delete the report.

From this milestone we are going to import the data and create the reports and dashboards for data visualization in the application.

## **Create Report**

### **Reports:**

In School Management App click Reports tab.

1. Click New Report.
2. Select the report type as School with students and parents for the report.
3. Click start report.
4. Customize your report, then save and run
5. Give report name – Schools with Students Report
6. Click Save

NOTE: In this report you can see your all record of the object you selected for reporting (What you Selects in “Select a report type option”).

Developer Edition Signup | Sales | Recently Viewed | Schools | Sales | Report Builder | Salesforce

kallamharanadainstitutete-  
c-dev-ed.develop.lightning.force.com/one/one.app#eyJb21wb25lbnREZWIyOulyZX8vcnRzOnJlcG9ydE1aWvkZXILCjhHRyaWJ1dGVzjp7injY29yZEikjoiliwibmV3UmVvb3JOQnVpbGRlcil6dH1ZX0slnN0YXRlljp7X0%3D

School Management Schools Students Parents Reports Dashboards

Create Report

**Category**

Recently Used

All

Accounts & Contacts

Opportunities

Customer Support Reports

Leads

Campaigns

Activities

Contracts and Orders

Price Books, Products and Assets

Administrative Reports

File and Content Reports

Individuals

Other Reports

Hidden Report Types

Select a Report Type

Report Type Name

Schools Schools Schools with Students

Category Standard Standard

[https://kallamharanadainstitutete-  
c-dev-ed.develop.lightning.force.com/reports/lightningReportApp.ap](https://kallamharanadainstitutete-<br/>c-dev-ed.develop.lightning.force.com/reports/lightningReportApp.ap)

Developer Edition Signup | Sales | Recently Viewed | Schools | Sales | Report Builder | Salesforce

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c-dev-ed.develop.lightning.force.com/one/one.app#eyJb21wb25lbnREZWIyOulyZX8vcnRzOnJlcG9ydE1aWvkZXILCjhHRyaWJ1dGVzjp7injY29yZEikjoiliwibmV3UmVvb3JOQnVpbGRlcil6dH1ZX0slnN0YXRlljp7X0%3D

School Management Schools Students Parents Reports Dashboards

**REPORT**

New Schools with Students Report Schools with Students

Outline Filters

Groups

GROUP ROWS Add group... School: School Name

GROUP COLUMNS Add group... Student: Student Name

No records returned. Try editing report filters.

Add Chart Save & Run Save Close Run

Update Preview Automatically

Developer Edition Signup | Sales | Recently Viewed | Schools | Sales | Report Builder | Salesforce

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c-dev-ed.develop.lightning.force.com/one/one.app#eyJb21wb25lbnREZWIyOulyZX8vcnRzOnJlcG9ydE1aWvkZXILCjhHRyaWJ1dGVzjp7injY29yZEikjoiliwibmV3UmVvb3JOQnVpbGRlcil6dH1ZX0slnN0YXRlljp7X0%3D

School Management Schools Students Parents Reports Dashboards

**REPORT**

New Schools with Students Report Schools with Students

Show Fields Filters

Groups

GROUP ROWS Add group... School: School Name

GROUP COLUMNS Add group... Student: Student Name

Columns

Add column... Student: Student Name

School: ID

No records returned. Try editing report filters.

Add Chart Save & Run Save Close Run

Update Preview Automatically

Save Report

\* Report Name Schools with Students Report

Report Unique Name Schools\_with\_Students\_Report\_YBC

Report Description

Folder Private Reports Select Folder

Cancel Save

Row Counts Detail Rows Subtotals Grand Total

## View Report

1. Click on App Launcher on left side of screen.
2. Search School Management App & click on it.
3. Click on Reports Tab.
4. Click on School with Students report and see records

The screenshot shows the Salesforce Reports interface. The top navigation bar includes tabs for 'Developer Edition Signup | Sales', 'Recently Viewed | Schools | Sales', and 'Reports | Salesforce'. Below the navigation is a search bar and a toolbar with various icons. The main content area is titled 'Recent' and shows a table with columns: Report Name, Description, Folder, Created By, Created On, and Subscribed. One row is selected: 'Schools with Students Report' (Description: 'Private Reports'), created by 'BANDI HEMANTH KUMAR' on '18/08/2023, 11:27 pm'.

The screenshot shows the Salesforce Schools detail view for 'SRI KONDAVEEDU HIGH SCHOOL'. The top navigation bar includes tabs for 'Developer Edition Signup | Sales', 'Recently Viewed | Schools | Sales', and 'SRI KONDAVEEDU HIGH SCHOOL'. The main content area displays the school's details under the 'Details' tab. Fields include School Name (SRI KONDAVEEDU HIGH SCHOOL), Address (REDLA BAZAR,SANGADIGUNTA), District (GUNTUR), State (ANDHRA PRADESH), and Phone Number. Other fields like Number of students (0) and Highest Marks are also present. The 'Owner' field shows 'BANDI HEMANTH KUMAR'. The bottom right corner of the detail view has buttons for 'New Contact', 'Edit', and 'New Opportunity'.

The screenshot shows the Salesforce Reports interface with a context menu open over the 'Schools with Students Report'. The menu options are: Run, Edit, Subscribe, Export, Delete, Add to Dashboard, Favorite, and Move. The report table in the background is identical to the one in the first screenshot, showing the same row selected.

## **Advantages:**

- Saves Time & Resources
- Improves Communication
- Better Efficiency
- Better Student Data Management
- Quick Access to Every Information
- Expense Management

## **Disadvantages:**

- There are no such disadvantages of school management software but there are some issues that are commonly faced by users.
- The school management software does not have enough features to fulfill the school's requirements

There are countless advantages of the school management system, and one can't simply ignore these benefits to save a few bucks.

## **APPLICATIONS:**

The application can be used by a variety of educational institutions, including:

- Schools and K-12 institutions
- Colleges and universities
- Online learning platforms
- Tutoring centers and coaching institutes
- Non-profit educational initiatives
- Training and development programs
- Vocational institutes
- Special education programs
- After-school programs
- Language schools

The application has the potential to revolutionize the way schools are run. By automating administrative tasks and improving communication, the application can help schools to provide a better educational experience for their students.

In the future, the application could be extended to include new features and functionality, such as:

- A mobile app for teachers and parents.
- A data analytics dashboard for administrators.
- Integration with other educational systems, such as learning management systems and student information systems.

## **Conclusion**

- School management software provides a way for schools to track student progress and hold students, teachers, and administrators accountable for their performance.
- This helps to ensure that all stakeholders are committed to achieving academic success.

- In conclusion, school management software is an essential tool for educational institutions. It helps to streamline administrative tasks, improve communication, and enhance overall efficiency.
- By using school management software, schools can improve student outcomes and provide a better education for their students.

## **Future Scope**

- The use of software for school management will ensure that schools in the future have streamlined processes in the apps with built-in features that allow for operational effectiveness, automatic upgrades and uniform compliance.
- Streaming of the process will include calibration that works for all departments and for all the users across the levels. This will ensure that redundant data entry work is eliminated along with any with unnecessary subsystems and processes that complicate administrative work in institutions
- Thus, for a successful school management software, it is essential that organisation consider a mobile app that can be easily accessed by students, teacher, parents and school staff alike.
- The application can be integrated with other systems, such as learning management systems and student information systems, to make it easier for students to learn and for teachers to manage their classes.
- The application can be used to collect data on student behavior and performance, which can then be used to improve teaching and learning.
- Gamification and rewards can be used to motivate students to learn and achieve their goals.
- Virtual reality and augmented reality can be used to create immersive learning experiences.
- Predictive analytics can be used to identify students who are at risk of failing and provide them with additional support.

**THANK YOU**