

Day 1 :- College Management Application

Topic :- create your Salesforce Developer Org To Get Start

Milestone / Activity :-

- Creating a Developer Account
- Account Activation
- Login to your Salesforce account
 - ☆ Salesforce Login

Detailed Description :-

To create the Developer Account first we have to login to the Account using the URL :- Developer.Salesforce.com and get into the sign in button. If we already have an account in Salesforce Login using the **Username and the correct password**.

Developer Account will started load to display your account screen. While clicking Setup button it will display a screen as shown below:

Creating a Developer Account :-

Student Dashboard x Developer Edition Signup | Sales x +

developer.salesforce.com/signup

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First Name*
Yeswanth raj

Last Name*
a

Email*
yeswanthrajx100@gmail.com

Role*
Developer

Company*
SVCT

Country*
India

Postal Code*
600 107

Username*
yeswanthrajx100@svct.com

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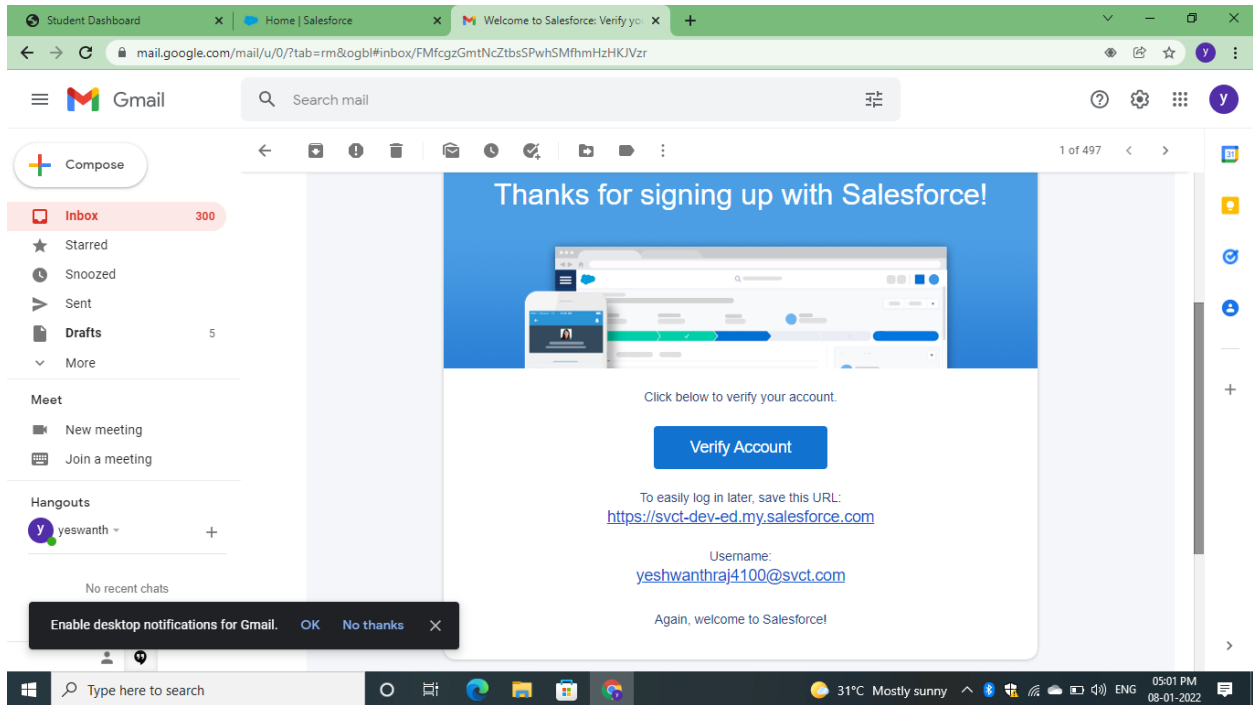
Type here to search

31°C Mostly sunny 04:56 PM 08-01-2022

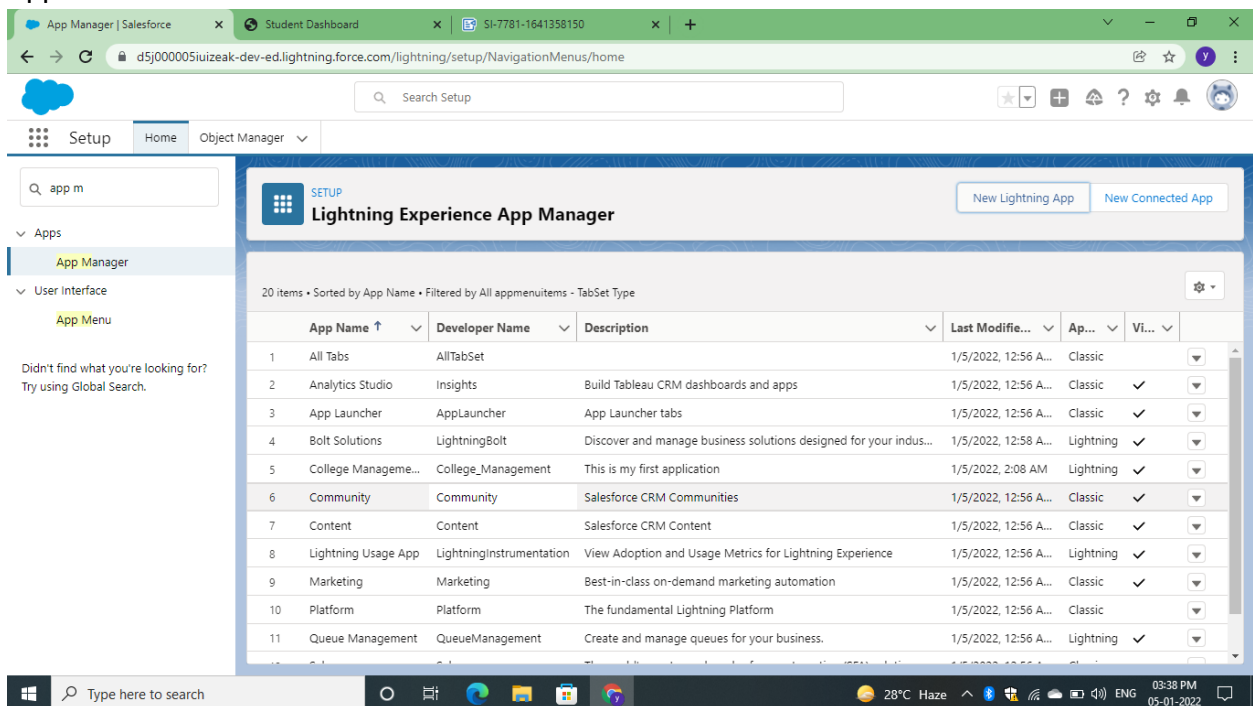
Object Manager :- It has two type of object are

- a. Customer Object :- It allows the user to create their own object.
- b. Standard Object :- It is standardly built by the salesforce.

Account Activation :-



Creating the Application called College management using App Manager in New Lightning App. The screen shot is shown below :-



Day 2 :-

Topic :- Customer Object Creation

Milestone / Activity :-

Creating the following object for the College Management Application

- ☆ College
- ☆ Application Form
- ☆ Student
- ☆ Subject

Detailed Description :-

In College Object we creating the field according to the relationship in the managements.

- ☆ Record Info
- ☆ College Name
- ☆ Hostel Fees
- ☆ College Fees
- ☆ Email
- ☆ Capacity Of Students

The screenshot shows the Salesforce Object Manager interface for the 'College' object. The 'Fields & Relationships' tab is active, displaying a table of 10 fields. The table has columns for FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are:

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Capacity Of Students	Capacity_Of_Students__c	Picklist		
College Fees	College_Fees__c	Currency(7, 2)		
College name	College_name__c	Picklist		
Created By	CreatedById	Lookup(User)		
Email	Email__c	Picklist		
Hostel Fees	Hostel_Fees__c	Currency(6, 2)		
Last Modified By	LastModifiedById	Lookup(User)		
name	Name	Text(80)		✓
Owner	OwnerId	Lookup(User/Group)		✓
Record Info	Record__c	Text(80)		

In Application Object :- Creating the field, as shown below

- ☆ Application Form ID and Looking For Hostel Stay
- ☆ Address and Phone
- ☆ College and College Fees and Hostel Fees
- ☆ Date Of Birth and Email
- ☆ Guardian Name and Student Name

Student Dashboard | Application Form | Salesforce | SI-7781-1641358150

svct-dev-ed.lightning.force.com/lightning/setup/ObjectManager/0115j000000BJJR/FieldsAndRelationships/view

Setup | Home | Object Manager

Application Form

Details | Fields & Relationships (14 Items, Sorted by Field Label)

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text(255)		
Application Form ID	Application_Form_ID__c	Auto Number		
Application Form Name	Name	Text(80)		✓
College	College__c	Master-Detail(College)		✓
College Fees	College_Fees__c	Currency(18, 0)		
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Email	Email__c	Email (Unique)		✓
Guardian Name	Guardian_Name__c	Text(30)		
Hostel Fees	Hostel_Fees__c	Currency(18, 0)		
Last Modified By	LastModifiedById	Lookup(User)		
Looking For Hostel Stay	Looking_For_Hostel_Stay__c	Checkbox		
Phone	Phone__c	Phone		
Ready To Join	Ready_To_Join__c	Checkbox		

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Creating the field on Student Object :-

- ☆ Student Name and Phone
- ☆ Application Form abd Guardian Name
- ☆ Address and Date Of Birth

Student Dashboard | Student | Salesforce | SI-7781-1641358150

svct-dev-ed.lightning.force.com/lightning/setup/ObjectManager/0115j000000BJJW/FieldsAndRelationships/view

Setup | Home | Object Manager

Student

Details | Fields & Relationships (9 Items, Sorted by Field Label)

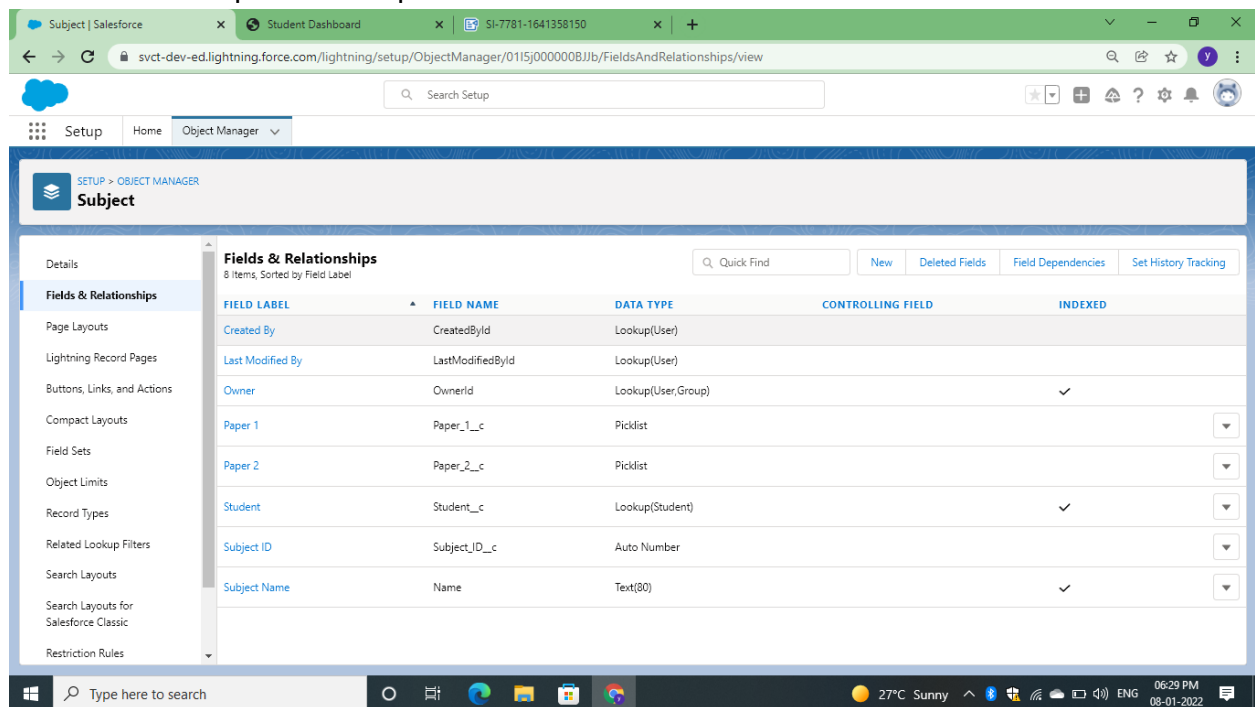
FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text(255)		
Application Form	Application_Form__c	Lookup(Application Form)		✓
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Guardian Name	Guardian_Name__c	Text(30)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User, Group)		✓
Phone	Phone__c	Phone		
Student Name	Name	Text(80)		✓

27°C Sunny 06:12 PM 08-01-2022

Creating the field on Subject Object :-

☆ Student and Student ID

☆ Paper 1 and Paper 2



The screenshot shows the Salesforce Object Manager interface for the 'Subject' object. The 'Fields & Relationships' section is active, displaying a table of 8 items. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed status.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User, Group)		✓
Paper 1	Paper_1__c	Picklist		
Paper 2	Paper_2__c	Picklist		
Student	Student__c	Lookup(Student)		✓
Subject ID	Subject_ID__c	Auto Number		
Subject Name	Name	Text(80)		✓

Adding the Business Logic to Application

1. Creating the Global Picklist Value Sets :-

We are creating the global picklist value set in the project called College Management. It is used to share values across object and the customer fields and to restrict the picklist to only the values that you specify. (1.1)

2. Creating the Field dependencies :-

That allows us to change the content of a picklist based on the value of another field. The below screenshot shows the field dependencies (2.1)

3. Validation Rule :-

☆ College Object (3.1)

☆ Application Form Object (3.2)

Student Dashboard x Picklist Value Sets | Salesforce x SI-7781-1641358150 x +

svct-dev-ed.lightning.force.com/lightning/setup/Picklists/page?address=%2F0nt5j000000kgVZ

Search Setup

Setup Home Object Manager

picklist

Data

- Picklist Settings
- State and Country/Territory
- Picklists

Objects and Fields

- Picklist Value Sets

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

Picklist Value Sets

Global Value Set Detail

Information

Label	Paper 2
Name	Paper_2
Description	

Picklist Values Used

Active and inactive picklist values 3 (1,000 max)

Values

Action	Values	API Name	Default	Chart Colors	Modified By
Edit Del Deactivate	MATHEMATICS	MATHEMATICS	<input type="checkbox"/>	Assigned dynamically	Yeswanth.ra.B. 1/8/2022, 5:14 AM
Edit Del Deactivate	ENGLISH	ENGLISH	<input type="checkbox"/>	Assigned dynamically	Yeswanth.ra.B. 1/8/2022, 5:14 AM
Edit Del Deactivate	STATISTICS	STATISTICS	<input type="checkbox"/>	Assigned dynamically	Yeswanth.ra.B. 1/8/2022, 5:14 AM

Inactive Values

No inactive Values values defined.

Fields Where Used

Global Picklist value Sets (1.1)

SI-7781-1641358150 x Student Dashboard x College | Salesforce x +

svct-dev-ed.lightning.force.com/lightning/setup/ObjectManager/0115j000000BJJM/FieldsAndRelationships/viewDependencyList

Search Setup

Setup Home Object Manager

College

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

Search Layouts for Salesforce Classic

Restriction Rules

College Field Dependencies

Back to Custom Object: College

This page allows you to define dependencies between fields (e.g., dependent picklists).

Field Dependencies

Action	Controlling Field	Dependent Field	Modified By
Edit Del	College name	Email	Yeswanth.ra.B. 1/8/2022, 5:24 AM
Edit Del	College name	Capacity Of Students	Yeswanth.ra.B. 1/8/2022, 5:24 AM

Field Dependencies (1.2)

SI-7781-1641358150 x Student Dashboard x Object Manager | Salesforce x +

svct-dev-ed.lightning.force.com/lightning/setup/ObjectManager/page?address=%2F03d5j000000DGUI

Search Setup

Setup Home Object Manager

Object Manager

College Validation Rule

[Back to College](#) [Help for this Page](#)

Validation Rule Detail [Edit](#) [Clone](#)

Rule Name	College_Name_Similar	Active	<input checked="" type="checkbox"/>
Error Condition Formula	TEXT(College_name__c) <> Name		
Error Message	This is college name is in record info	Error Location	Top of Page
Description			
Created By	Yessanth raj B. 1/8/2022, 5:39 AM	Modified By	Yessanth raj B. 1/8/2022, 5:39 AM

[Edit](#) [Clone](#)

Type here to search 28°C Mostly clear 07:09 PM 08-01-2022

Validation Rule - College Object (3.1)

SI-7781-1641358150 x Student Dashboard x Object Manager | Salesforce x +

svct-dev-ed.lightning.force.com/lightning/setup/ObjectManager/page?address=%2F03d5j000000DGUE

Search Setup

Setup Home Object Manager

Object Manager

Application Form Validation Rule

[Back to Application Form](#) [Help for this Page](#)

Validation Rule Detail [Edit](#) [Clone](#)

Rule Name	Application_Form_Similar	Active	<input checked="" type="checkbox"/>
Error Condition Formula	AND(Ready_To_Join__c == true, OR(ISCHANGED(Address__c), ISCHANGED(College__c), ISCHANGED(Date_of_Birth__c), ISCHANGED(Email__c), ISCHANGED(Guardian_Name__c), ISCHANGED(Phone__c)))		
Error Message	This application form is in creation	Error Location	Top of Page
Description			
Created By	Yessanth raj B. 1/8/2022, 5:38 AM	Modified By	Yessanth raj B. 1/8/2022, 5:38 AM

[Edit](#) [Clone](#)

Type here to search 28°C Mostly clear 07:08 PM 08-01-2022

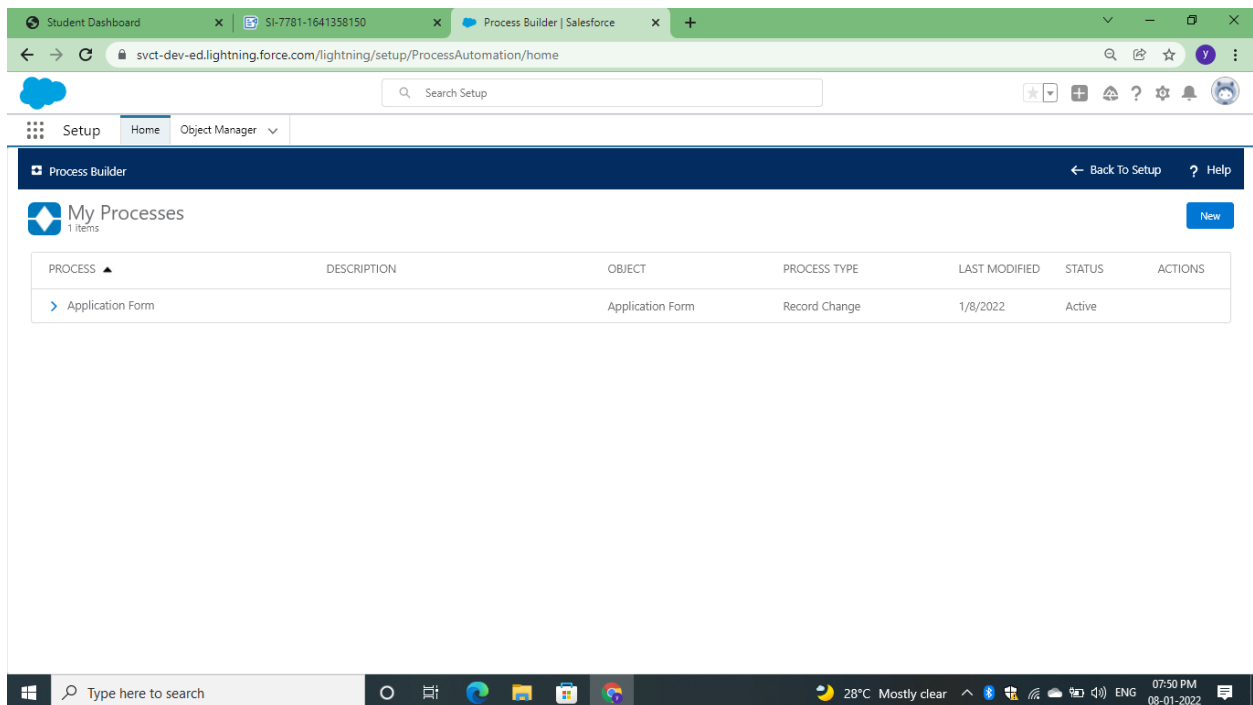
Validation Rule - Application Form Object (3.2)

Day 3

Topic :- Process Automation :-

Milestone / Activity :-

Process Builder is the tool for admins and also capable of performing everything workflow with the exception of sending outbound message - message to another person. Better example is that we doing the College Management Application.



The screenshot shows the Salesforce Process Builder interface. At the top, there's a navigation bar with 'Setup', 'Home', and 'Object Manager'. Below this, the 'Process Builder' section is active, showing 'My Processes' with 1 item. A table lists the processes:

PROCESS	DESCRIPTION	OBJECT	PROCESS TYPE	LAST MODIFIED	STATUS	ACTIONS
> Application Form		Application Form	Record Change	1/8/2022	Active	

The bottom of the screen shows the Windows taskbar with the search bar and system tray.

Go to setup ---> in quick finder search **Process Builder** ---> click process builder then ---> click new ---> Create a process builder on "**Application Form**" process start when a record change

Process Builder - Application Form

Expand All Collapse All View All Processes Clone View Properties Deactivate Read Only

START

Application Form

Ready To Join

TRUE

IMMEDIATE ACTIONS

Application Form

SCHEDULED ACTIONS

Set Schedule

STOP

FALSE

Add Criteria

TRUE

IMMEDIATE ACTIONS

SCHEDULED ACTIONS

Set Schedule

STOP

FALSE

Day 4

Topic :- Flow builder

Milestone / Activity :-

1. Navigate to setup --> Search flows in Quick Finder --> click on New Flow.

Setup Flows

New Flow

Flow Definitions

All Flows

18 items • Sorted by Flow Label • Filtered by All flow definitions • Updated a few seconds ago

Flow Label	Process Type	Active	Tem...	Package State	Pack...	Last Modifi...	Last Modified D...
Cancel Item Flow	Screen Flow	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Create a Case	Screen Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Create Order Summary Flow	Autolaunched Flow	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Create Process Exception Flow	Autolaunched Flow	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Create Reship Order	Screen Flow	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Discount Flow	Screen Flow	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Inbound Cancel Appointment	Salesforce Scheduler Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Inbound Modify Appointment	Salesforce Scheduler Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Inbound New Appointment	Salesforce Scheduler Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Inbound New Guest Appointment	Salesforce Scheduler Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Outbound Modify Appointment	Salesforce Scheduler Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Outbound New Appointment	Salesforce Scheduler Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			
Reset Password	Screen Flow	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	Managed-Installed			

2. In object manager, we already created the customer object **Student** with phone, email, name and etc.

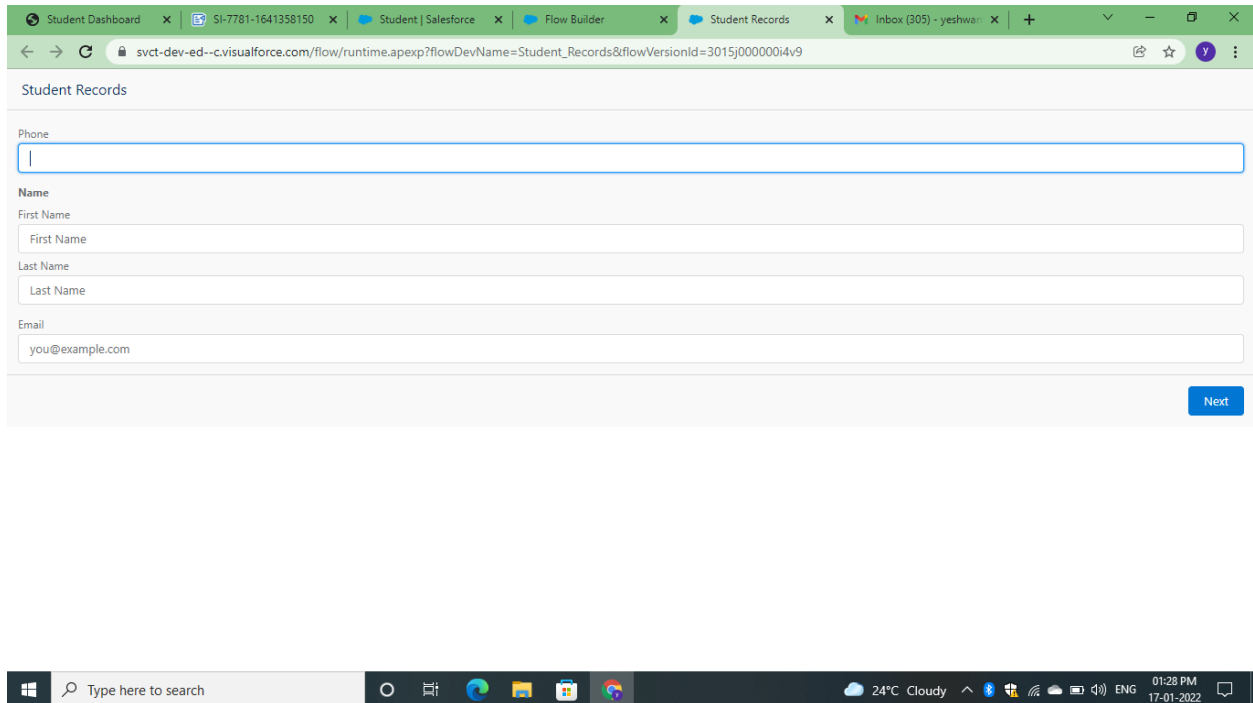
The screenshot shows the Salesforce Object Manager interface for the 'Student' object. The 'Fields & Relationships' tab is selected, displaying a table of 11 fields. The table has columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed. The fields listed are: Address, Application Form, College Name, Created By, Date of Birth, Email, Guardian Name, Last Modified By, and Owner. The 'Application Form' field is highlighted in blue.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text(255)		
Application Form	Application_Form__c	Lookup(Application Form)		✓
College Name	College_Name__c	Formula (Text)		
Created By	CreatedById	Lookup(User)		
Date of Birth	Date_of_Birth__c	Date		
Email	Email__c	Email		
Guardian Name	Guardian_Name__c	Text(30)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User/Group)		✓

Student Record is created using element called **Create Record**. Next creating the screen name the element has Student Information and Success Screen.

The screenshot shows the Salesforce Flow Builder interface. The flow is titled 'Student Records - V1'. The flow starts with a 'Screen Flow Start' element, followed by a 'student information Screen' element, then a 'Student Record Create Records' element, then a 'success screen Screen' element, and finally an 'End' element. The 'Student Record Create Records' element is highlighted in red. The left sidebar shows the 'Toolbox' with 'Manager' and 'Resources' sections. The 'Resources' section lists 'Screen Components (4)' (Email, Name, phone, record_saved_successfully), 'Variables (1)' (StudentId from Student_Record), and 'ELEMENTS' (Create Records (1) Student_Record, Screens (2) student_information, success_screen).

Output :-



Day 5 :- Apex

Topic :- Developer console

Milestone / Activity :-

1. querying from child to parent

`select Student_Name __c, Gaudian_Name__c, Date_of_Birth__c from Application_Form__c`

2. querying from parent to child

`select id, College_Name__c, (select id, Student_Name __c, Gaudian_Name__c, Date_of_Birth__c from Application_Form__c)`

Negotiation to setup --> click Developer Console

Apex Trigger that will execute before or after the following operation

- ☆ insert
- ☆ update
- ☆ delete

Before an object record are inserted into the database, after record have been deleted or even after a reord is restored from the recycle bin. There are two type of triggers - before and after trigger. In the developer Console , click File | new | apex trigger.

Then enter College Management - trigger management

Developer Console - Google Chrome

svct-dev-ed.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

Application_Form__c@2:22 PM Application_Form__c@2:31 PM Application_Form__c@2:32 PM

select id, Date_of_Birth__c, Address__c, Email__c, Guardian_Name__c from Application_Form__c

Query Results - Total Rows: 0

Id	Date_of_Birth__c	Address__c	Email__c	Guardian_Name__c
----	------------------	------------	----------	------------------

Query Grid: Save Rows Insert Row Delete Row Refresh Grid Access in Salesforce: Create New Open Detail Page Edit Page

Logs Tests Checkpoints Query Editor View State Progress Problems

select id, Date_of_Birth__c, Address__c, Email__c, Guardian_Name__c from Application_Form__c

Any query errors will appear here...

Execute Use Tooling API

History

- Executed
- select id, Date_of_Birth__c, Address__c, Ema...
- select id, Date_of_Birth__c, Address__c, Ema...
- select id, Date_of_Birth__c, Address__c from...
- select id, Date_of_Birth__c from Application...

Type here to search 24°C Light rain 03:00 PM 17-01-2022

Developer Console - Google Chrome

srivenkateswaraacollegeof50-dev-ed.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

College__c@3:31 PM Application_Form__c@3:32 PM

select id, College_fee__c, Date_of_Birth__c, Email__c from Application_Form__c

Query Results - Total Rows: 5

Id	College_fee__c	Date_of_Birth__c	Email__c
a015j000007yMq4AAE	100000	2022-01-06	dilip@gmail.com
a015j000007yMpuAAE	100000	2022-01-06	rakesh@gmail.com
a015j000007yMppAAE	100000	2022-01-06	ramesh@gmail.com
a015j000007yMowAAE	100000	2022-01-06	yeswa@gmail.com
a015j000007yMpqAAE	100000	2022-01-06	monika@gmail.com

Query Grid: Save Rows Insert Row Delete Row Refresh Grid Access in Salesforce: Create New Open Detail Page Edit Page

Logs Tests Checkpoints Query Editor View State Progress Problems

select id, College_fee__c, Date_of_Birth__c, Email__c from Application_Form__c

Any query errors will appear here...

Execute Use Tooling API

History

- Executed
- select id, College_Name__c from College__c
- select id, College_fee__c, Date_of_Birth__c, Email__c from Appl...

Type here to search 24°C Light rain 03:33 PM 17-01-2022

Day 6 :- Batch Apex

Topic :- **start(), execute() and finish()**

Milestone / activity :-

Basic syntax :-

```
public class ApplicationBatchTest implements Database.Batchable<subject>
{
    //start(), execute(), finish().
    public Database.QueryLocator start (Database.BatchableContext bc) {
        }
    public void exeute (Database.BatchableContext bc, List<subjects>listobj) {
        }
    public void finish(Database.BatchableContext bc) {
        }
}
```

Using batch apex, you can process records asynchronously in batches to stay within platform limits.

Start()

Used to collect the records or object to be passed to the interface method execute for processing. It is the beginning of a batch apex job.

Execute()

It perform the actual processing for each batch of data passed to the method.

finish()

it allow to execute the post processing operation and once the batch has been process, it will called.

The salesforce provided the Database.Batchable and then invoke. From Setup, enter Apex jobs in the Quick Finder box, then select Apex Jobs.

Apex Classes :- its used to implement the actions associated with an object.

Developer Console - Google Chrome

srivenkateswaraacollegeof50-dev-ed.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

Restore Down

File Edit Debug Test Workspace Help < >

ApplicationBatchTest.apxc

Code Coverage: None API Version: 53 Go To

```
1 public class ApplicationBatchTest implements Database.Batchable<subject>
2 {
3     //start(), execute(), finish().
4     public Database.QueryLocator start (Database.BatchableContext bc) {
5     }
6     public void exeute (Database.BatchableContext bc, List<subjects>listobj) {
7     }
8     public void finish(Database.BatchableContext bc) {
9     }
10 }
```

Logs Tests Checkpoints Query Editor View State Progress Problems

User	Application	Operation	Time	Status	Read	Size
------	-------------	-----------	------	--------	------	------

Filter Click here to filter the log list

Type here to search

30°C Mostly cloudy 01:44 PM 19-01-2022

Student Dashboard x yeswanthraj4100/college-r x SI-7781-1641358150 x Apex Jobs | Salesforce x Salesforce Project Program x

srivenkateswaraacollegeof50-dev-ed.lightning.force.com/lightning/setup/AsyncApexJobs/home

Search Setup

Setup Home Object Manager

apex

Email

Apex Exception Email

Custom Code

Apex Classes

Apex Settings

Apex Test Execution

Apex Test History

Apex Triggers

Environments

Jobs

Apex Flex Queue

Apex Jobs

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

Apex Jobs

Click here to go to the new batch jobs page

Apex Jobs

Monitor the status of all Apex Jobs, and optionally, abort Jobs that are in progress.

View: yeswanthraj b Edit Create New View

Submitted Date	Job Type	Status	Status Detail	Total Batches	Batches Processed	Failures	Submitted By	Completion Date	Apex Class	Apex Method	Apex Job ID	Parent Job	Last Processed ID	Last Pr
No records to display.														

https://srivenkateswaraacollegeof50-dev-ed.lightning.force.com/one/app#/setup/AsyncApexJobs/home

Type here to search

30°C Mostly cloudy 01:52 PM 19-01-2022

Day 7 :-

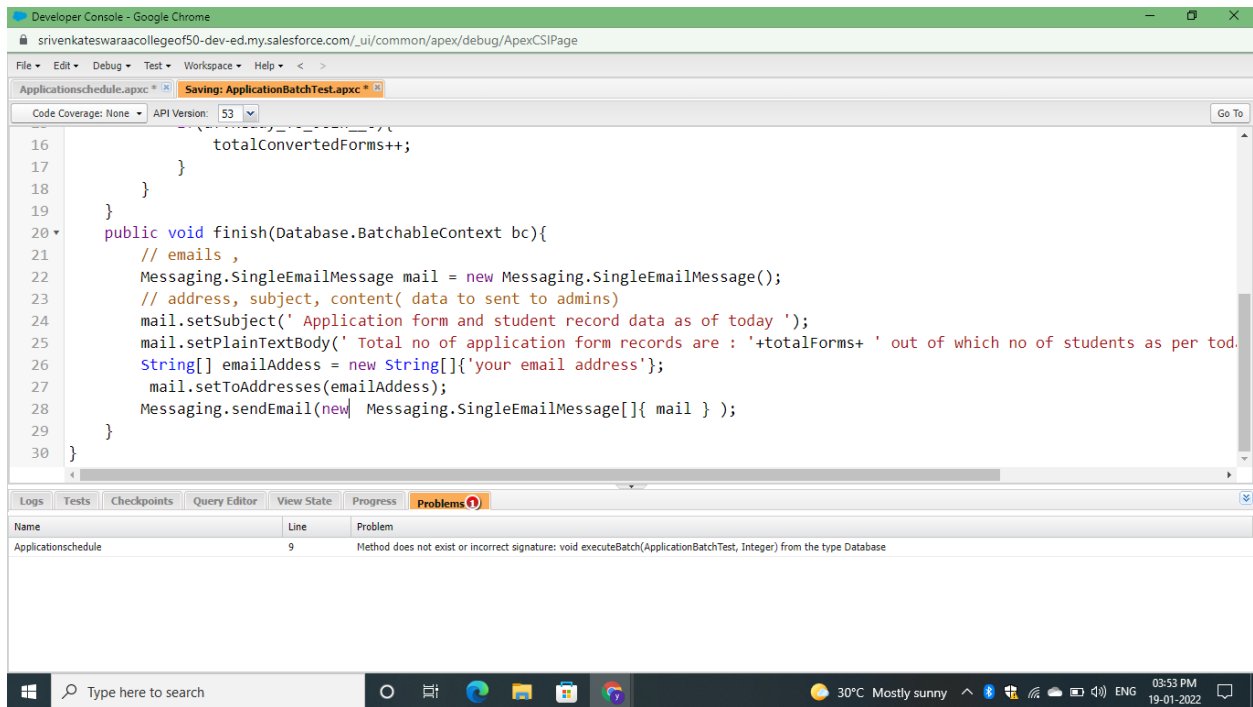
Topic :- Scheduler Classes

Milestone / Activity :-

The scheduler runs as system—all classes are executed, whether or not the user has permission to execute the class.

```
global void execute(SchedulableContext sc)
{
}

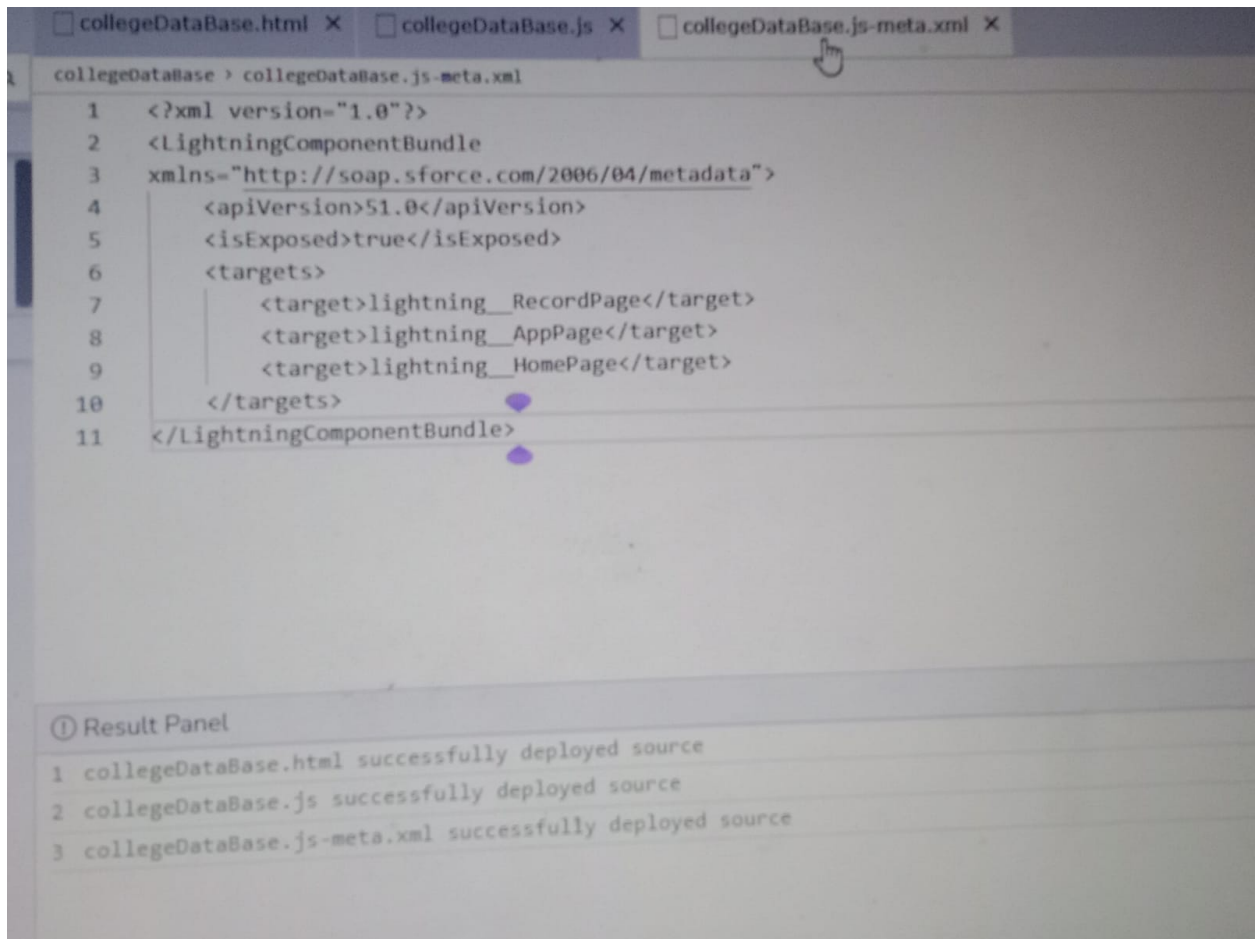
```



Day 8, 9, 10, 11:-

Topic :- Lightning web components

- **Creating College Data Table Component**
 - ==>Apex Class
 - ==>HTML File
 - ==>Javascript (Js) File
 - ==>Meta File



collegeDataBase.html X collegeDataBase.js X collegeDataBase.js-meta.xml X

collegeDataBase > collegeDataBase.js

```
1 import { LightningElement, api, wire } from 'lwc';
2 import getapplicationvalues
3 from '@salesforce/apex/GetapplicationDetails.getapplicationvalues';
4 export default class CollegeDataTable extends LightningElement {
5   columnslist = [
6     {label : 'Application Form' , fieldName : 'Name', type:'text' },
7     {label : 'College Fees' , fieldName : 'College_Fees__c', type:'currency' },
8     {label : 'Date Of Birth' , fieldName : 'Date_Of_Birth__c', type:'date' },
9     {label : 'Email' , fieldName : 'Email__c', type:'email' },
10    {label : 'Hostel Fees' , fieldName : 'Hostel_Fees__c', type:'Currency' },
11    {label : 'StudentName' , fieldName : 'Student_Name__c', type:'text' }
12  ];
13
14  @api recordId;
15  recordList;
16  error;
17
18  @wire(getapplicationvalues, {CollegeId : '$recordId'})
```

① Result Panel

```
1 collegeDataBase.html successfully deployed source
2 collegeDataBase.js successfully deployed source
3 collegeDataBase.js-meta.xml successfully deployed source
```

