

College Management Application

Day 1 :

Topic :Creating Salesforce Developer Org To Get Started

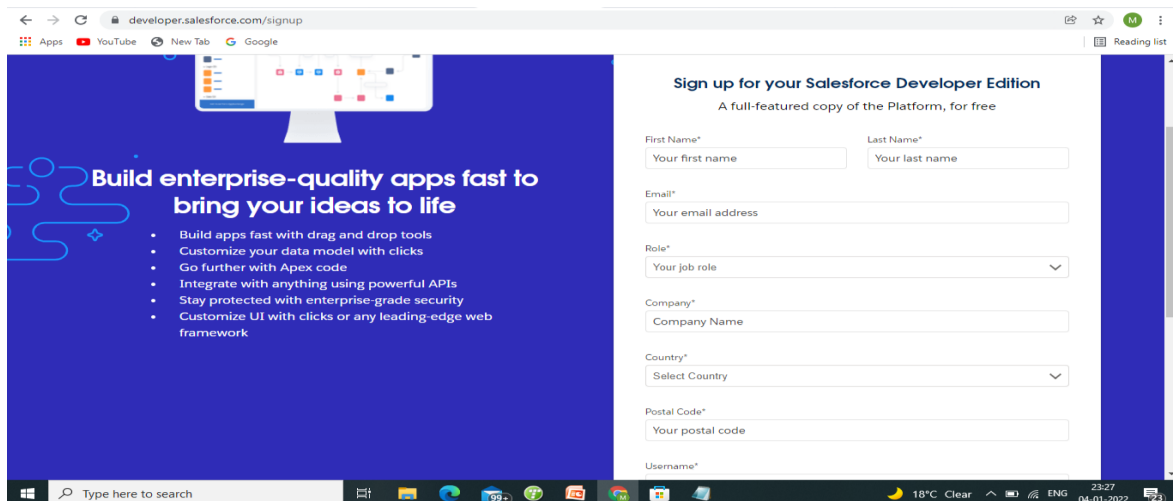
Milestone/Activity :Created, Activated, logged in.

Detailed Description :Creating a developer org in salesforce.

1. Go to developers.salesforce.com/
2. Click on sign up.
3. On the sign up form, enter the following details :
 1. First name & Last name
 2. Email
 3. Role : Developer
 4. Company : College Name
 5. County : India
 6. Postal Code : pin code
 7. Username : should be a combination of your name and company
This need not be an actual email id, you can give anything in the format
[:username@organization.com](#)

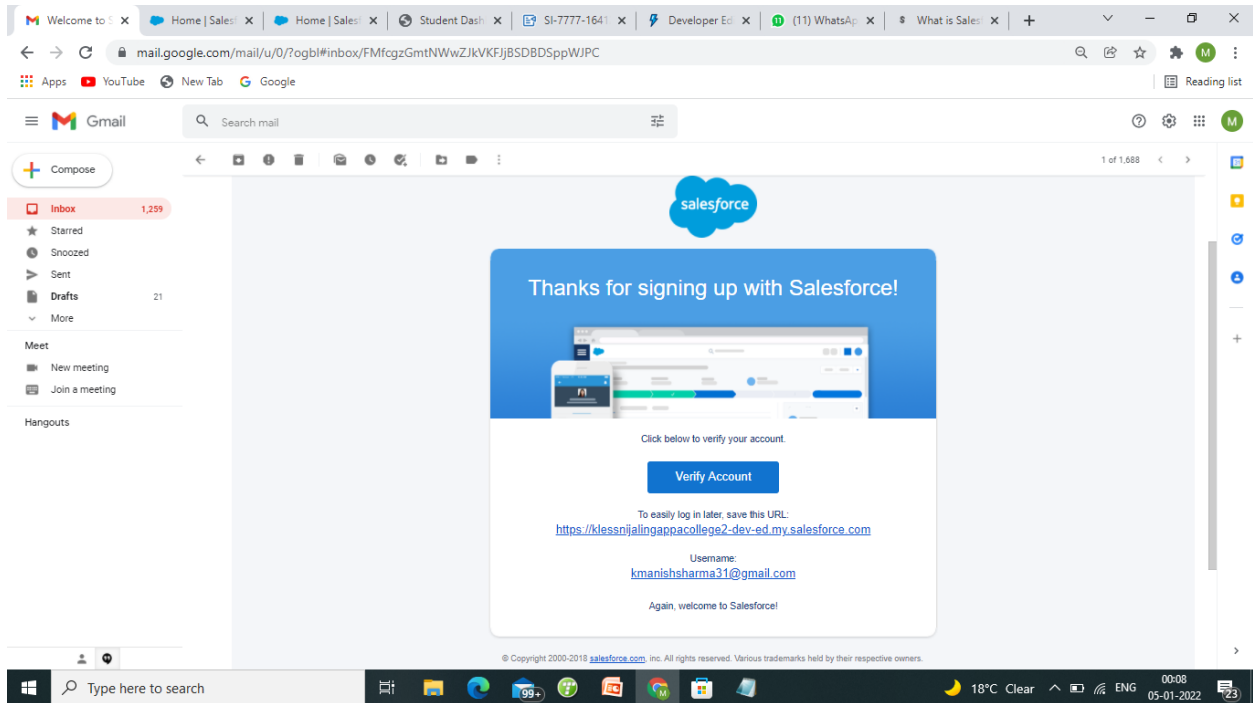
Screenshots :

Creating Developer Account

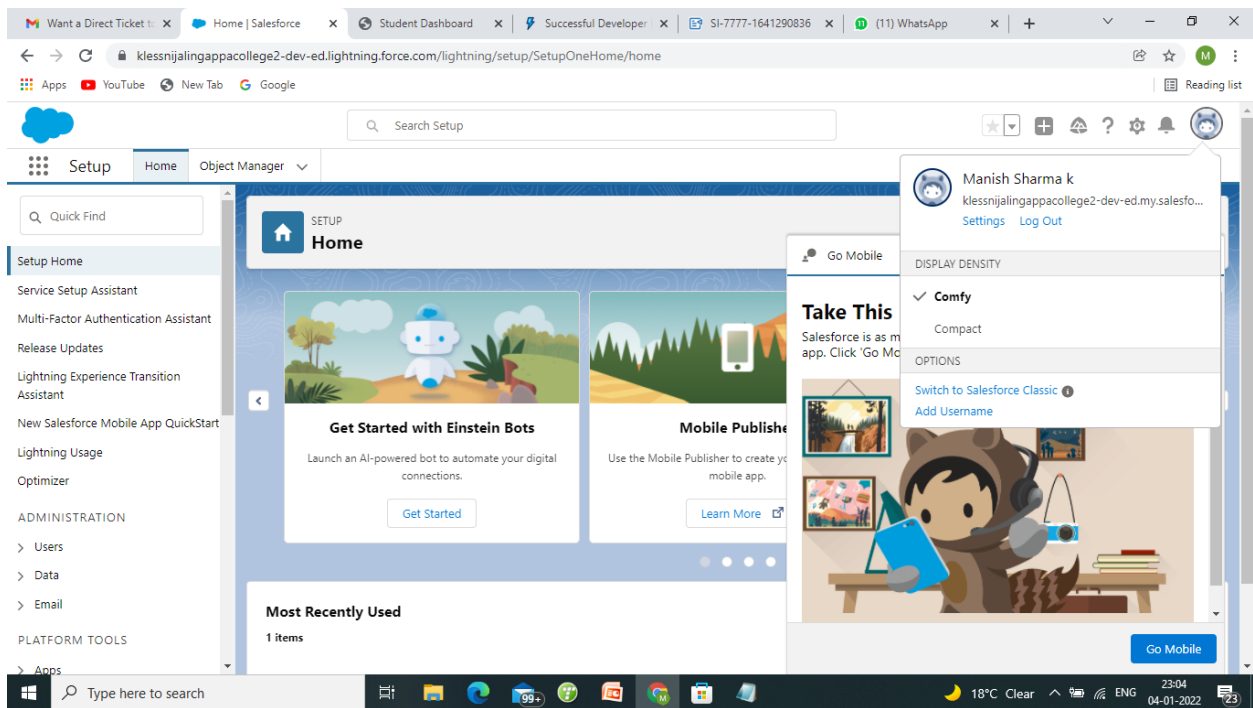


The screenshot shows a web browser window with the URL developers.salesforce.com/signup. The page has a blue header with the text "Build enterprise-quality apps fast to bring your ideas to life" and a list of bullet points: "Build apps fast with drag and drop tools", "Customize your data model with clicks", "Go further with Apex code", "Integrate with anything using powerful APIs", "Stay protected with enterprise-grade security", and "Customize UI with clicks or any leading-edge web framework". On the right side, there is a sign-up form titled "Sign up for your Salesforce Developer Edition" with the subtitle "A full-featured copy of the Platform, for free". The form contains the following fields: "First Name*" (with placeholder "Your first name"), "Last Name*" (with placeholder "Your last name"), "Email*" (with placeholder "Your email address"), "Role*" (a dropdown menu with "Your job role" selected), "Company*" (with placeholder "Company Name"), "Country*" (a dropdown menu with "Select Country" selected), "Postal Code*" (with placeholder "Your postal code"), and "Username*" (with placeholder "Your username"). The browser's taskbar at the bottom shows the Windows logo, a search bar, and various application icons. The system tray on the right shows the date and time as "23:27 04-01-2022" and the weather as "18°C Clear".

Account Activation



Login To Your Salesforce Account



Day 2 :

Topic :Custom Object Creation

Milestone/Activity :Created The Custom Objects For The Application

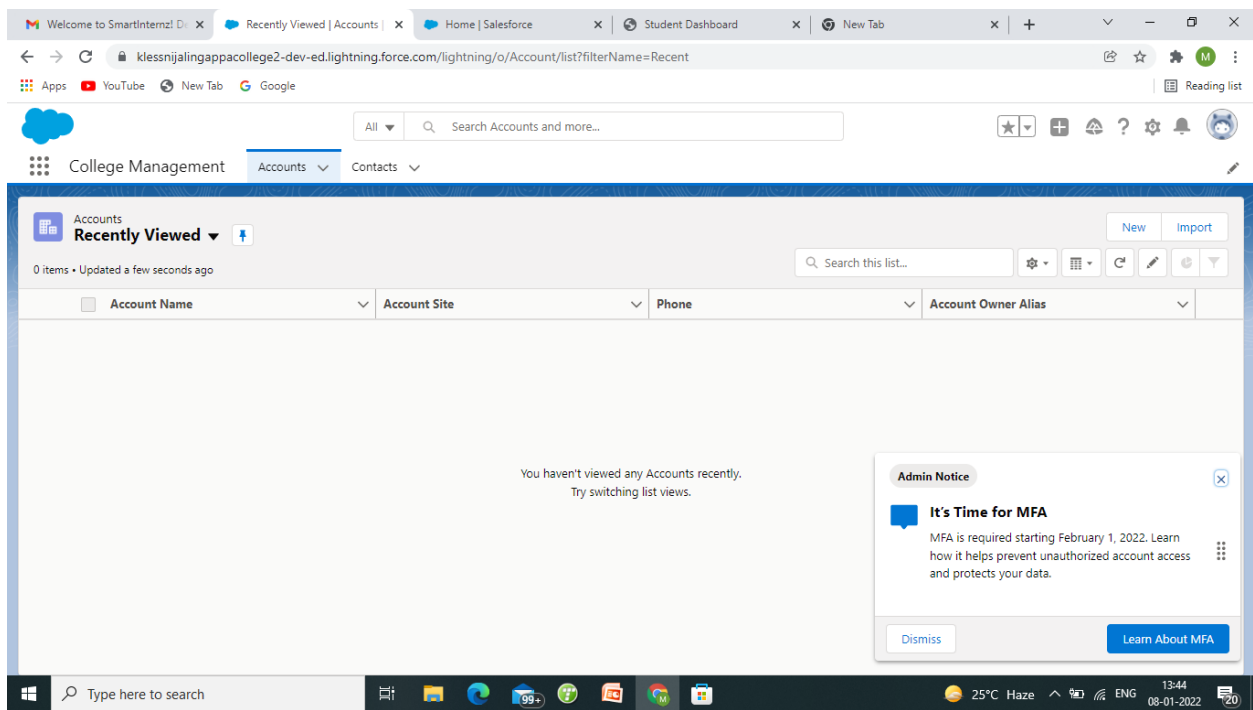
Created Fields On College Object

Created Fields On Application Form Object

Created Fields On Student Object

Detailed Description:

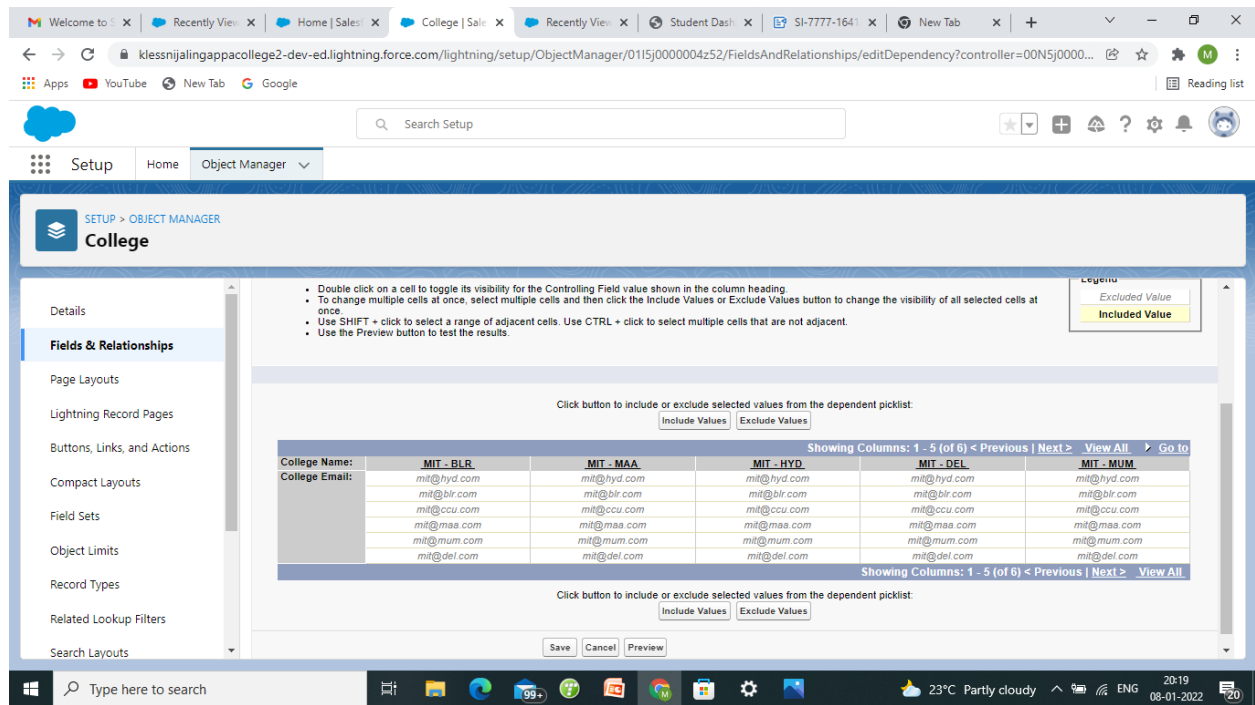
Mentioned an application name as College Management



.Created picklist value set for college Email:

Email	Picklist	mit@blr.com mit@hyd.com mit@mum.com mit@maa.com mit@ccu.com mit@del.com
-------	----------	--

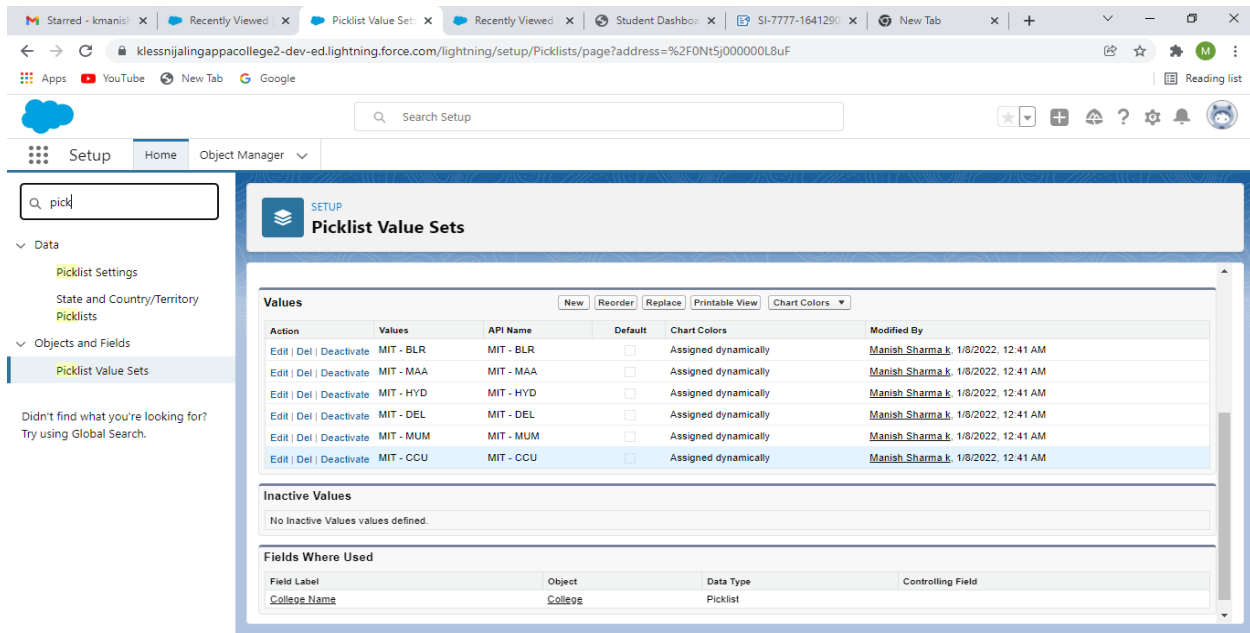
Screenshot :



Created the following global picklist value sets for the application.

Picklist Value Name	Values
College	MIT-HYD MIT-BLR MIT-MUM MIT-MAA MIT-DEL MIT-CCU

Screenshot :



The screenshot shows the Salesforce Setup interface for Picklist Value Sets. The left sidebar contains navigation links for Data, Objects and Fields, and a search bar. The main content area displays the 'Picklist Value Sets' configuration for the 'College' object. It includes a table of values with columns for Action, Values, API Name, Default, Chart Colors, and Modified By. Below the table, there are sections for 'Inactive Values' and 'Fields Where Used'.

Action	Values	API Name	Default	Chart Colors	Modified By
Edit Del Deactivate	MIT - BLR	MIT - BLR	<input type="checkbox"/>	Assigned dynamically	Manish Sharma k , 1/8/2022, 12:41 AM
Edit Del Deactivate	MIT - MAA	MIT - MAA	<input type="checkbox"/>	Assigned dynamically	Manish Sharma k , 1/8/2022, 12:41 AM
Edit Del Deactivate	MIT - HYD	MIT - HYD	<input type="checkbox"/>	Assigned dynamically	Manish Sharma k , 1/8/2022, 12:41 AM
Edit Del Deactivate	MIT - DEL	MIT - DEL	<input type="checkbox"/>	Assigned dynamically	Manish Sharma k , 1/8/2022, 12:41 AM
Edit Del Deactivate	MIT - MUM	MIT - MUM	<input type="checkbox"/>	Assigned dynamically	Manish Sharma k , 1/8/2022, 12:41 AM
Edit Del Deactivate	MIT - CCU	MIT - CCU	<input type="checkbox"/>	Assigned dynamically	Manish Sharma k , 1/8/2022, 12:41 AM

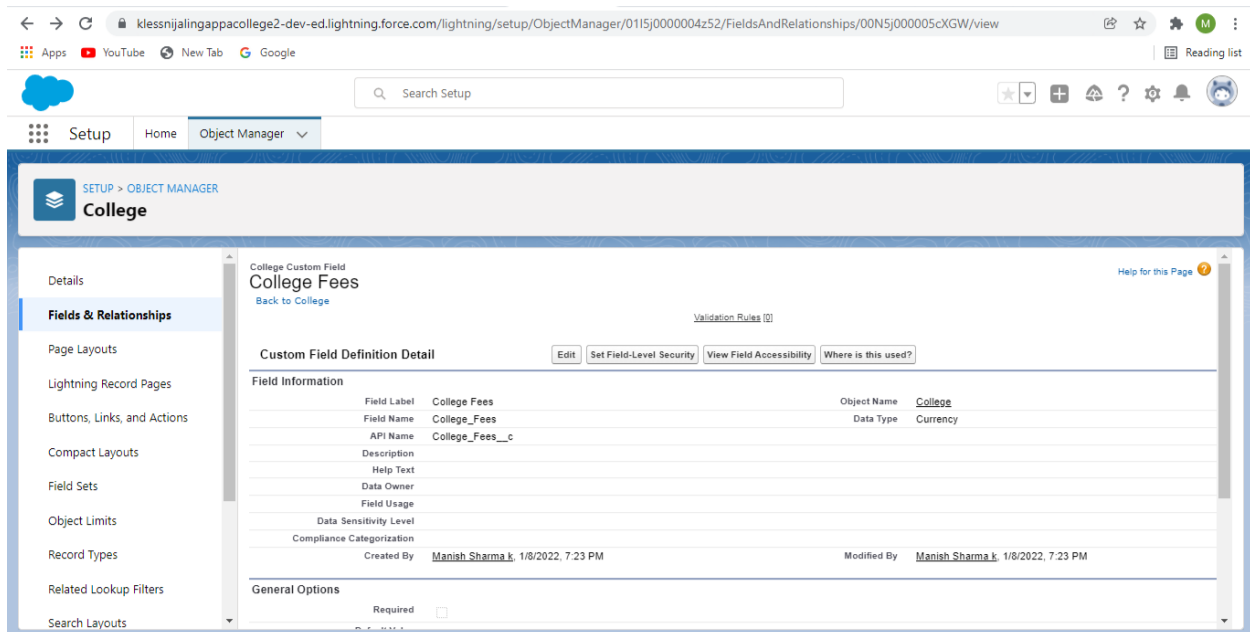
Inactive Values
No Inactive Values values defined.

Fields Where Used

Field Label	Object	Data Type	Controlling Field
College Name	College	Picklist	

.Created college fees Fields On College Object

Field name	Datatypes
College Fees	Currency(7,2)



The screenshot shows the Salesforce Setup interface for the 'College' object, specifically the 'College Fees' field. The left sidebar contains navigation links for Details, Fields & Relationships, Page Layouts, Lightning Record Pages, Buttons, Links, and Actions, Compact Layouts, Field Sets, Object Limits, Record Types, Related Lookup Filters, and Search Layouts. The main content area displays the 'College Custom Field' configuration for 'College Fees'. It includes a 'Custom Field Definition Detail' section with tabs for Edit, Set Field-Level Security, View Field Accessibility, and Where is this used?. The 'Field Information' section shows the field label, name, API name, description, help text, data owner, field usage, data sensitivity level, and compliance categorization. The 'General Options' section shows the 'Required' checkbox.

Field Label	Object Name	Data Type
College Fees	College	Currency

Field Information

Field Name	API Name	Description	Help Text	Data Owner	Field Usage	Data Sensitivity Level	Compliance Categorization
College_Fees	College_Fees__c						

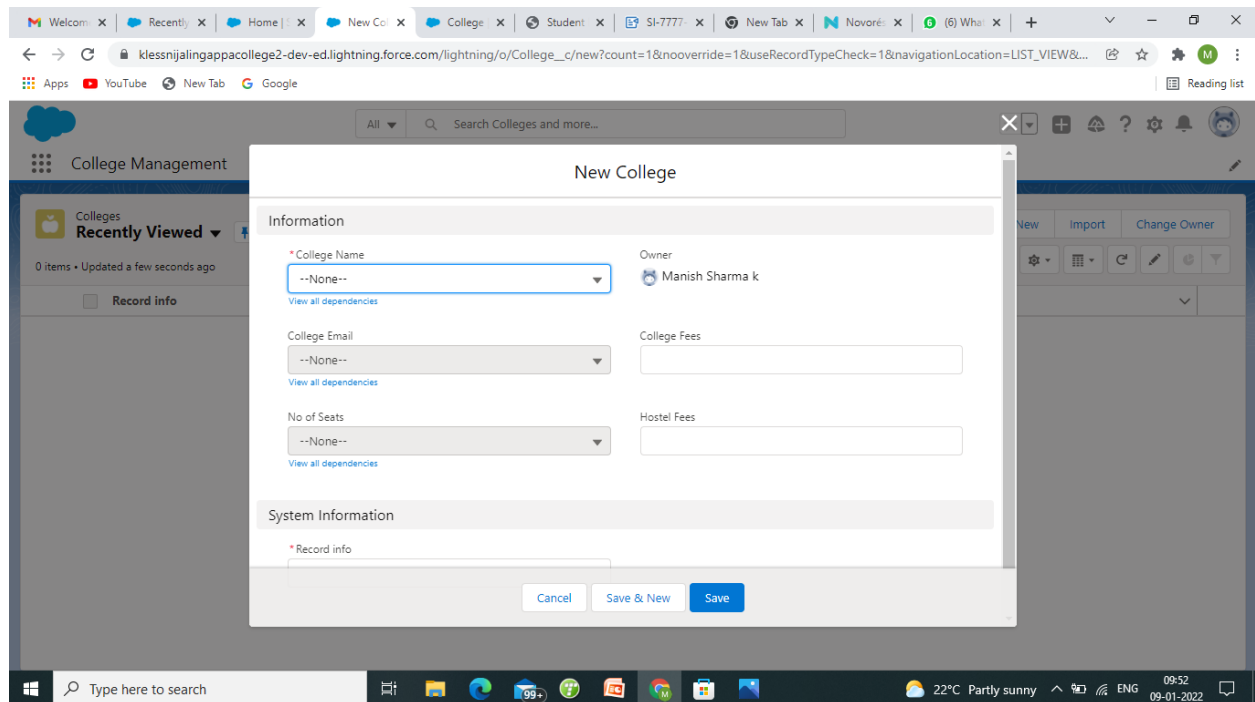
General Options

Required ☐

Created the following fields on the college object.

Field Name	Data Type	Required	Values
Record Info	Text		
College Fees	Currency(7,2)	Yes	
Hostel Fees	Currency(6,2)	Yes	
College Name	Picklist(Refer Business Logic In Milestones)	Yes	
Email	Picklist		blr@mit.co.in hyd@mit.co.in mum@mit.co.in maa@mit.co.in ccu@mit.co.in del@mit.co.in
No of seats	Picklist		500-1000, 1000-2500, 2500-6000, 6000-10000

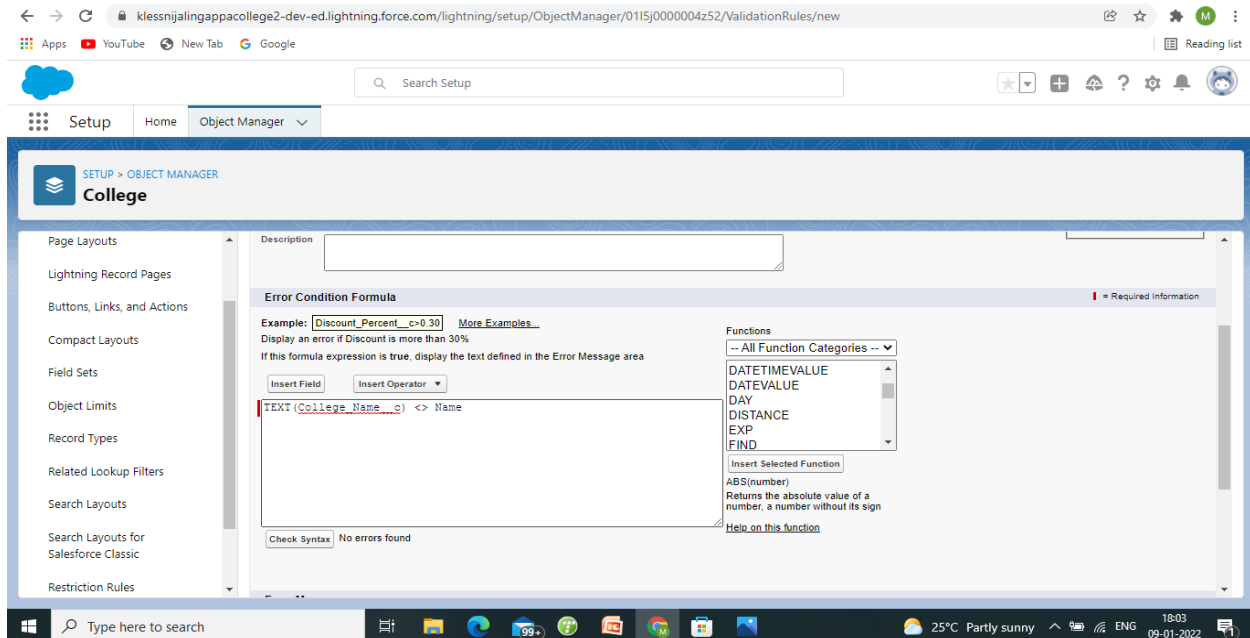
Screenshot :



.Created a validation rule on the college object such that the college name and record info should have the same name.

TEXT(College_Name__c) <> Name.

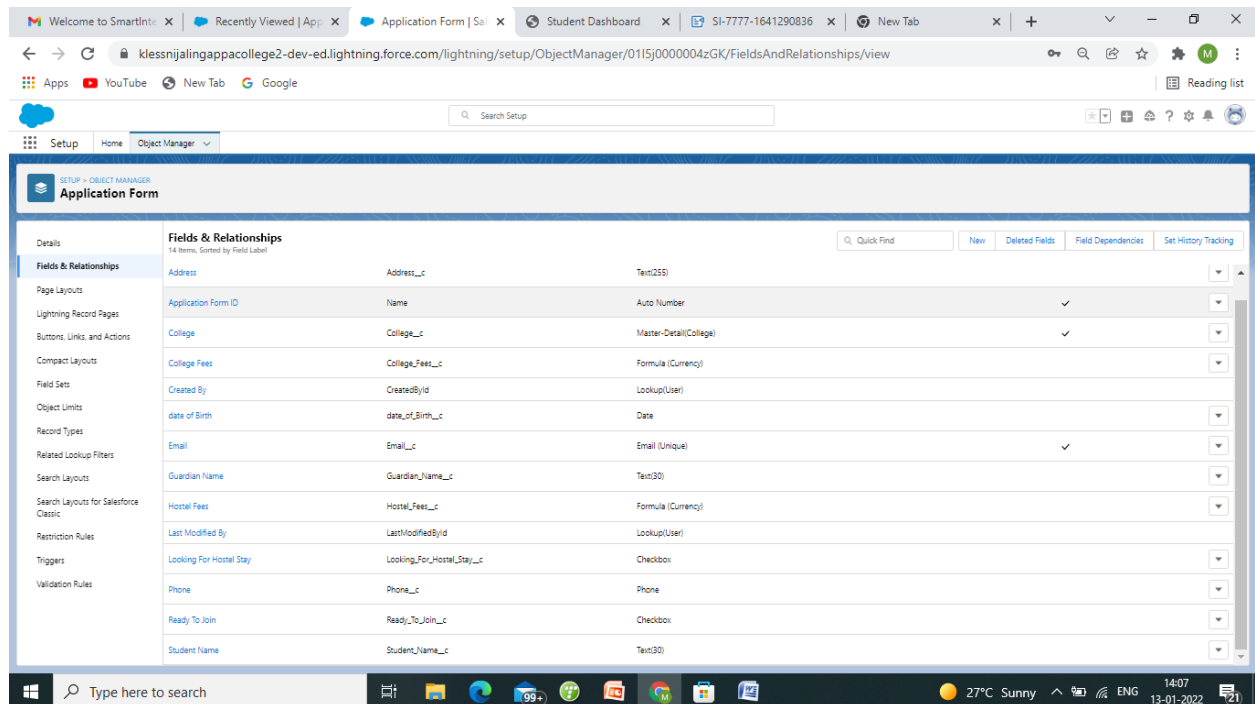
Screenshot:



.Created Fields On Application Form Object

Field Name	Data Type	Required	Values
Application Form ID	Autonumber		F-{000000} Starting Number=1
Address	Text(255)	Yes	
College	Master-Detail(College)	Yes	
College Fees	Formula(Currency)		
Hostel Fees	Formula(Currency)		
date of Birth	Date	Yes	
Email	Email(Unique)	Yes	
Guardian Name	Text(30)	Yes	
Looking For Hostel Stay	Checkbox(default=Unchecked)		
Ready To Join	Checkbox(default=Unchecked)		
Student Name	Text(30)	Yes	
Phone	Phone	Yes	

Screenshot :



Day 3 :

Topic : Custom Object, Recordtypes, validation rules.

Milestone/Activity : Created custom object for student

Created Fields On Student Object

Created custom object for Subject

Created the fields On the Subject object

Created Global Picklist Value Sets

Created Field Dependencies

Creating Validation Rules on Application Form

**Detailed Description : .Created custom object for student
steps are:**

.go to object manager

.click on create

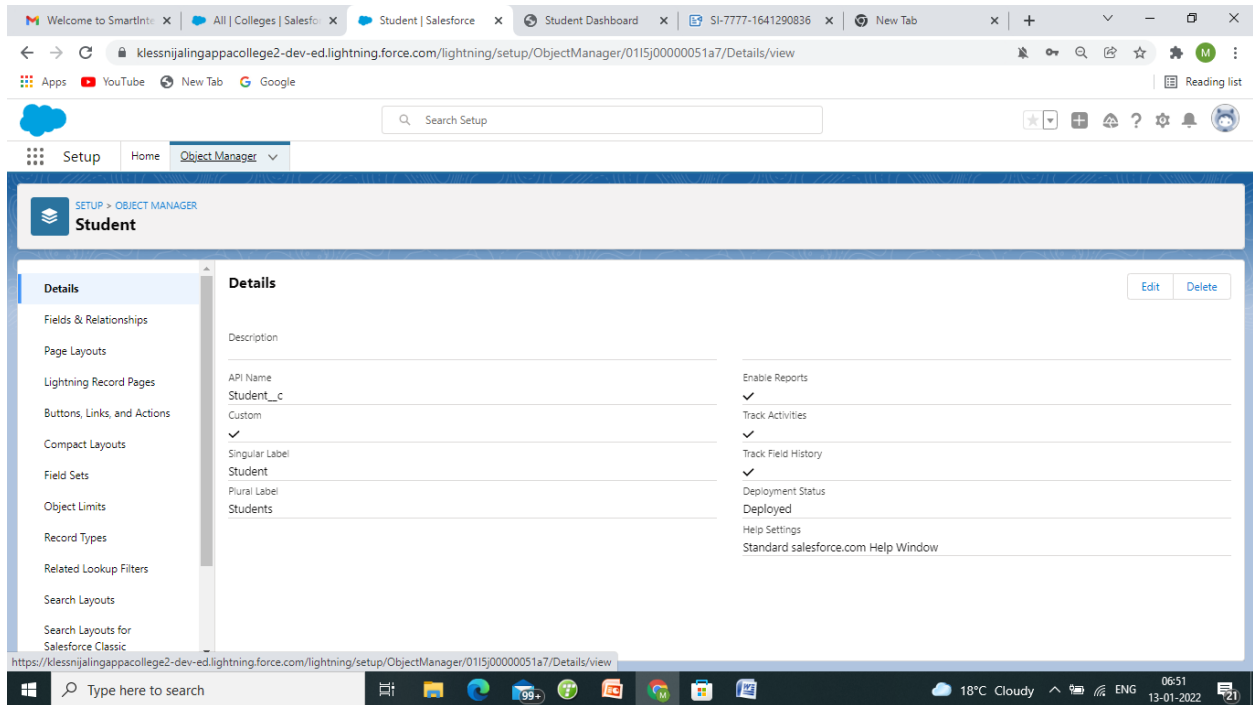
.then select custom object

.Give label name as Student

.Fill the require detail

.At the end click on save.

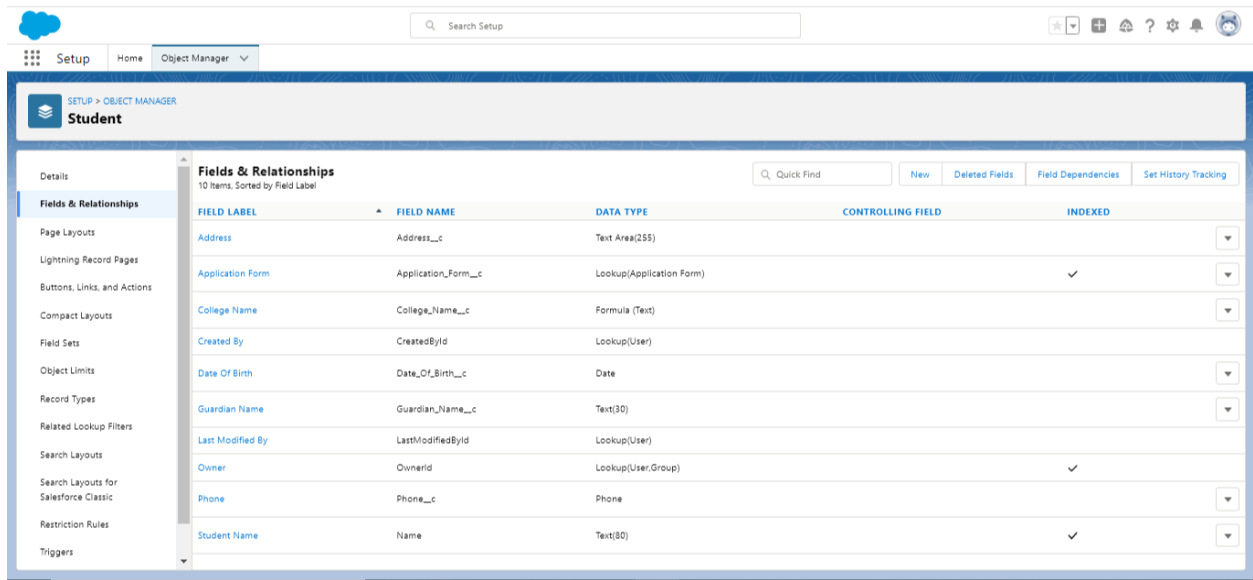
Screenshot :



.Created Fields On Student Object:

Field Name	Data Type	Required	Values
Student Name	Text		
Address	Text(255)	Yes	
Application Form	Lookup(Application Form)		
College Name	Formula(Text)		
Date Of Birth	Date	Yes	
Guardian Name	Text(30)	Yes	
Phone	Phone	Yes	

Screenshot:



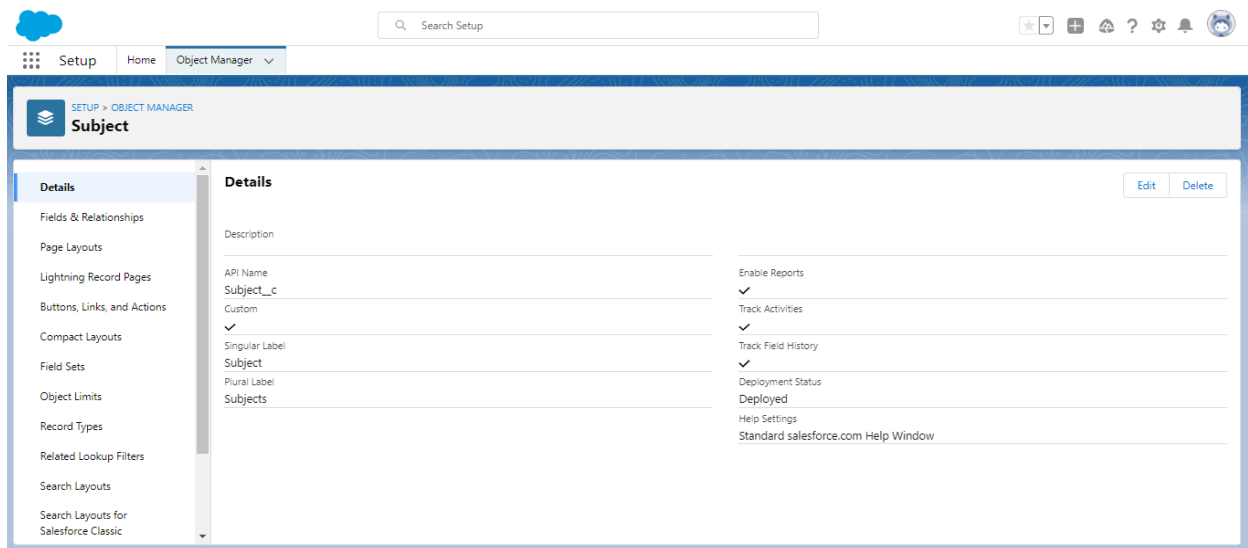
The screenshot shows the Salesforce Setup interface for the 'Student' object. The 'Fields & Relationships' tab is selected, displaying a list of 10 fields. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, etc. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Address	Address__c	Text Area(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		
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)		✓

.Created custom object for Subject steps are:

- .go to object manager
- .click on create
- .then select custom object
- .Give label name as Subject
- .Fill the require detail
- .At the end click on save.

Screenshot :



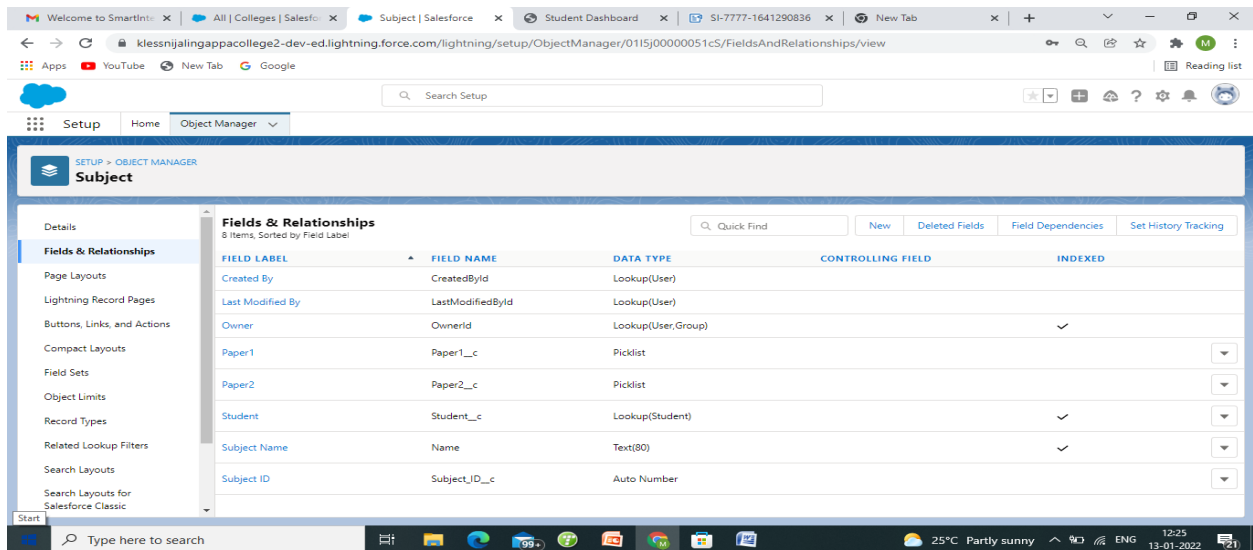
The screenshot shows the Salesforce Setup interface for the 'Subject' object. The 'Details' tab is selected, displaying a form for configuring the object. The left sidebar contains a navigation menu with options like Details, Fields & Relationships, Page Layouts, etc. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'.

Field	Value
Description	
API Name	Subject__c
Custom	✓
Singular Label	Subject
Plural Label	Subjects
Enable Reports	✓
Track Activities	✓
Track Field History	✓
Deployment Status	Deployed
Help Settings	Standard salesforce.com Help Window

.Created the following fields On the Subject object.

Field Name	Data Type	Required	Values
Subject ID	AutoNumber		S-{000000} Starting Number=1
Paper 1	Picklist(Refer Business Logic Milestone)		
Paper2	Picklist(Refer Business logic Milestone)		
Student	Lookup(Student)		

screenshot :



Creating Global Picklist Value Sets

1. Created the following global picklist value sets for the application.

a)College

Picklist Value Name	Values
College	MIT-HYD MIT-BLR MIT-MUM MIT-MAA MIT-DEL MIT-CCU

b)Paper1

Picklist Value Name	Values
Paper 1	APEX JAVA C C++

c)Paper2

Picklist Value Name	Values
Paper2	MATHEMATICS ENGLISH STATISTICS

Screenshot :

The screenshot shows the Salesforce Setup interface for 'Picklist Value Sets'. The left sidebar contains a navigation menu with categories like Data, Feature Settings, and Objects and Fields. Under 'Objects and Fields', 'Picklist Value Sets' is selected. The main content area displays the 'Picklist Value Sets' page, which includes a table of global value sets. The table has columns for 'Action', 'Label', and 'Description'. The rows listed are 'College Name', 'Paper1', 'Paper2', and 'Deleted Global Value Sets (0)'. A 'New' button is located above the table. The browser's address bar shows the URL 'klessnjalingappcollege2-dev-ed.lightning.force.com/lightning/setup/Picklists/home'.

Created Field Dependencies

1. Created field dependency between college Name and Email, where the controlling field is college Name and dependent field is Email. Selected the email ids according to the college names.

Screenshot :

College Management Accounts

Colleges All

6 Items • Sorted by Record Info • Filtered by All colleges

Record info ↑

	MIT - BLR
1	MIT - BLR
2	MIT - CCU
3	MIT - DEL
4	MIT - HYD
5	MIT - MAA
6	MIT - MUM

New College

Information

* College Name MIT - BLR View all dependencies

Owner Manish Sharma k

College Email --None-- mit@blr.com View all dependencies

* College Fees

Hostel Fees

System Information

* Record Info

Cancel Save & New Save

2. Created field dependency between college Name and capacity of students, where the controlling field is college Name and dependent field is Capacity of Students. Select the values according to your wish.

Screenshot :

College Management Accounts

Colleges All

6 Items • Sorted by Record Info • Filtered by All colleges

Record info ↑

	MIT - BLR
1	MIT - BLR
2	MIT - CCU
3	MIT - DEL
4	MIT - HYD
5	MIT - MAA
6	MIT - MUM

New College

Information

* College Name MIT - BLR View all dependencies

Owner Manish Sharma k

College Email mit@blr.com View all dependencies

* College Fees

Hostel Fees

No of Seats --None-- 3000-5000

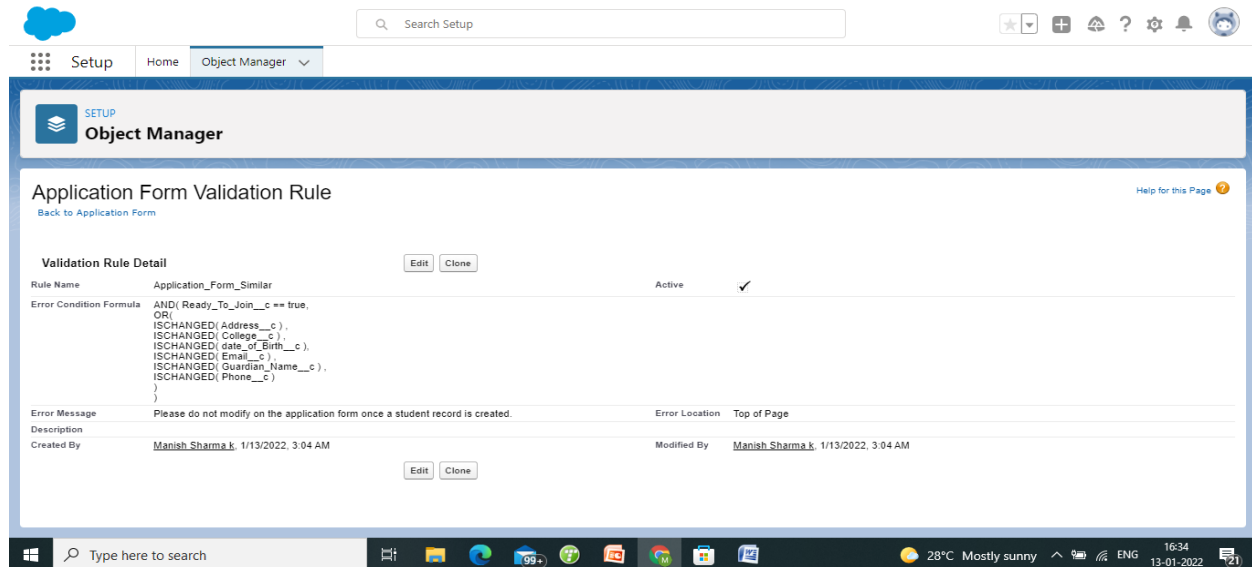
System Information

* Record Info

Cancel Save & New Save

. Created a validation rule on the application form object to stop any modification on the application form once a student record is created.

Screenshot :



Day 4 :

Topic :Process Automation,Flow

Milestone/Activity : Process Automation

Created The Student Record Using Flow

Detailed Description : .Created pocess automation for application form

. Created an automation process such that when the "ready to join" field is checked on the application form object we need to create the student record automatically with the information specified in the application form record.

2. Go to Setup -> select "Process Builder" from quick find. Create a Process Builder on the "Application Form" object with a condition as "When a record change". And select "When a record is created or edited".

- . In the diamond shape box(called nodes), select the criteria which trigger the Process builder to fire. In our example, it is "When Ready to Join field is checked."

Screenshot :

The screenshot displays the Salesforce Process Builder interface. The top navigation bar includes 'Setup', 'Home', and 'Object Manager'. The main header is 'Process Builder - Application Form'. The flow diagram on the left shows a process starting with 'START', followed by an 'Application Form' object, a decision 'Ready to Join', and two paths leading to 'IMMEDIATE ACTIONS' and then 'STOP'. The right panel, 'Select and Define Action', is open, showing a table for 'Set Field Values'.

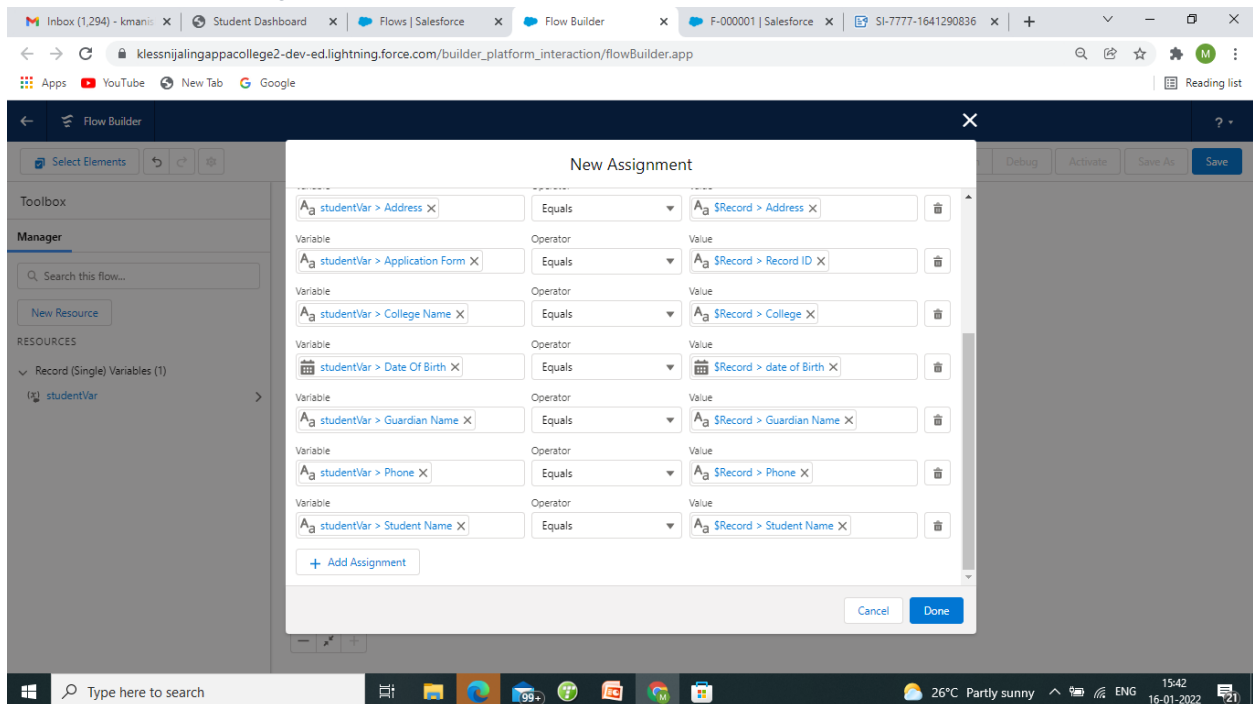
Field *	Type *	Value *
Address	Field Reference	[Application_Form_...Q]
Date Of Birth	Field Reference	[Application_Form_...Q]
Guardian Name	Field Reference	[Application_Form_...Q]
Phone	Field Reference	[Application_Form_...Q]
Student Name	Field Reference	[Application_Form_...Q]
Application Form	Field Reference	[Application_Form_...Q]

Buttons at the bottom of the right panel include 'Save' and 'Cancel'.

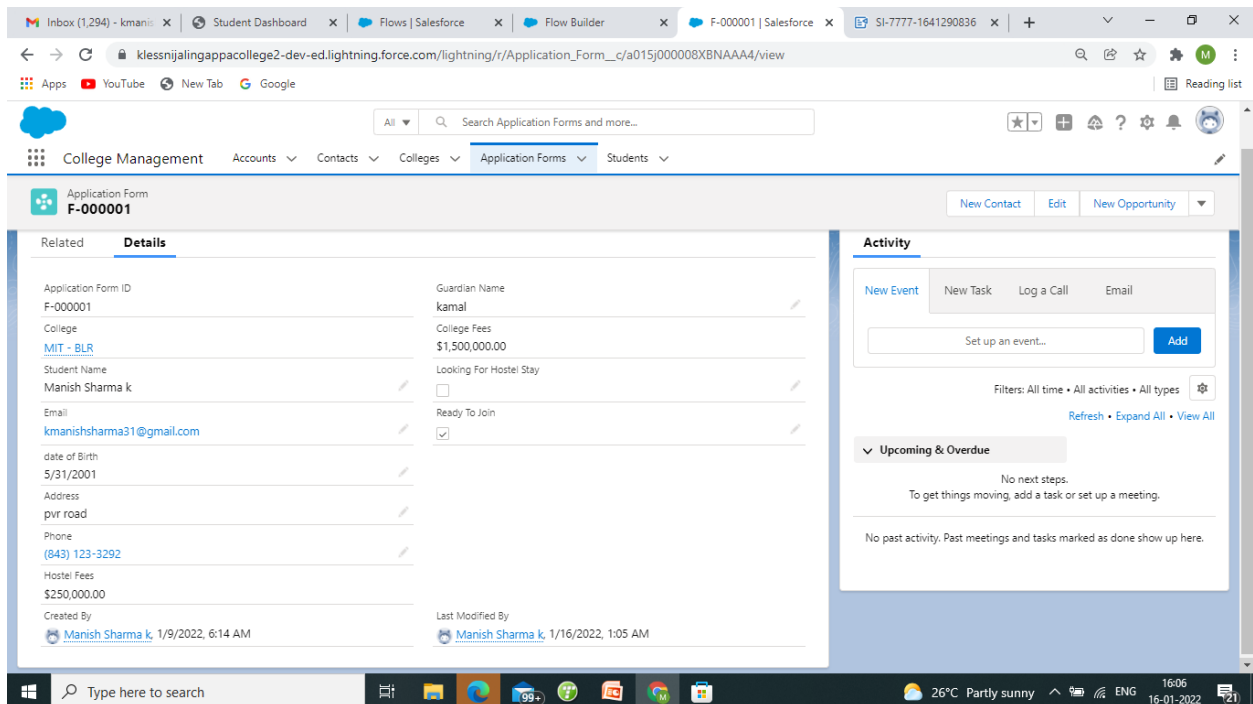
.Created The Student Record Using Flow

- . First deactivated the process builder which we created earlier.
- . Now search for flows and select new flow ->record triggered flow
- . For object select application form, in configure trigger select when the record is updated for entry criteria select as ready to join equals to true.
- . Now create a variable named student in the resource section.
- .Added Assignment
- .Finally add create records.

Screenshot :added assignment



screenshot : Final output



Day 5 :

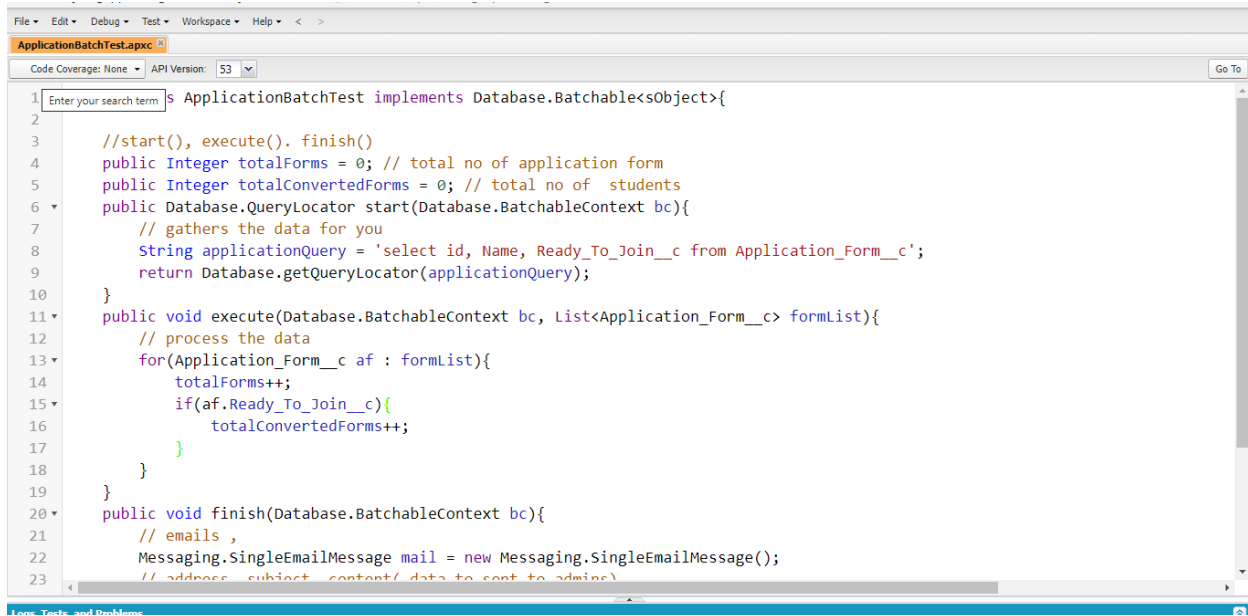
Topic: Batch Apex

Milestone/Activity: Batch apex

Detailed Discription :

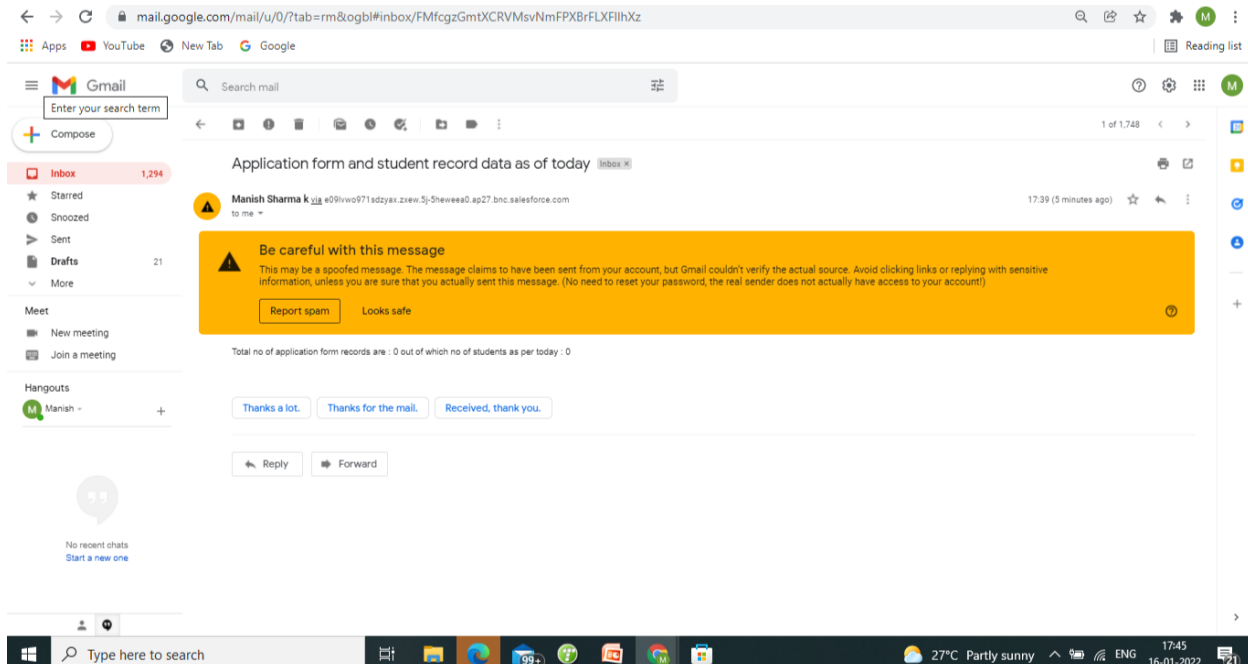
From the developer console created a new apex class and enter the following code.

Screenshot :



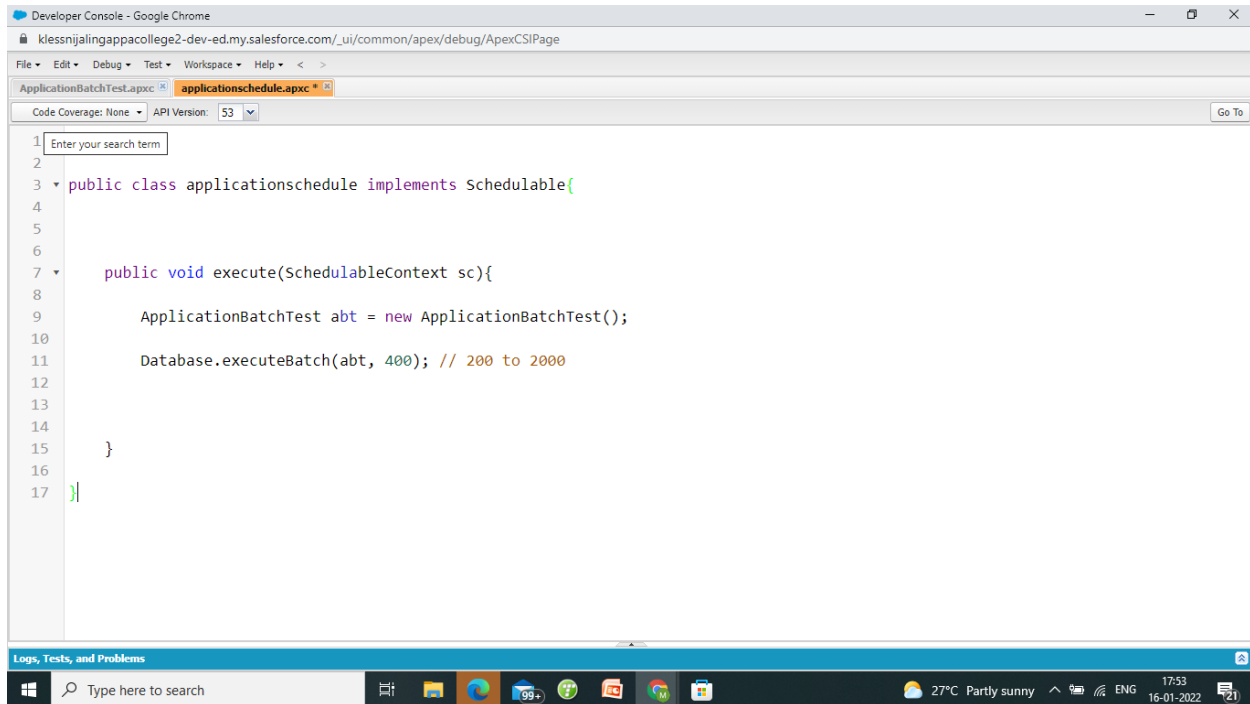
```
1 Enter your search term s ApplicationBatchTest implements Database.Batchable<sObject>{
2
3     //start(), execute(). finish()
4     public Integer totalForms = 0; // total no of application form
5     public Integer totalConvertedForms = 0; // total no of students
6     public Database.QueryLocator start(Database.BatchableContext bc){
7         // gathers the data for you
8         String applicationQuery = 'select id, Name, Ready_To_Join__c from Application_Form__c';
9         return Database.getQueryLocator(applicationQuery);
10    }
11    public void execute(Database.BatchableContext bc, List<Application_Form__c> formList){
12        // process the data
13        for(Application_Form__c af : formList){
14            totalForms++;
15            if(af.Ready_To_Join__c){
16                totalConvertedForms++;
17            }
18        }
19    }
20    public void finish(Database.BatchableContext bc){
21        // emails ,
22        Messaging.SingleEmailMessage mail = new Messaging.SingleEmailMessage();
23        // address, subject, content( data to sent to admin)
```

Screenshot : email which I had recieved.



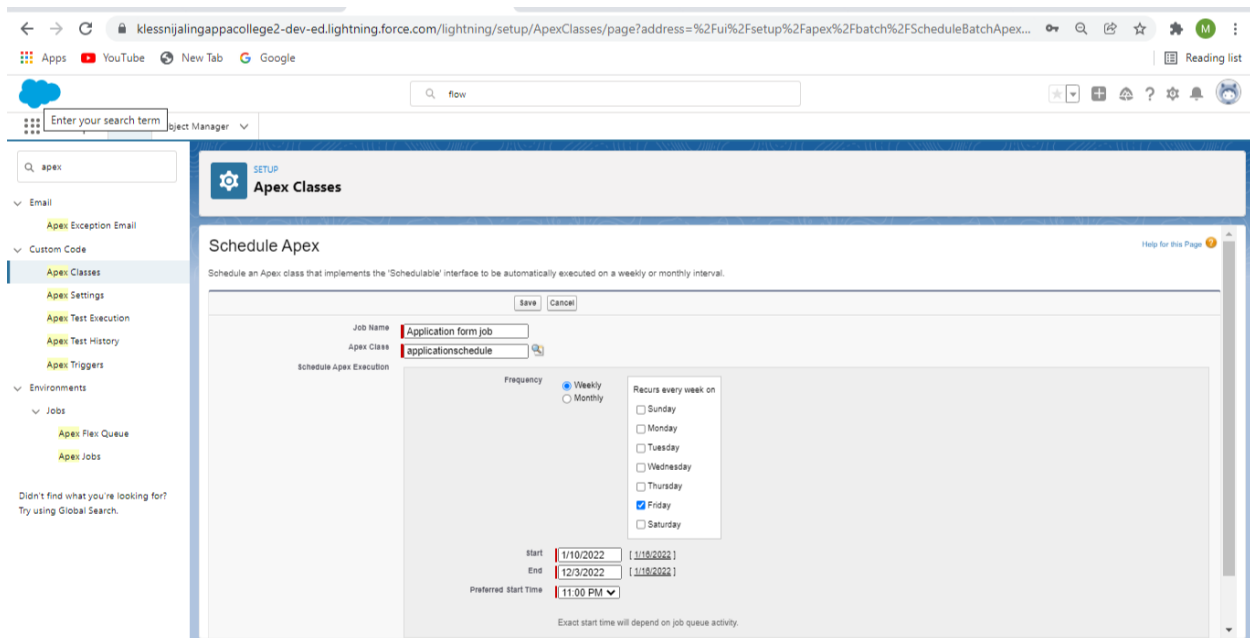
.A Scheduler Class :

From the developer console created a new apex class as applicationschedule
screenshot :



.From setup search for apex class and click on schedule jobs and fill the details as per the requirements.

Screenshot :



Day 6 :

Topic : Lightning Web Components

Milestone/Activity :

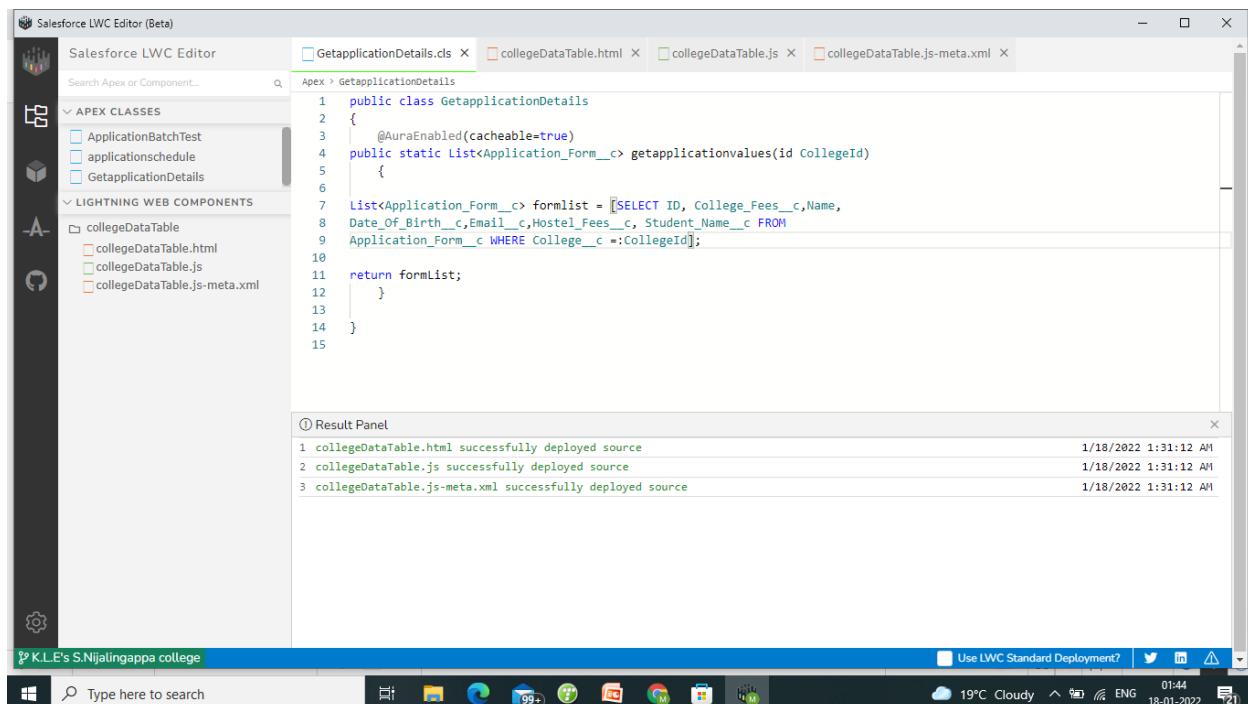
- .Created College DataTable Component(APEX CLASS)**
- .Created College DataTable Component (HTML FILE)**
- .Created College DataTable Component(JAVA SCRIPT FILE)**
- .Created College DataTable Component(META FILE)**

Detailed Discription :

.Created College DataTable Component(APEX CLASS)

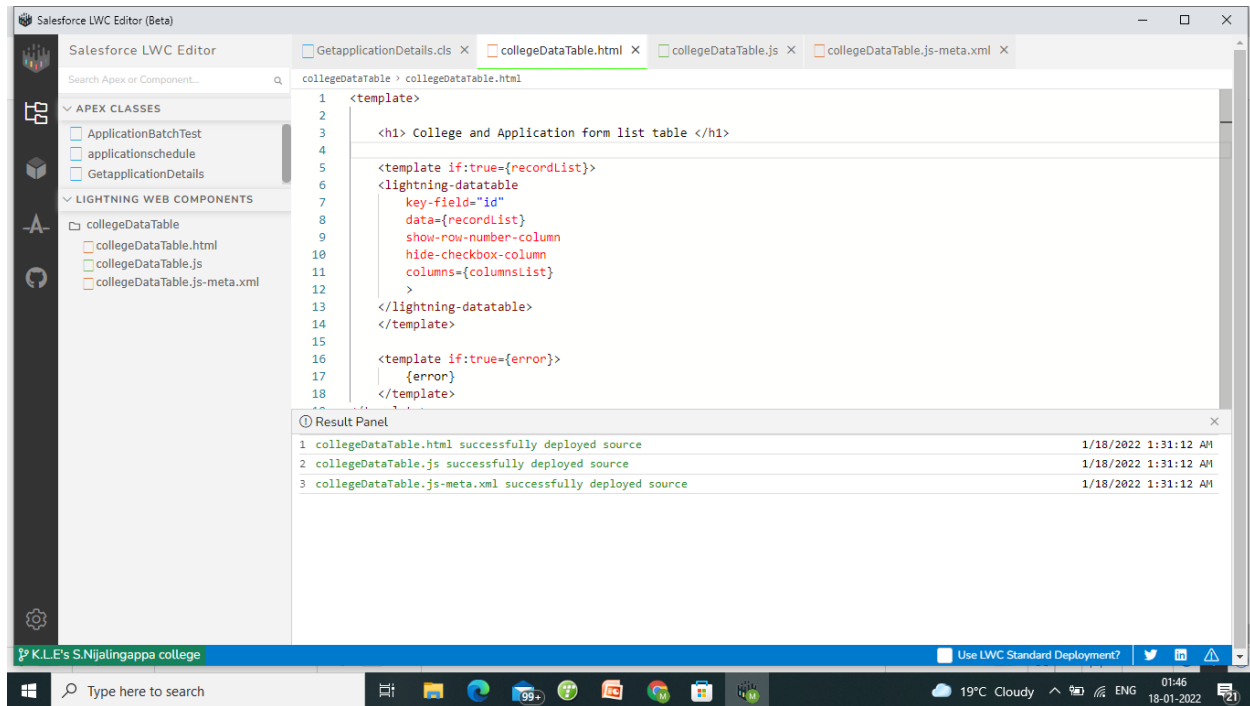
Here we are going to create the college data table, for this we need to create an apex class, from which we are going to retrieve the data and Html, javascript files for UI .

Screenshot :



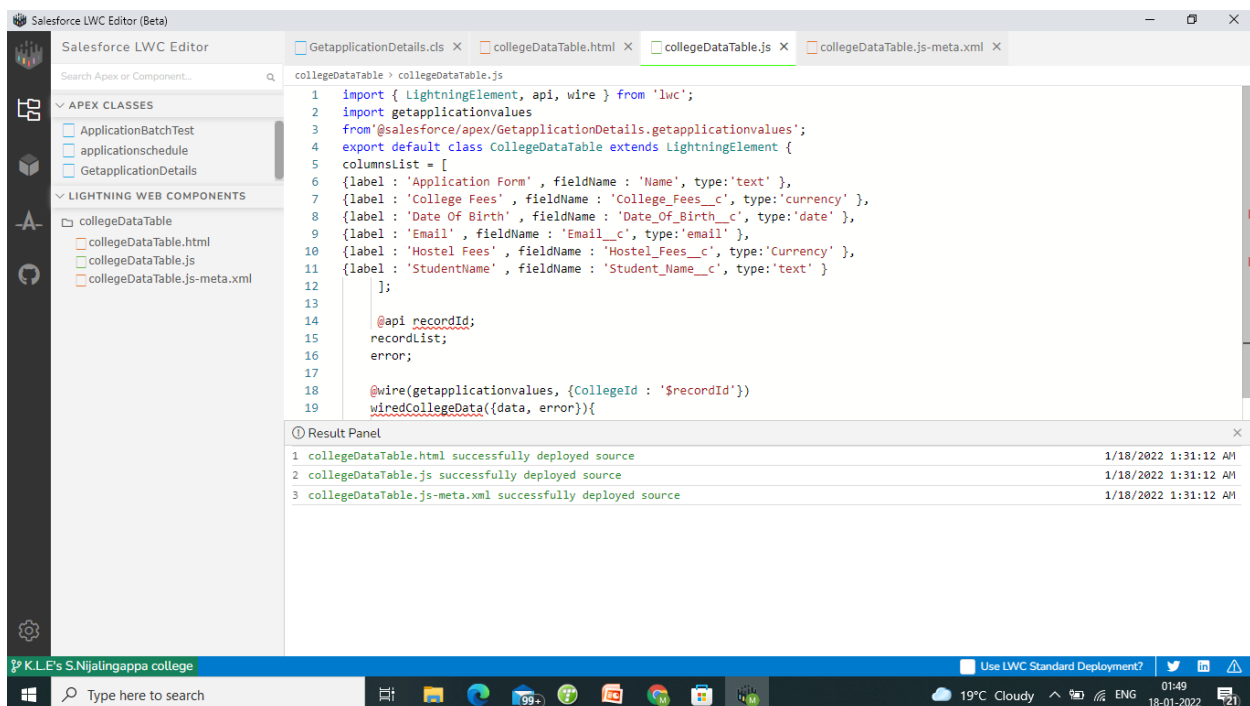
.Created College DataTable Component (HTML FILE)

Screenshot :



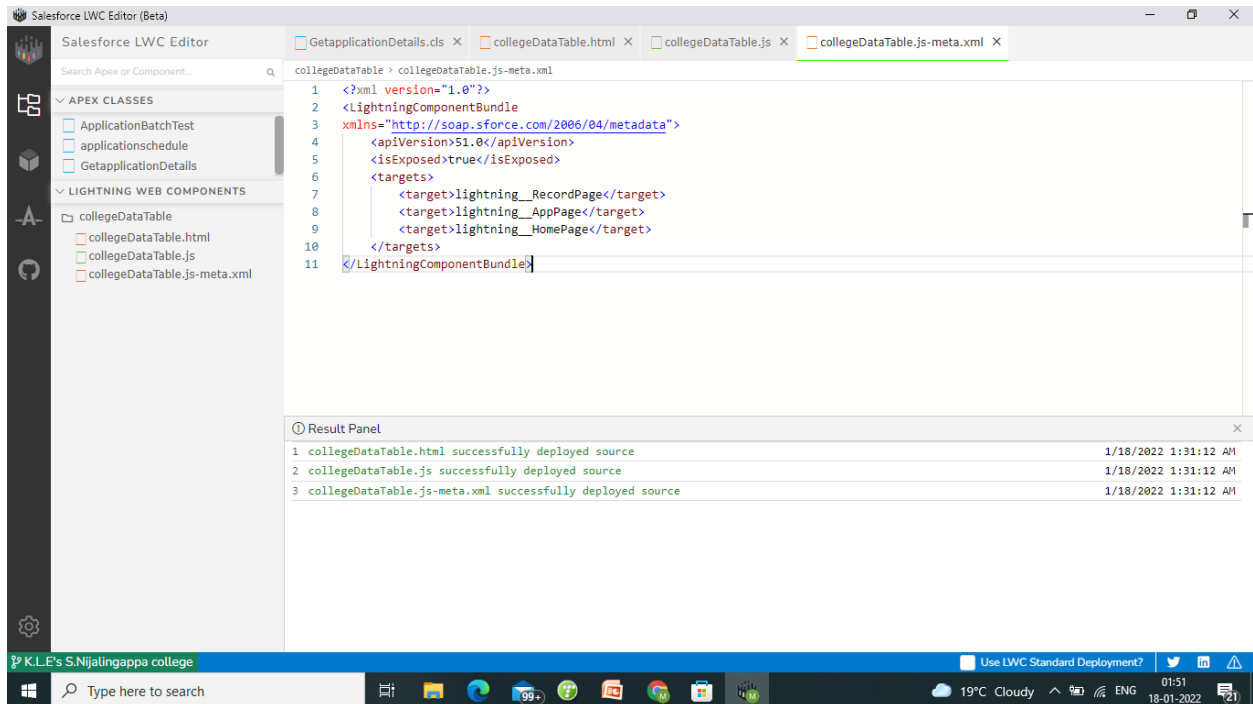
Created College DataTable Component(JAVA SCRIPT FILE)

Screenshot :



Created College DataTable Component(META FILE)

Screenshot :



Screenshot : Final Output

