

Project Title: College Management Application

Day 1:

Topic: Create Your Salesforce Developer Org To Get Started

Milestone / Activities : (i) Creating Developer Account

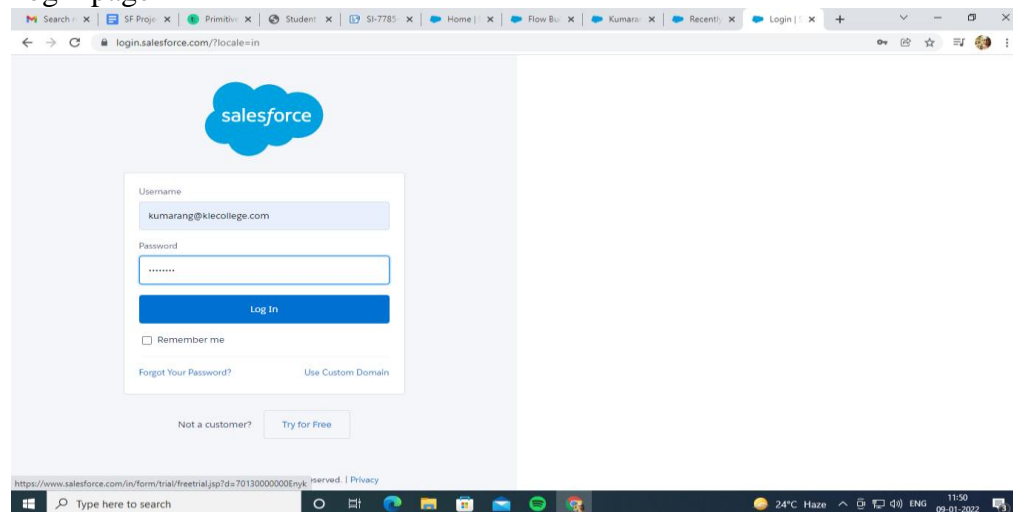
(ii) Login To Your Salesforce Account

Detailed Description: In the first step I have created the Salesforce developer org by following the given instruction such as (first name, Last name, E-mail etc).

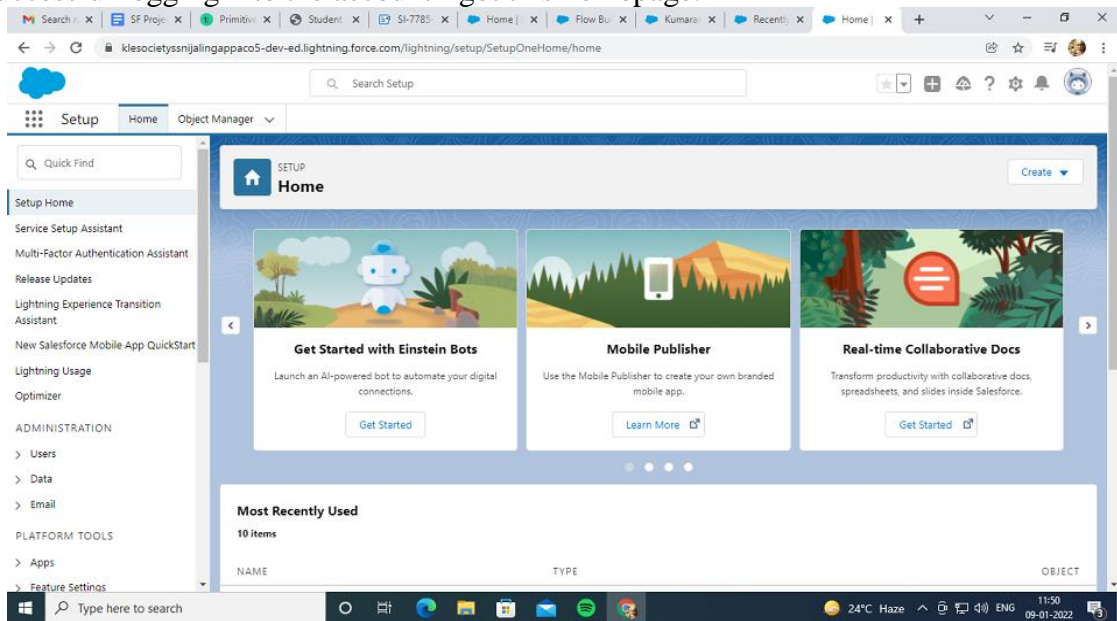
After this I have signed up, and I have received the mail for verifying my developer account.

This process activates my Salesforce developer account, So I have created the password for the salesforce developer account. I have logged into the Salesforce developer account with the Username and Password.

Screenshot : Login page



After successful logging into the account I got this homepage.



Day 2 :

Topic: Custom Object Creation

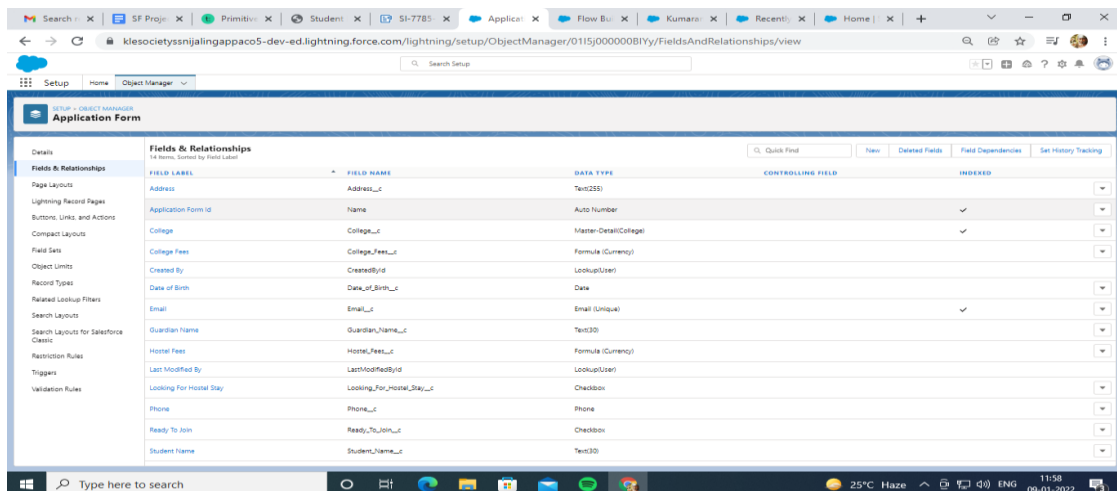
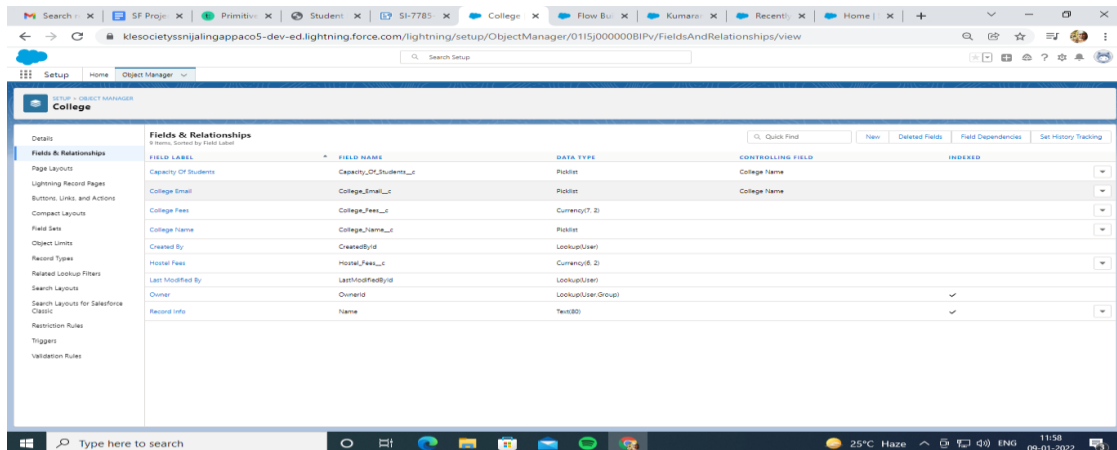
Milestone / Activities : (i) Create The Custom Objects For The Application

(ii) Create Fields On College Object

(ii) Create Fields On Application Form Object

Detailed Description : First we need to create the College Management Lightning App. Then we need to create the custom objects for the Application for the following such as Application Form, College, Student, Subject. For the following custom objects create a tab with particular icons. Then create the fields for the College object by giving the particular name and its data type such as (Record info as field name and text as data type). Similarly create the fields for the Application Form object.

Screenshot : After creating the fields for the College and application form object



Day 3 :

Topic : Custom Object Creation And Profile Creation

Milestone / Activities: (i) Create Fields On Student Object
(ii) Create Fields On Subject Object
(iii) Create users for Application

Detailed Description : Create the fields for the Student object by giving the particular field name and its data type such as (Student Name as field name and text as data type). Similarly create the fields for the Subject object.
For the profile creation go to setup page, and in search bar type profiles and click on it, a tab opens up. Click on new profile and fill the particular field and click on create. It is helpful for giving the access to the object.

Screenshot : After creating the field for student and subject object. After clicking on edit in profile the screenshot is given below

The image displays two screenshots of the Salesforce Setup page, specifically the 'Fields & Relationships' section for the 'Student' and 'Subject' objects.

Top Screenshot: Student Object

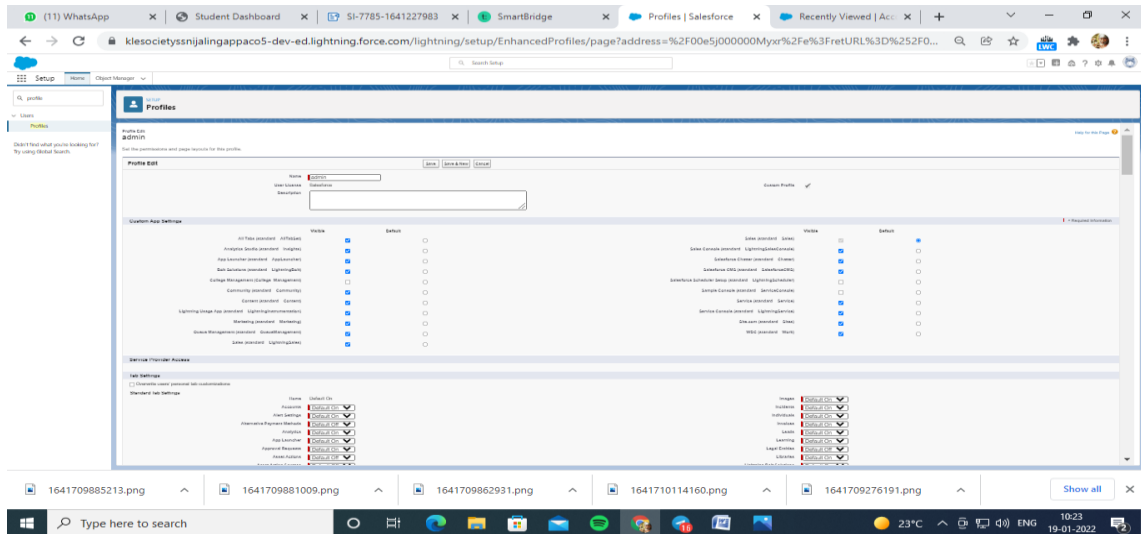
The 'Fields & Relationships' section for the 'Student' object shows a list of fields with their labels, names, data types, and whether they are indexed or controlling fields.

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	CreatedBy	Lookup(User)		
Date Of Birth	DateOfBirth__c	Date		
Guardian Name	Guardian_Name__c	Text(80)		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User Group)		✓
Phone	Phone__c	Phone		
Student Name	Name	Text(80)		✓

Bottom Screenshot: Subject Object

The 'Fields & Relationships' section for the 'Subject' object shows a list of fields with their labels, names, data types, and whether they are indexed or controlling fields.

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Created By	CreatedBy	Lookup(User)		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User Group)		✓
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)		✓



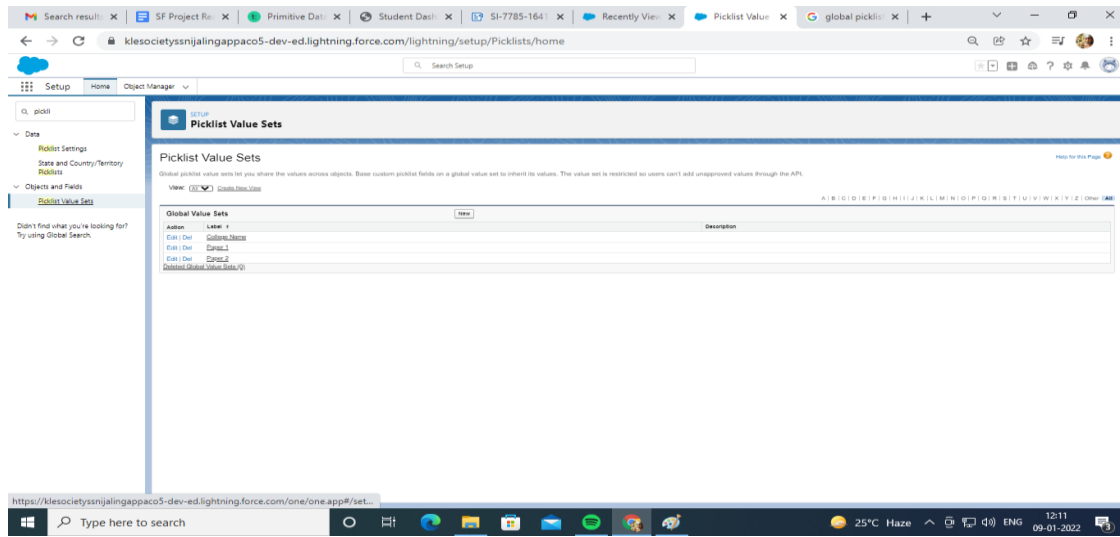
DAY 4:

Topic: Adding Business Logic To Application

Milestone / Activities : (i) Creating Global Picklist Value Sets
(ii) Creating Field Dependencies

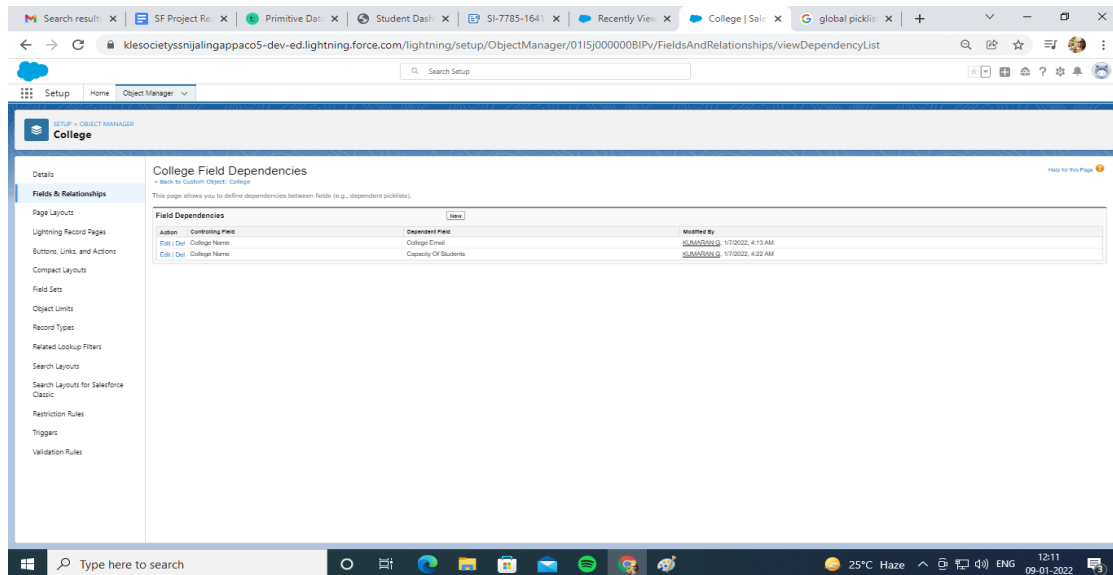
Detailed Description : To create the following global picklist value sets for the application, In setup page search for picklist and click on it. Click on new picklist and create the picklist value for College (MIT-HYD, MIT-BLR MIT-MUM, MIT-MAA, MIT-DEL, MIT-CCU), Paper 1(APEX, JAVA, C, C++) and Paper 2 (MATHEMATICS, ENGLISH,STATISTICS). Create field dependency between college Name and Email for selecting the email ids according to the college names. Create field dependency between college Name and capacity of students for selecting the values according to our wish. To create field dependency go to College object and click on fields and relationship tab and select field dependency , fill all the details.

ScreenShots : After creating the Global picklist values and Field dependencies.



This screenshot shows the 'Picklist Value Sets' page in Salesforce Setup. The left sidebar contains navigation links for 'Data', 'Picklist Settings', 'State and Country/Territory Picklists', and 'Objects and Fields'. The main content area is titled 'Picklist Value Sets' and includes a description: 'Global picklist value sets let you share the values across objects. Base custom picklist fields on a global value set to inherit its values. The value set is restricted so users can't add unapproved values through the API.' Below this, there is a table for 'Global Value Sets' with columns 'Action', 'Label', and 'Description'. The table contains three rows: 'Edit | Del | Global Name', 'Edit | Del | Group 1', and 'Edit | Del | Group 2'. The bottom of the screen shows a Windows taskbar with the search bar and system tray.

Action	Label	Description
Edit Del	Global Name	
Edit Del	Group 1	
Edit Del	Group 2	



This screenshot shows the 'College Field Dependencies' page in Salesforce Setup. 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', 'Search Layouts', 'Search Layouts for Salesforce Classic', 'Restriction Rules', 'Triggers', and 'Validation Rules'. The main content area is titled 'College Field Dependencies' and includes a description: 'This page allows you to define dependencies between fields (e.g., dependent picklists)'. Below this, there is a table for 'Field Dependencies' with columns 'Action', 'Controlling Field', 'Dependent Field', and 'Modified By'. The table contains three rows: 'Edit | Del | College Name', 'Edit | Del | College Email', and 'Edit | Del | Capacity of Students'. The bottom of the screen shows a Windows taskbar with the search bar and system tray.

Action	Controlling Field	Dependent Field	Modified By
Edit Del	College Name	College Email	9/1/2022, 4:13 AM
Edit Del	College Name	Capacity of Students	9/1/2022, 4:22 AM

DAY 5:

Topic : Adding Business Logic To Application

Milestone / Activities: Creating Validation Rules

Detailed Description: Create a validation rule on the college object such that the college name and record info should have the same name.

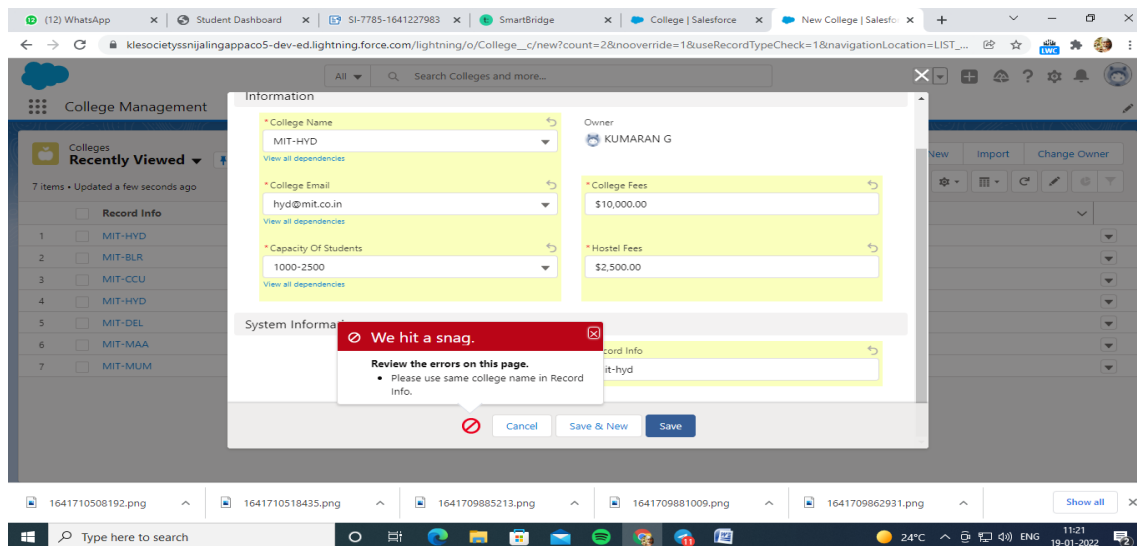
And the formula is “TEXT(College_Name__c) <> Name”.

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

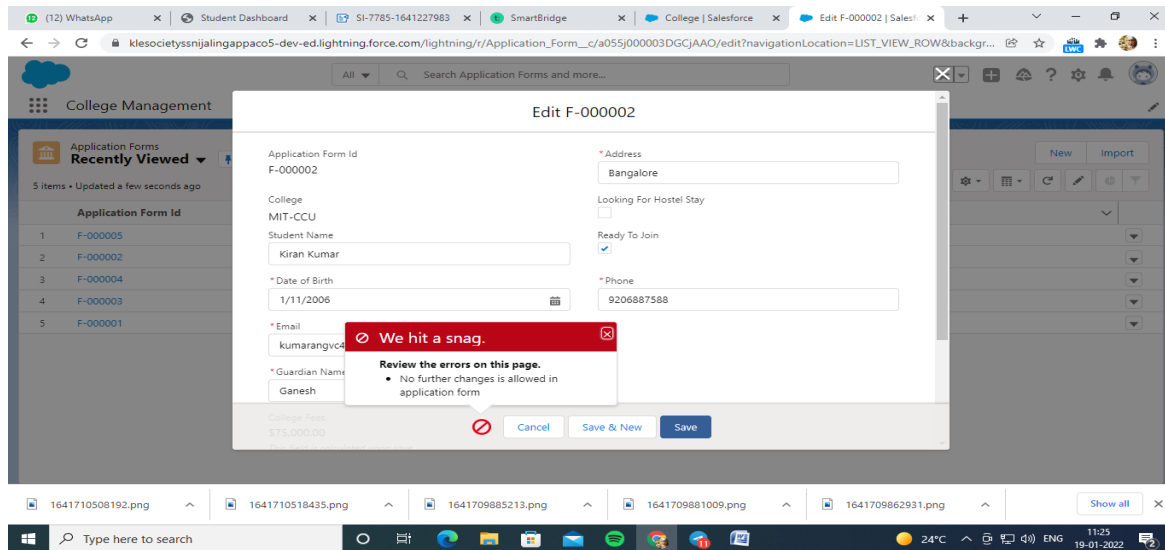
Formula is “AND(Ready_To_Join__c==true,
OR(
ISCHANGED(Address__c),
ISCHANGED(College__c),
ISCHANGED(Date_Of_Birth__c),
ISCHANGED(Email__c),
ISCHANGED(Guardian_Name__c),
ISCHANGED(Phone__c)
)
)”

Screenshot : After creating the validation rules the following output occurs.

If the College name is not same as record info the output is



Once the student record is created we cannot edit the Application Form.



Day 6 :

Topic : Adding Business Logic To Application

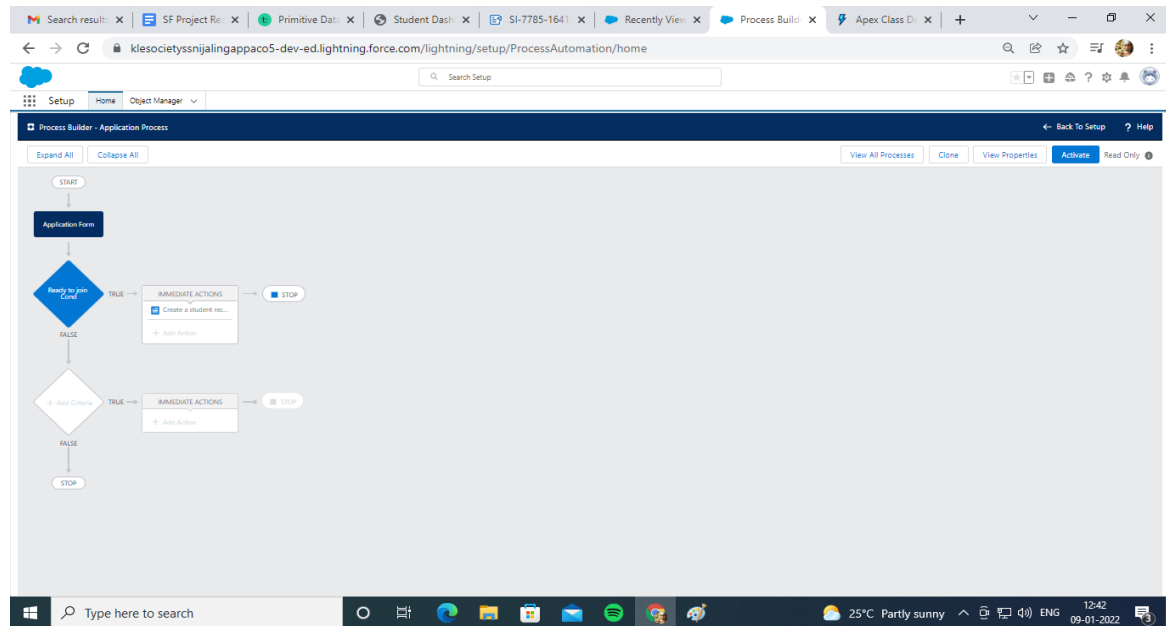
Milestone / Activities : Process Automation

Detailed Description : Create 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. 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".

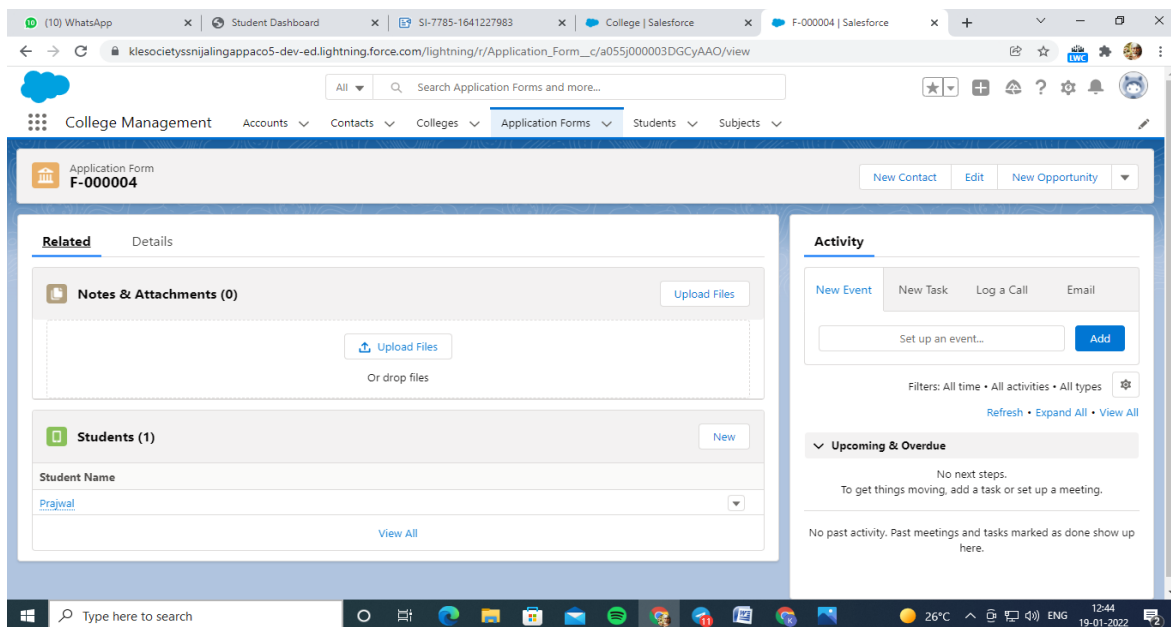
a. In the diamond shape box (called nodes), select the criteria which trigger the Process builder to fire. In our example, it is "When Ready to Join field is checked."

b. Once the node is setup, click on the adjacent box called "Immediate action". And select create a record on the student object. Please follow the below screenshot.

Screenshot : This is the way of creating the Process Builder.



The output for Process Builder is When ready to join checkbox is selected a student record is created automatically.



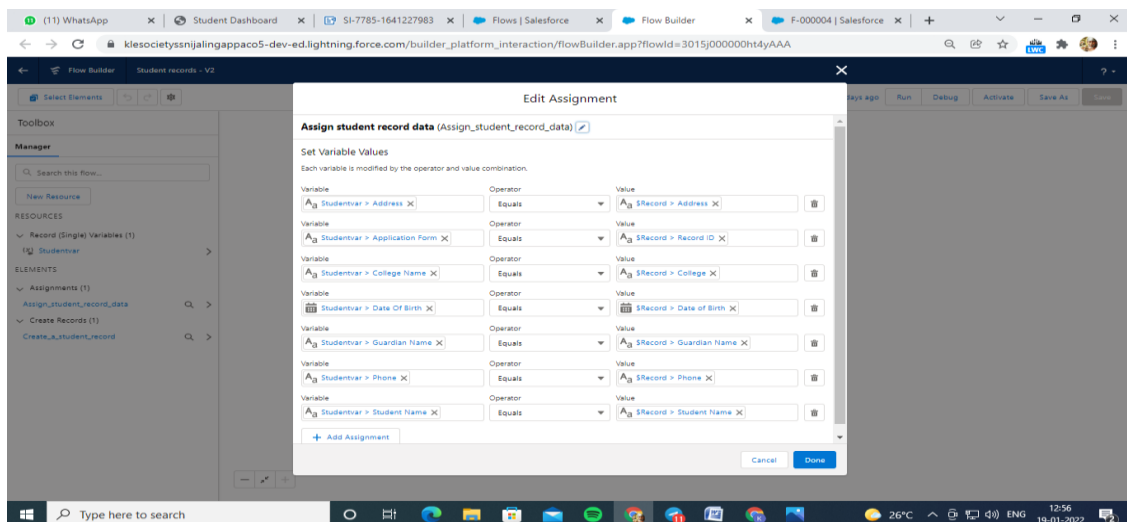
Day 7 :

Topic : Adding Business Logic To Application

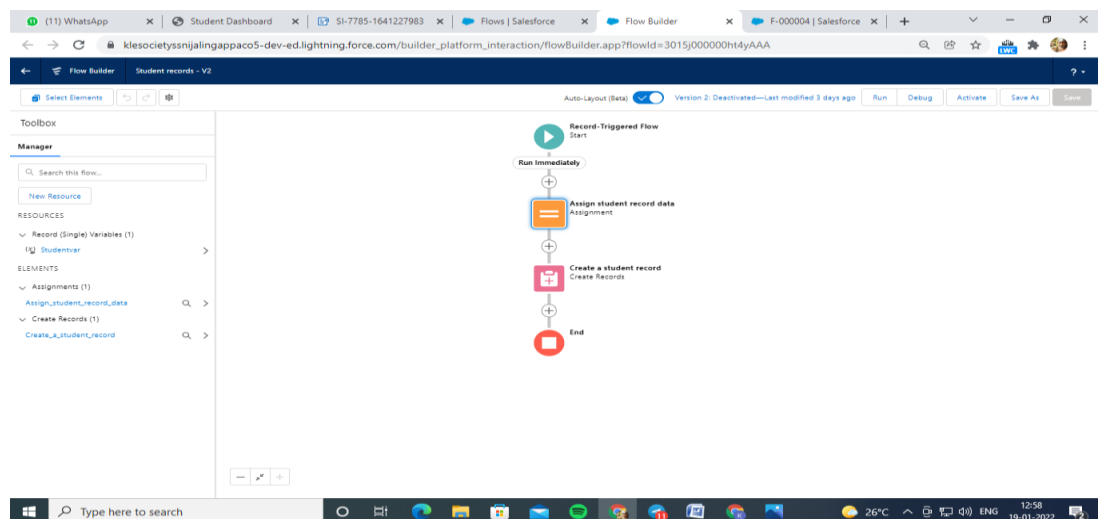
Milestones / Activities : Create The Student Record Using Flow

Detailed Description : First deactivate the process builder which we created earlier because it will create two student record. Now search for flows and select new flow and select 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. Now add the assignment as follows. And then click on Create records.

Screenshots : The assignment to add is as follows



The output for the flows to add a Student record is



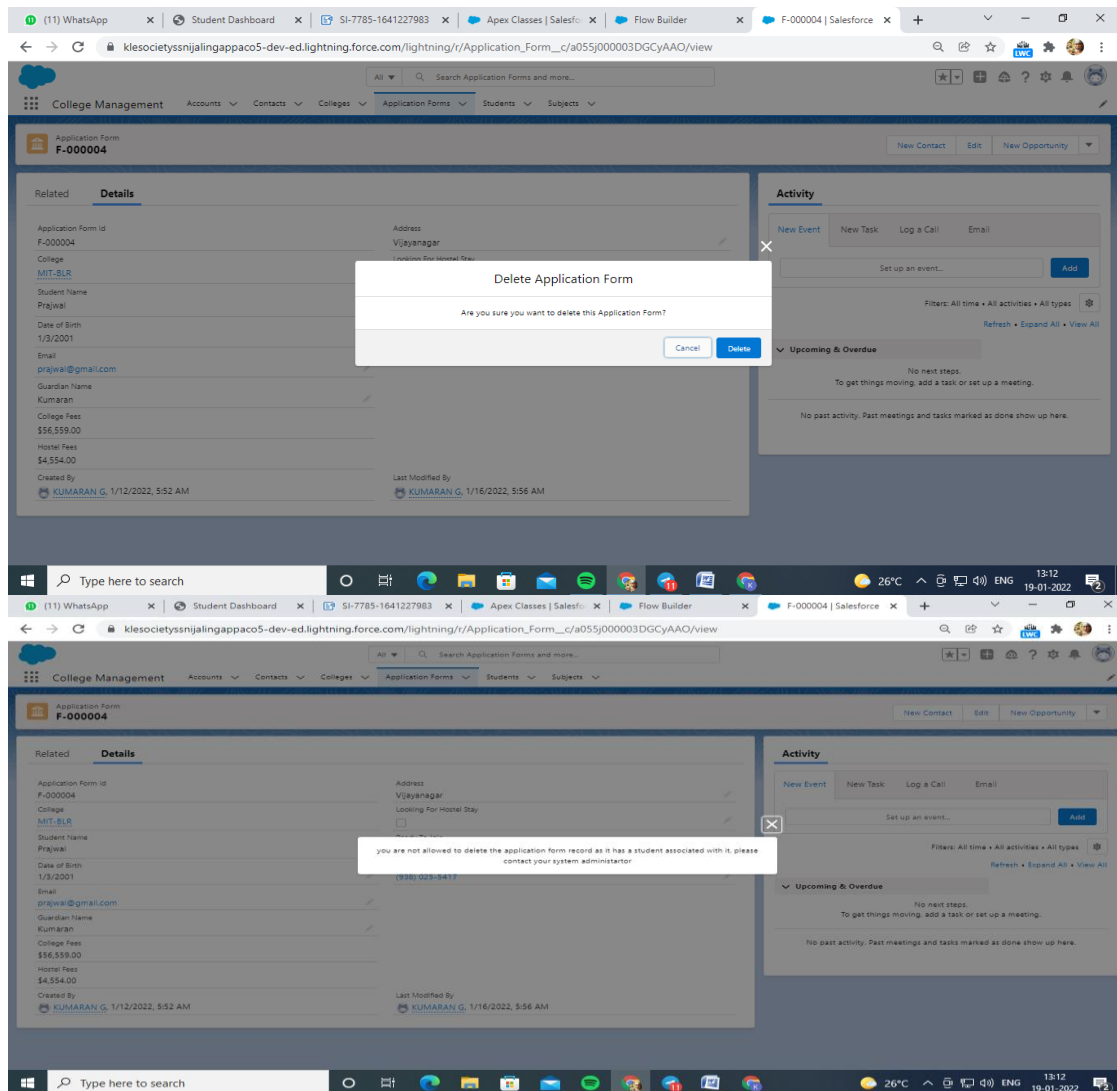
Day 8 :

Topic : Triggers

Milestones/Activities : Create the Triggers

Detailed Description : A trigger is an Apex script that executes before or after data manipulation language (DML) events occur. In the home page click on setup and select developer console option. In developer console click on file and select the triggers option and type your code in it. Here in triggers I'm writing a code to give the error message as "Application Form should not be deleted when a student record is associated with it.

Screenshots: The output for the code written is shown below



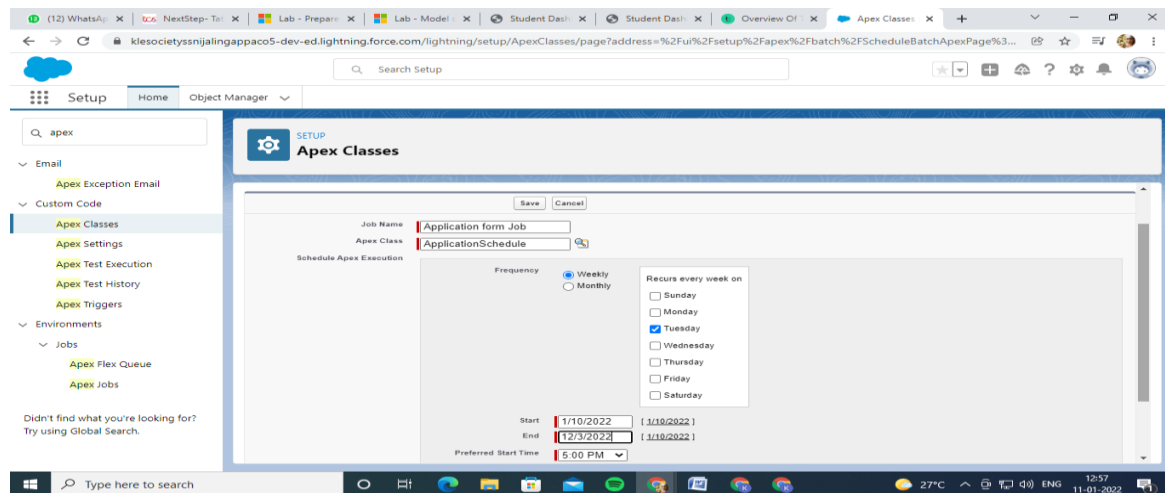
Day 9:

Topic : Batch apex

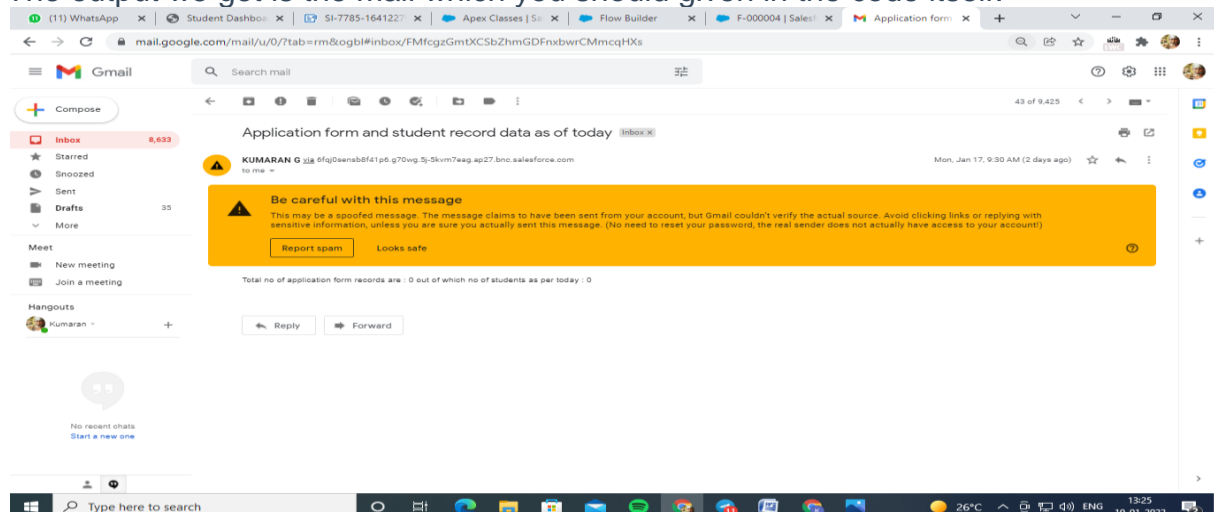
Milestone / Activities: (i) Create A Batchapex For Application Form
(ii) Create A Scheduler Class

Detailed Description : From the developer console create a new apex class and enter the your code for the apex class.
From the developer console create a new apex class and enter the your code for the Scheduler class.
And after writing the code go to setup search for apex class and click on schedule jobs and fill the details as per your requirements.

Screenshots : The schedule jobs window looks like as below



The output we get is the mail which you should given in the code itself.



Day 10:

Topic : LWC Overview

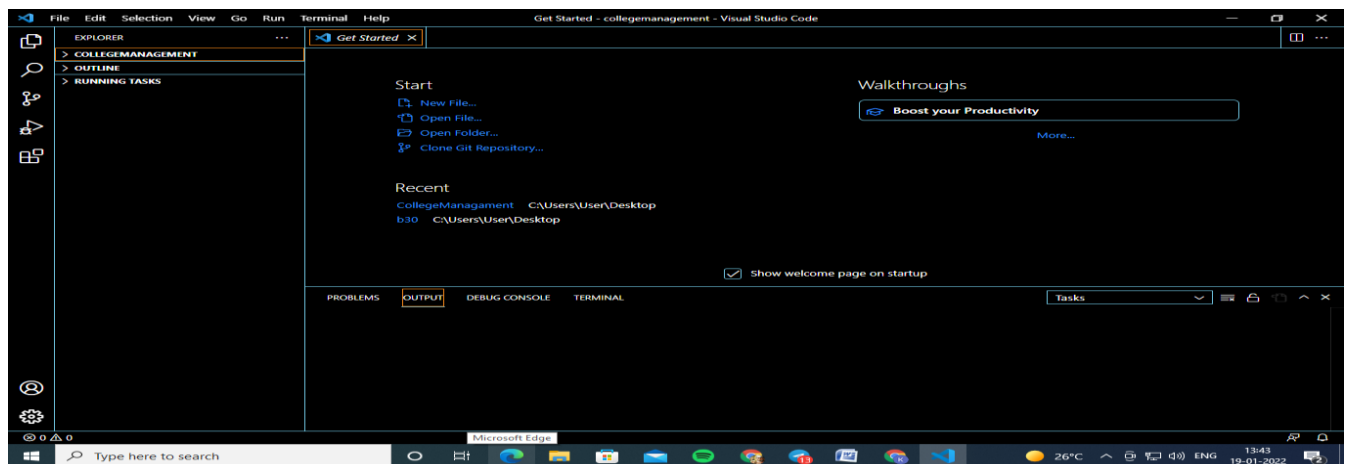
Milestones/Activities : Installation of VS code and Extensions of Salesforce in VS code

Detailed Description : In chrome type VS code a particular has come. Click on VS code download link and install the Software.

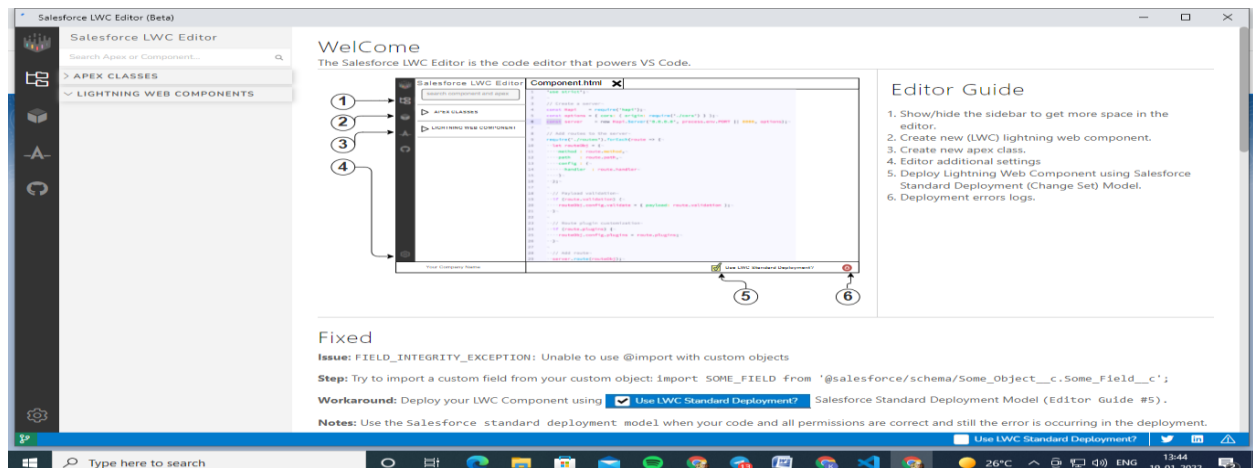
After installation click on Extension menu or press Ctrl+Shift+X and type as Salesforce Extension pack and install it to.

Or if you find that the VS code takes time to load, For time being you can add Salesforce LWC editor to your Chrome web store start writing your code, but triggers will not work.

Screenshots : VS code home page



Salesforce LEC editor homepage



Day 11:

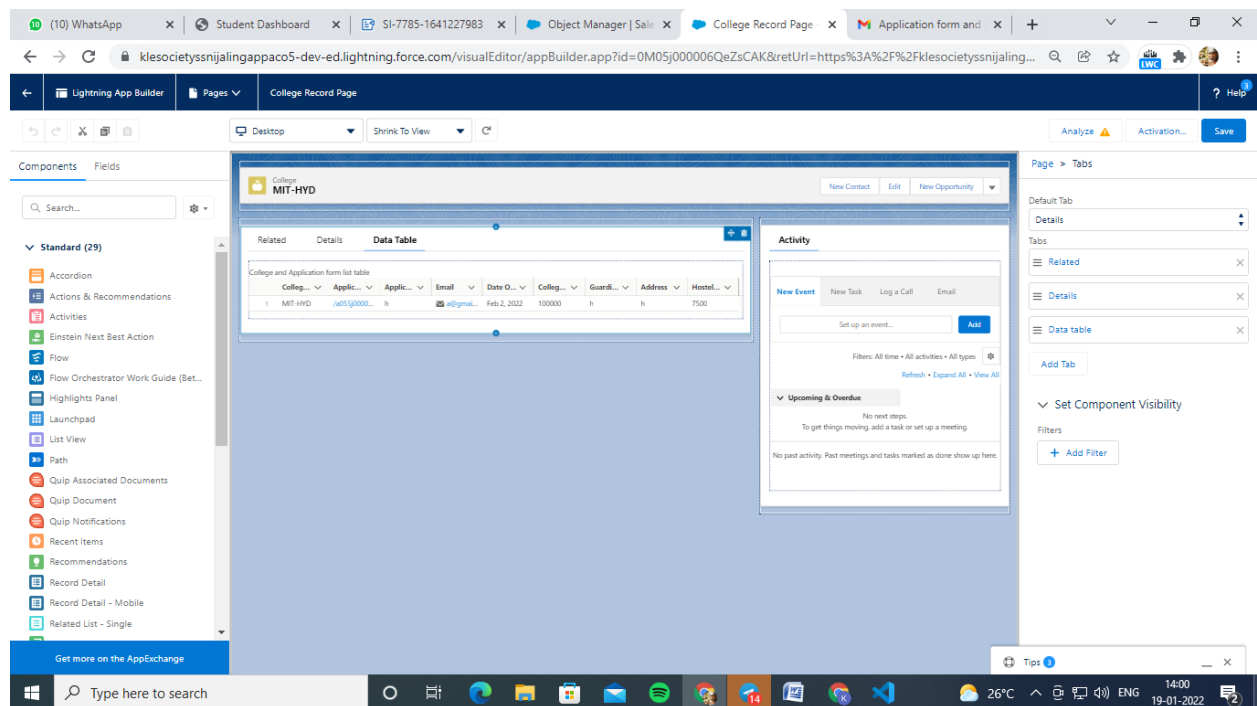
Topic: Lightning Web Components

Milestones/Activities : (i) Create College DataTable Component(APEX CLASS)
(ii) Create College DataTable Component (HTML FILE)
(iii) Create College DataTable Component(JAVA SCRIPT FILE)
(iv) Create College DataTable Component(META FILE)

Detailed Description: Here I am 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 .Create an Apex Class With the Functionality. Now create the component and write the code for HTML files. After the creation of HTML files write the code for JS. Change the meta File also.

After writing the code click on setup and choose edit page and add data table field

Scrennshots : The page looks similar after adding the data table field



After saving the page the field is added and the output is similar to the below image.

The screenshot shows a Salesforce Lightning page for a record named 'MIT-BLR'. The page layout includes a top navigation bar with tabs for 'College Management', 'Accounts', 'Contacts', 'Colleges', 'Application Forms', 'Students', and 'Subjects'. The 'Colleges' tab is active. Below the navigation bar, the record name 'MIT-BLR' is displayed. The main content area is divided into two sections: 'Data Table' and 'Activity'.

Data Table: This section displays a table with the following columns: College N..., Applicatio..., Applicant ..., Email, Date Of Bl..., College Fe..., Guardian ..., Address, and Hostel Fees. The table contains two rows of data.

College N...	Applicatio...	Applicant ...	Email	Date Of Bl...	College Fe...	Guardian ...	Address	Hostel Fees
1 MIT-BLR	/a055j000003D...	Prajwal	prajwal@g...	Jan 2, 2001	56559	Kumaran	Vijayanagar	4554
2 MIT-BLR	/a055j000003D...	Suryakanth R	suryakanth0...	Nov 22, 2001	56559	Ravichandra	Mahaganapatin...	4554

Activity: This section shows a list of activities for the record. It includes buttons for 'New Event', 'New Task', 'Log a Call', and 'Email'. Below these buttons is a text input field labeled 'Set up an event...' and an 'Add' button. The activity list is currently empty, showing 'No next steps' and 'No past activity'. The bottom of the page shows a Windows taskbar with various application icons and a system clock indicating 14:01 on 19-01-2022.