College Management Application

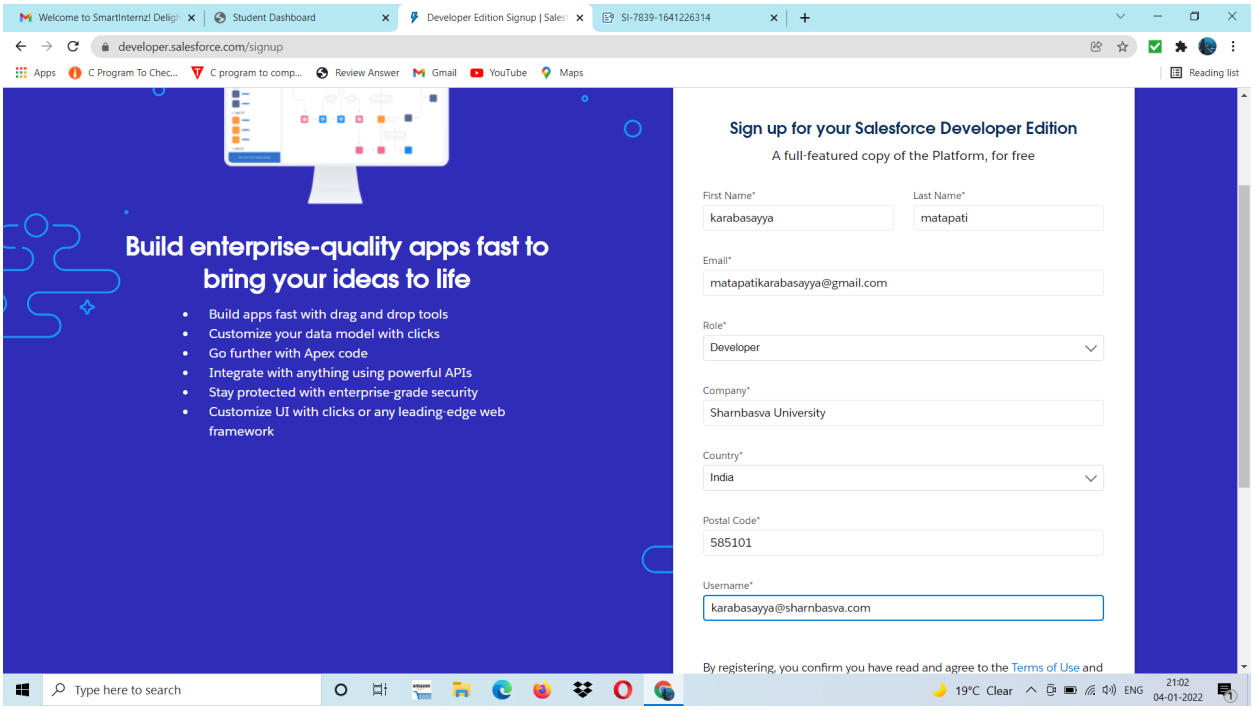
Day 1:

Topic : **College Management Application.**

Milestone/Activities : 1)Creating Developer Account.
2)Account Activation.
3) Login To your salesforce account.

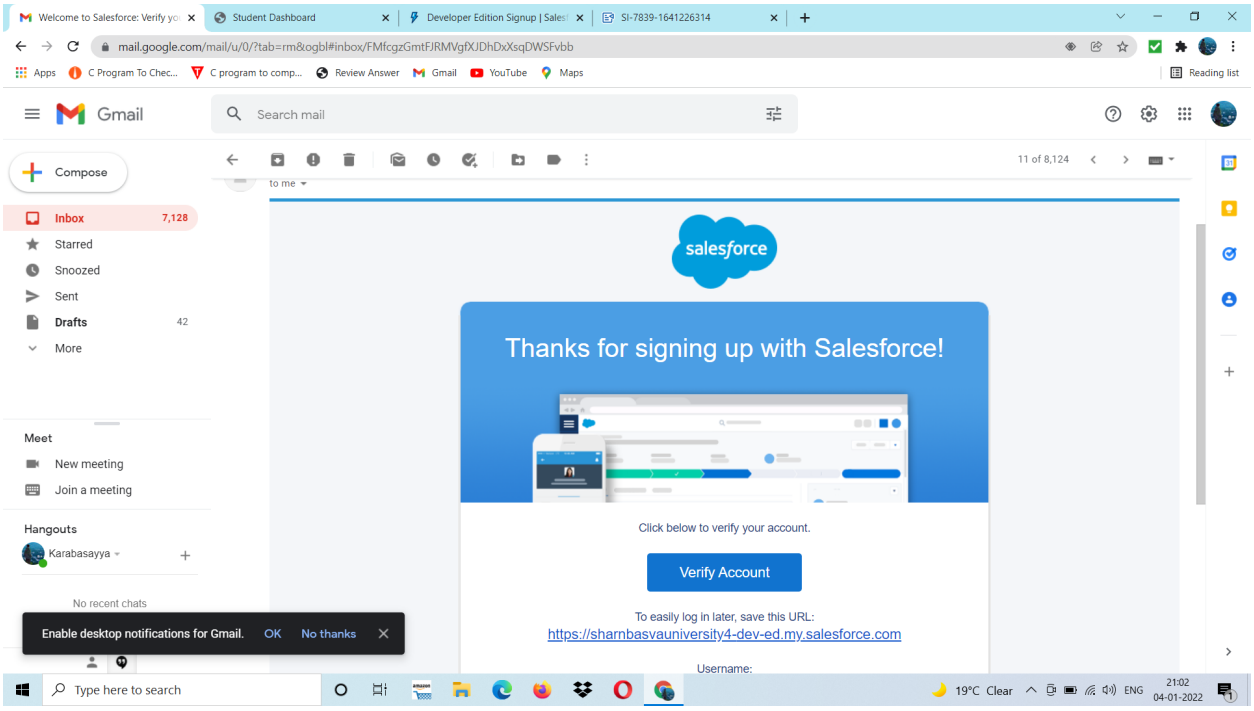
Detailed Description : in first step I have created the salesforce developer organization by following the instructions such as first-name,last-name , e-mail id and username, after that I verified my developer account using e-mail this step activates my salesforce developer account. where I set new password for my developer account and after this I logged into my salesforce developer account using my Username & Password.

screenshot :Creating Developer org Account in developers.salesforce.com/

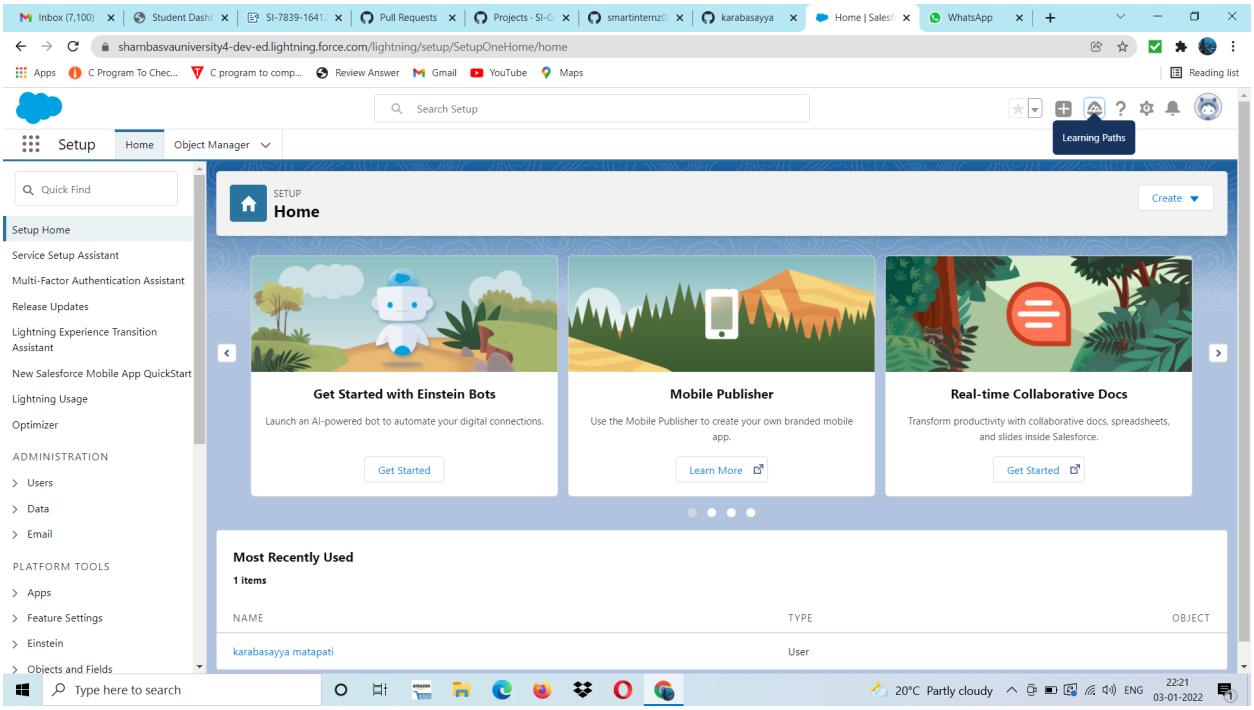


College Management Application

Screenshot : Account Verification.



Screenshot : after successful logging in I got this homepage



College Management Application

Day 2 :

Topic : **College Management Application.**

Milestone/Activities : Create the college management app.

a) Custom objects creation for the Application

1. College
2. Application Form.
3. Students.
4. Subjects.

b) Create Fields on College Object.

c) Create Fields on Application object form

Detailed description: I created the college management app in my salesforce developer org using lightning app, in that app I created the four custom objects in the Object Manager they are,

1. College
2. Application Form.
3. Students.
4. Subjects.

==> Steps for creating the object

a.1)Login-->Setup-->Object Manager-->Create-->Custom Objects.

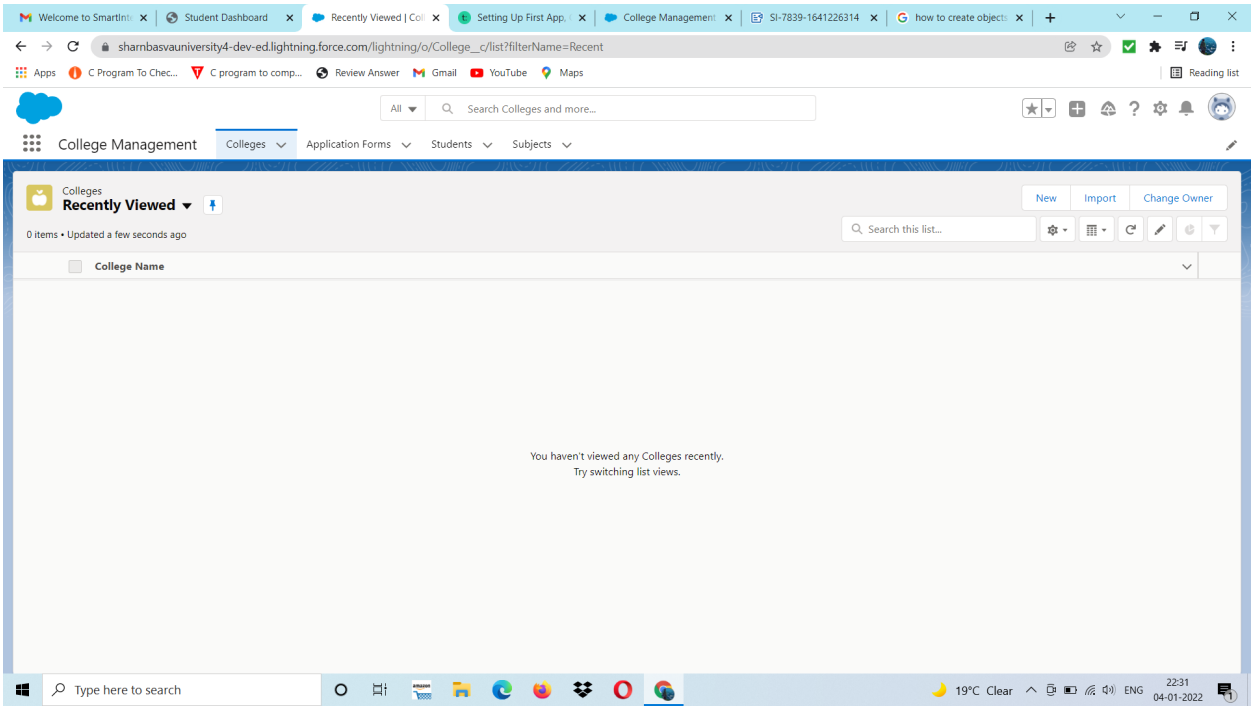
after creation of the objects I created the fields for the each object in the Fields and Relationships

==> steps for creating the Fields in Objects

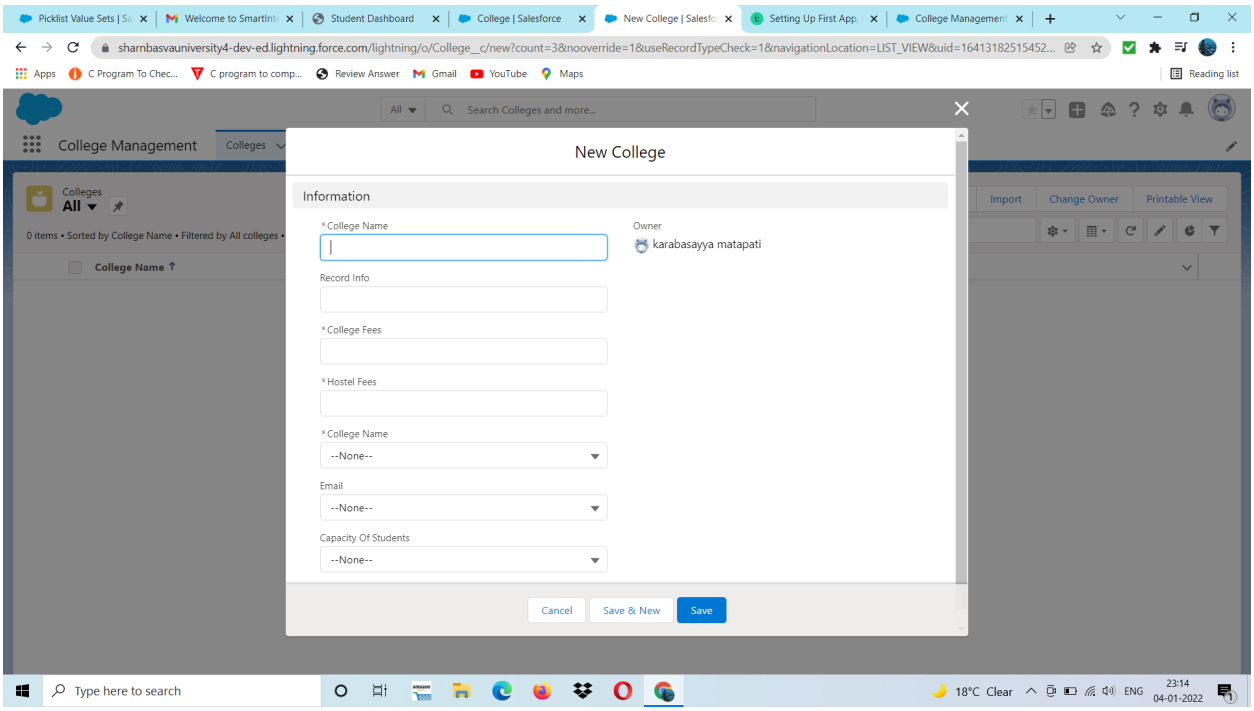
b.1)Login-->Setup-->Object Manger-->Fields & Relationship-->New.

College Management Application

Screenshot : college management app and its objects

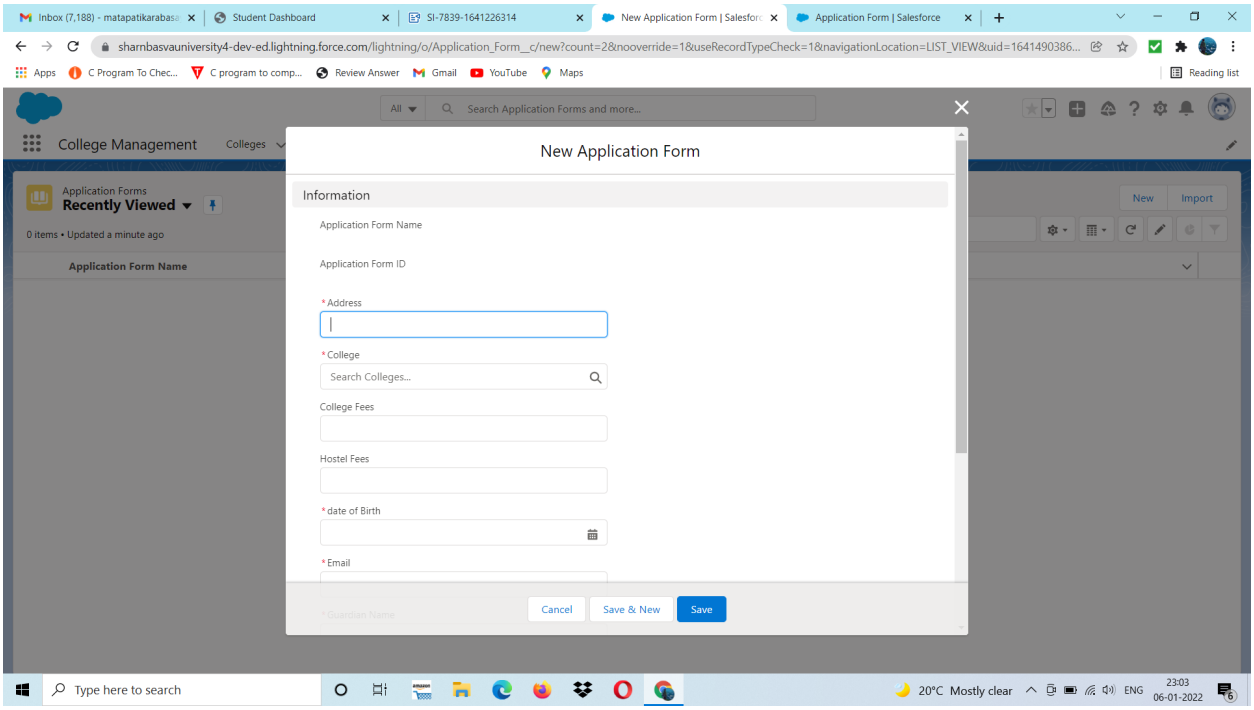


Screenshot : Created the Fields for College object



College Management Application

Screenshot: Created the Fields on Application Form Object



College Management Application

Day3 :

Topic : **College Management Application.**

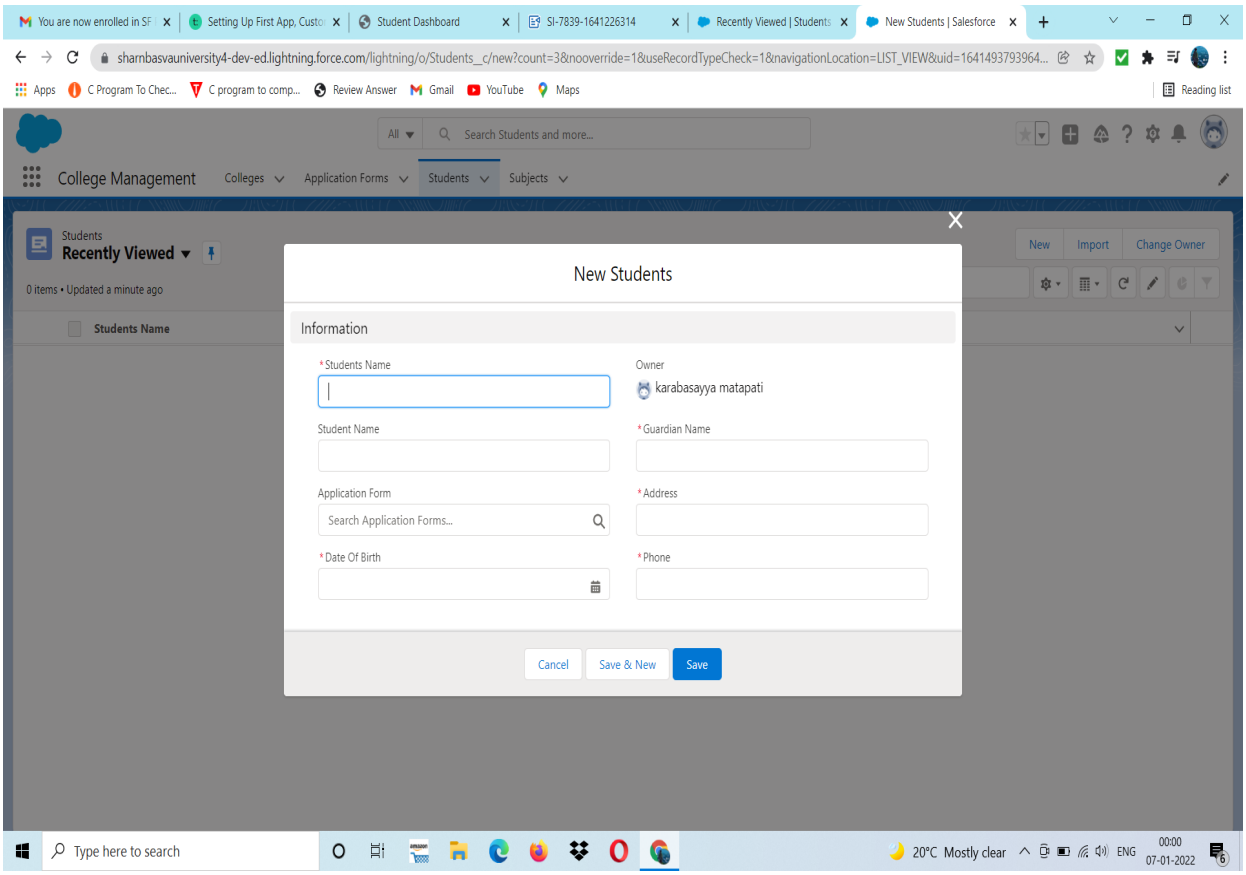
Milestone/Activities : 1)Created The Fields on Student Object.
2)Created The Fields on Subject Object.
3)Creating Global Picklist Value Sets

Detailed description: I logged into the salesforce developer org where I created the fields for the Student object , and also created the Fields for Subject objects , after this I created the Global pick List Value Sets.

==>Steps for creating The fields on object
a)Login-->Setup-->Object Manager-->object-->new--> save.

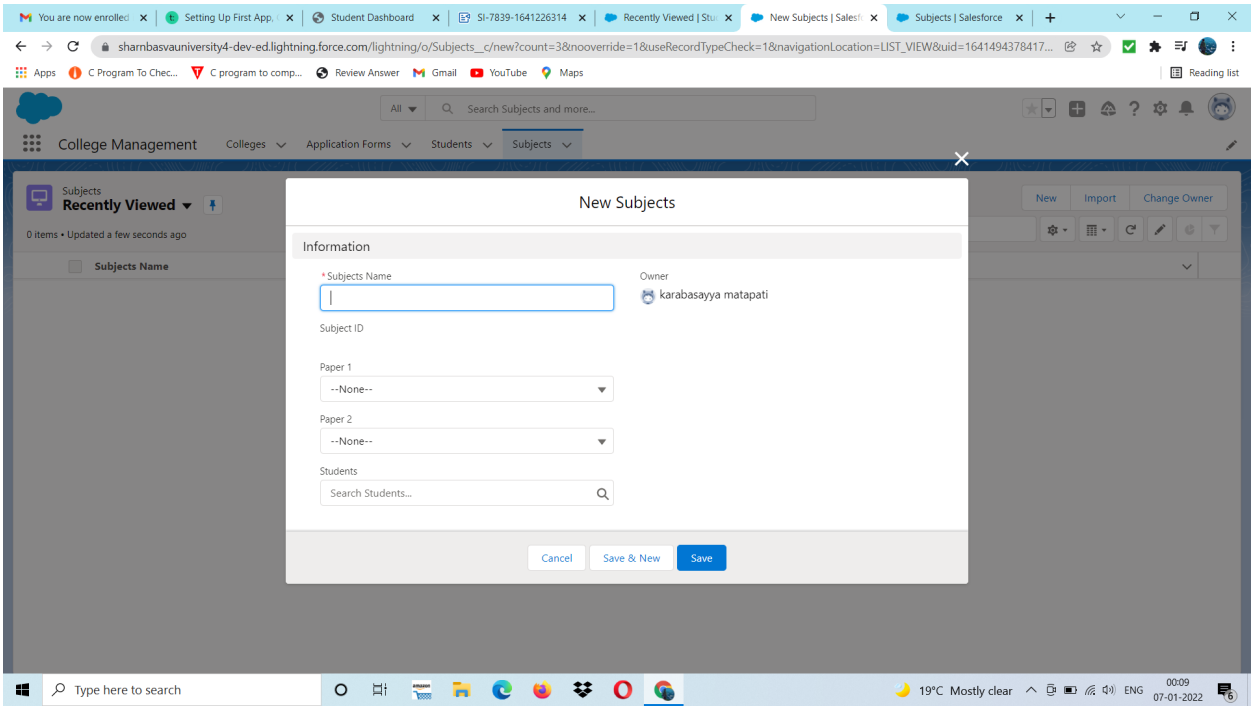
==>Steps for creating PickList Value Sets
b)Login-->Setup-->Home-->PickList Value Sets-->new-->Save.

Screenshot : Created the Fields on Student Object.

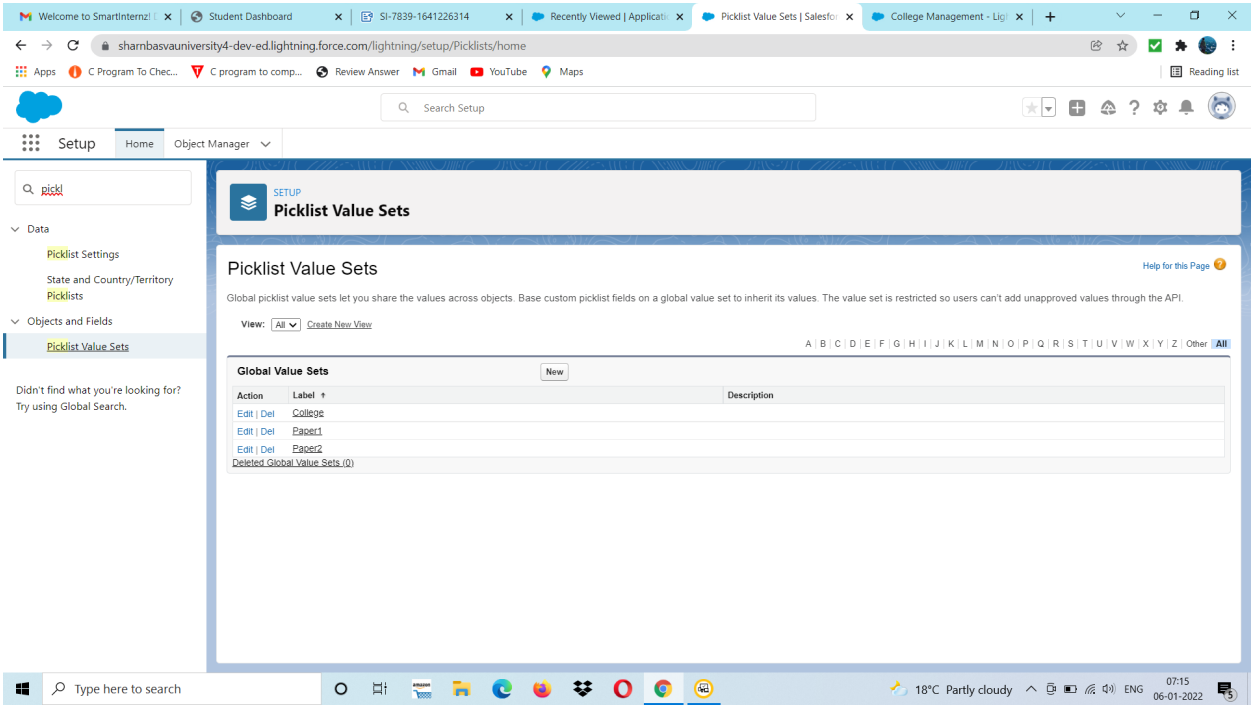


College Management Application

Screenshot : Created The Fields on Subjects Object



Screenshot: Created the Global PickList Value Sets



College Management Application

Day 4:
Topic : **College Management Application.**

Milestone/Activities : 1)Creating Field Dependencies

2)Creating Validation Rules

Detailed description: 1) created the field decencies for college object where, where the controlling field is college Name and dependent field is Email. while creating the field dependencies , Selected the email ids according to the college name. after this I created the one more field dependencies that is between college Name and capacity of students, where the controlling field is college Name and dependent field is Capacity of Students.

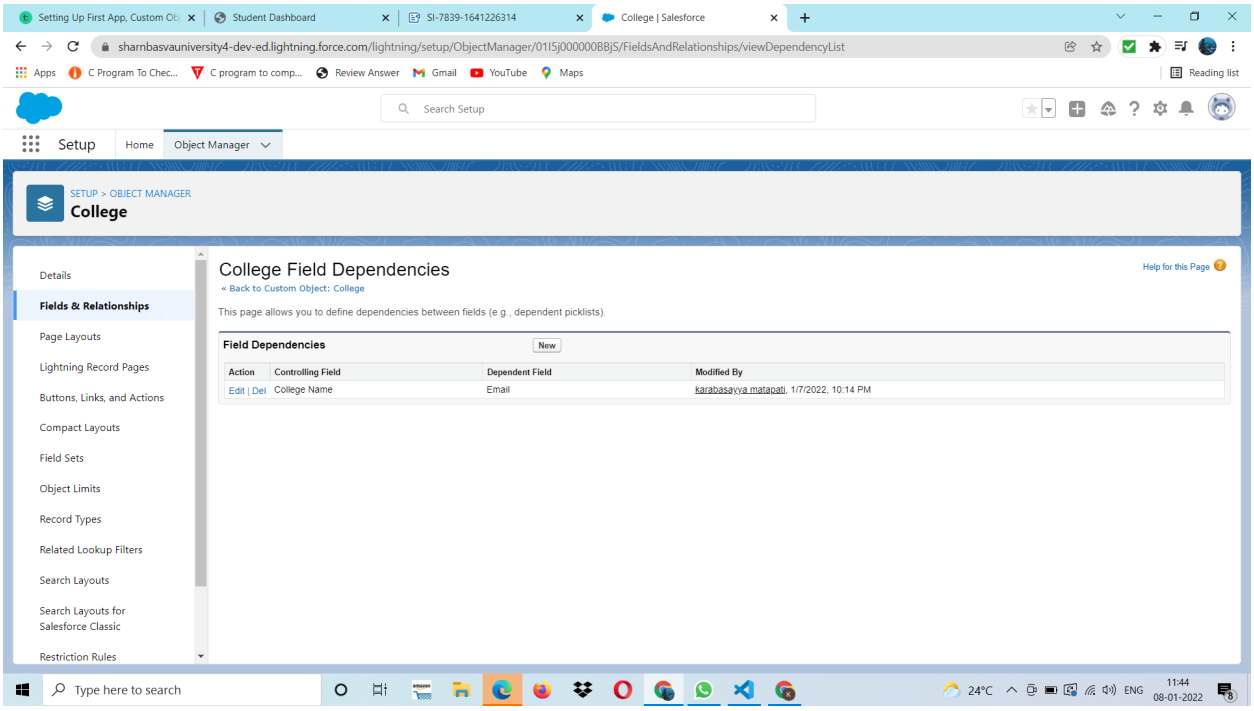
2) a)created the validation rules for college object and application in first validation rule the college name and record info need to same if you enter the wrong name it displays the error message

b) created the validation rule for the applicatin form object where once you created the record further you cannot modify it.

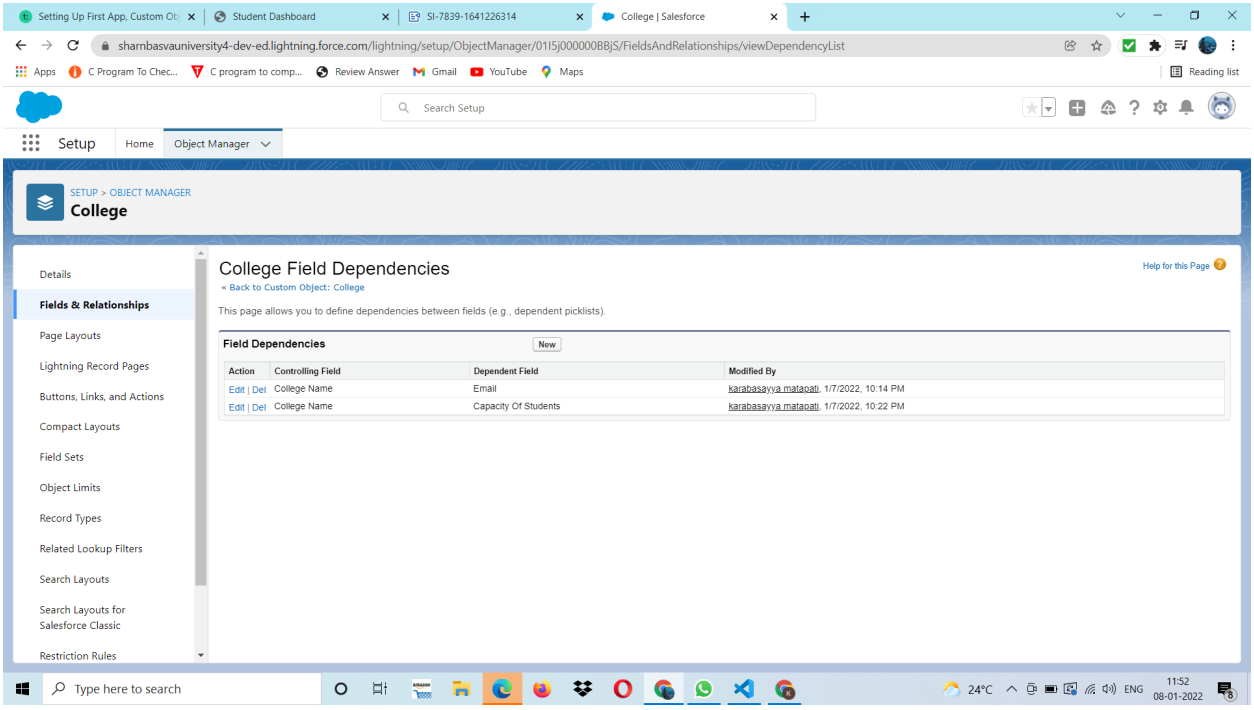
College Management Application

Screenshot : Creating Field Dependencies

1) College name <==>Email



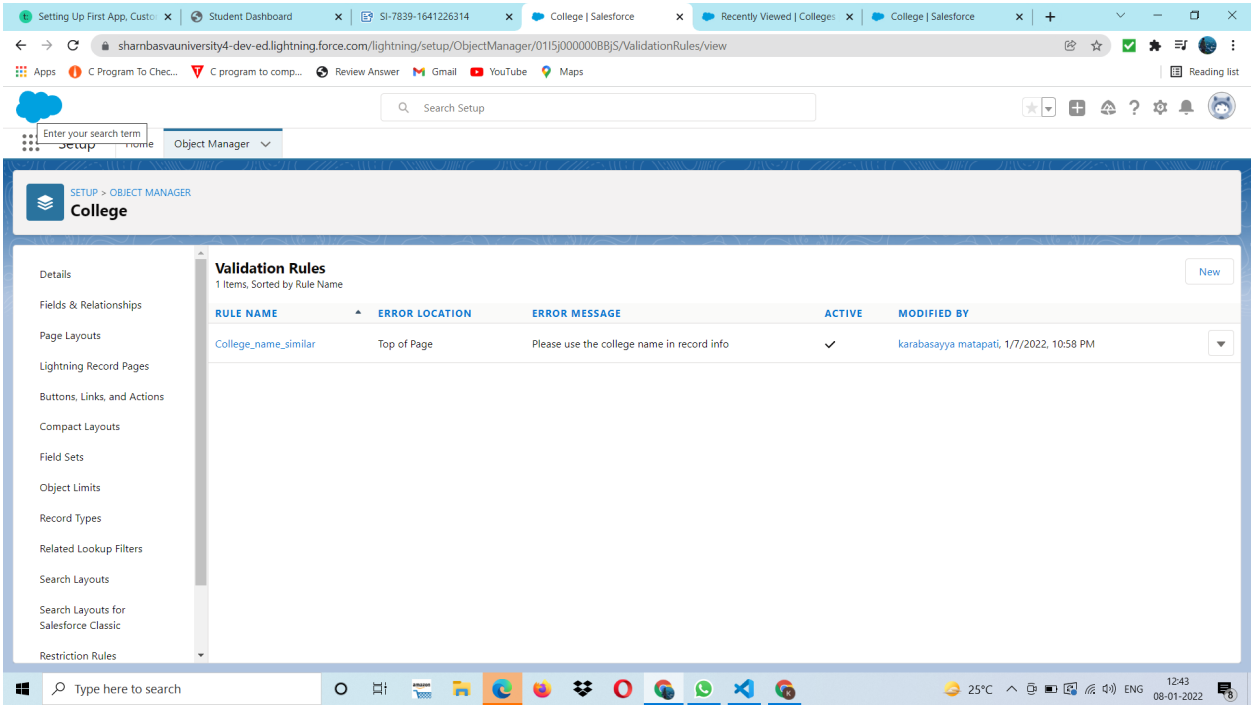
2)College name<==>Capacity of Students



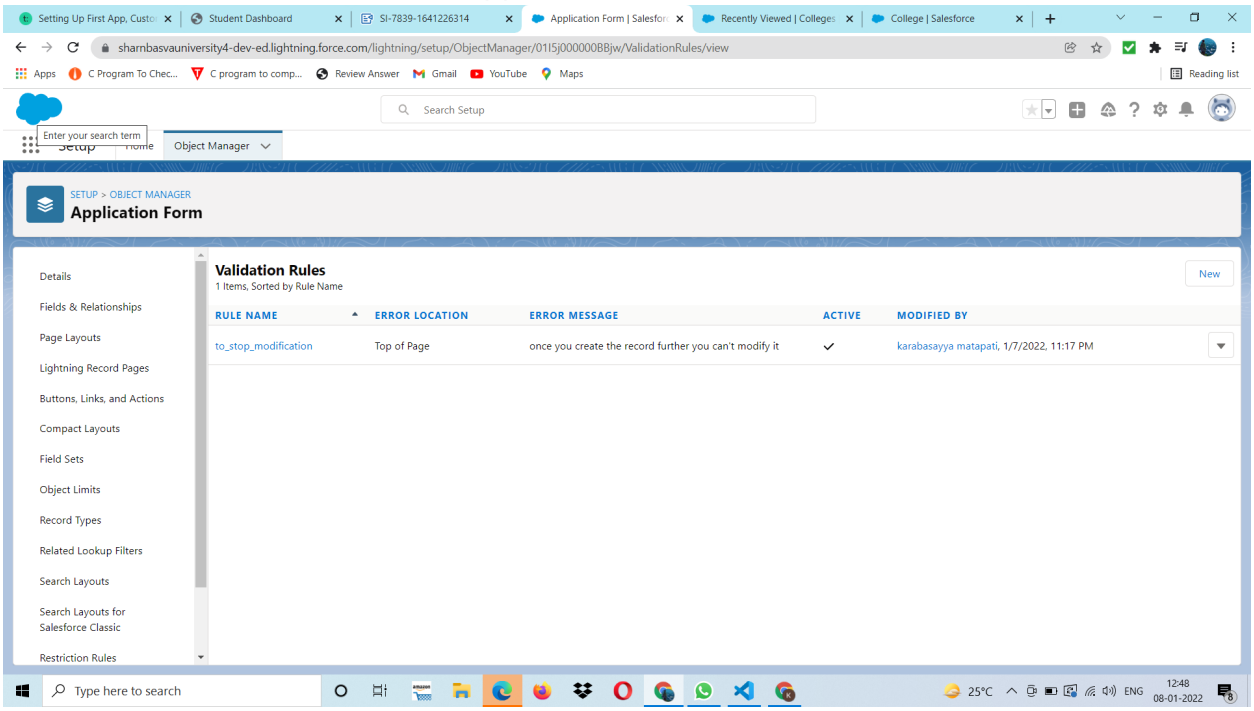
College Management Application

Screenshot: created the validation rules.

a) validation rule for College object



b) Created the validation rule for Application Form



College Management Application

Day 5:

Topic : **College Management Application.**

Milestone/Activities : 1)Process Automation

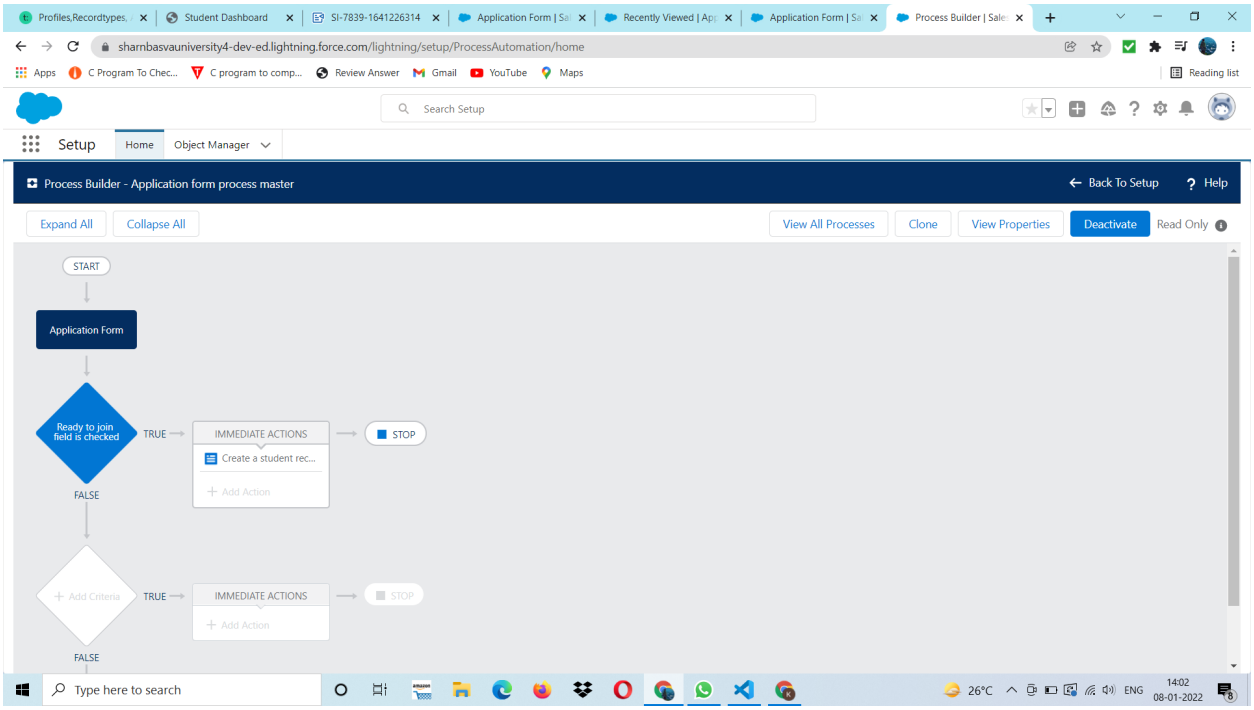
2)Create The Student Record Using Flow

Detailed description: 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, and activated it .
after this I deactivated the process automation and worked on the flows there are mainly 5 types of flows and they are
1) Screen Flow
2)Record Triggered Flow
3)Schedule Triggered Flow
4)Platform event triggered Flow
5)Auto launched Flow
We created the Student Record using Record Triggered Flow.
Creating or updating a record can trigger an auto launched flow to make additional updates to that record before it's saved to the database. A record-triggered flow can update a Salesforce record 10 times faster than a record-change process.

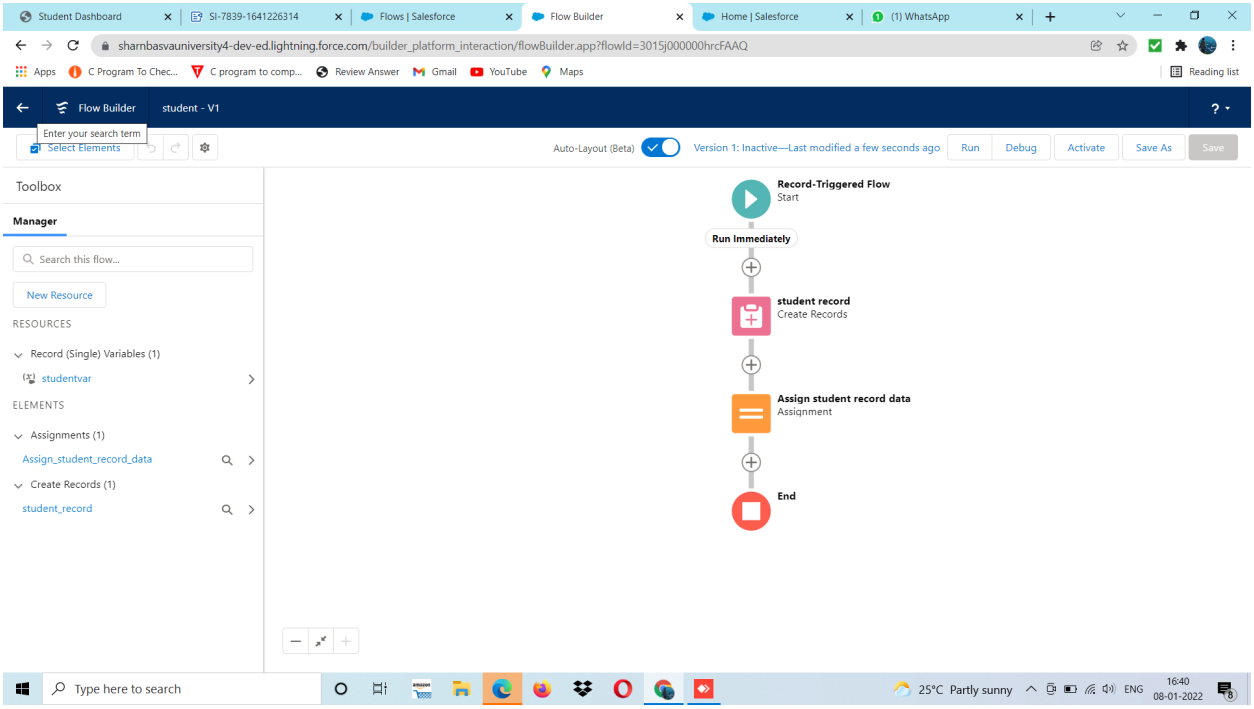
Security model in salesforce
1) Object level security
2) Field level Security
3)Record level Security

College Management Application

Screenshot: Process automation



Screenshot:Created The Student Record Using Flow



College Management Application

Day 6:

Topic : **College Management Application.**

Milestone/Activities : Create A Batch apex For Application Form

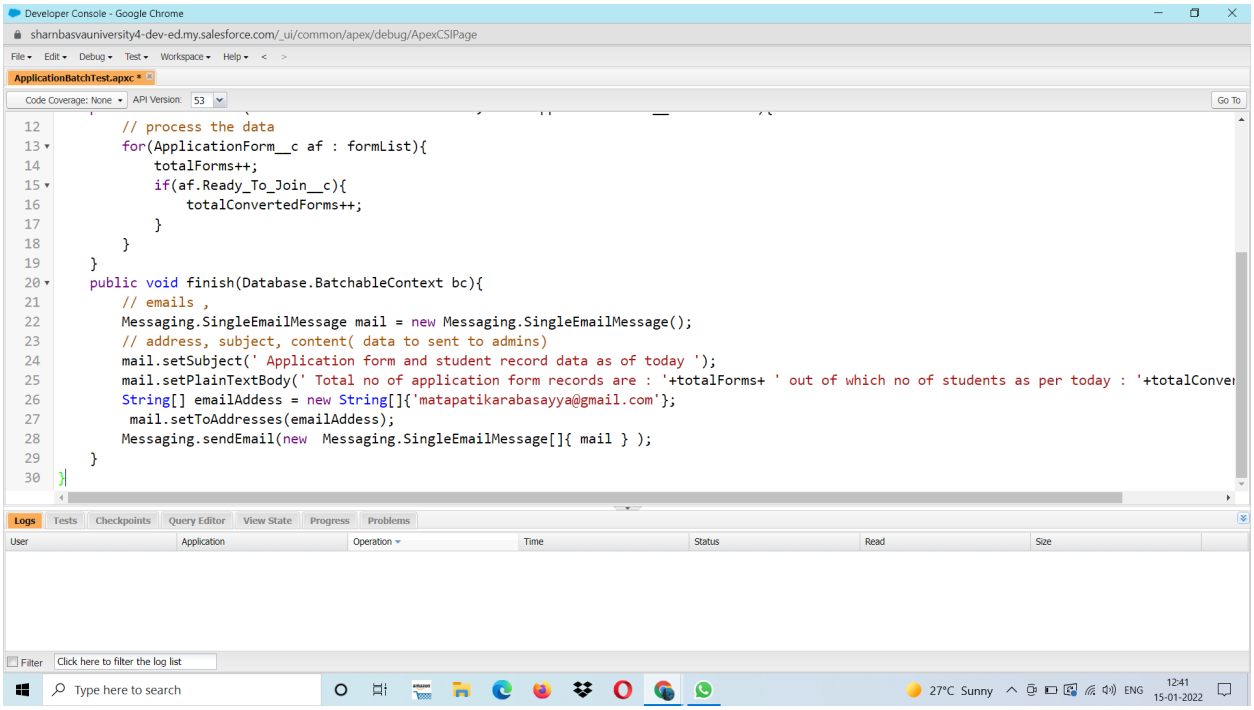
Detailed description: Apex is a strongly typed, object-oriented programming language that allows developers to execute flow and transaction control statements on Salesforce servers in conjunction with calls to the API. Using syntax that looks like Java and acts like database stored procedures, Apex enables developers to add business logic to most system events, including button clicks related record updates, and Visual force pages. Apex code can be initiated by Web service requests and from triggers on objects.

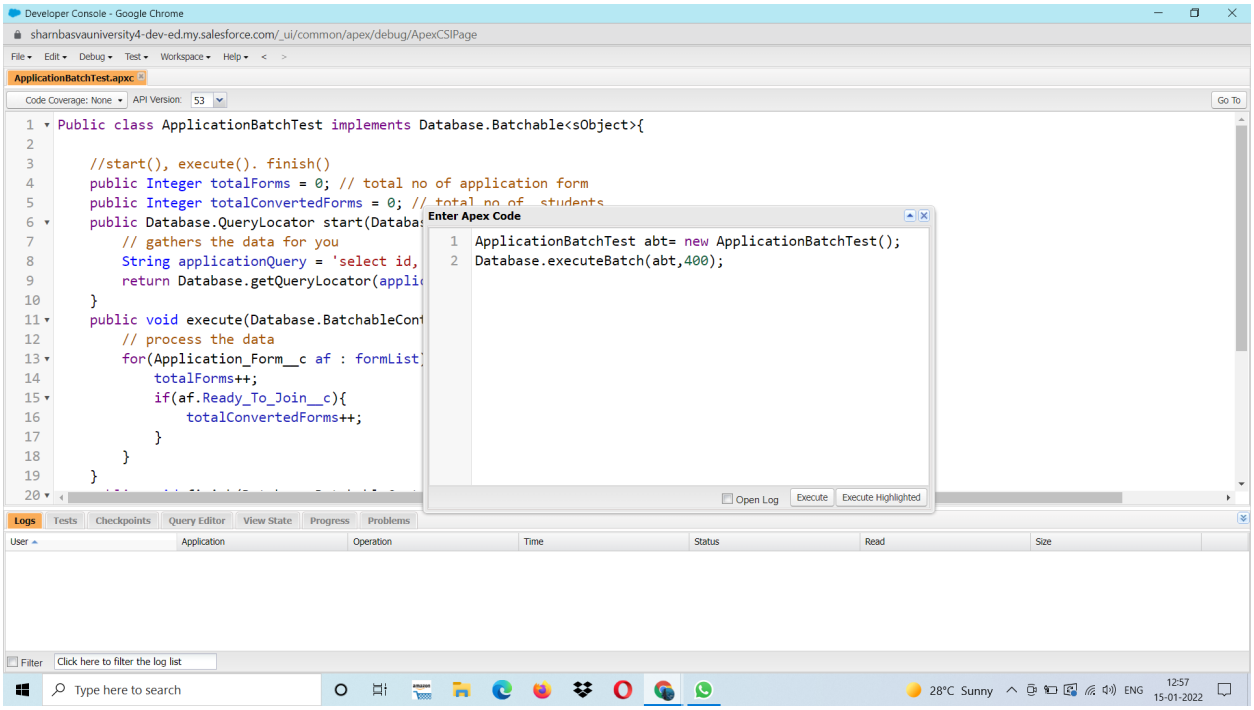
in apex we have primitive datatypes like int,double and boolean, string,date,datetime,id etc..
in apex we have Collections List,Set,Map.
I created the ApplicationBatchTest Class where I executed the code.

The Apex programming language is saved and runs in the cloud—the multitenant platform. Apex is tailored for data access and data manipulation on the platform, and it enables you to add custom business logic to system events. While it provides many benefits for automating business processes on the platform, it is not a general purpose programming language.

College Management Application

ScreenShot: created the apex class named as ApplicationBathTest





College Management Application

Day 7 :

Topic : **College Management Application.**

Milestone/Activities : Create A Schedular Class.

Detailed description: To invoke Apex classes to run at specific times, first implement the Schedulable interface for the class, then specify the schedule using either the Schedule Apex page in the Salesforce user interface, or the System.schedule method.

To schedule an Apex class to run at regular intervals, first write an Apex class that implements the Salesforce-provided interface Schedulable.The scheduler runs as system—all classes are executed, whether or not the user has permission to execute the class.To monitor or stop the execution of a scheduled Apex job using the Salesforce user interface, from Setup, enter `Scheduled Jobs` in the `Quick Find` box, then select

Scheduled Jobs.

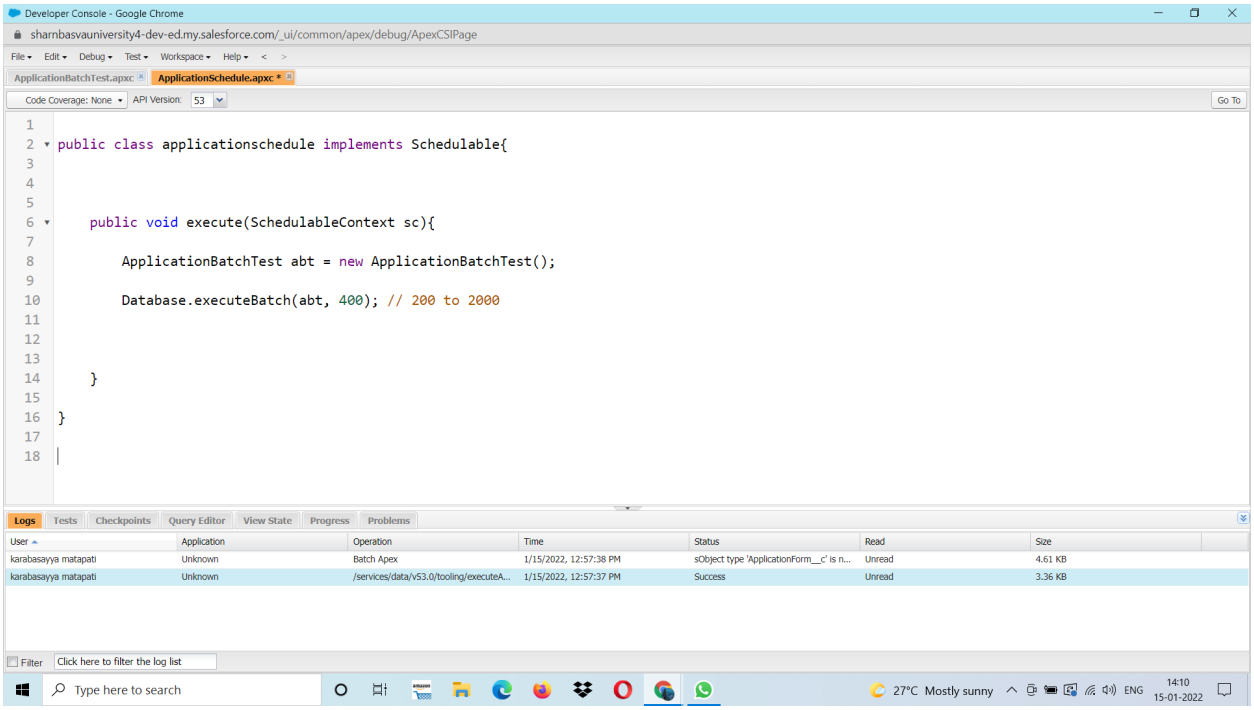
The Schedulable interface contains one method that must be implemented, execute.

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

The implemented method must be declared as global or public. Use this method to instantiate the class you want to schedule.

College Management Application

Screenshot : Created a Schedular Class



College Management Application

Day 8:

Topic : **College Management Application.**

Milestone/Activities : LWC Component

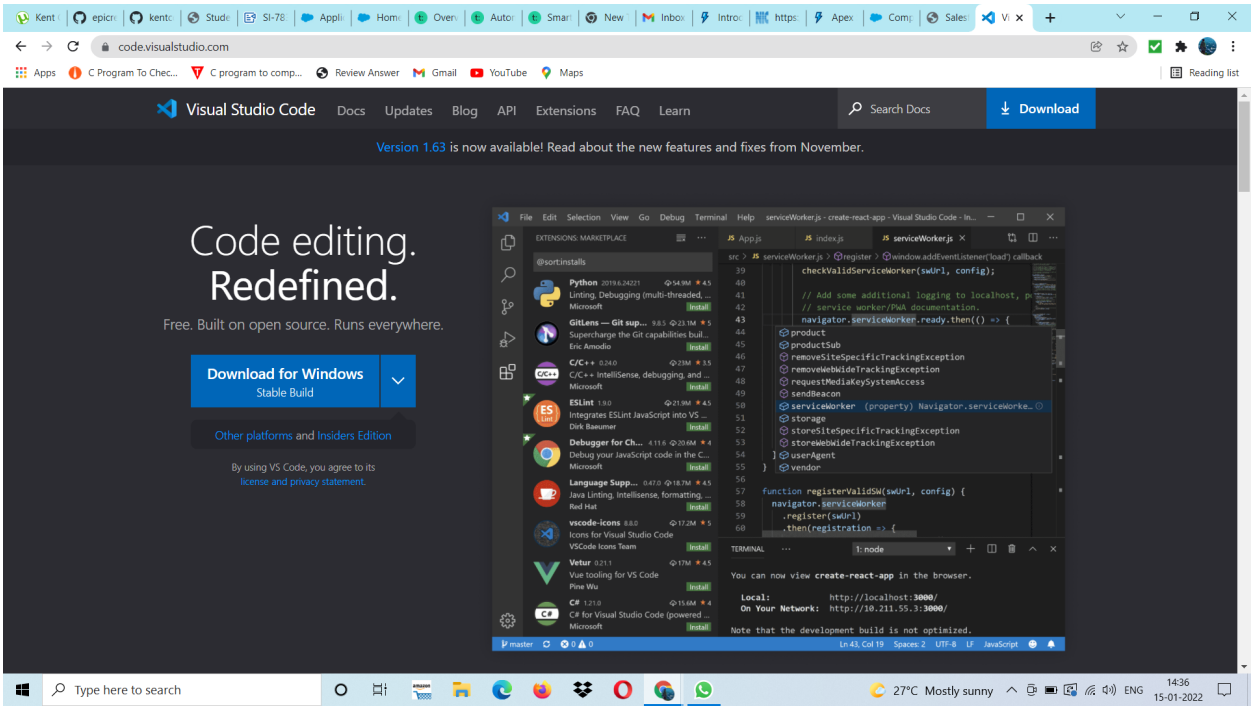
1) Installation of visual studio
2) installation of salesforce extension package

Detailed Description : Lightning Web Components (LWC) is a programming model for a Lightning Component Framework released in Spring 2019, though available since December 2018. A Lightning web component is a reusable custom HTML element with its own API.

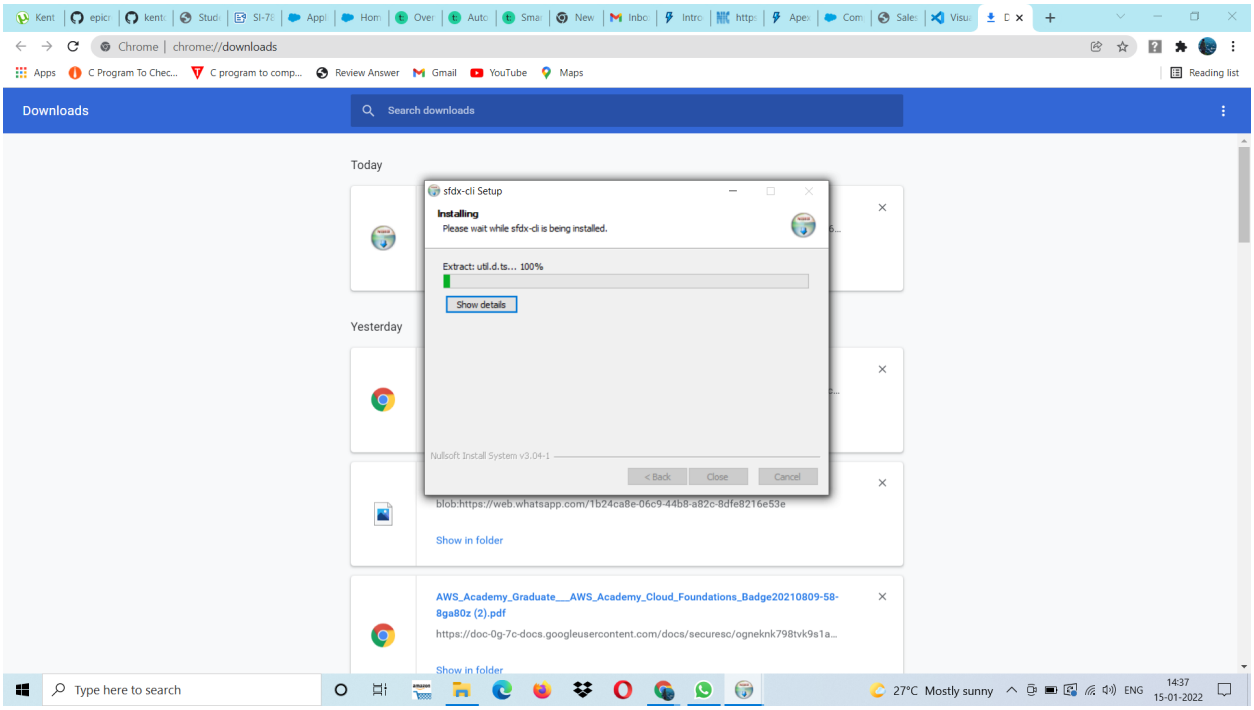
First we need to install the visual studio code and after that we needed to install the salesforce extension pack, and also we need to install the salesforce CLI after this all steps we need to connect our org to the visual studio through the salesforce extension, after that we can access all the files in the visual studio code only.

College Management Application

ScreenShot : installation of Visual Studio

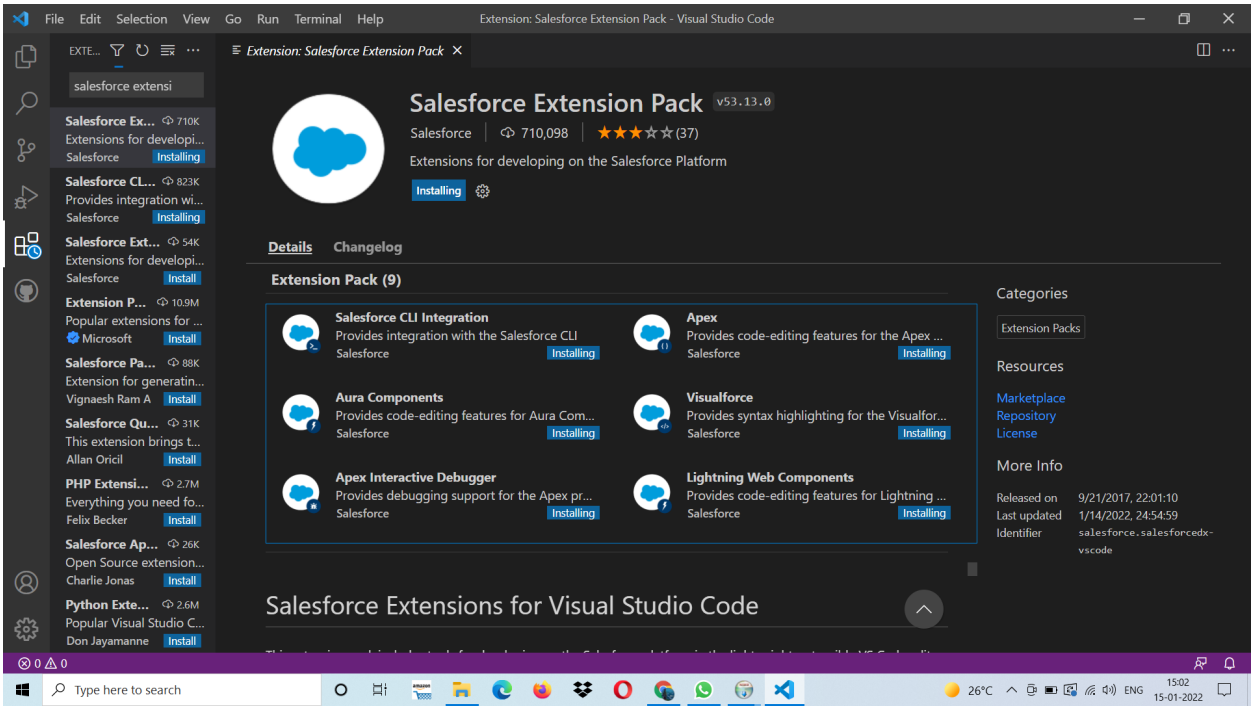


Screenshot : installation of Salesforce CLI



College Management Application

ScreenShot : Installation of salesforce Extension pack



College Management Application

Day 9:

Topic : **College Management Application.**

Milestone/Activities : LWC Components
Introduction to the Javascript

Detailed Description : Now you can build Lightning components using two programming models: Lightning Web Components, and the original model, Aura Components. Lightning web components are custom HTML elements built using HTML and modern JavaScript. Lightning web components and Aura components can coexist and interoperate on a page. To admins and end users, they both appear as Lightning components.

Define a Component:

A Lightning web component that renders UI must include an HTML file, a JavaScript file, and a metadata configuration file. The files must use the same name so the framework can autowire them. A service component (library) must include a JavaScript file and a metadata configuration file.

HTML Templates:

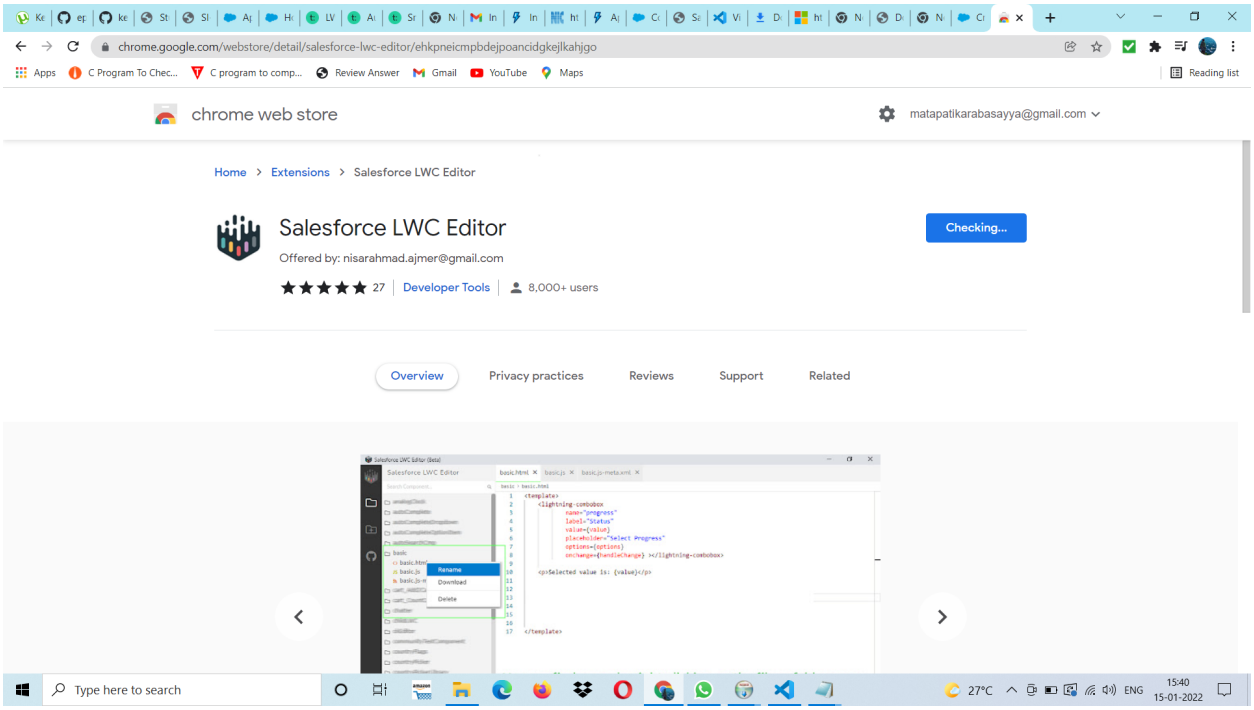
The power of Lightning Web Components is the templating system, which uses the virtual DOM to render components smartly and efficiently. It's a best practice to let LWC manipulate the DOM instead of writing JavaScript to do it.

CSS :

To give your component the Lightning Experience look and feel, use Lightning Design System. To go your own way, write your own CSS.

College Management Application

Screenshot : Adding chrome Extemnsion of salesforce Lwc Editor



College Management Application

Day 10:

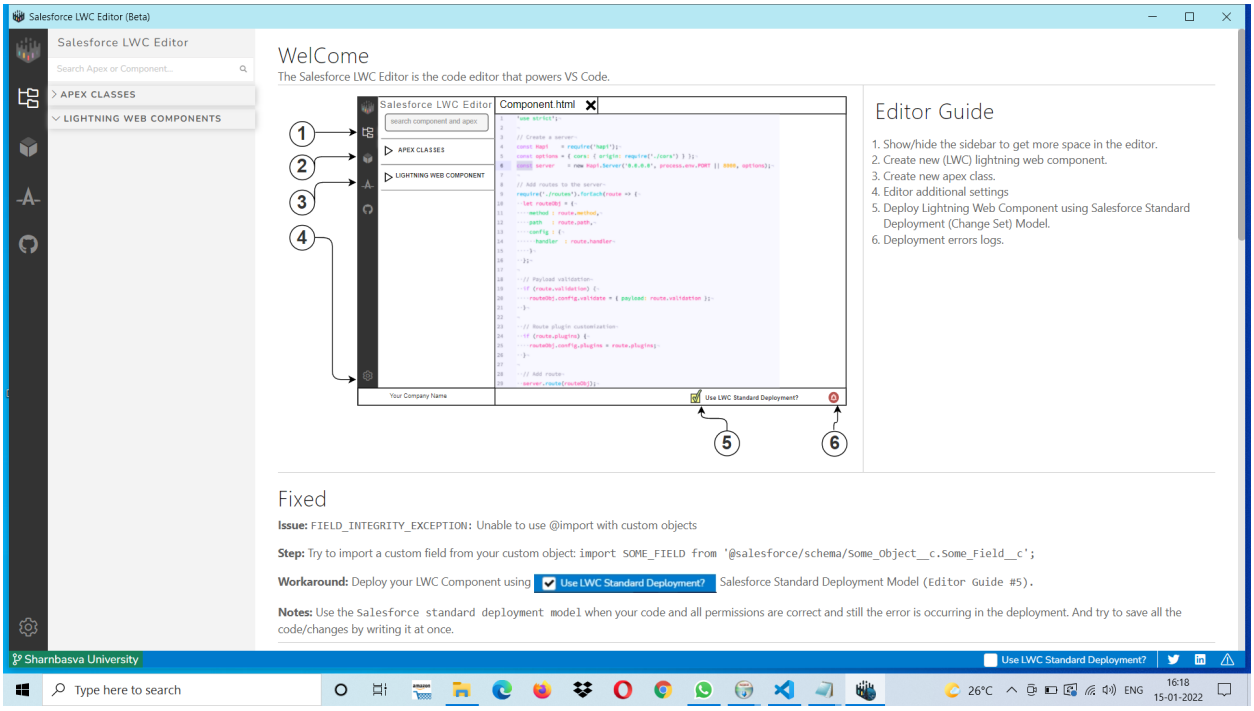
Topic : **College Management Application.**

Milestone/Activities : LWC Component

Detailed Description : Using LWC Editor we can deploy the our data into salesforce org, we have learnt about the javaScript datatypes, methods. JavaScript is a lightweight, cross-platform, and interpreted scripting language. It is well-known for the development of web pages, many non-browser environments also use it. JavaScript can be used for Client-side developments as well as Server-side developments. JavaScript contains a standard library of objects, like Array, Date, and Math, and a core set of language elements like operators, control structures, and statements.

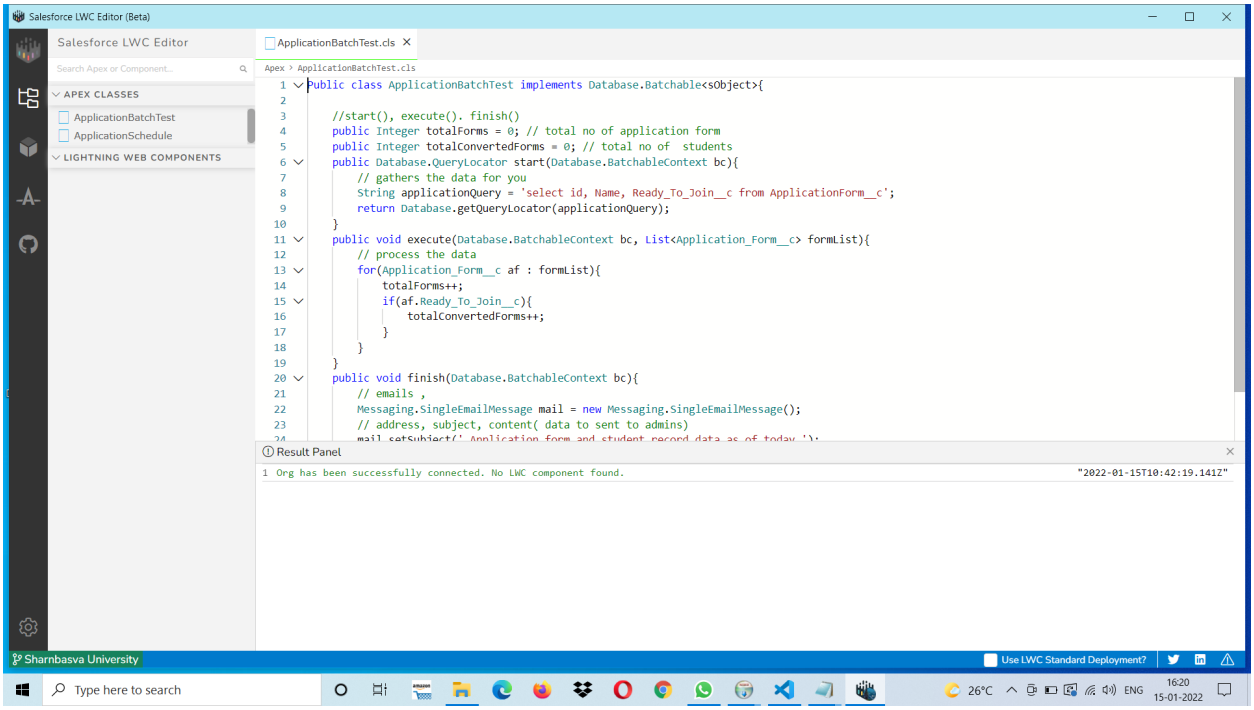
A function is a set of statements that take inputs, do some specific computation, and produces output. Basically, a function is a set of statements that performs some tasks or does some computation and then return the result to the user.
We have worked with the LWC editor

ScreenShot : salesforce LWC EDitor



College Management Application

ScreenShot : salesforce LWC EDitor



College Management Application

Day 11:

Topic : **College Management Application.**

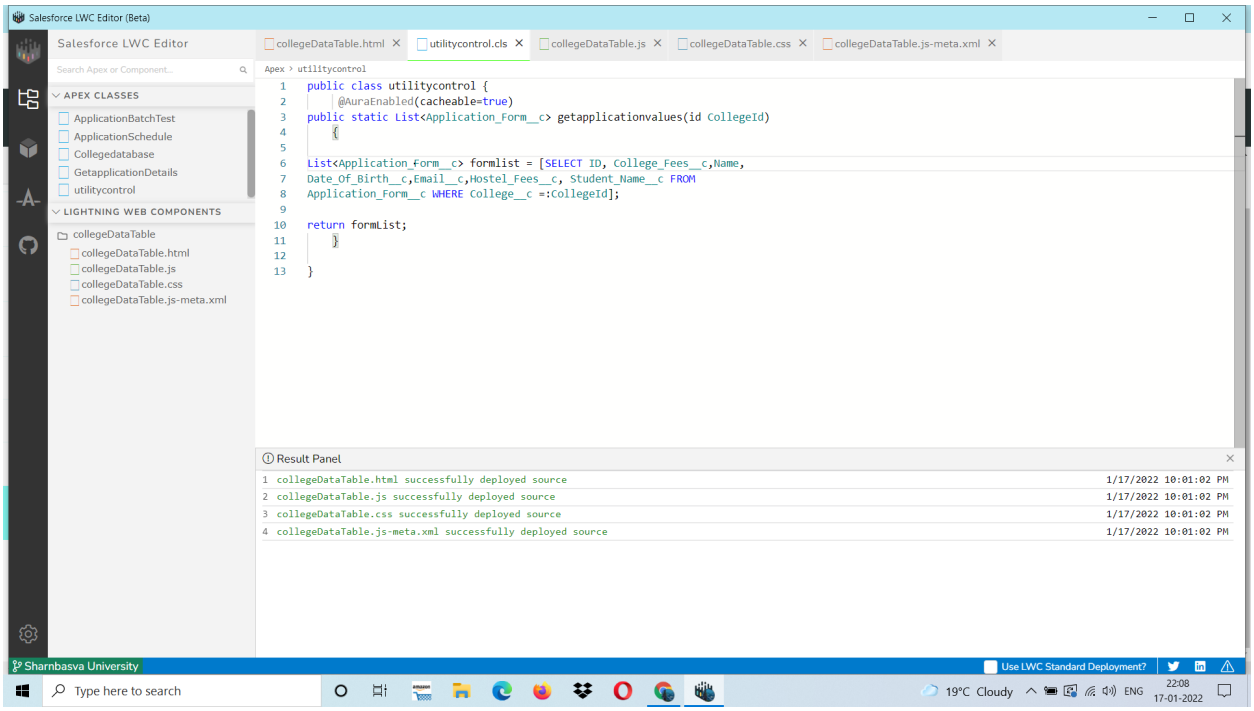
Milestone/Activities : Create College DataTable Component(APEX CLASS)

Detailed Description : In Salesforce LWC Editor created the APEX class named as Utilitycontrol , this apex class is helpful in creating the college datatable where we can call the college Datatable, college datatable consist of one html file and one js file and one css file and also one meta file. this apex class is helpful in calling the college datatable lightning web component.

```
public class GetapplicationDetails
                                {

@AuraEnabled(cacheable=true)
                                                        public static
List<ApplicationForm__c> getapplicationvalues(id CollegeId)
                                            {


List<ApplicationForm__c> formlist = [SELECT ID, College_Fees__c,Name,

Date_Of_Birth__c,Email__c,Hostel_Fees__c, Student_Name__c FROM
                                                    ApplicationForm__c
WHERE College__c =:CollegeId];

                                                return formList;
                                            }

                                        }
```

College Management Application

ScreenShot : created the apex class and succesfully deployed it to the salesforce org.



College Management Application

Day 12:

Topic : **College Management Application.**

Milestone/Activities : Created the LWC Component collegeDataTable

1)Create College DataTable Component (HTML FILE)

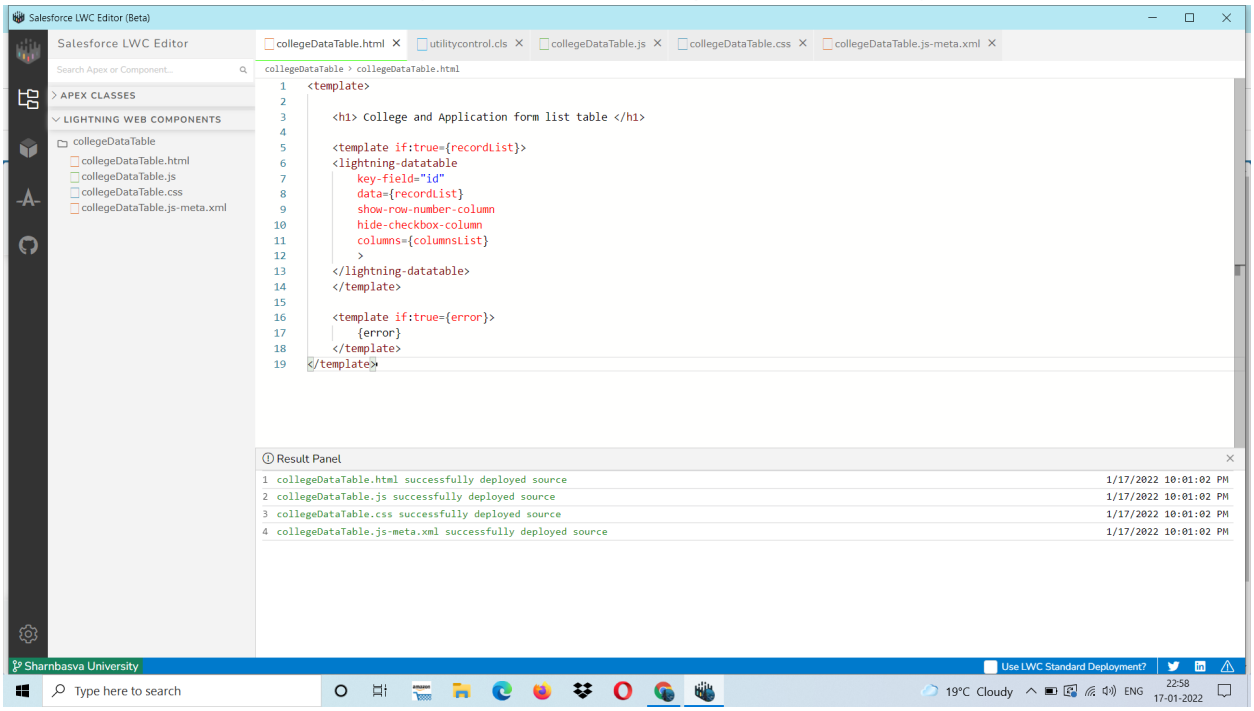
2)Create ColleDataTable Component(JAVA SCRIPT FILE)

3)Create College DataTable Component(META FILE)

In Salesforce LWC Editor created the LWC Component named as CollegeDatatable where it consist of four files they are one is html file and one is css file and another one is javascript file and the last one is meta file and this files are included in the lightning page , app page and also in the home page. this all pages are called by the apex class .
we succesfully saved each file and deployed it in the salesforce org .

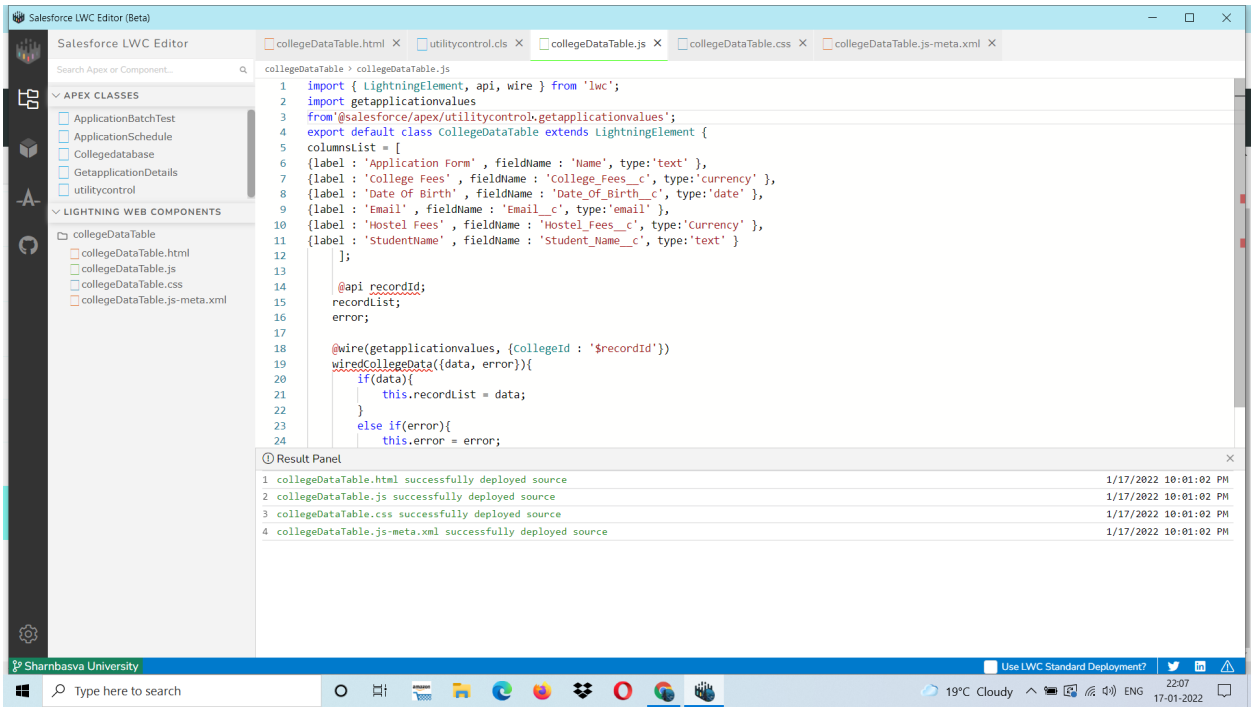
College Management Application

ScreenShot : created the collegeDataTable and deployed to the org(HTML FILE)

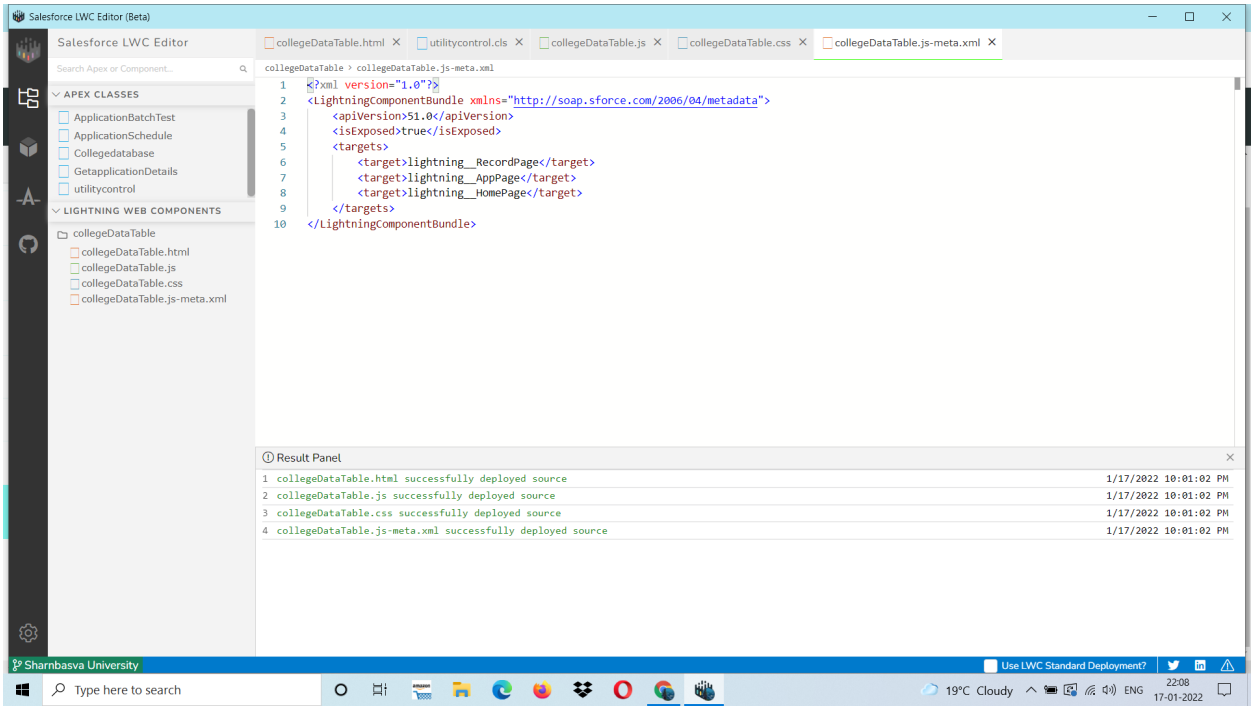


ScreenShot : Create ColleDataTable Component(JAVA SCRIPT FILE)

College Management Application



ScreenShot : Create College DataTable Component(META FILE)



College Management Application