SALESFORCE PROJECT READY

Entry Level Training & Professional Development Program

Project Title : College Management Application

Day 1

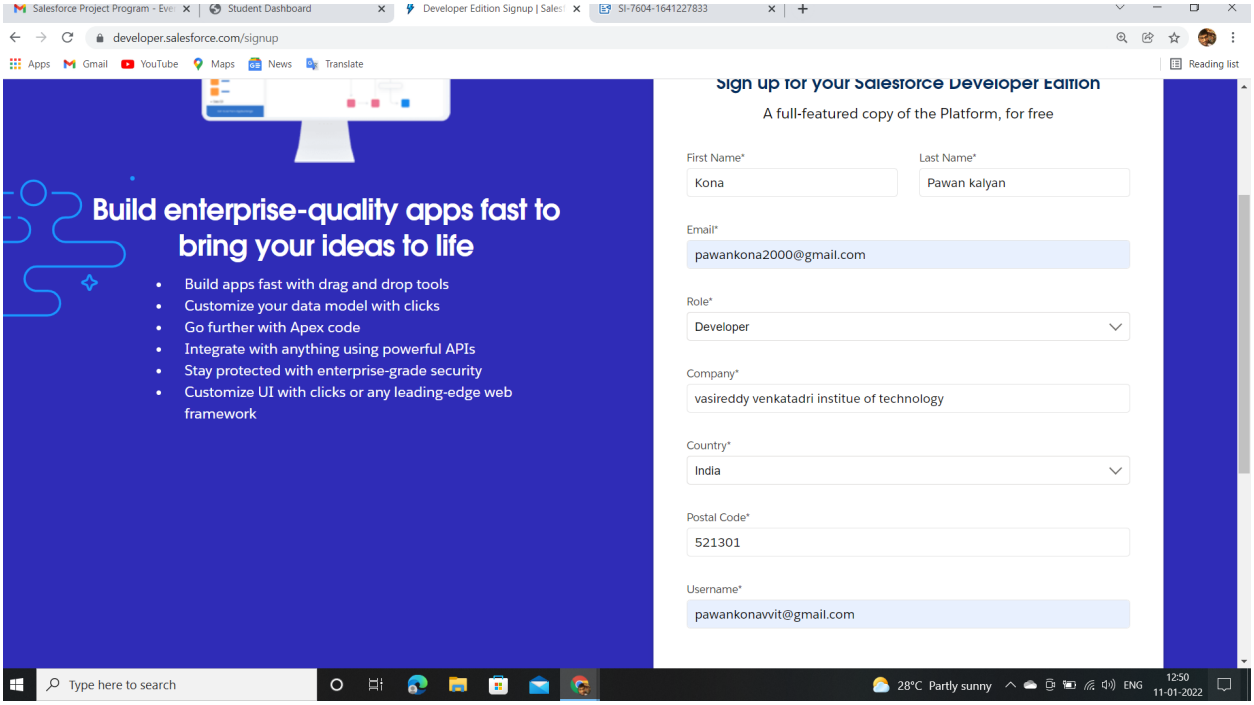
Creating our Salesforce Developer Org To Get Started

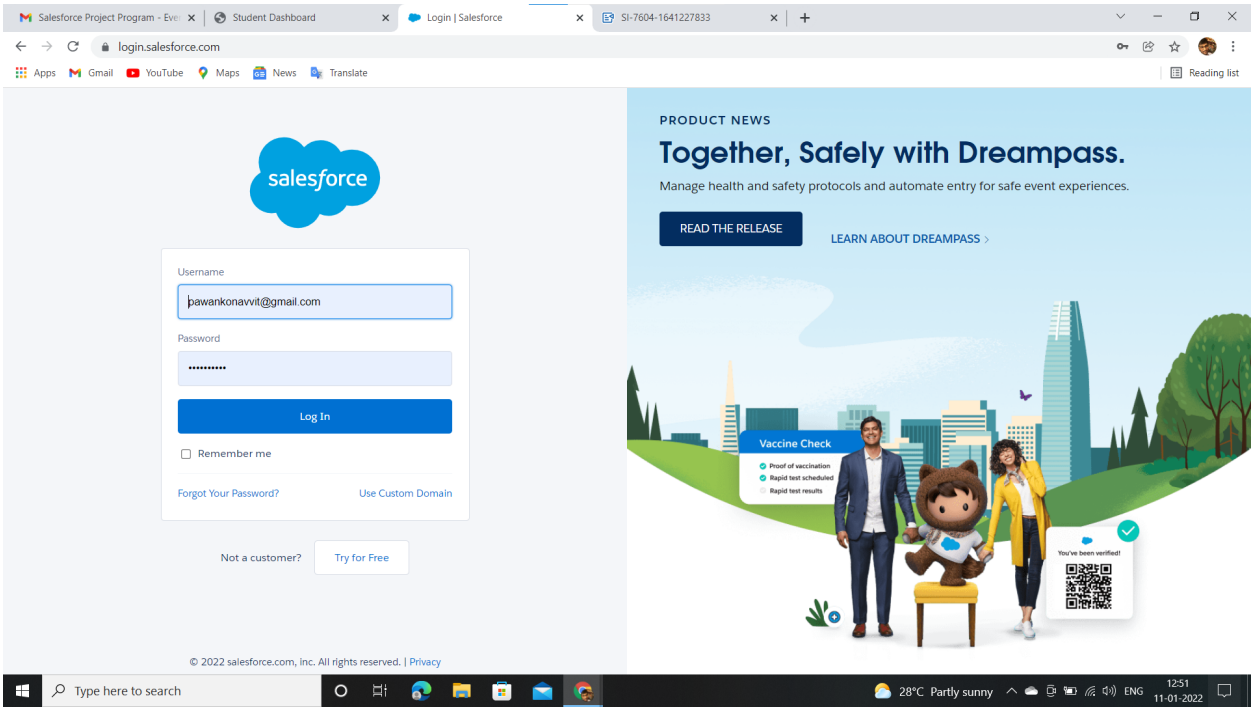
1.Creating Developer AccountCreating a developer org in salesforce.
Go to developers.salesforce.com/
Click on sign up.
On the sign up form, entering our details

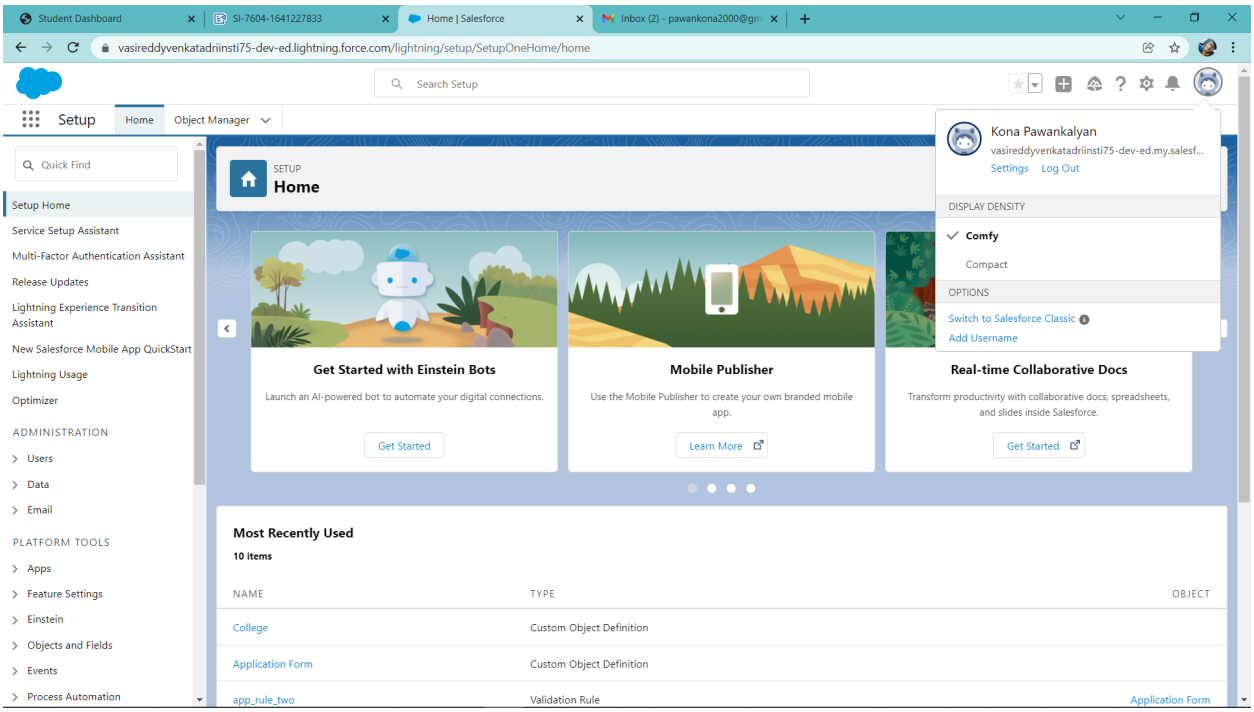
2.Account Activation
Go to the inbox of the email and Click on the verify account to activate my account

3.Login To Your Salesforce Account

login to salesforce account by using login details



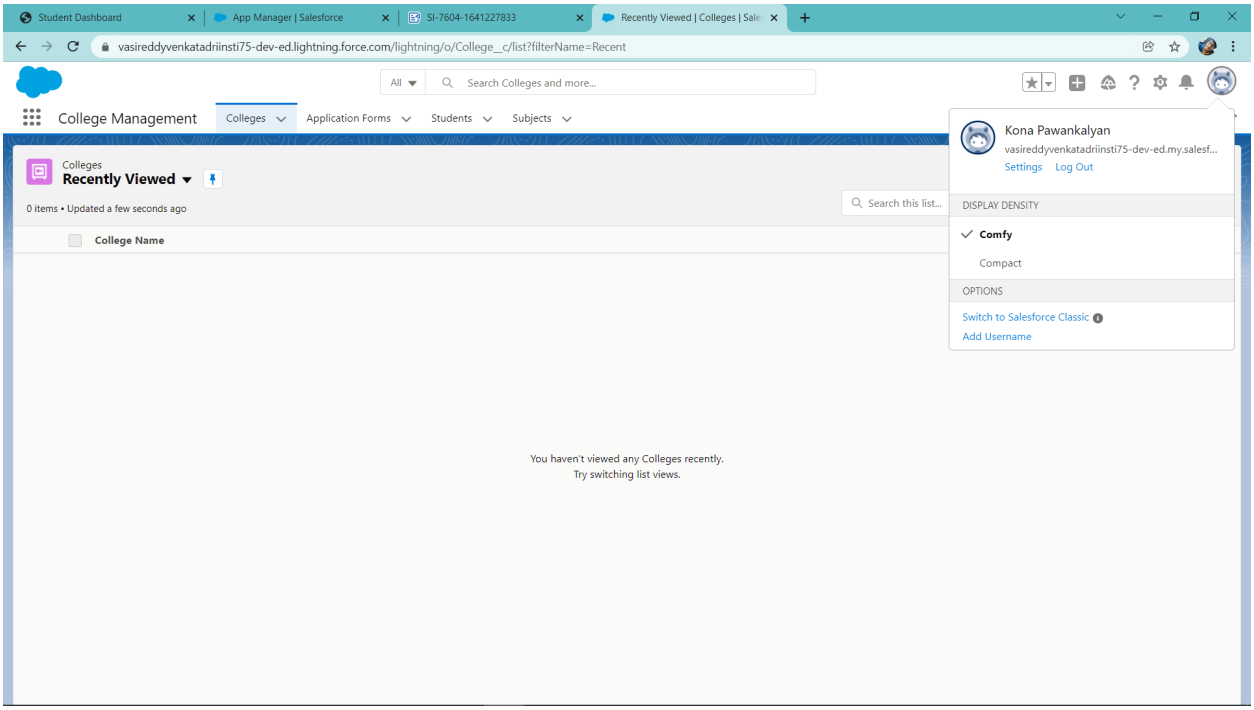




The above screenshot shows my new Developer Org Account.

DAY 2:

Firstly, we have to build an college management app with the help of New Lightning App.



The above picture shows college management tab.

Creating an Custom Object :

1.Create The Custom Objects For The Application

First we create the College Management Lightening App

And then we create custom objects

College.

Application Form.

Students.

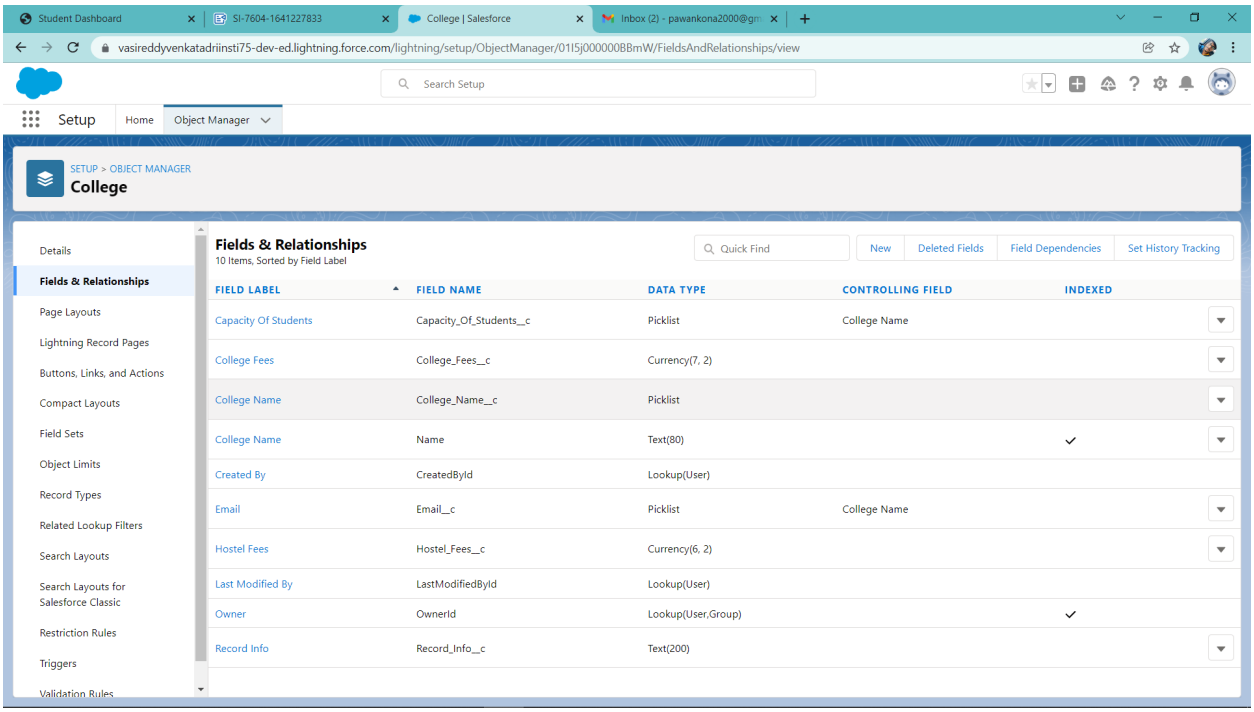
Subjects.

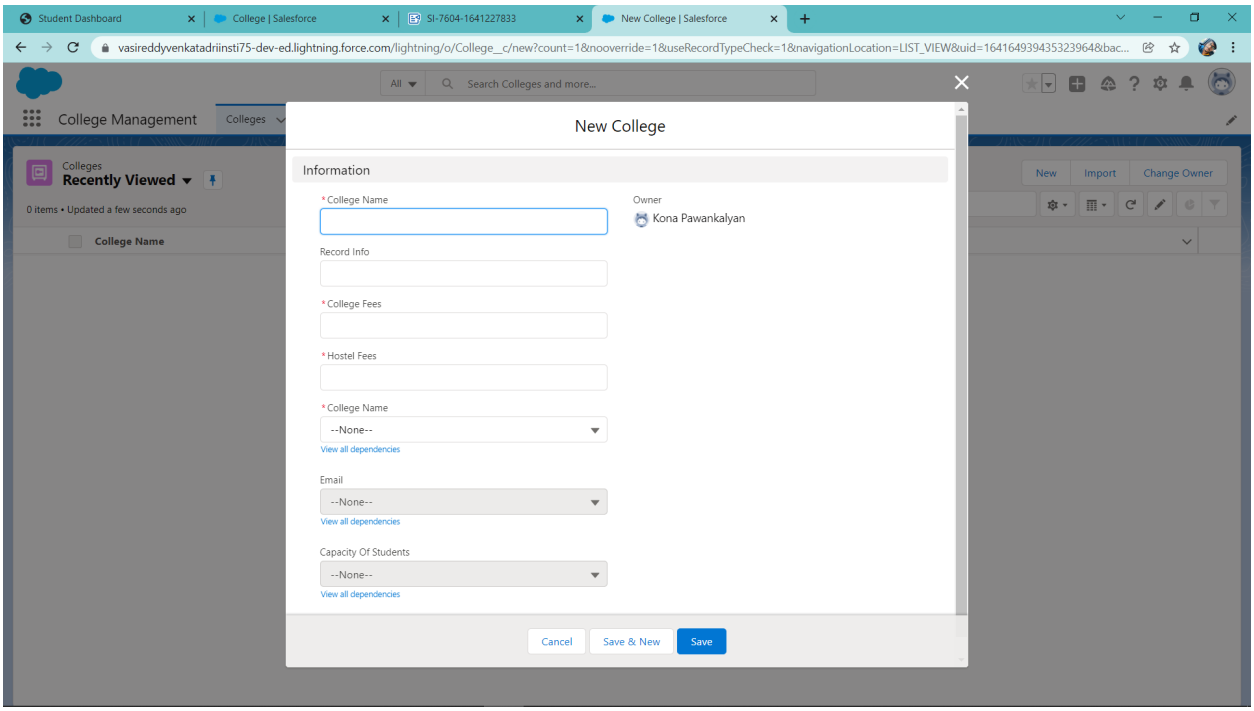
And then we create fields in custom objects according to the requirement

Creating Fields On College Object

Creating 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
Capacity Of Students	Picklist		500-1000, 1000-2500, 2500-6000, 6000-10000



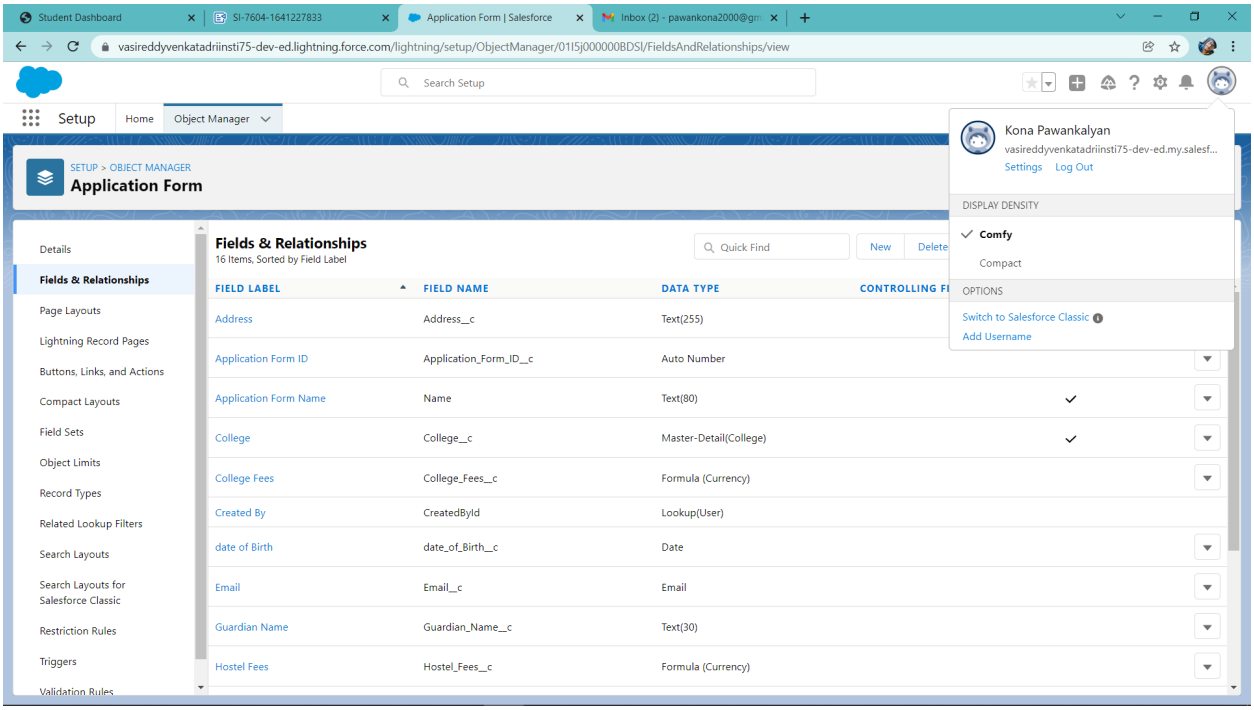


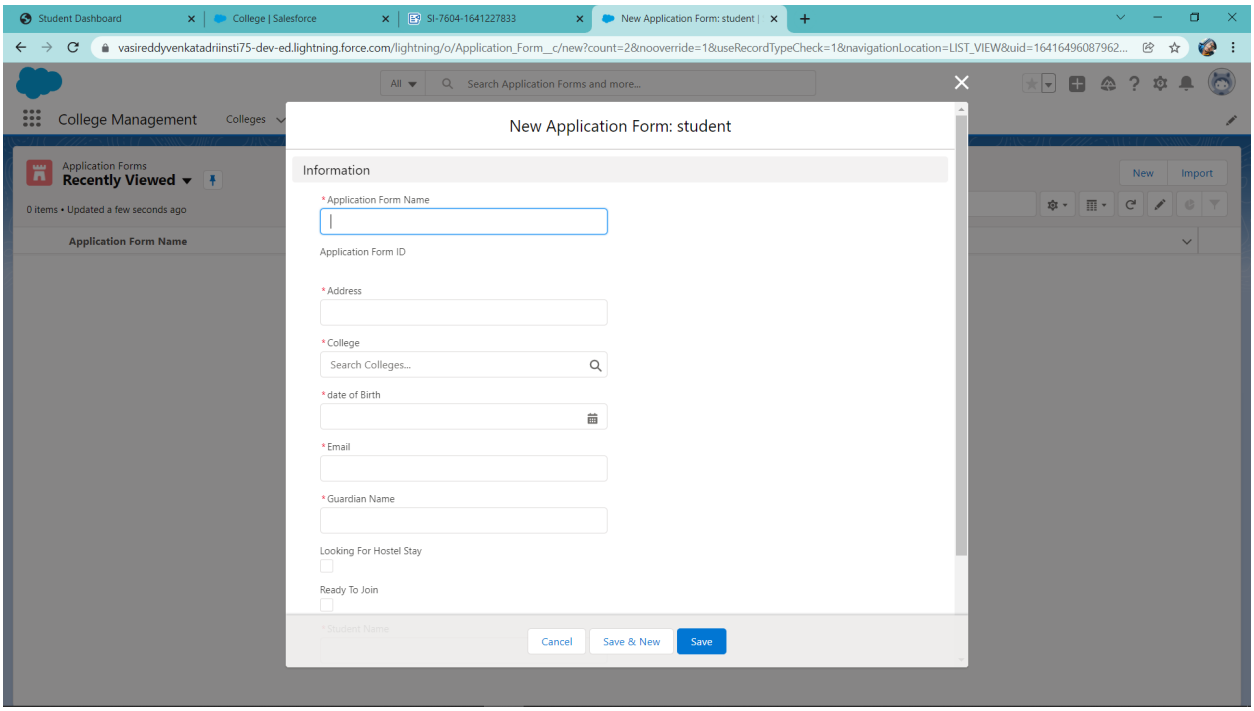
I had created an custom object college. Now by the following requirements, I have created Fields. After that I have created an custom object on Application form and

Fields On Application Form Object

Field Name	Data Type	Required	Values
Application Form ID	Auto number		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	Checkbox(default=Unch		

Stay	eck)		
Ready To Join	Checkbox(default=Uncheck)		
Student Name	Text(30)	Yes	
Phone	Phone	Yes	

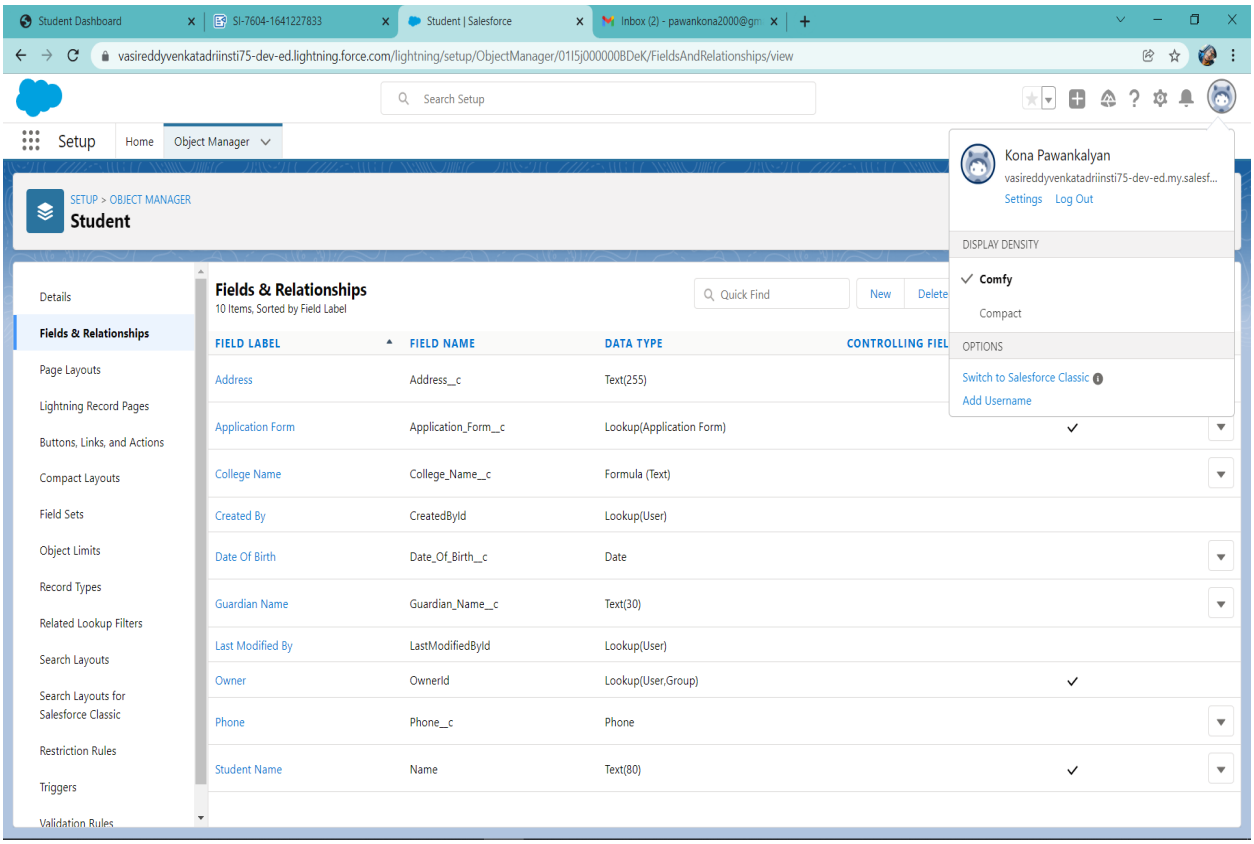




This screenshot shows, fields creation in application form.

Fields On Student Object

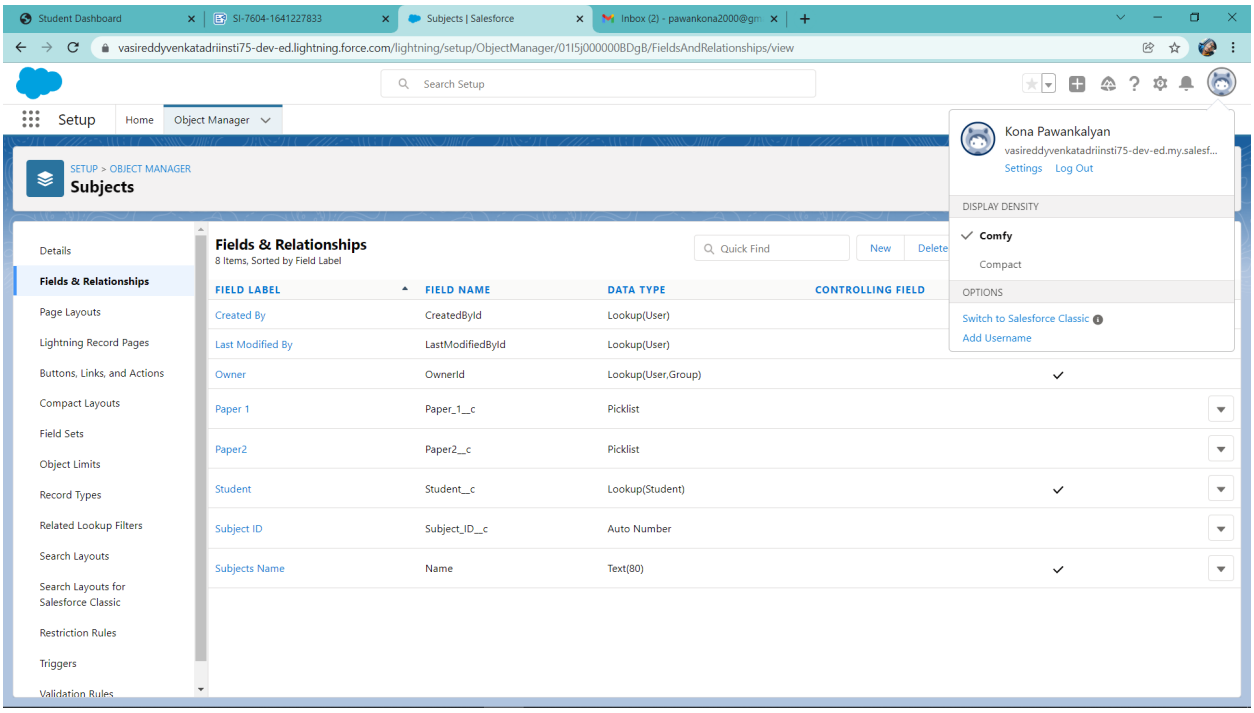
Field Name	Data Type	Required	Values
Student Name	Text		
Address	Text(255)	Yes	
Application Form	Lookup(Application Form)		
College Name	Formula(Text)		
Date Of Birth	Date	Yes	
Guardian Name	Text(30)	Yes	
Phone	Phone	Yes	

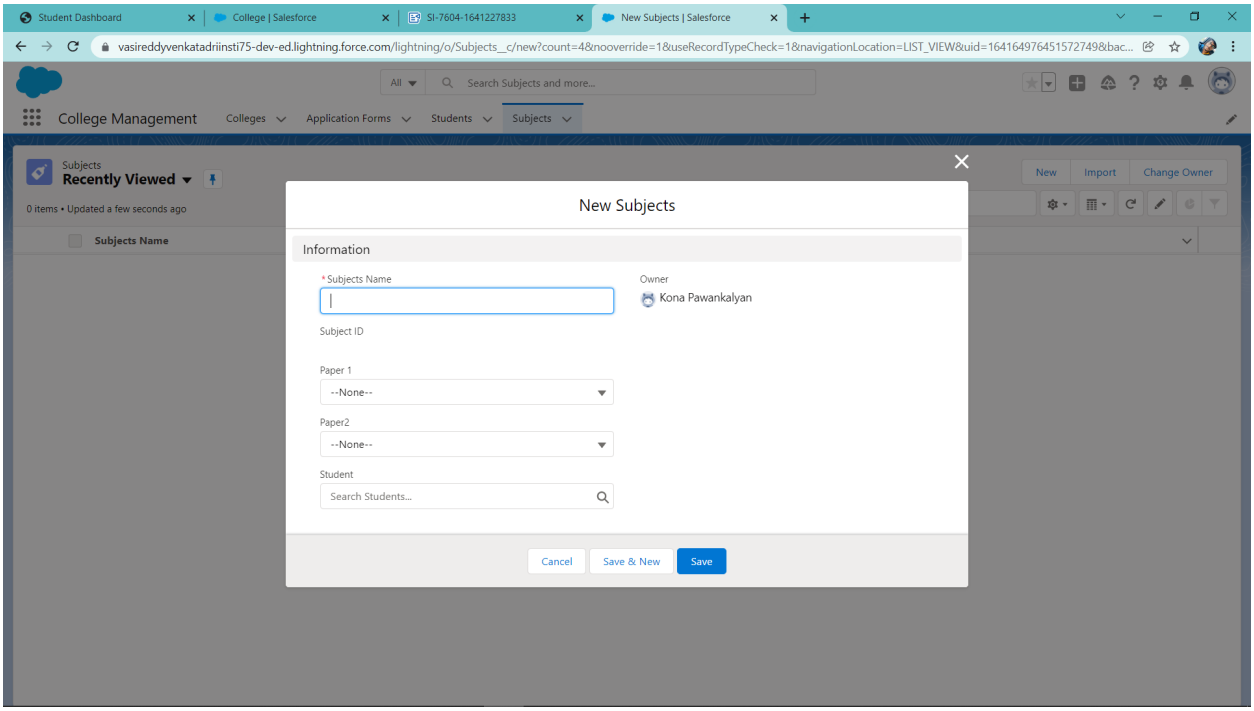


The above screenshots shows adding of fields on student custom object.

Fields On 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)		





The above screenshots shows the creation of fields on Subjects custom object.

DAY 3:

Adding Business Logic To Application:

Creating Global Picklist Value Sets

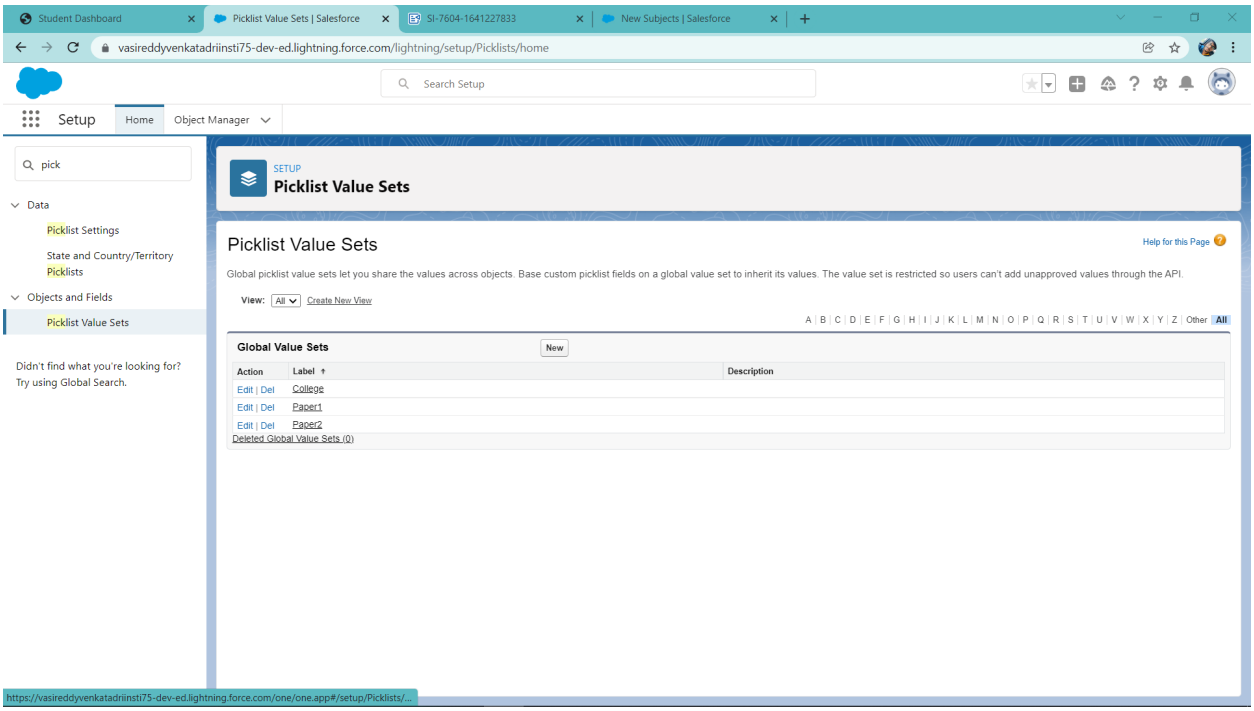
First we go to the College object.

Create Global picklist value sets

College values are :
- MIT-HYD
- MIT-BLR
- MIT-MUM
- MIT-MAA
- MIT-DEL
- MIT-CCU

Paper 1 :
values are
- APEX
- JAVA
- C
- C++

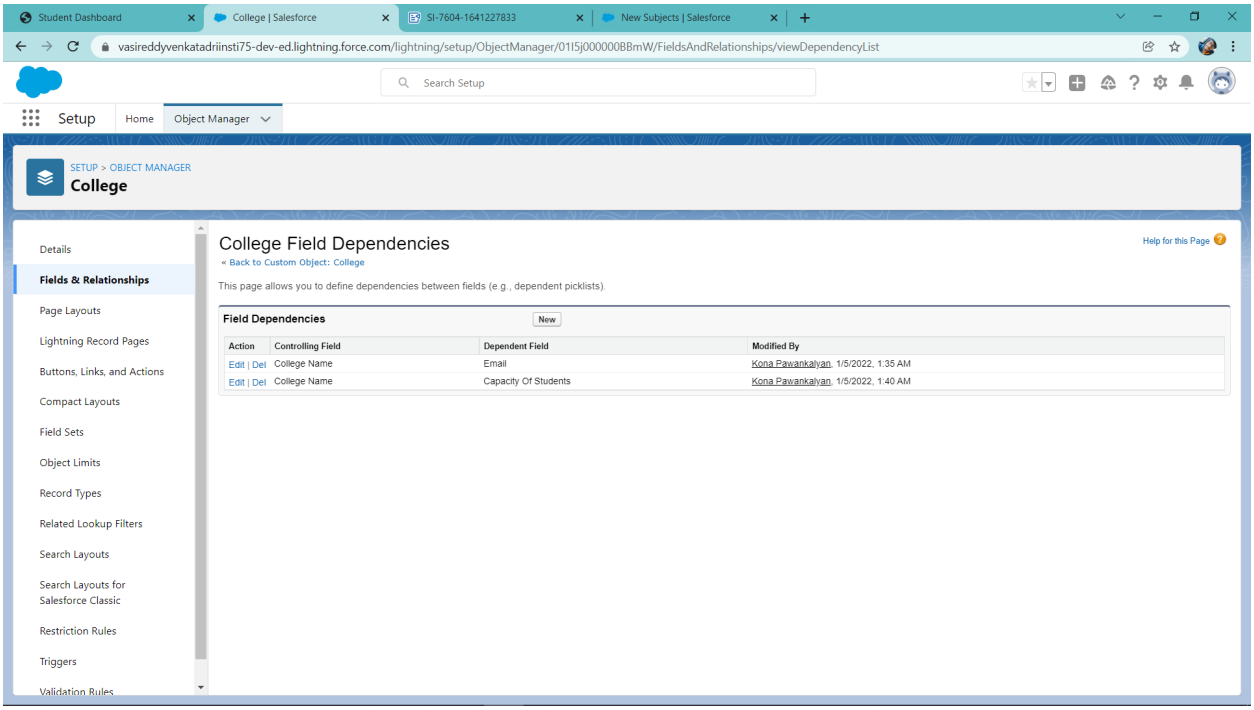
Paper2 :
values are
- MATHEMATICS
- ENGLISH
- STATISTICS



Creating Field Dependencies

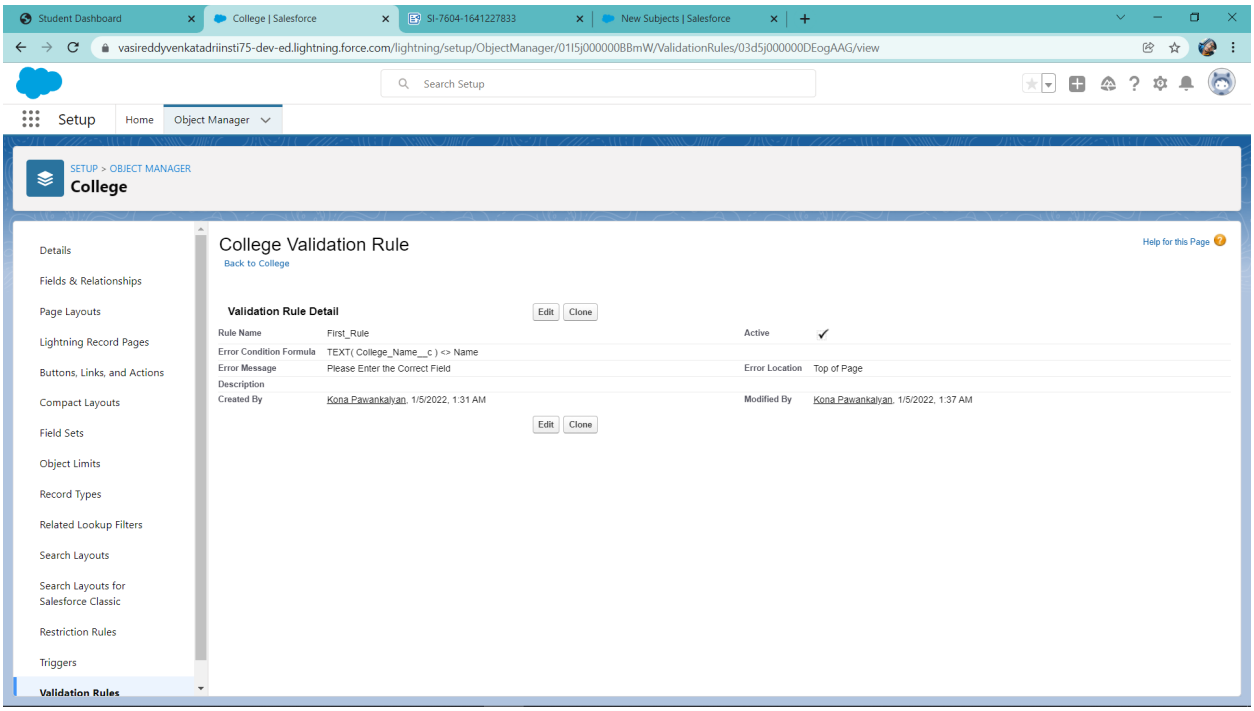
Go the College object and then to Fields and relationship and go Field dependencies we create field dependency between college Name and Email

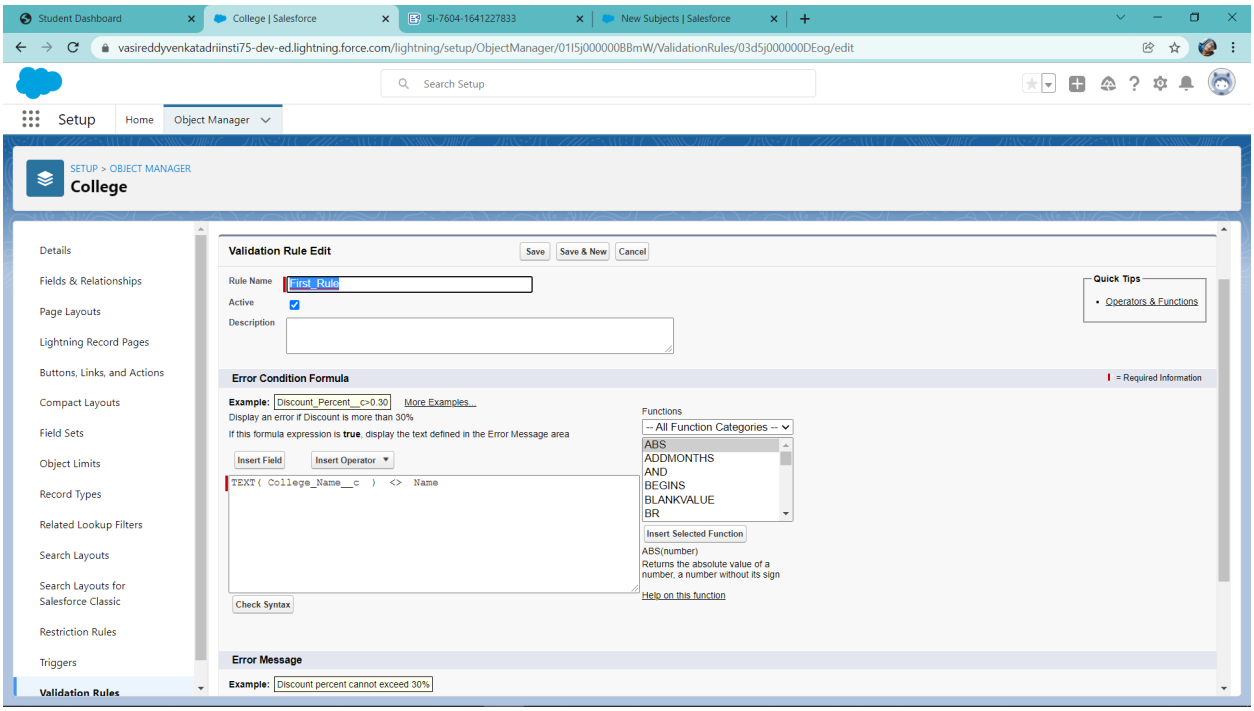
Create field dependency between college Name and capacity of students



Creating Validation Rules

First Create a validation rule on the College object and create a validation rule

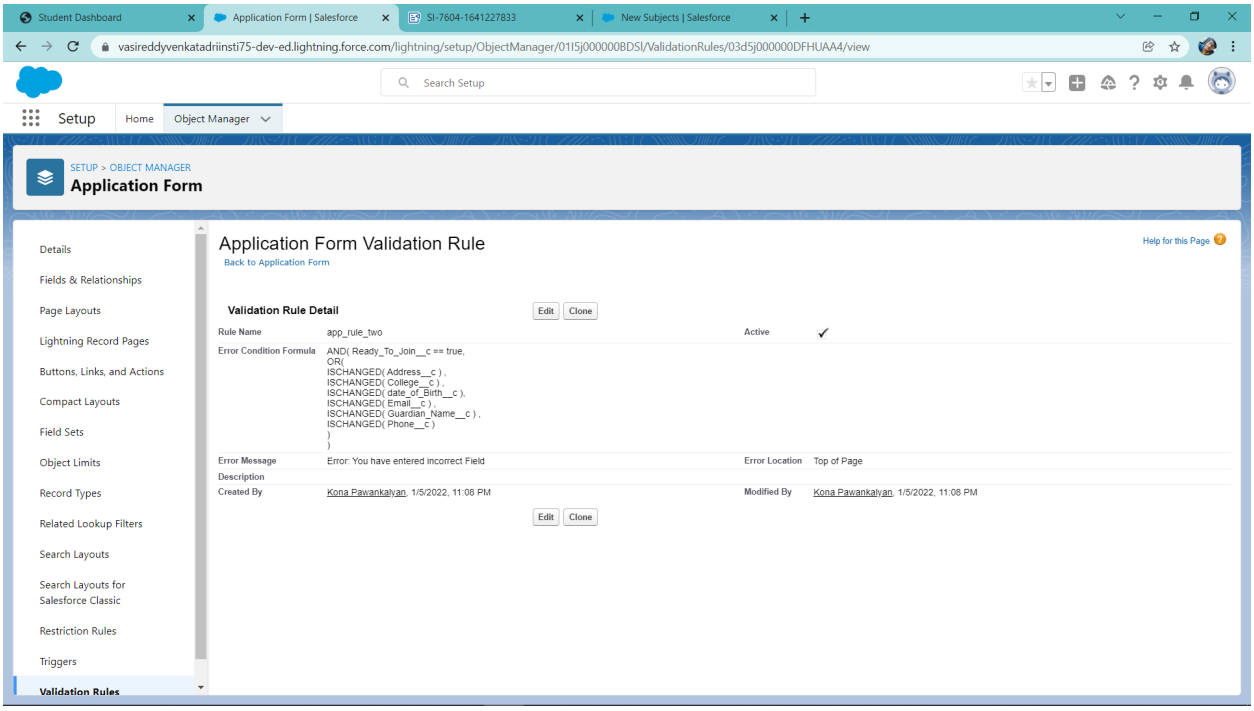


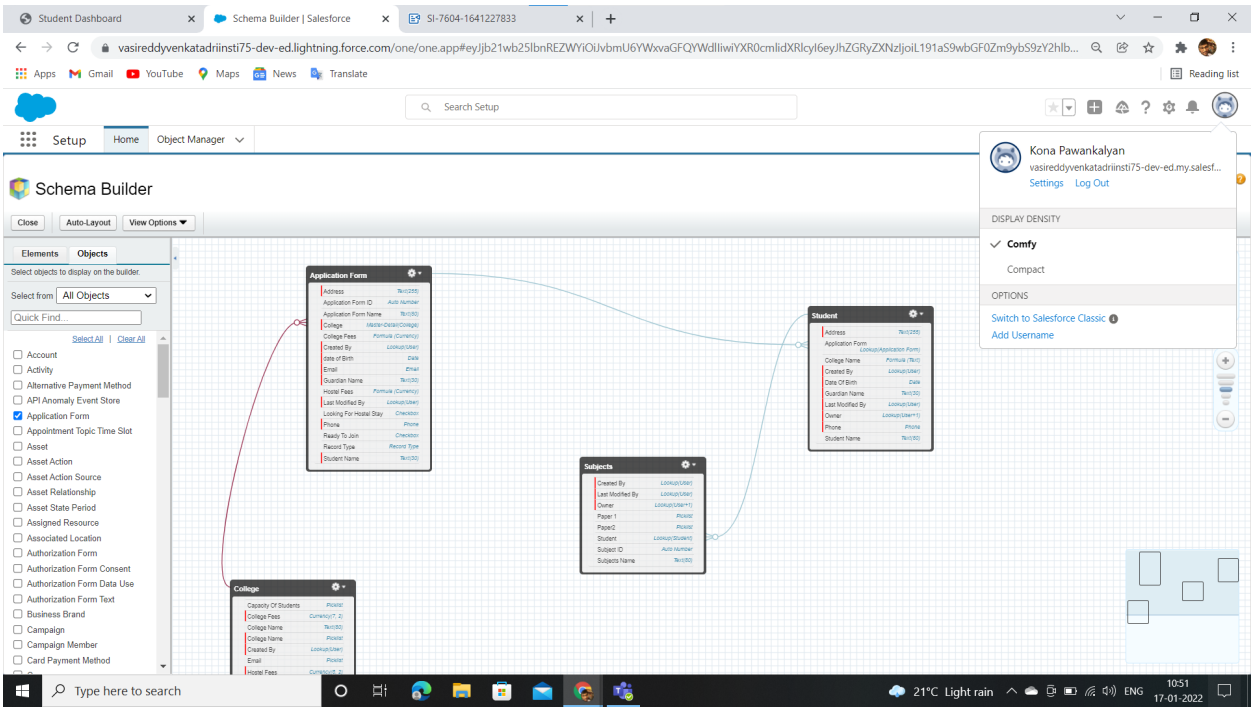


After completion of college object validation rule.

We have to Create a validation rule on the application form.

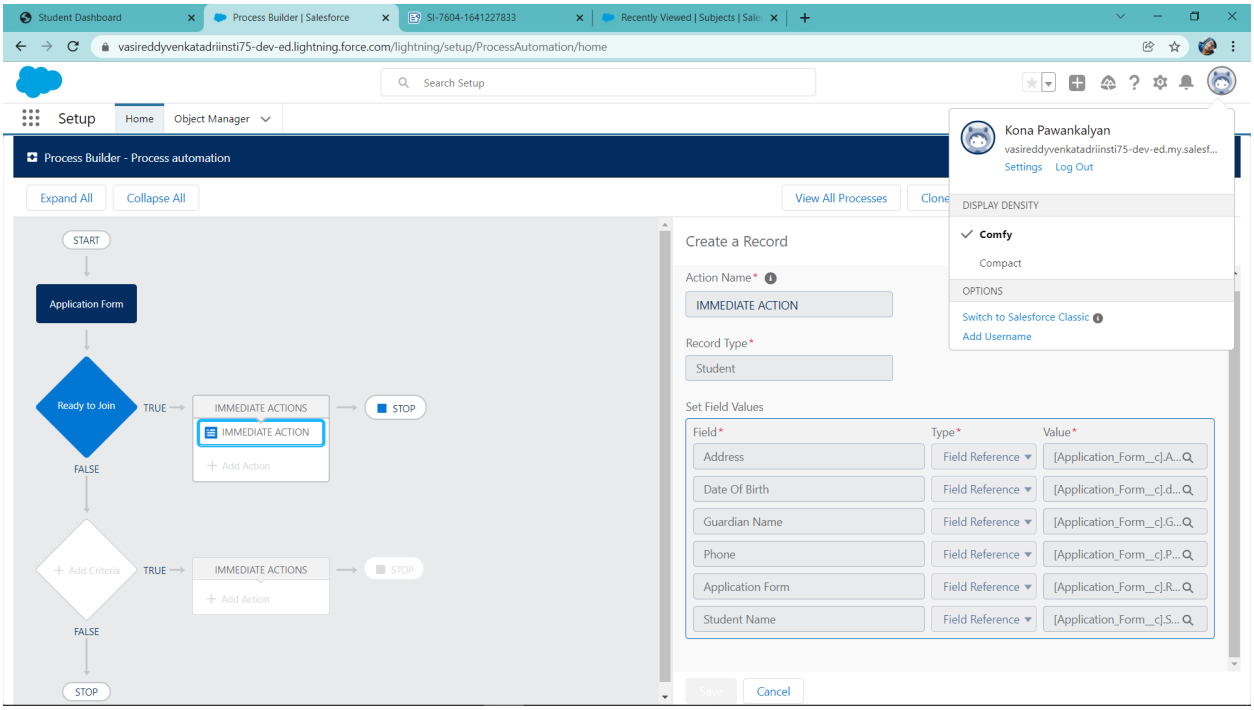
First we create a Student Report type and then add the validation rule





DAY 4 :

Process Automation
Go to Setup -> select “Process Builder” from quick find And next click on NEW.
Create a Process Builder on the “Application Form”
Next click on Ready to join
And in adjacent box click on Immediate action and select create a record on the student object and set field values for Student type.



The above flow is an process automation. In which we create flow process and it is also called as Process Builder. Process Builder has more immediate actions as compared with work flows. Process Builder can update related record which work flow cannot.

DAY 5:

Create The Student Record Using Flow

1.First deactivate the process builder which we created earlier.

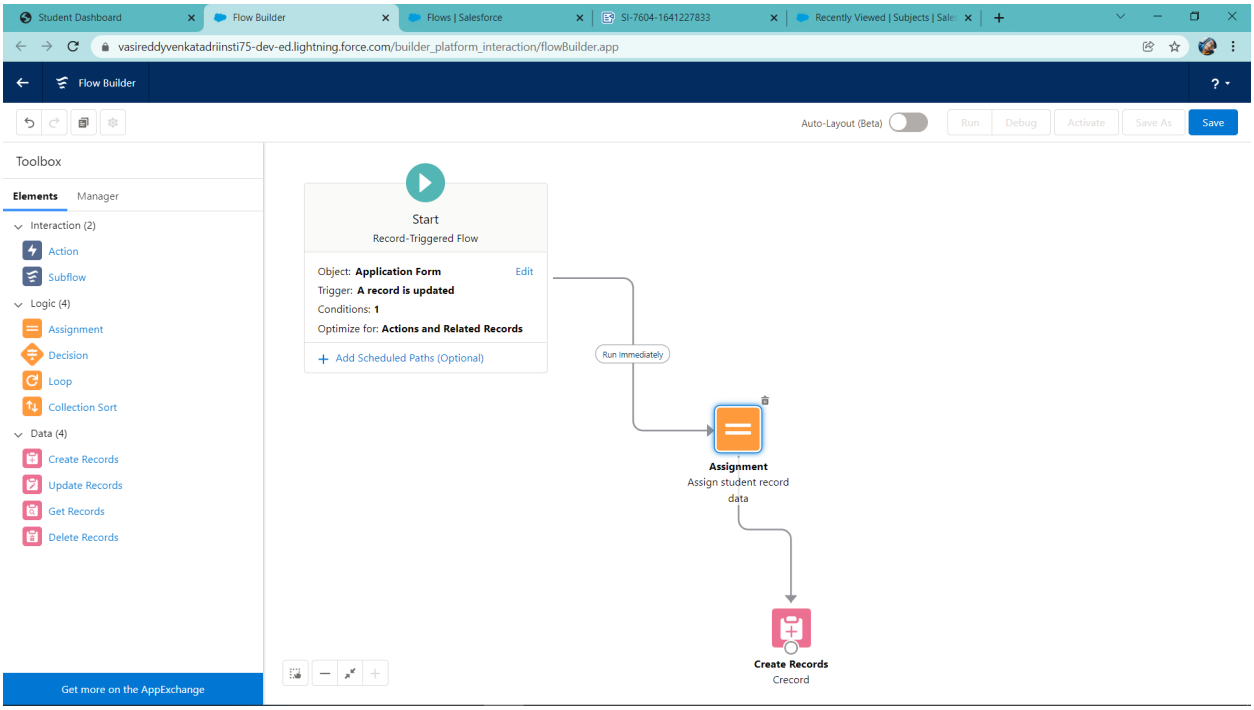
2. Now search for flows and select new flow ->record triggered flow

3. 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.

4. Now create a variable named student in the resource section.

5. Now add the assignment to the Variable and Values

save the Flow as Student flow.



Flow Builders

1. It is more powerful when compared with workflow, process builders.

2. It can do any tasks where work flow and process builder cannot.

3. It is also called as LIGHTNING FLOW.

4. In previous days there is no outbound messages in flows. Now, we can access the outbound messages in flows also.

Day 6:

Batch Apex

Batch Apex is used to run large jobs (think thousands or millions of records!) that would exceed normal processing limits. Using Batch Apex, you can process records asynchronously in batches (hence the name, “Batch Apex”) to stay within platform limits. If you have a lot of records to process, for example, data cleansing or archiving, Batch Apex is probably your best solution.

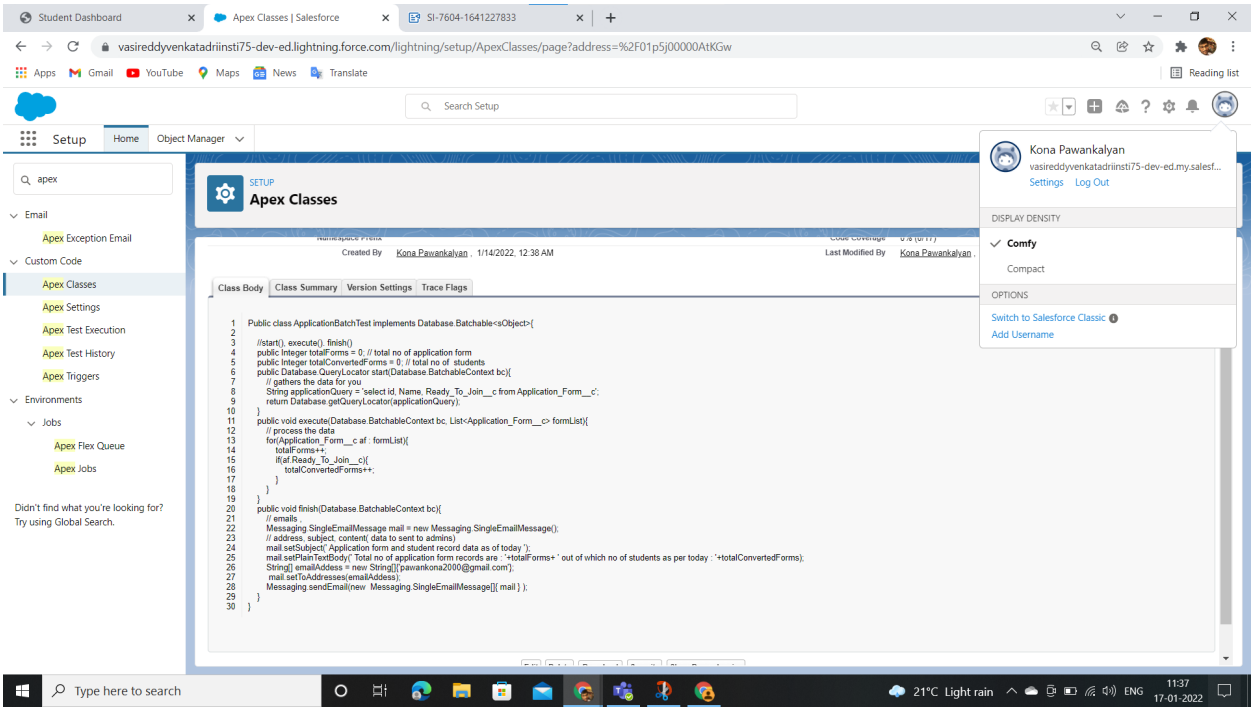
Creating A Batch apex For Application Form

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

```
Public class ApplicationBatchTest implements Database.Batchable<sObject>{

   //start(), execute(). finish()
   public Integer totalForms = 0; // total no of application form
   public Integer totalConvertedForms = 0; // total no of  students
   public Database.QueryLocator start(Database.BatchableContext bc){
      // gathers the data for you
      String applicationQuery = 'select id, Name, Ready_To_Join__c from ApplicationForm__c';
      return Database.getQueryLocator(applicationQuery);
   }
   public void execute(Database.BatchableContext bc, List<ApplicationForm__c> formList){
      // process the data
      for(ApplicationForm__c af : formList){
         totalForms++;
         if(af.Ready_To_Join__c){
            totalConvertedForms++;
         }
      }
   }
   public void finish(Database.BatchableContext bc){
      // emails ,
      Messaging.SingleEmailMessage mail = new Messaging.SingleEmailMessage();
      // address, subject, content( data to sent to admins)
      mail.setSubject(' Application form and student record data as of today ');
      mail.setPlainTextBody(' Total no of application form records are : '+totalForms+ ' out of
```

which no of students as per today : '+totalConvertedForms);
String[] emailAddess = new String[]{'your email address'};
mail.setToAddresses(emailAddess);
Messaging.sendEmail(new Messaging.SingleEmailMessage[]{ mail });
}
}
Now, I am creating a scheduler class



Creating A Scheduler Class

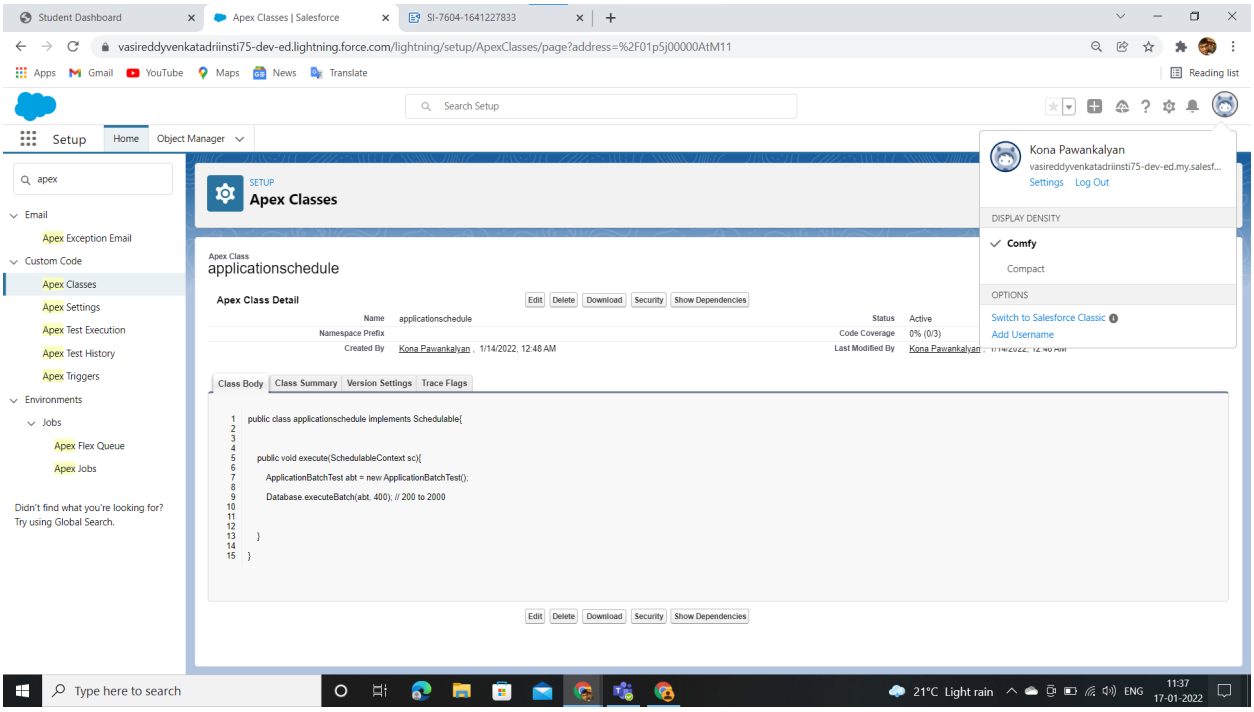
1. From the developer console create a new apex class and enter the following code.

```
public class applicationschedule implements Schedulable{

    public void execute(SchedulableContext sc){
        ApplicationBatchTest abt = new ApplicationBatchTest();
        Database.executeBatch(abt, 400); // 200 to 200
```

```
    }
}
```

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



Day 7

On the day 7, we learnt Apex Trigger.

There are different types of triggers:

- before insert.
- before update.
- before delete.
- after insert.
- after update.
- after delete.
- after undelete

There are two types of triggers BEFORE and AFTER
Operations are insert, update, delete, undelete.

Trigger context variable
trigger.old,trigger.new, trigger.new-map, trigger.old map.

Day 8

Lightning Web Components

Lightning Web Components (LWC) is a stack of modern lightweight frameworks built on the latest web standards. It is a DOM (Document Object Model), element created through reusable code and is used to generate a dynamic interface without using JavaScript or building a Library. This feasibility makes it quick and seamless, saving the developers a ton of time and effort on the Web Stack. Let's look at some of its remarkable features:

- Improved performance of the component as most of the code is recognized by the native web browser engine and web stack
- Ability to compose applications using smaller chunks of code since the

crucial elements that are required to create a component is part of the native web browser engine and web stack

- Increase in the robustness of the applications built using LWCs as they are inclusive of the said modern web standards.
- Parallel interoperability and feasibility to use both Lightning Web Components and Aura components together in the applications with no visible differentiation to the end-users

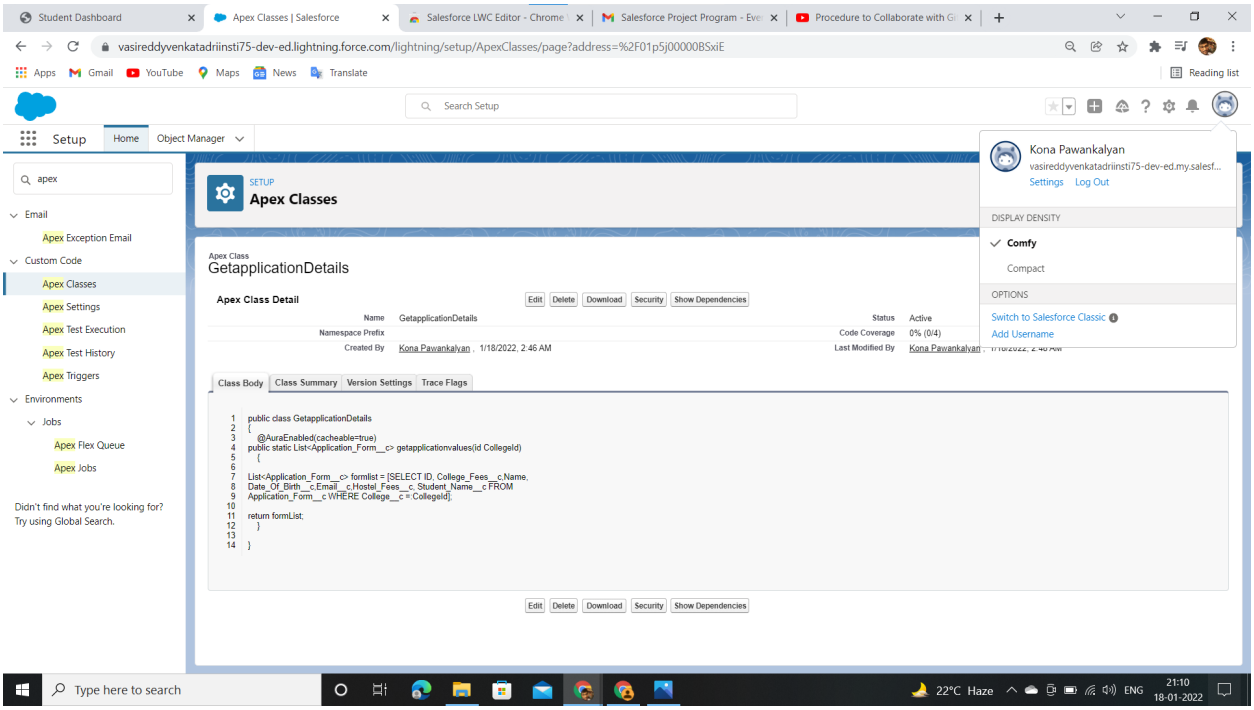
Lightning Web Components

Create College DataTable Component(APEX CLASS)

First Go to setup and search Apex classes and next click onDeveloper console and create a apex class with name GetapplicationDetails and enter the code and click on save to save the 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 .

Create an Apex Class With The Required Functionality



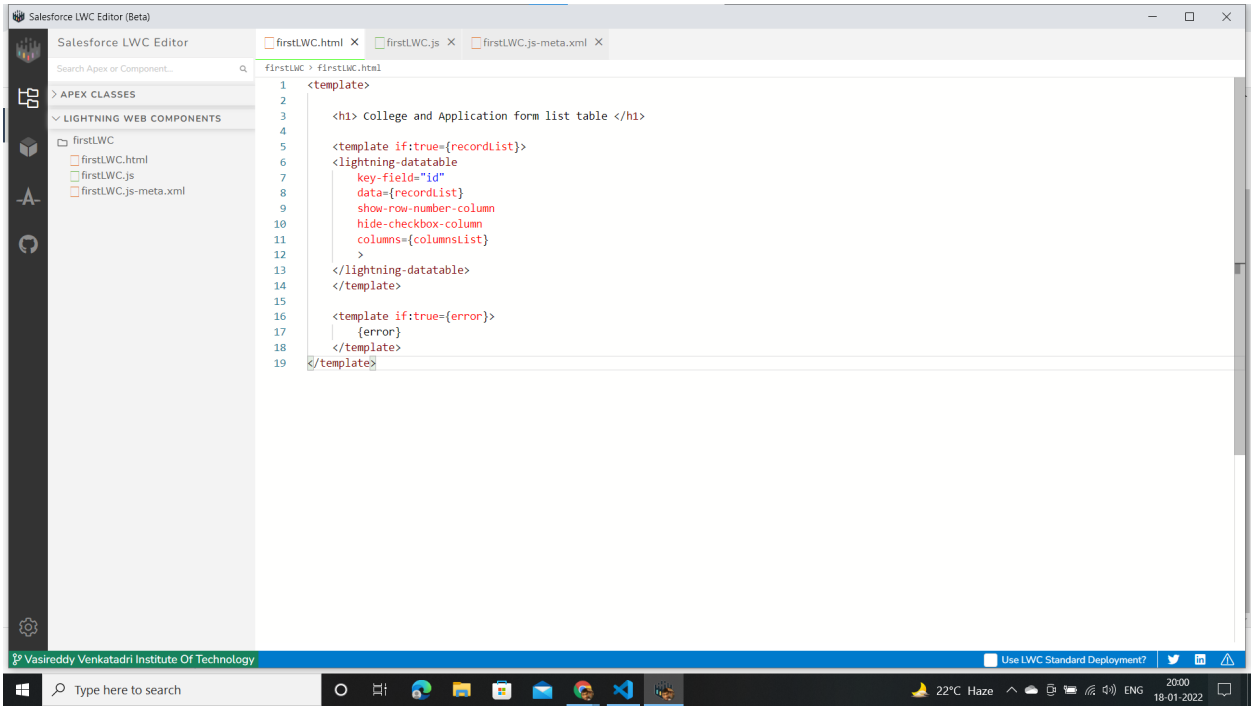
Day 9

Create College DataTable Component (HTML FILE)

Open visual studio app and search for sf:create a new lightning component.

after clicking that I named it as "FirstLWC". It creates a three types of extension files, .html, .js, .js.meta.xml.

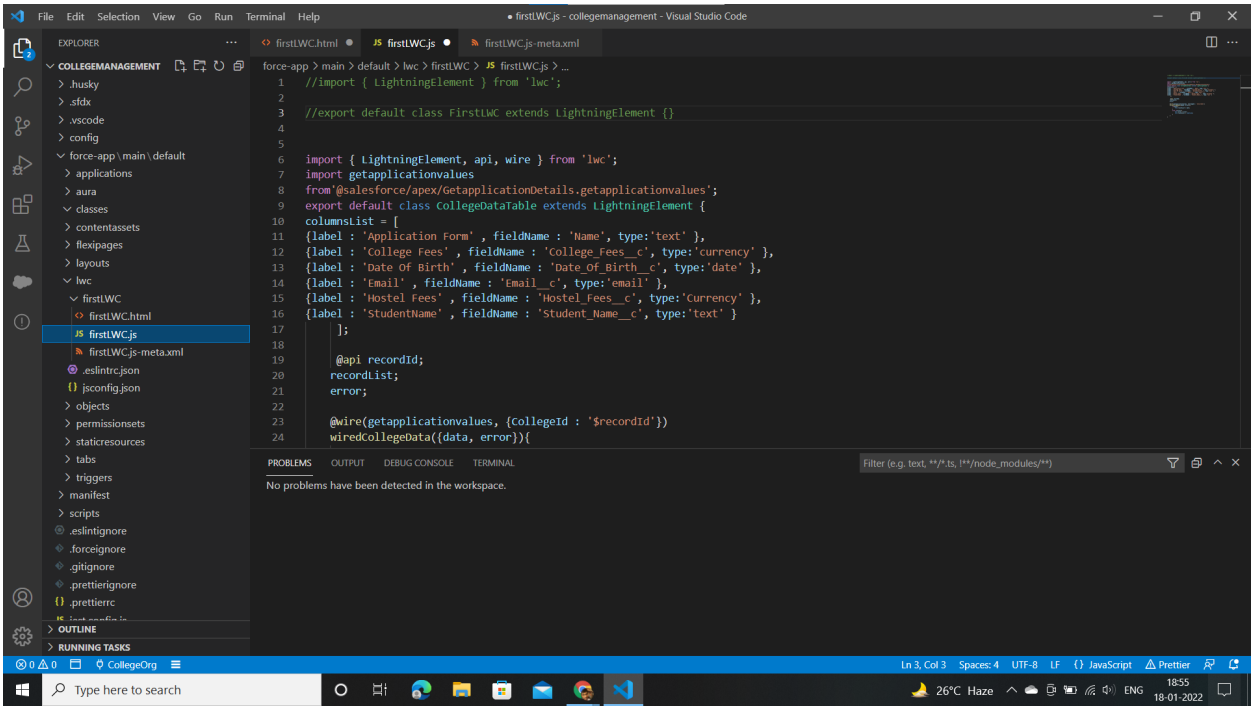
After clicking that copy the code into the firstLWC.html.

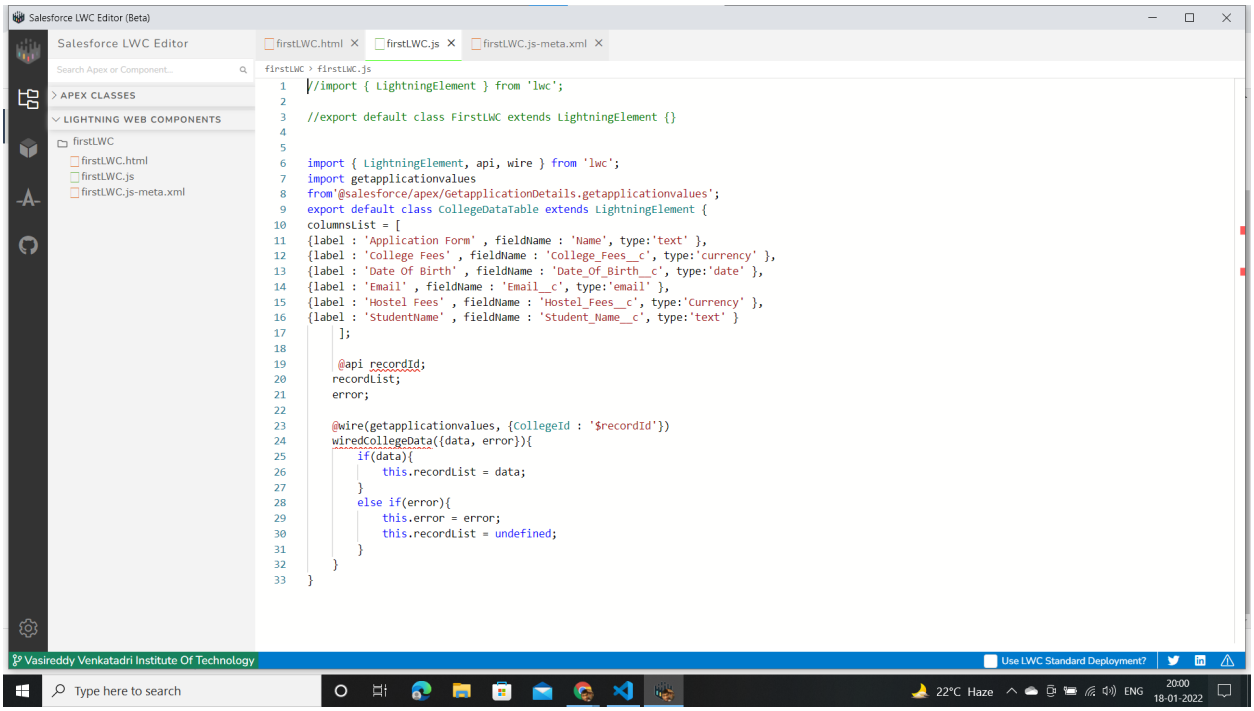


Day 10

Create College DataTable Component(JAVA SCRIPT FILE)

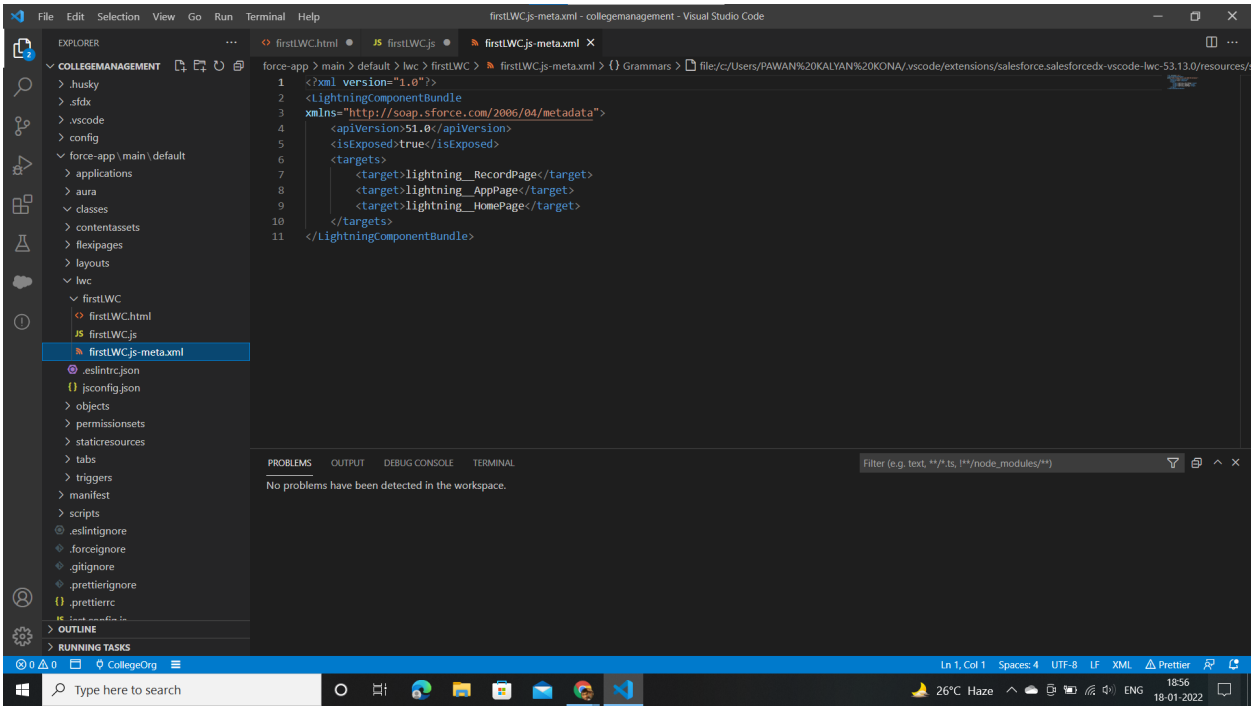
After the creation of the Html file create the java script file name it as college date table

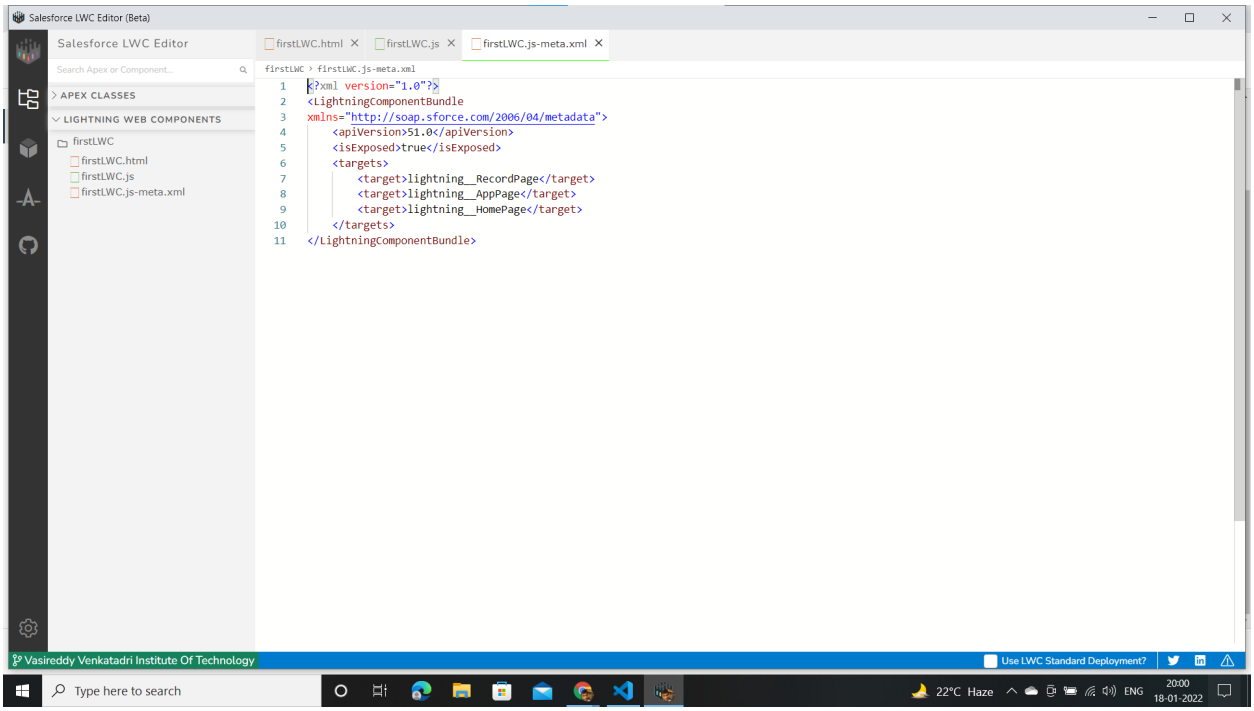




At last we created a meta file in visual studio code.

Create College DataTable Component(META FILE)




Salesforce LWC Editor (Beta)
Salesforce LWC Editor
Search Apex or Component...
APEX CLASSES
LIGHTNING WEB COMPONENTS
firstLWC
firstLWC.html
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Vasireddy Venkatadri Institute Of Technology
Use LWC Standard Deployment?
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