

Day1 :

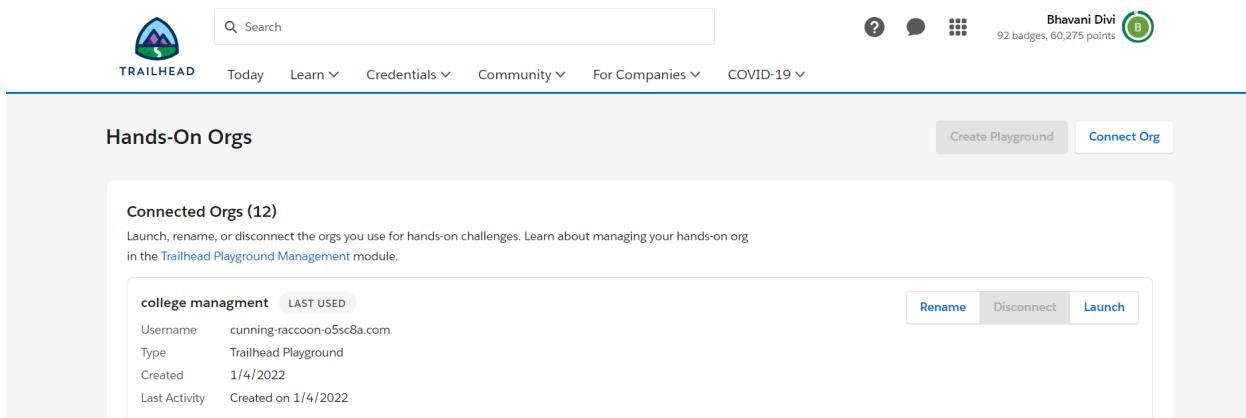
Topic : College Management Application.

Milestone / Activities : Creating Developer Account, Account Activation, Login To Your Salesforce Account.

Detailed Description: As I already have a developer account I just created a new org in the name of college management and ill continue to do all the work in this org itself regarding the college management application.

On the first day I have learnt about various features which salesforce provides.

Upload the Screenshot of the Milestones / Activities :



Day2 :

Topic : Custom Object Creation

Milestone / Activities : Create The Custom Objects For The Application, Create Fields On College Object, Create Fields On Application Form Object, Create Fields On Student Object, Create Fields On Subject Object.

Detailed Description: Today I have created the objects which are similar to tables in

dbms such as College ,Application Form, Students,Subjects.

As these are some of the main things which a college needs.

After completion of creating the objects I just created some fields for all the above mentioned objects. fields are similar to columns in databases.for the

College - Record Info,College Fees,Hostel Fees,College Name,Email,Capacity Of Students.

Application form - Address,College,College Fees,Hostel Fees,date of Birth,Email,Guardian Name,Looking For Hostel Stay,Ready To Join,Student Name,Phone.

Students - Student Name,Address,Application Form,College Name,Date Of Birth,Guardian Name,Phone.

Subject - Subject ID,Paper 1,Paper2,Student.

During the field creation we need to choose the correct data type like text, phone , date, if we have many options to choose like different colleges / the papers which a subject includes we need to use picklist data type , for calculating we need formula pick formula as a data type.

Upload the Screenshot of the Milestones / Activities :

college object:

The screenshot shows the Salesforce Object Manager interface. The top navigation bar has tabs for 'Home', 'Object Manager', and 'Setup'. The current view is 'SETUP > OBJECT MANAGER' for the 'College' object. On the left, there's a sidebar with various configuration options: 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, and Partition Rules. The main content area is titled 'Details' and shows the following fields:

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

these are the fields for College object.

The screenshot shows the Salesforce Setup interface with the URL cunning-raccoon-o5sc8a-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01I5j000000IMf0/FieldsAndRelationships/view. The page title is "College". The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area is titled "Fields & Relationships" and displays 10 items sorted by Field Label. Each item shows the field name, API name, type, and description. For example, "Capacity Of Students" is a Picklist type with the API name "Capacity_Of_Students__c". Other fields include "College Fees" (Currency(7, 2)), "College Name" (Picklist), "Created By" (Lookup(User)), "Email" (Picklist), "Hostel Fees" (Currency(6, 2)), "Last Modified By" (Lookup(User)), "Owner" (Lookup(User,Group)), and "Record Info" (Text(10)).

Application form object

The screenshot shows the Salesforce Setup interface with the URL cunning-raccoon-o5sc8a-dev-ed.lightning.force.com/lightning/setup/ObjectManager/01I5j000000IMf0/Details/view. The page title is "Application Form". The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, etc. The main content area is titled "Details" and shows the configuration for the "Application Form" object. It includes fields for Description, API Name (Application_Form__c), Singular Label (Application Form), Plural Label (Application Forms), and Deployment Status (Deployed). It also includes checkboxes for Enable Reports, Track Activities, and Track Field History, all of which are checked. The Help Settings link points to "Standard salesforce.com Help Window".

fields for application form

The screenshot shows the Salesforce Setup interface with the URL cunning-raccoon-o5sc8a-dev-ed.lightning.force.com/lightning/setup/ObjectManager/0115j000000IMfK/FieldsAndRelationships/view. The page title is "Application Form". The left sidebar lists various setup categories under "Fields & Relationships". The main content area displays a table of fields:

Field Name	Description	Type	Actions
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	Formula (Currency)	
Created By	CreatedById	Lookup(User)	
date of Birth	date_of_Birth_c	Date	
Email	Email_c	Email	
Guardian Name	Guardian_Name_c	Text(30)	

student object

The screenshot shows the Salesforce Setup interface with the URL cunning-raccoon-o5sc8a-dev-ed.lightning.force.com/lightning/setup/ObjectManager/0115j000000IMfK/Details/view. The page title is "Student". The left sidebar lists various setup categories under "Details". The main content area displays a table of details:

Detail Name	Description	Value	Actions
API Name	Student_c		
Custom	✓		
Singular Label	Student		
Plural Label	Students		
Enable Reports	✓		
Track Activities	✓		
Track Field History	✓		
Deployment Status	Deployed		
Help Settings	Standard salesforce.com Help Window		

Fields for student object.

The screenshot shows the Salesforce Object Manager interface for the 'Student' object. On the left, a sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Field Sets. The main area is titled 'Fields & Relationships' and displays a table of fields. The table columns are FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. The fields listed are:

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(30)		
Last Modified By	LastModifiedBy	Lookup(User)		
Owner	OwnerId	Lookup(User,Group)		
Phone	Phone__c	Phone		

Subject object

The screenshot shows the Salesforce Object Manager interface for the 'Subject' object. On the left, a sidebar lists various setup options like Page Layouts, Lightning Record Pages, and Field Sets. The main area is titled 'Details' and displays a table of object details. The table columns are Description, API Name, and Enable Reports. The details listed are:

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

Fields for Subject

The screenshot shows the Salesforce Object Manager interface. The left sidebar lists various setup categories like Page Layouts, Lightning Record Pages, etc. The main content area is titled 'Fields & Relationships' and displays a table of fields for the 'Subject' object. The table includes columns for Field Label, Field Name, Data Type, Controlling Field, and Indexed status. The fields listed are:

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		
Paper2	Paper2__c	Picklist		
Student	Student__c	Lookup(Student)		✓
Subject ID	Subject_ID__c	Auto Number		
Subject Name	Name	Text(80)		✓

Day3:

Title: Adding Business Logic To Application.

Milestone / Activities: Creating Global Picklist Value Sets,

Creating Field Dependencies, Creating Validation Rules, Process Automation,

Create The Student Record Using Flow.

Detailed Description :

Global value picklist are nothing but the restricted picklist means the users cannot modify /date/update the data here only the admins have the authority to do this. I have created some global picklists here which are needed for college management app.
for College(college names), papers(the subjects which the papers include).

I have created field Dependencies here they are nothing but the filters that allow us to change the contents of a picklist based on the value of another field. Rather than displaying every value for Region in a single picklist, you can limit the values that are

displayed based on a value for another field, like Zone. we will have a controlling field as well as a dependent field here.

comming to the validation rules they are used to validate the data being entered in the fields It does not allow the record to get saved in case there is any validation error.

In the process automation we have created a process step by step where from the start to end what are the steps involved are mentioned here.

Flows can look up, create, update, and delete Salesforce records. They can also create Chatter posts, submit records for approval, and send emails.

Upload the Screenshot of the Milestones / Activities :

picklist list value sets

The screenshot shows the Salesforce Setup interface with the following details:

- Page Title:** Picklist Value Sets
- Section:** Global Value Sets
- Table Headers:** Action, Label, Description
- Table Data:**

Action	Label	Description
Edit Del	College	
Edit Del	Paper1	
Edit Del	Paper2	
- Page Navigation:** Help for this Page, View: All, Create New View, Alphabetical navigation (A-Z), and Other
- Left Sidebar:** Search bar, Setup icon, Home, Object Manager, Data (Picklist Settings, State and Country/Territory, Picklists), Objects and Fields (Picklist Value Sets).
- Bottom:** Windows taskbar showing various application icons and system status.

field dependencies

The screenshot shows the Salesforce Setup interface for the 'College' object. The left sidebar lists various setup categories like Details, Fields & Relationships, Page Layouts, and Validation Rules. The main content area is titled 'College Field Dependencies' and displays a table of dependencies between fields:

Action	Controlling Field	Dependent Field	Modified By
Edit Del	College Name	Email	Bhavani Divi, 1/9/2022, 1:28 AM
Edit Del	College Name	Capacity Of Students	Bhavani Divi, 1/9/2022, 1:29 AM

validation rules

The screenshot shows the Salesforce Setup interface for the 'College' object. The left sidebar lists various setup categories. The main content area is titled 'Validation Rules' and displays a table of validation rules:

RULE NAME	ERROR LOCATION	ERROR MESSAGE	ACTIVE	MODIFIED BY
Validation_rule_Co	Top of Page	college name and record info should have the same name	✓	Bhavani Divi, 1/9/2022, 1:32 AM

Screenshot of the Salesforce Application Form Validation Rules page.

Validation Rules

Rule Name	Error Location	Error Message	Active	Modified By
Validation_Rule_AF	Top of Page	No Modification to be Done.	✓	Bhavani Divi, 1/9/2022, 1:34 AM

Navigation Sidebar:

- 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
- Description

process automation.

Screenshot of the Salesforce Process Builder - Application Form Process Master.

Process Flow:

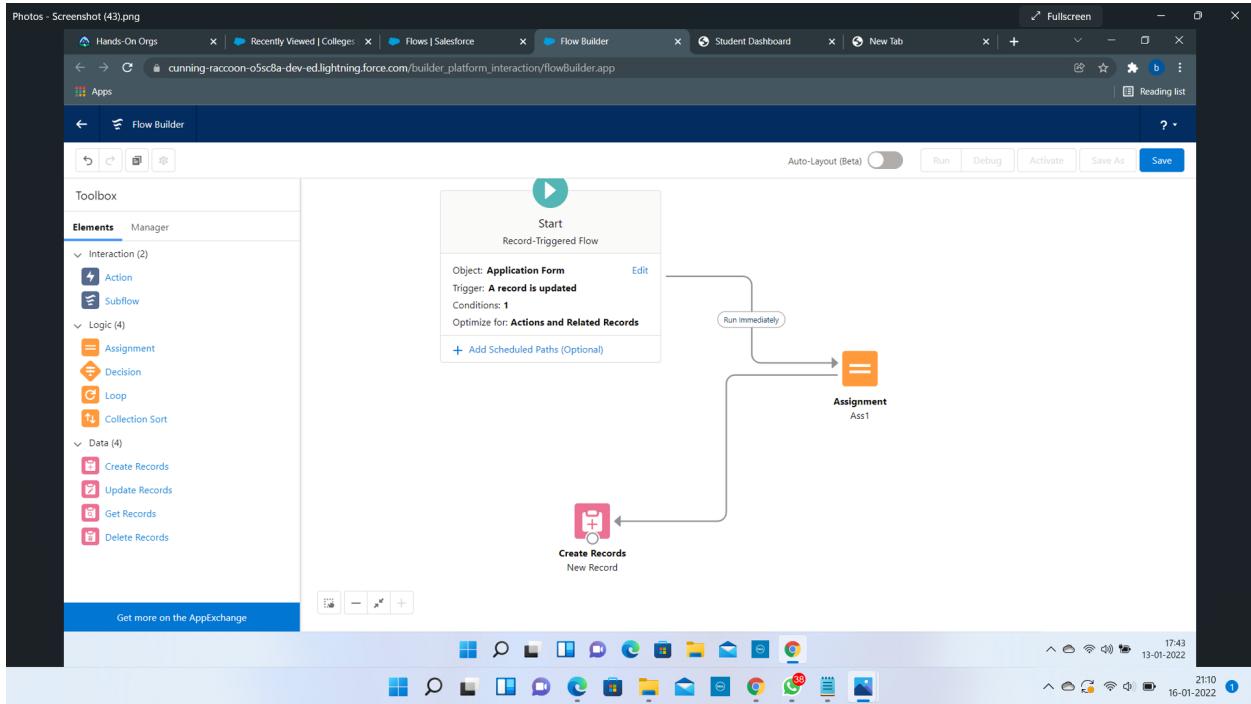
```

graph TD
    START([START]) --> AF[Application Form]
    AF --> Decision1{Ready to Join  
field is checked}
    Decision1 -- TRUE --> IMMEDIATE_ACTIONS1[IMMEDIATE ACTIONS]
    IMMEDIATE_ACTIONS1 --> STOP1([STOP])
    Decision1 -- FALSE --> Decision2{+ Add Criteria}
    Decision2 -- TRUE --> IMMEDIATE_ACTIONS2[IMMEDIATE ACTIONS]
    IMMEDIATE_ACTIONS2 --> STOP2([STOP])
    Decision2 -- FALSE --> END([END])
    
```

Buttons and Options:

- Expand All, Collapse All
- View All Processes, Clone, View Properties, Activate, Read Only
- Back To Setup, Help

flows



Day:4

Title:Batch Apex

Milestone / Activities :Create A Batchapex For Application Form,

Create A Schedular Class.

Detailed description:

here I have created a batch apex for the application form and a schedular class with the help of these we can schedule a job by selecting the apex class.

Upload the Screenshot of the Milestones / Activities :

The screenshot shows the Salesforce Setup interface with the 'Apex Classes' tab selected. The 'Apex Class Detail' section displays the following information:

- Name:** ApplicationBatchTest
- Namespace Prefix:** (empty)
- Status:** Active
- Code Coverage:** 0% (0/17)
- Last Modified By:** Bhavani Divi, 1/16/2022, 5:38 AM

The 'Class Body' tab is active, showing the Apex code:1 Public class ApplicationBatchTest implements Database.Batchable<sObject>{
2 // (empty), execute(), finish()
3 public Integer totalForms = 0; // total no of application form
4 public Integer totalConvertedForms = 0; // total no of students
5 public Database.QueryLocator start(Database.BatchableContext bc){
6 // gathers the data for you
7 String query = 'select id, Name, Ready__To__Join__c from Application__Form__c';
8 return Database.getQueryLocator(query);
9 }
10 public void execute(Database.BatchableContext bc, List<Application__Form__c> formList){
11 // process the data
12 for(Application__Form__c a : formList){
13 totalForms++;
14 if(a.Ready__To__Join__c){
15 totalConvertedForms++;
16 }
17 }
18 }
19 public void finish(Database.BatchableContext bc){
20 // emails
21 Messaging.SingleEmailMessage mail = new Messaging.SingleEmailMessage();
22 // address, subject, content data to sent to admins
23 // mail.setToRecipients(new String[]{System.today()});
24 // mail.setSubject('Data as of today');
25 }
}

The URL in the browser is <https://cunning-raccoon-o5sc8a-dev-ed.lightning.force.com/lightning/setup/ApexClasses/page?address=%2F01p5j00000B0gp>.

The screenshot shows the Salesforce Setup interface with the 'Apex Classes' tab selected. The 'Apex Class Detail' section displays the following information:

- Name:** applicationschedule
- Namespace Prefix:** (empty)
- Status:** Active
- Code Coverage:** 0% (0/3)
- Last Modified By:** Bhavani Divi, 1/18/2022, 3:40 AM

The 'Class Body' tab is active, showing the Apex code:1 public class applicationschedule implements Schedulable{
2 // (empty)
3 public void execute(SchedulableContext sc){
4 ApplicationBatchTest abt = new ApplicationBatchTest();
5 Database.executeBatch(abt, 400); // 200 to 2000
6 }
7 }

The URL in the browser is <https://cunning-raccoon-o5sc8a-dev-ed.lightning.force.com/lightning/setup/ApexClasses/page?address=%2F01p5j00000B1j3n>.

DAY: 5

Topic: Lightning Web Components.

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

Create College DataTable Component (HTML FILE),,,

Create College DataTable Component(JAVA SCRIPT FILE),

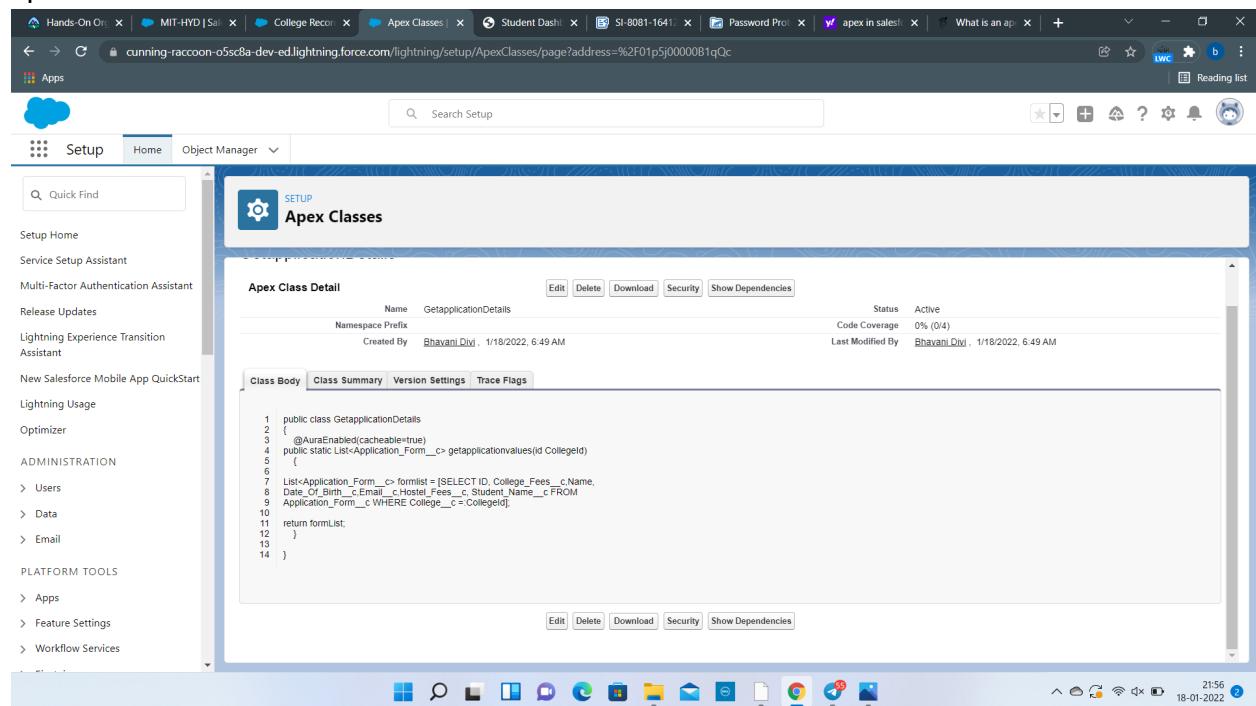
Create College DataTable Component(META FILE).

Detailed Description:

here I have created an apex class , html ,js.xml file for pagecomponent. I have added lwc to my chrome in that I have done my html ,js and xml files.i have also added the record pages for the college object here.

Upload the Screenshot of the Milestones / Activities :

apex class



The screenshot shows the Salesforce Setup interface with the 'Apex Classes' page open. The page title is 'Apex Classes'. The 'Apex Class Detail' section displays the class 'GetapplicationDetails' with the following details:

Name	Namespace Prefix	Status	Active
GetapplicationDetails		Code Coverage	0% (0/4)
	Created By	Bhavani Dixi	1/18/2022, 6:49 AM
	Last Modified By	Bhavani Dixi	1/18/2022, 6:49 AM

The 'Class Body' tab is selected, showing the following Apex code:

```
1 public class GetapplicationDetails
2 {
3     @AuraEnabled(cacheable=true)
4     public static List<Application__Form__c> getapplicationvalues(id CollegeId)
5     {
6         List<Application__Form__c> formList = [SELECT ID, College_Fees__c.Name,
7             Date_of_Birth__c, Email__c, Hostel_Fees__c, Student_Name__c FROM
8             Application__Form__c WHERE College__c = :CollegeId];
9
10        return formList;
11    }
12}
13
14 }
```

html file

Salesforce LWC Editor (Beta)

Search Apex or Component...

APEX CLASSES

- ApplicationBatchTest
- applicationschedule
- GetapplicationDetails

LIGHTNING WEB COMPONENTS

- applicationDet

 - applicationDet.html
 - applicationDet.js
 - applicationDet.css
 - applicationDet.js-meta.xml
 - applicationDet.svg

```

<template>
1 <h1> College and Application form list table </h1>
2
3 <template if:true={recordList}>
4   <lightning-datatable
5     key-field="id"
6     data={recordList}
7     show-row-number-column
8     hide-checkbox-column
9     columns={columnsList}
10    >
11    </lightning-datatable>
12  </template>
13
14 <template if:true={error}>
15   {error}
16 </template>
17
18 </template>
19

```

Result Panel

```

1 applicationDet.html successfully deployed source 1/18/2022 8:45:54 PM
2 applicationDet.js successfully deployed source 1/18/2022 8:45:54 PM
3 applicationDet.js-meta.xml successfully deployed source 1/18/2022 8:45:54 PM

```

MVGR college of engineering

Use LWC Standard Deployment?

21:57 18-01-2022

js file

Salesforce LWC Editor (Beta)

Search Apex or Component...

APEX CLASSES

- ApplicationBatchTest
- applicationschedule
- GetapplicationDetails

LIGHTNING WEB COMPONENTS

- applicationDet

 - applicationDet.html
 - applicationDet.js
 - applicationDet.css
 - applicationDet.js-meta.xml
 - applicationDet.svg

```

import { LightningElement, api, wire } from 'lwc';
import getapplicationvalues
from '@salesforce/apex/GetapplicationDetails.getapplicationvalues';
export default class CollegeDatatable extends LightningElement {
  columnsList = [
    {label : 'Application Form' , fieldName : 'Name', type:'text' },
    {label : 'College Fees' , fieldName : 'College_Fees__c', type:'currency' },
    {label : 'Date of Birth' , fieldName : 'Date_of_Birth__c', type:'date' },
    {label : 'Email' , fieldName : 'Email__c', type:'email' },
    {label : 'Hostel Fees' , fieldName : 'Hostel_Fees__c', type:'Currency' },
    {label : 'StudentName' , fieldName : 'Student_Name__c', type:'text' }
  ];
  @api recordId;
  recordList;
  error;
  @wire(getapplicationvalues, {collegeId : '$recordId'})
  wiredCollegeData({data, error}){
    if(data){
      this.recordList = data;
    }
    else if(error){
    }
  }
}

```

Result Panel

```

1 applicationDet.html successfully deployed source 1/18/2022 8:45:54 PM
2 applicationDet.js successfully deployed source 1/18/2022 8:45:54 PM
3 applicationDet.js-meta.xml successfully deployed source 1/18/2022 8:45:54 PM

```

MVGR college of engineering

Use LWC Standard Deployment?

21:57 18-01-2022

xml file

The screenshot shows the Salesforce LWC Editor (Beta) interface. On the left, there's a sidebar with icons for Apex Classes, Lightning Web Components, and other components. The main area displays three tabs: applicationDet.html, applicationDet.js, and applicationDet.js-meta.xml. The applicationDet.js-meta.xml tab contains the following XML code:

```
<?xml version="1.0"?>
<lightningComponentBundle
    xmlns="http://soap.sforce.com/2006/04/metadata">
    <apiVersion>51.0</apiVersion>
    <isExposed>true</isExposed>
    <targets>
        <target>lightning__RecordPage</target>
        <target>lightning__AppPage</target>
        <target>lightning__HomePage</target>
    </targets>
</LightningComponentBundle>
```

Below the code editor is a Result Panel window titled "Result Panel" which shows deployment logs:

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

The status bar at the bottom indicates the deployment was successful on 1/18/2022 at 8:45:54 PM.

adding record pages

The screenshot shows the Lightning App Builder interface. The top navigation bar includes tabs for "College Record Page" and "Pages". The main workspace displays a "Components" section on the left with a search bar and a list of components under "Standard (0)", "Custom (1)" (which is "applicationDet"), and "Custom - Managed (0)". To the right, there's a preview pane showing a "College Record Page" with a "Datatable" component displaying student data and an "Activity" component showing a list of events. On the right side, there's a configuration panel for the "Page" object, which includes fields for "Label" (set to "College Record Page"), "Developer Name" (set to "College_Record_Page"), "Page Type" (set to "Record Page"), "Object" (set to "College"), "Template" (set to "Header and Right Sidebar"), and a "Description" field. A checkbox for "Enable page-level dynamic actions for the Salesforce mobile app" is checked. The status bar at the bottom indicates the operation was completed on 18-01-2022 at 21:58.

-----END-----

