PROJECT TITLE:
A CRM APPLICATION TO ENGINEERING WORKS

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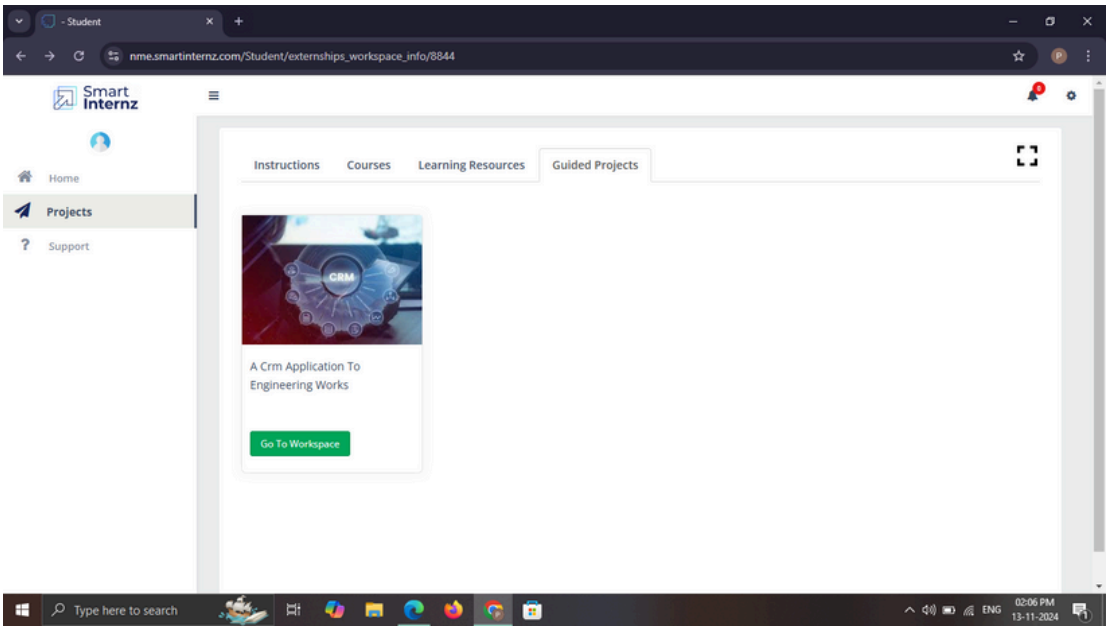
A CRM APPLICATIONS TO ENGINEERING WORKS

1. Project Overview:

The "CRM Application for Engineering Works" project aims to enhance customer relationship management by leveraging Salesforce's powerful cloud-based platform. This application was developed to streamline customer interactions, project tracking, and resource management within engineering firms. Designed with a user-friendly interface, the CRM enables efficient data handling and workflow automation, which is essential for managing client information, tracking project progress, and optimizing service delivery.



2. Objectives

Business Goals:

Increase Operational Efficiency: Minimize redundancies, save time, and improve team collaboration by integrating the CRM with other business systems.

Enhance Customer Satisfaction: Provide timely, personalized communication and support to enhance client experience and build stronger relationships.

Specific Outcome:

Improve Project Tracking: Enable real-time projecttracking to monitor progress, allocate resourceeffectively, and meet project deadlines.

Enable Data-Driven Decisions: Utilize analytics to gain insights into client behavior, project performance, and sales trends to make informed business decisions.

3. Salesforce Key Features And Concept Utilized:

Salesforce CRM: Central to this project, Salesforce's CRM functionality enables tracking of customer data, interactions, and leads, helping the engineering firm manage relationships and improve client service.

Lightning Components: Salesforce Lightning Components were used to create dynamic and responsive interfaces, improving the user experience with a modern, faster, and interactive design.

Process Builder and Workflow Rules: These tools automate repetitive tasks, like updating records, sending email notifications, and tracking project milestones, making day-to-day operations smoother.

Custom Objects and Fields: Custom objects and fields were created to store specific data related to engineering projects, such as project specifications, milestones, and resource details.

Chatter: Salesforce's collaboration tool, Chatter, was implemented to enable team communication, allowing members to share project updates, discuss client needs, and keep all stakeholders aligned.

Data Security and Permissions: Salesforce’s robust security model, including role hierarchies, sharing rules, and permission sets, ensures sensitive project and client data is accessible only to authorized personnel.

Detailed Steps To Solution Design:

Activity 1 : Create Object

Enter the label name>> Fabrication

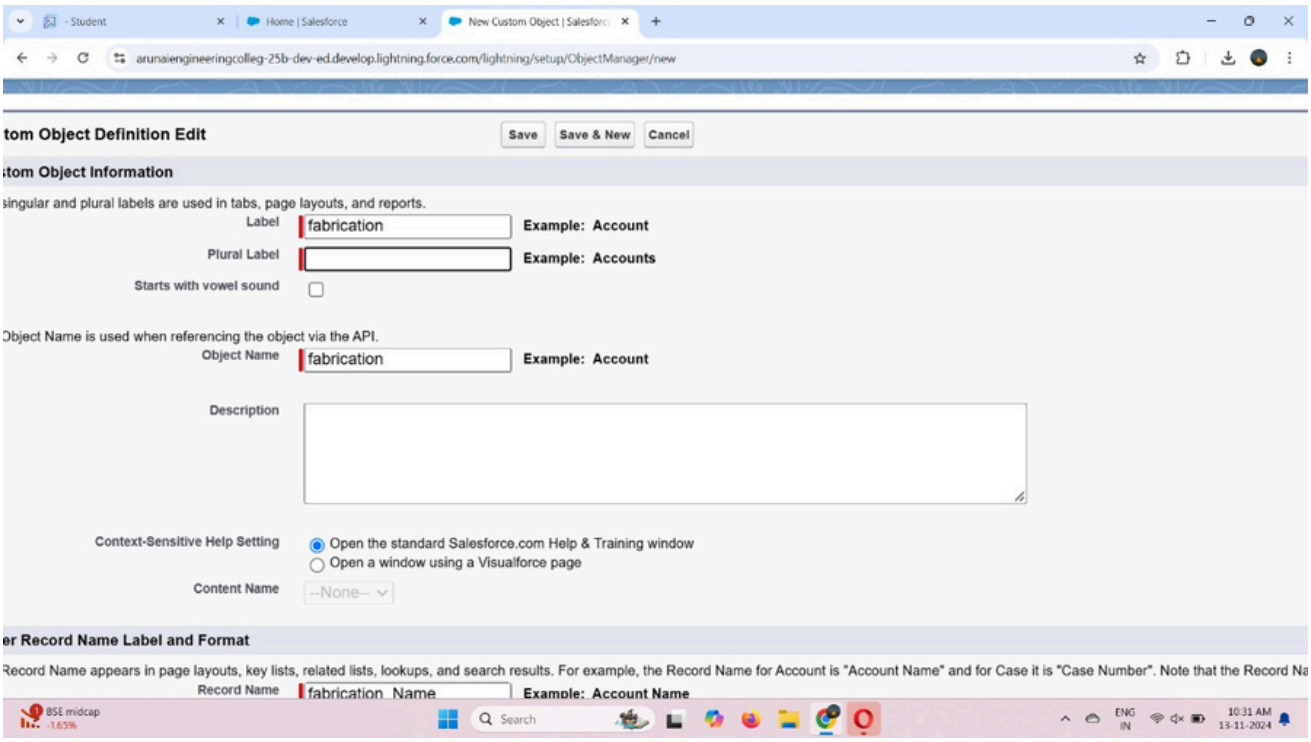
Plural label name >> Fabrications

Enter Record Name Label and Format

Record Name >> Fabrication Name

Data Type >> Text

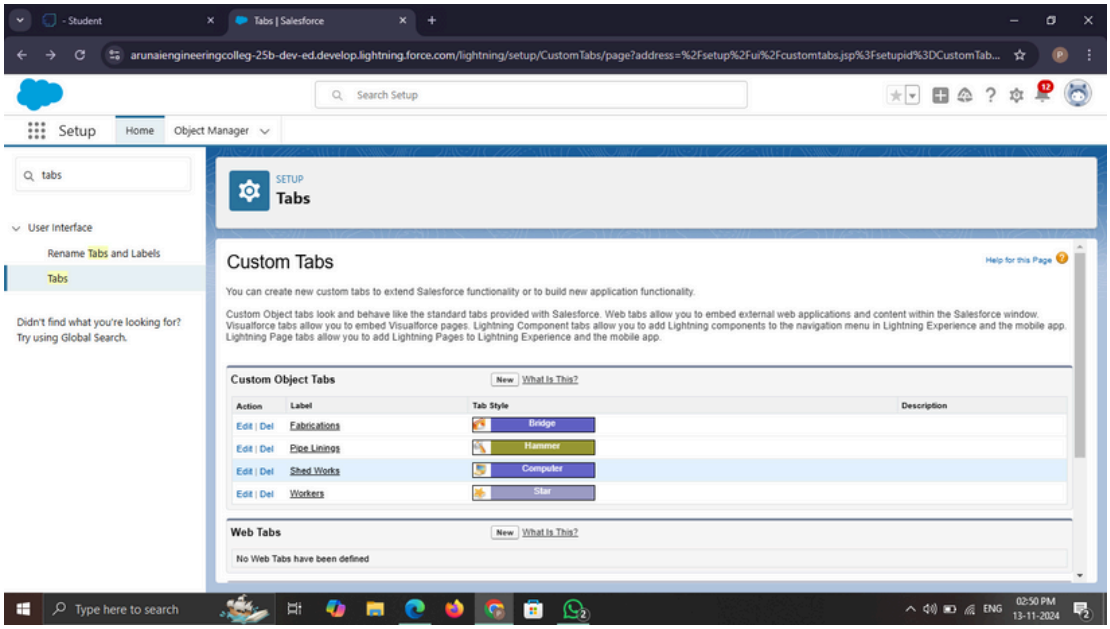
Click Save.

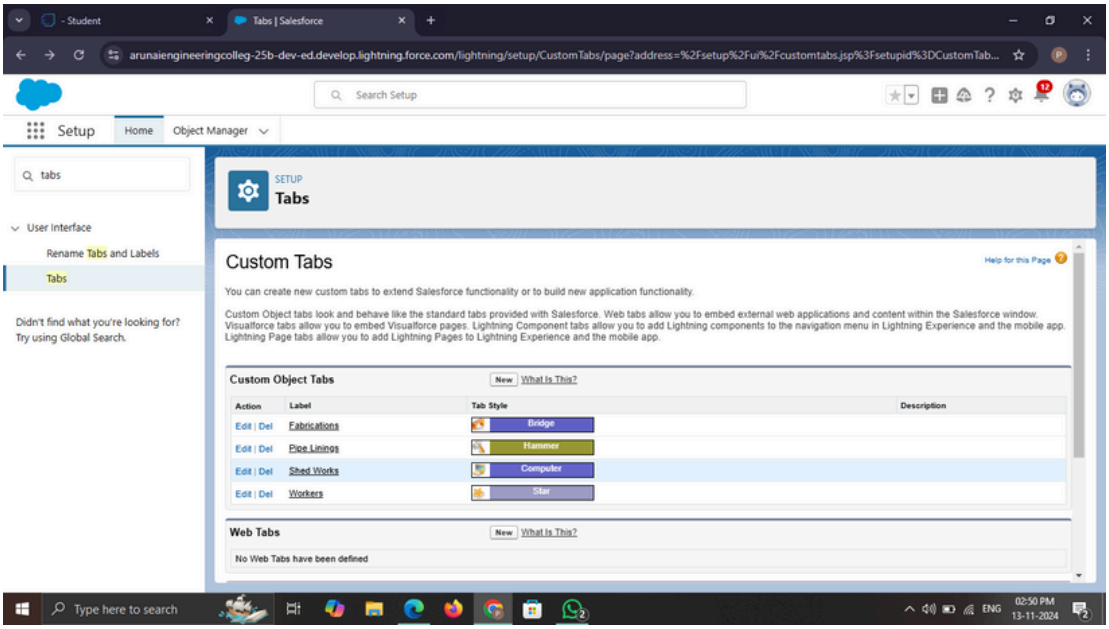


Activity 2: Creating Tabs

A tab is like a user interface that is used to build records for objects and to view the records in the objects.

1. Click on the "Tabs" Button: In the Fabrication object's details page, click on the "Tabs" button.
2. Click on the "New" Button: Click on the "New" button to create a new tab for the Fabrication object.
3. Enter Tab Details: Enter the tab label, name, and description for the Fabrication tab (e.g., "Fabrication Details", "Fabrication_Info", "Displays fabrication details").
4. Choose a Tab Style: Select a tab style (e.g., "Standard", "Custom", or "Visualforce") for the Fabrication tab.
5. Save the Tab: Click "Save" to create the Fabrication tab.





Activity 3: The Lightning App

Go to setup page >> search “app manager” in quick find >> select “app manager” >> click on New lightning App.

- Fill the app name in app details and branding as follow
- App Name : Engineering Works
- Developer Name : This will auto populated
- Image : optional (if you want to give any image you can otherwise not mandatory) Primary color hex value : keep this default.

Then click Next >> (App option page)Set Navigation Style as Standard Navigation >> Next.

To Add Navigation Items:

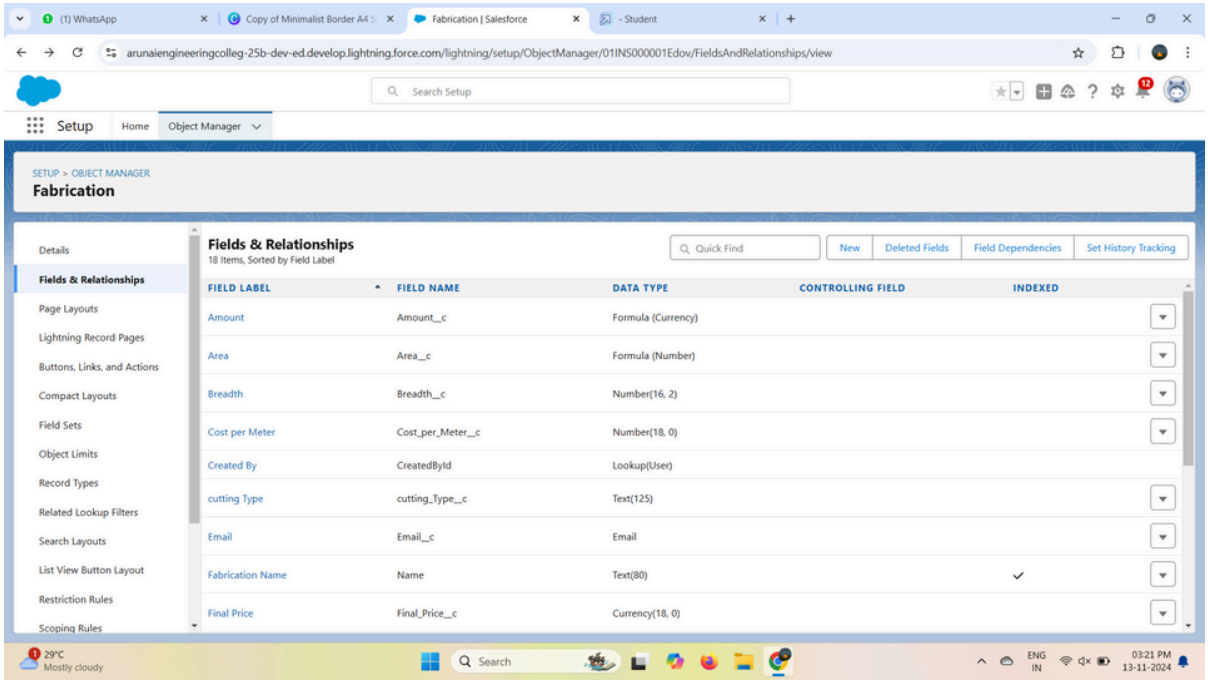
Search for the item in the (Fabrications, Shed Works, Pipe Linings, Workers) from the search bar and move it using the arrow button >> Next >> Next.

Save and Finish

Activity 4: Creation of Fields

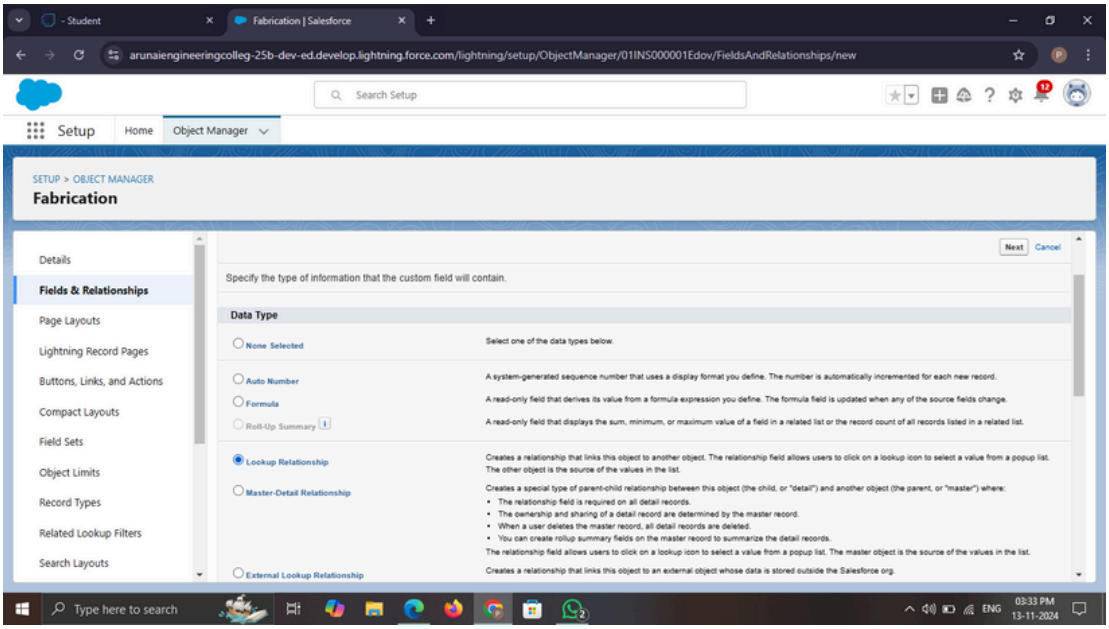
Go to setup >> click on Object Manager >> type object name(Fabrication) in search bar >> click on the object.

Sample for fabrication object is shown as below, similarly create fields for shedwork worker and pipeline objects

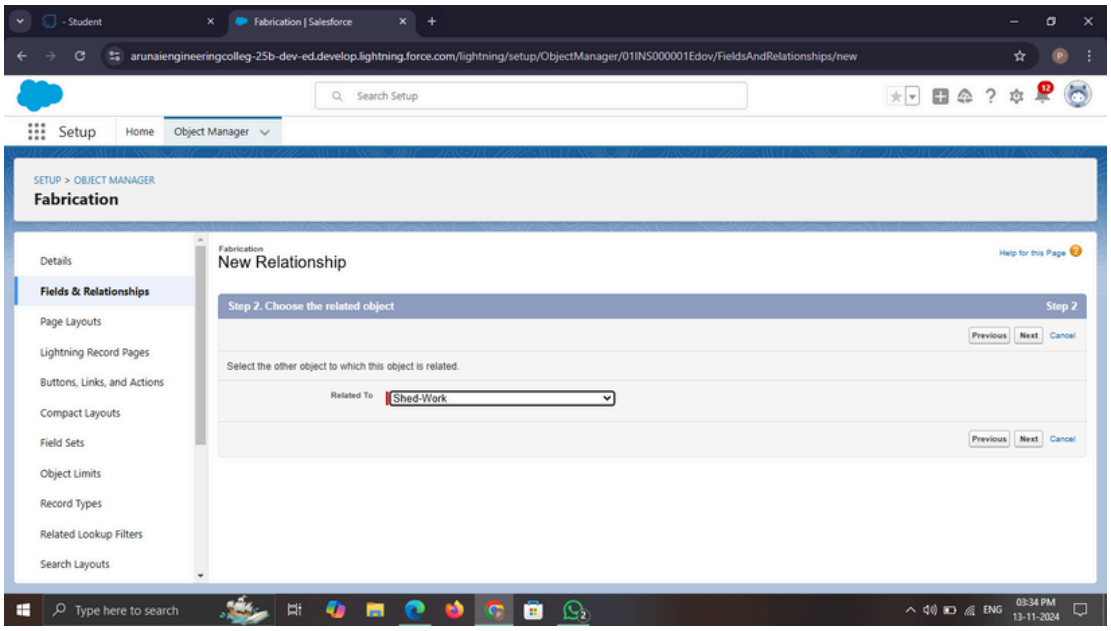


Here, we created fields for the objects as area,length,breadth,amount,cost per meter,cutting type etc.,,,

Creation of Lookup fields:

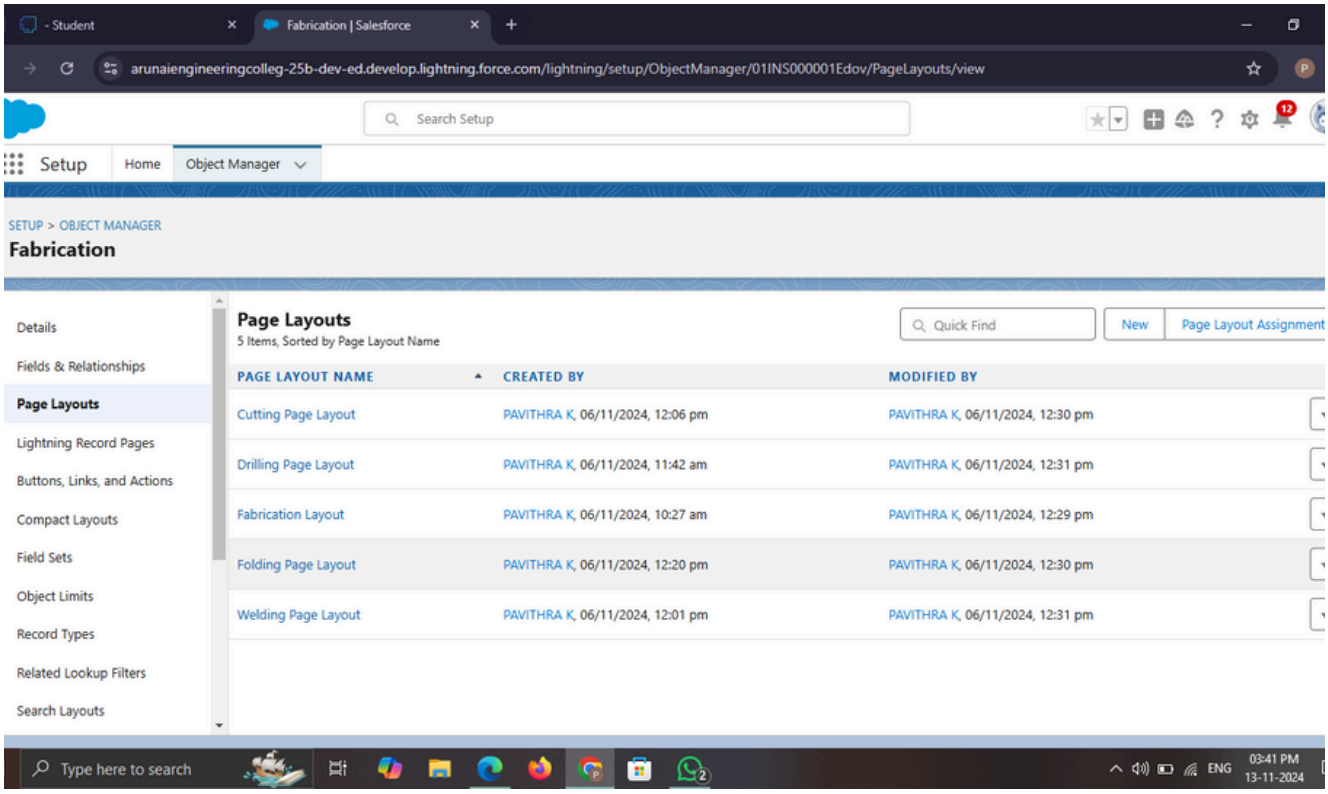


Create the relationships between the objects .



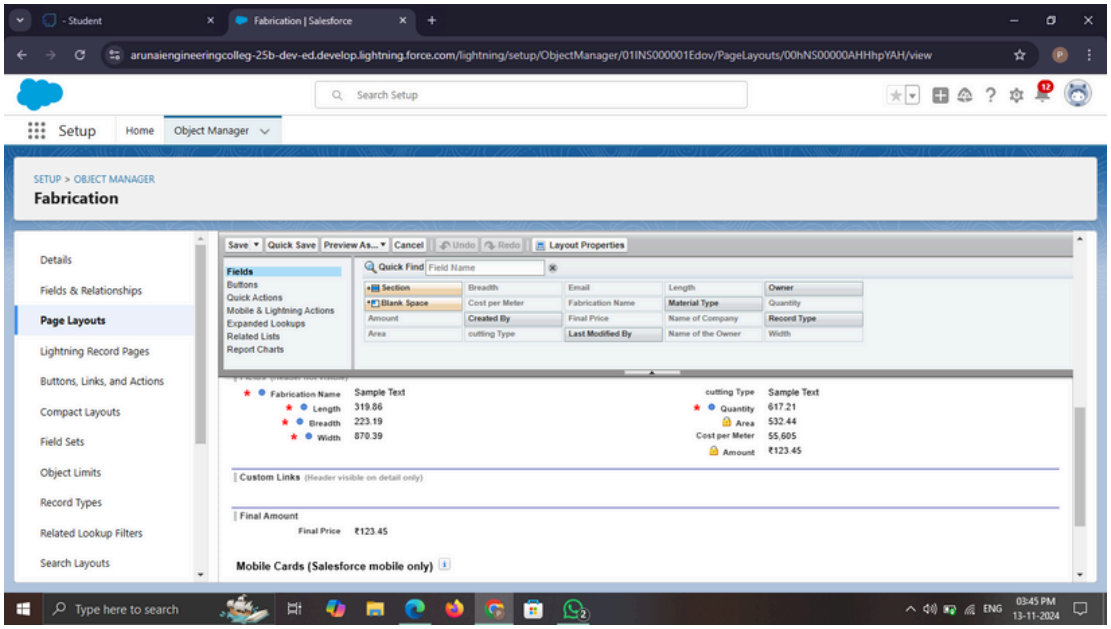
Activity 5: Creation of Page Layouts

Here we have created Four Page Layouts (For Drilling, For Welding, For Cutting, For Folding)
Steps for creating pagelayout for fabrication object is shown as below for sample:



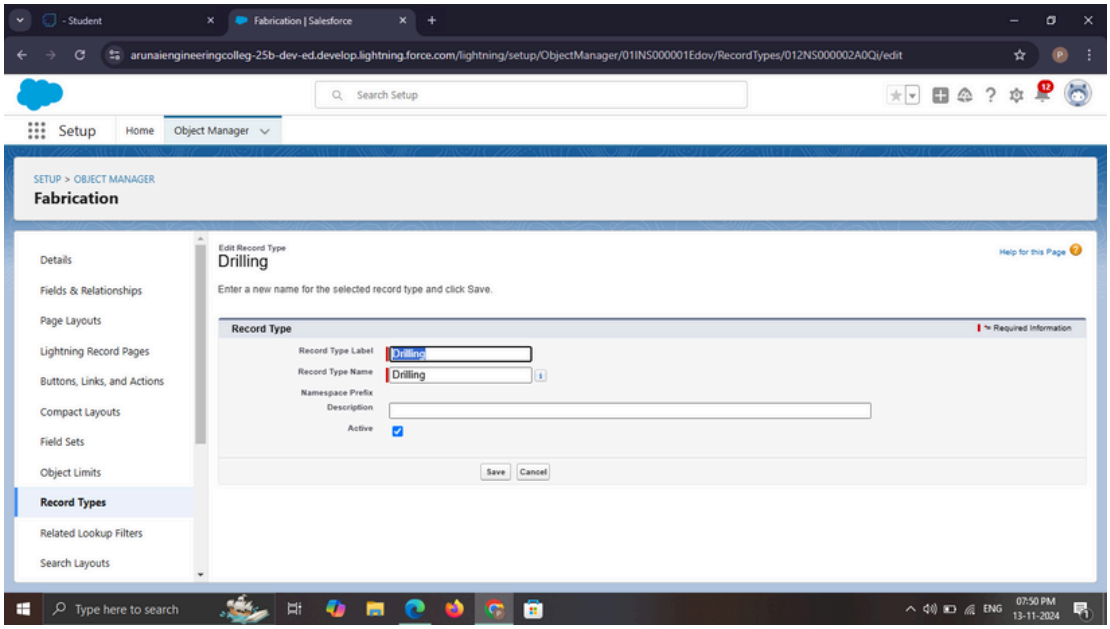
We Created Page layouts for other fields are created similarly

Drag the necessary fields in the given section



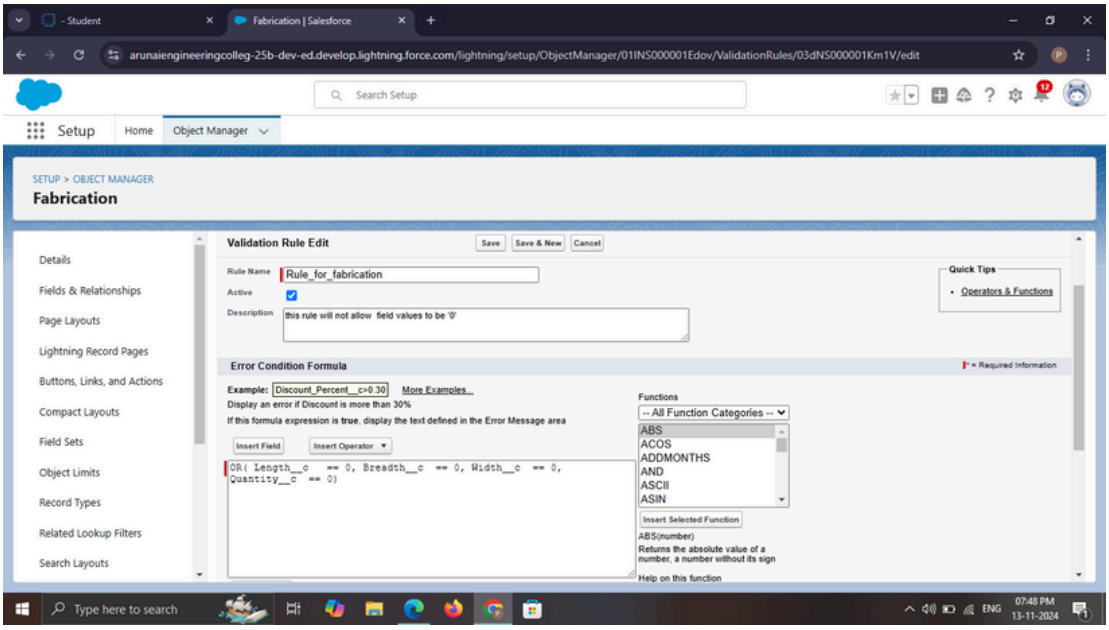
Activity 6: Creation of Record Types

We have created the record types for each page layout.



Activity 7: Validation Rule

Create the Validation Rule for each objects for length, breadth, area, amount, etc.,



Activity 8: Email templates

The Email template includes the following steps:

- Upload Logo into Salesforce

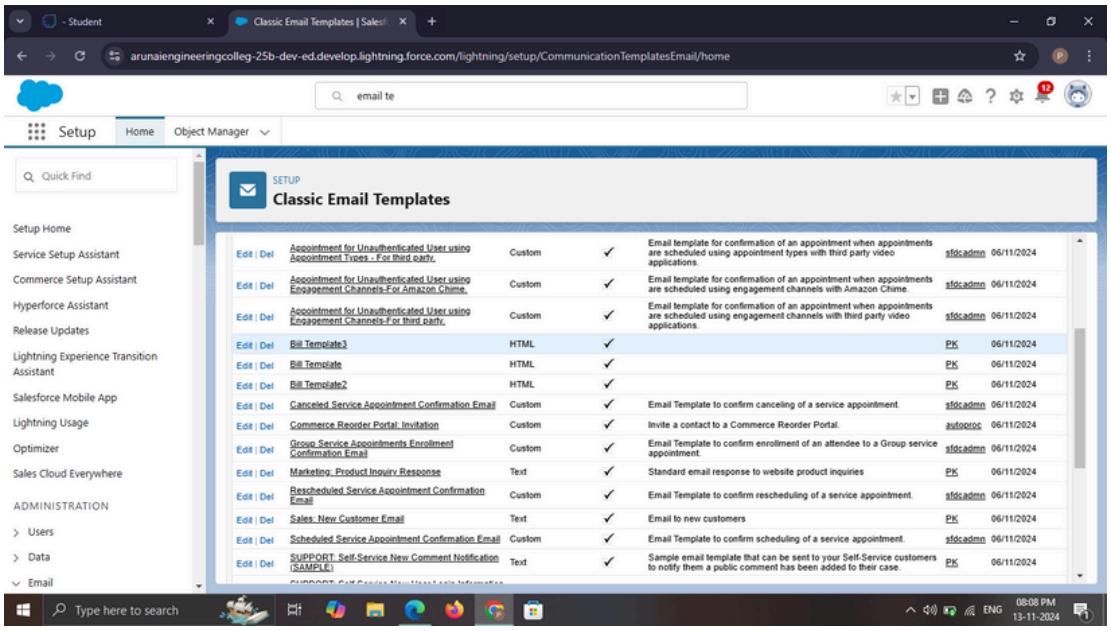
  Here we can upload our application Logo to Salesforce.

- Creation of Letterhead for Email Purpose
- Create Email Template

  Here we created the Template for our email. (here “Bill Template)

  It includes the email body, header and footer.

- Create Email alerts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Release Updates
Lightning Experience Transition Assistant
Salesforce Mobile App
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Edit | Del Bill Template HTML ✓ PK 06/11/2024
Edit | Del Bill Template2 HTML ✓ PK 06/11/2024
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Edit | Del Commerce Reorder Portal: Invitation Custom ✓ Invite a contact to a Commerce Reorder Portal. autoproc 06/11/2024
Edit | Del Group Service Appointments Enrollment Confirmation Email Custom ✓ Email Template to confirm enrollment of an attendee to a Group service appointment. sfdcadmn 06/11/2024
Edit | Del Marketing: Product Inquiry Response Text ✓ Standard email response to website product inquiries PK 06/11/2024
Edit | Del Rescheduled Service Appointment Confirmation Email Custom ✓ Email Template to confirm rescheduling of a service appointment. sfdcadmn 06/11/2024
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Edit | Del Scheduled Service Appointment Confirmation Email Custom ✓ Email Template to confirm scheduling of a service appointment. sfdcadmn 06/11/2024
Edit | Del SUPPORT: Self-Service New Comment Notification (SAMPLE) Text ✓ Sample email template that can be sent to your Self-Service customers to notify them a public comment has been added to their case. PK 06/11/2024
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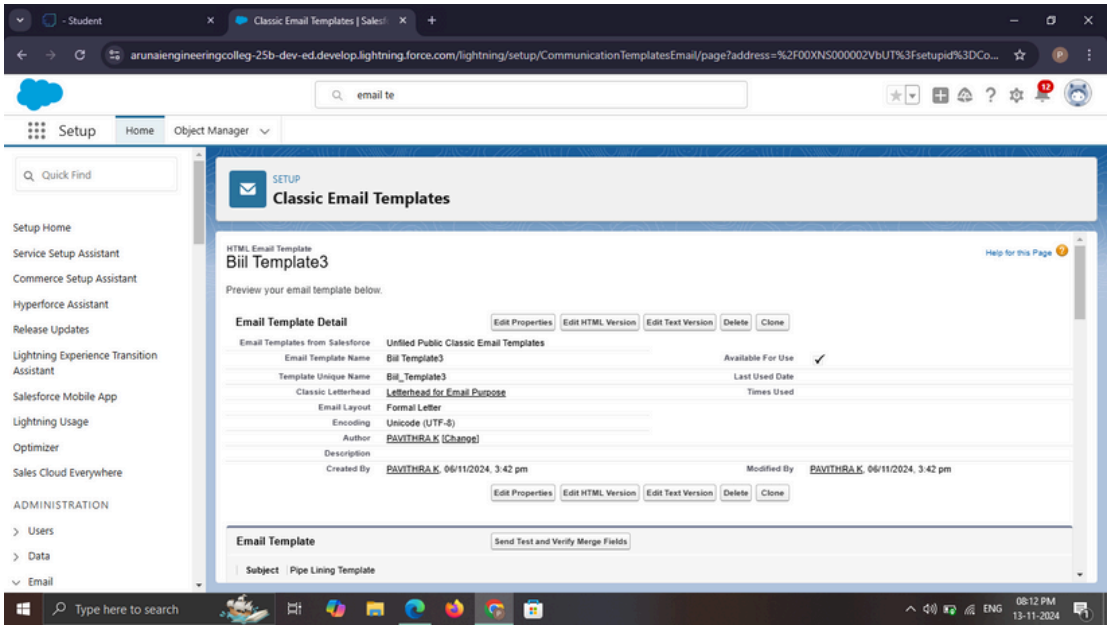
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Optimizer
Sales Cloud Everywhere
ADMINISTRATION
Users
Data
Email
SETUP
Classic Email Templates
HTML Email Template
Bill Template3
Help for this Page
Preview your email template below.
Email Template Detail
Edit Properties
Edit HTML Version
Edit Text Version
Delete
Clone
Email Templates from Salesforce Unfiled Public Classic Email Templates
Email Template Name Bill Template3
Available For Use ✓
Template Unique Name Bill_Template3
Last Used Date
Classic Letterhead Letterhead for Email Purpose
Times Used
Email Layout Formal Letter
Encoding Unicode (UTF-8)
Author PAVITHRA K [Change]
Description
Created By PAVITHRA K, 06/11/2024, 3:42 pm
Modified By PAVITHRA K, 06/11/2024, 3:42 pm
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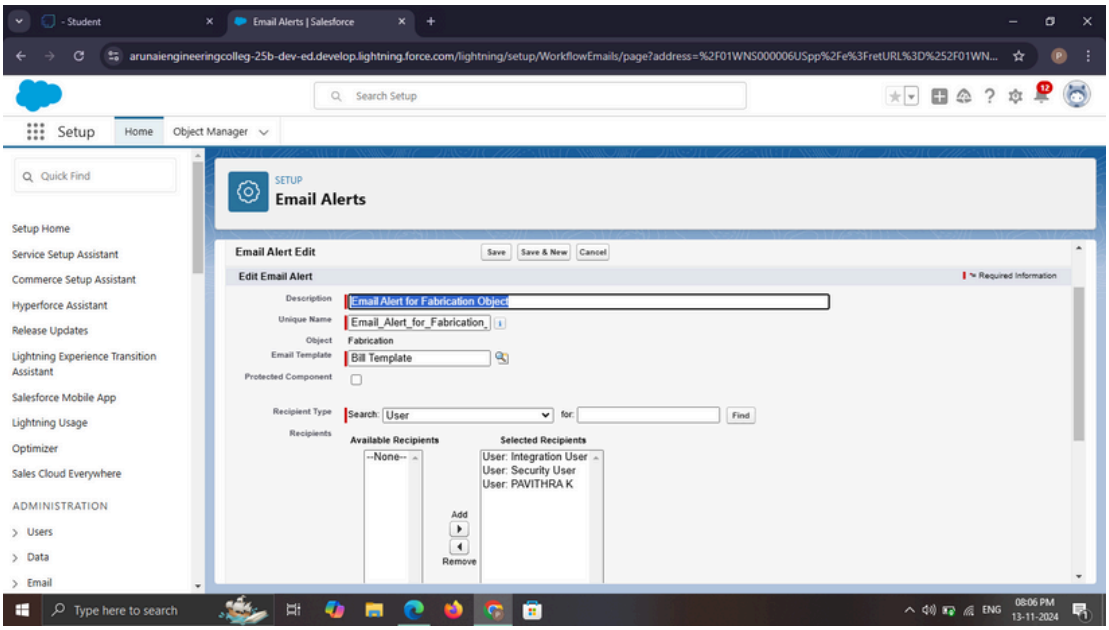
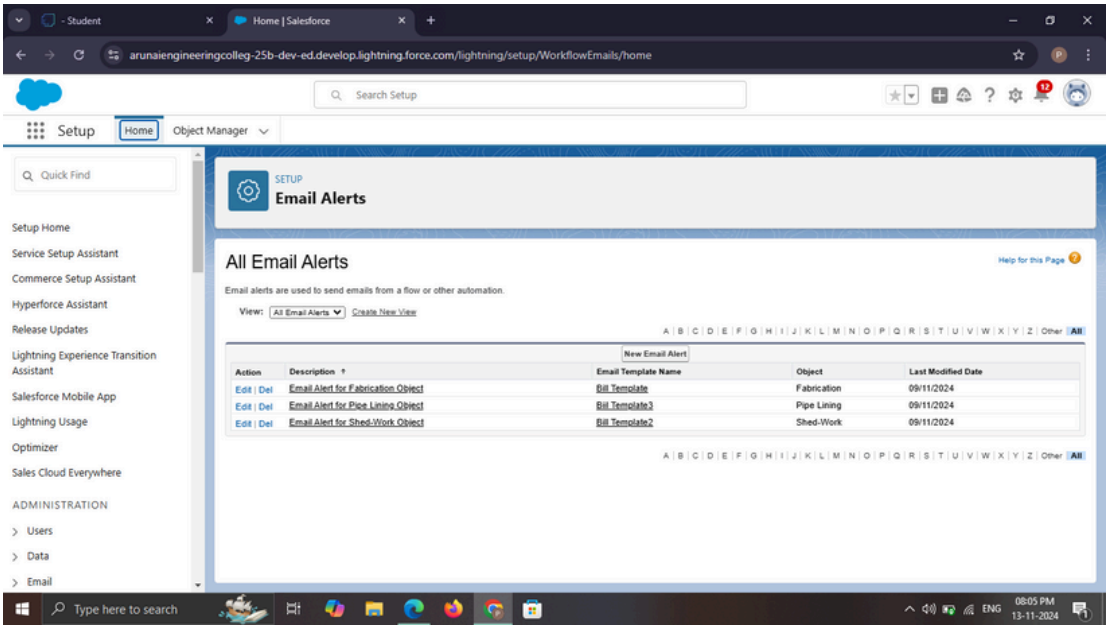


Similarly we created Email Alerts for all the objects.



Activity 9: Flows

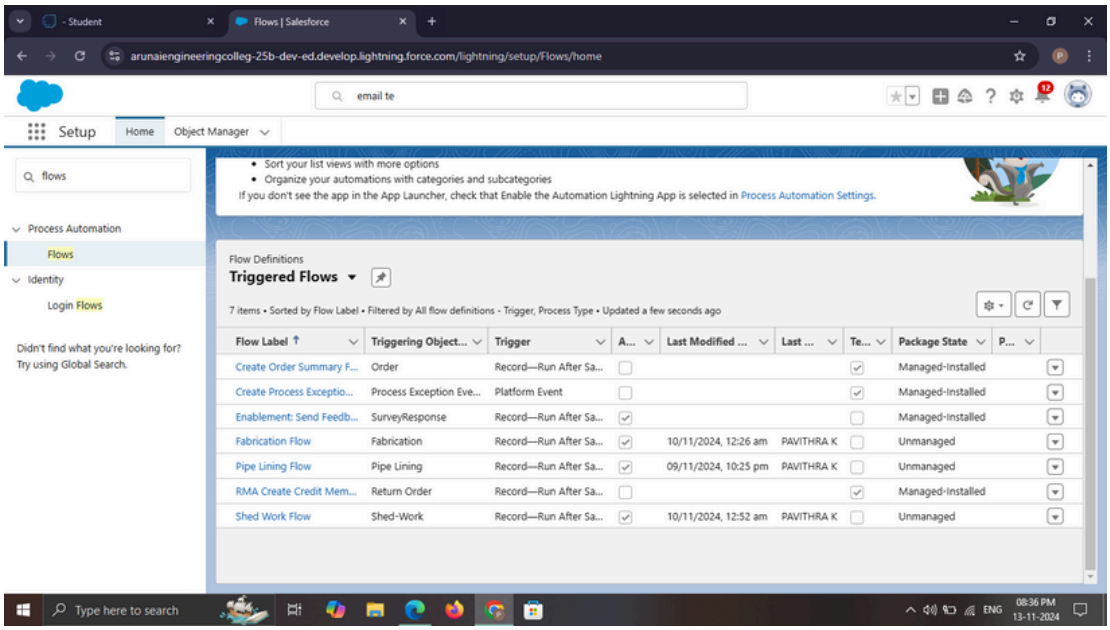
- To create flows for final price on each object

(Fabrication, Shed-Work, Pipe-Lining)

- Create Record-Triggered Flows for each object.
- Add Action(Email Alert of that object)
- Add Decision Elements (Create Outcomes for Metal, Iron, Wood, Aluminum, etc.,
- Add Update Record Elements and other necessary element to the flow.
- Run the Flow after creating the necessary elements in the flow.
- Finally save the flow with a unique API_name .
- Note: All the flow elements in each flow should have unique API_name . This will help us not to confuse over the flow elements.

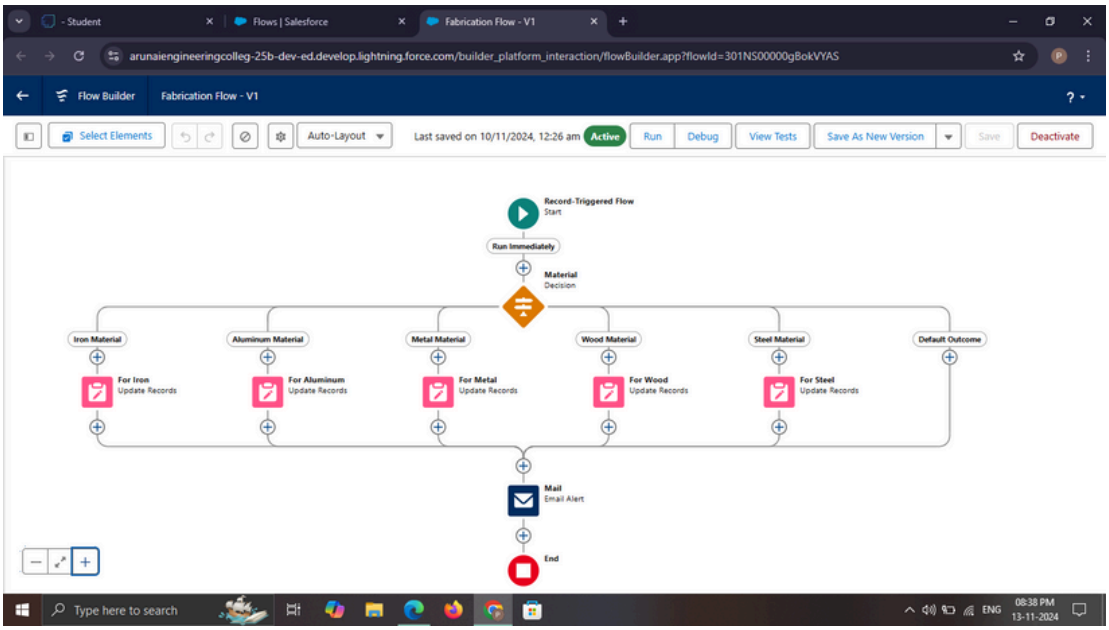
Sample images inserted to view the flow creation process.

List of Flows created for Fabrication,
Shed-Work, Pipe-Lining Objects.

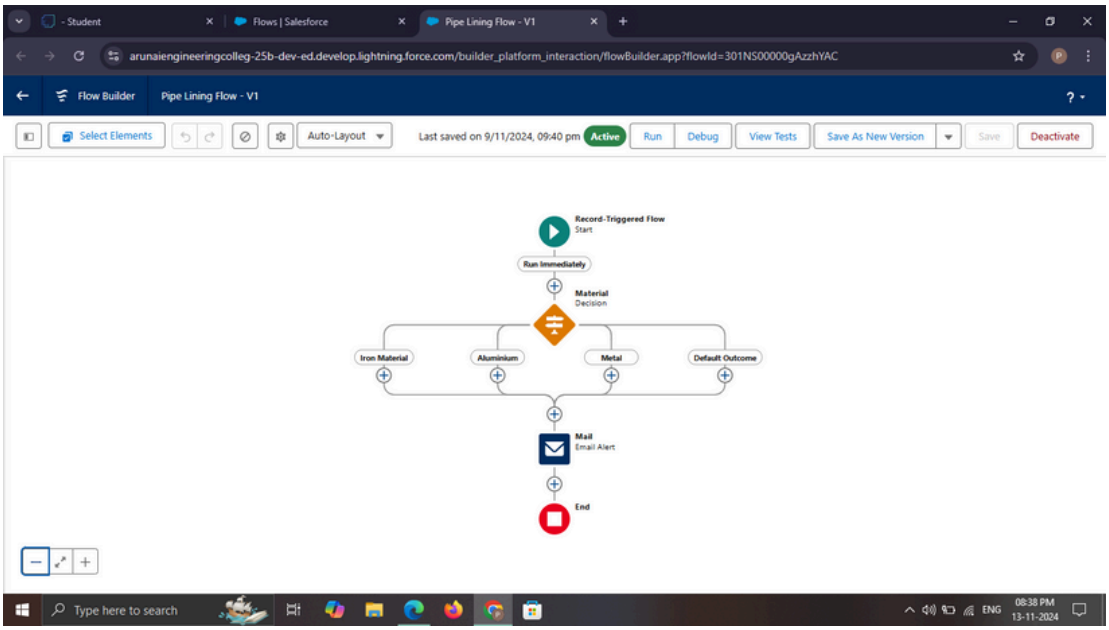


Flow Name Should be unique

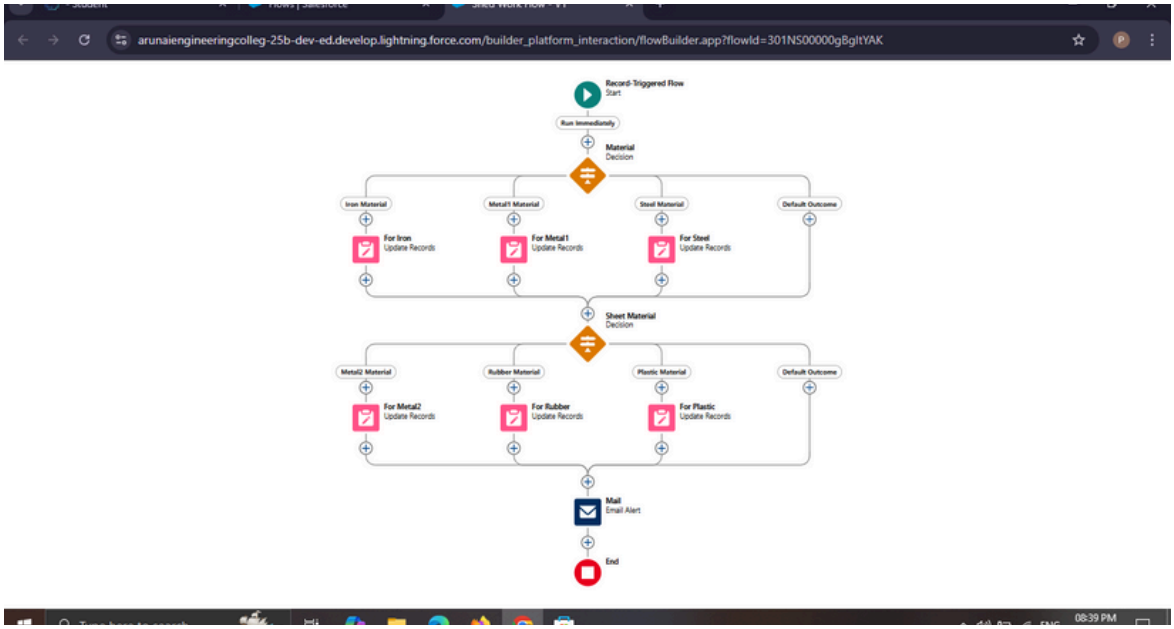
Flow of Fabrication Object:



Flow of Shed-Work Object:

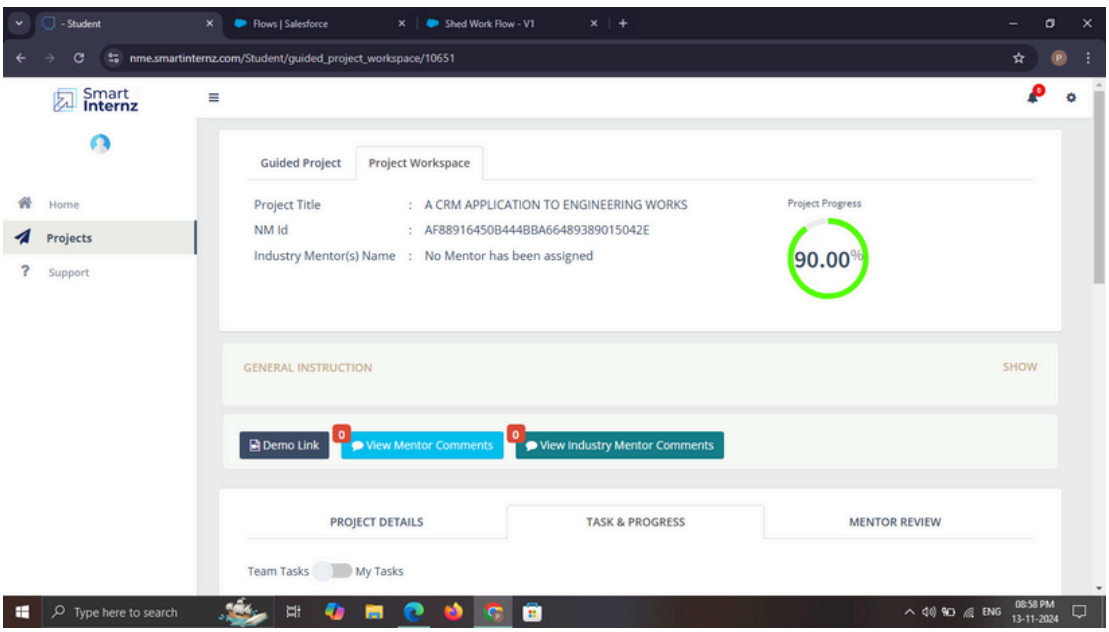


Flow of Pipe-Lining Object:



For Pipe-Lining Object ,we have created two decision elements such as metal1 and metal 2.

Thus creation of flows is done and once done we should run the flow to check whether the flow is working according to project flow.

Conclusion:

This Engineering Works Project automates the calculation of area whenever a record is created or updated, utilizing parameters such as length, breadth, and width, as well as quantity and cost per meter. The final amount is then determined based on the area and material type.