

A CRM APPLICATION TO ENGINEERING WORKS

-Sales force

Hardware Required:

Windows 8 machine

Software Required:

Install with two web browser

System Required:

Bandwidth of 30mbps

An application is required to efficiently manage client information for engineering projects, encompassing details such as company information, owner details, contact information, worker details, and their respective requirements for materials, including measurements. Additionally, the application should automatically calculate the price based on the specified materials and measurements. The available works in Engineering Works comprise Fabrication, Shed Construction, and Pipe Lining. Within the Fabrication work, various processes are involved, namely Drilling, Welding, Cutting, and Folding. Similarly, the shed-work involves the construction of the sheds, and Pipe Lining involves pipe repairing and replacing. These processes are integral to the fabrication workflow and need to be accurately tracked and managed within the application.

Submitted by

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1. CREATE OBJECT:

Create Fabrication Object:

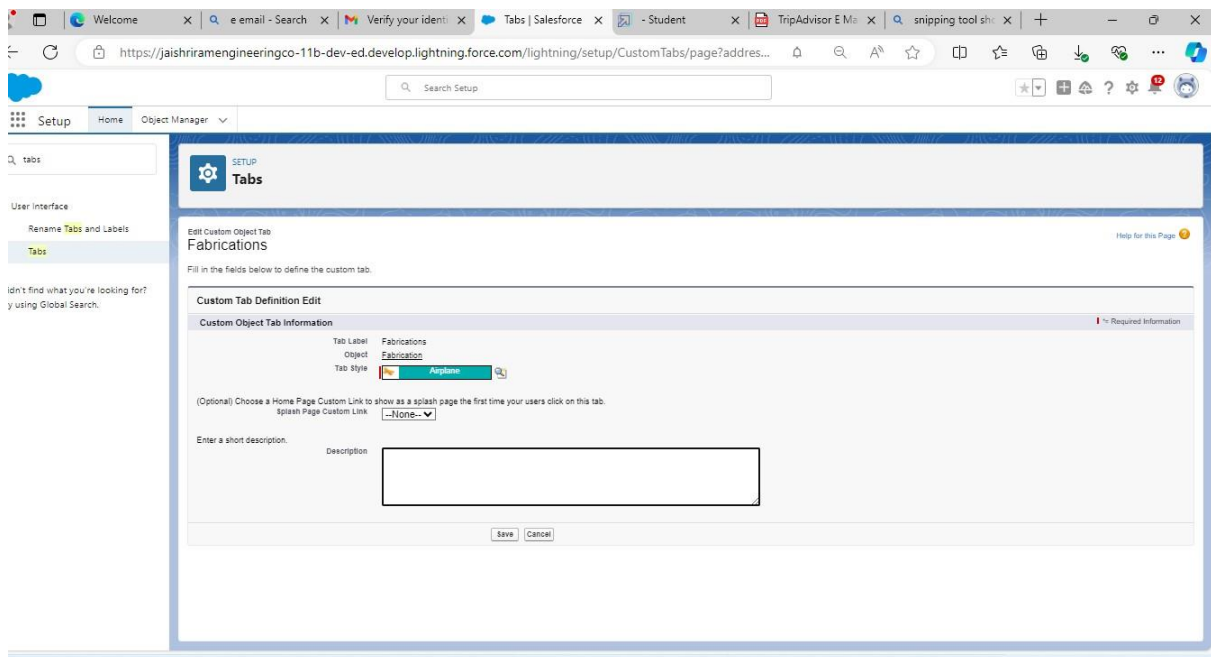
The screenshot shows the Salesforce Object Manager interface for creating a custom object named 'Fabrication'. The left sidebar contains a navigation menu with options like 'Details', 'Fields & Relationships', 'Page Layouts', etc. The main content area is titled 'Fabrication' and contains the 'Custom Object Definition Edit' form. The form has several sections: 'Custom Object Information' with fields for Label ('Fabrication'), Plural Label ('Fabrications'), Object Name ('Fabrication'), and Description; 'Enter Record Name Label and Format' with a Record Name field ('Fabrication Name') and a Data Type dropdown set to 'Text'; and 'Optional Features' with checkboxes for 'Allow Reports', 'Allow Activities', 'Track Field History', 'Allow in Chatter Groups', and 'Enable Licensing'. The 'Object Classification' section has checkboxes for 'Allow Sharing', 'Allow Bulk API Access', and 'Allow Streaming API Access'. The 'Deployment Status' section has radio buttons for 'In Development' and 'Deployed'. The 'Search Status' section has a checkbox for 'Allow Search'. The bottom of the form has 'Save', 'Save & New', and 'Cancel' buttons.

This screenshot shows the same 'Fabrication' setup page, but with the 'Optional Features' and 'Object Classification' sections expanded. The 'Optional Features' section includes checkboxes for 'Allow Reports', 'Allow Activities', 'Track Field History', 'Allow in Chatter Groups', and 'Enable Licensing'. The 'Object Classification' section includes checkboxes for 'Allow Sharing', 'Allow Bulk API Access', and 'Allow Streaming API Access'. The 'Deployment Status' section has radio buttons for 'In Development' and 'Deployed'. The 'Search Status' section has a checkbox for 'Allow Search'. The bottom of the form has 'Save', 'Save & New', and 'Cancel' buttons.

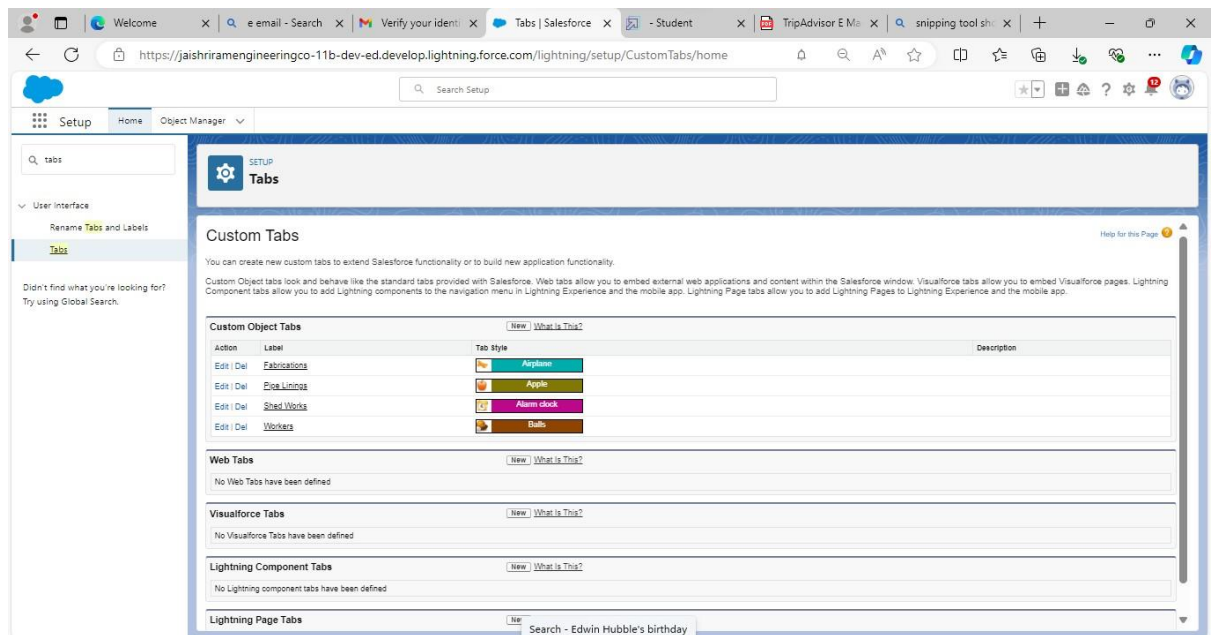
Similarly create object for Shed-Work Object, Pipe Lining Object, Worker Object

2. Tabs:

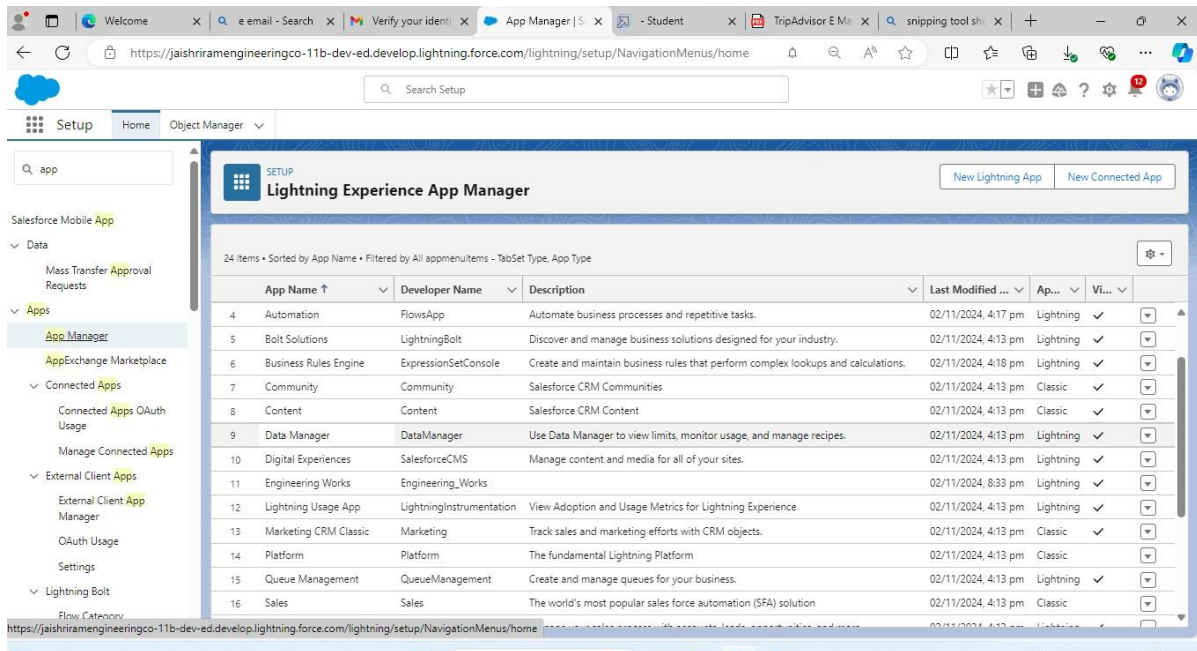
Creating a Custom Tab



Similarly create the Tabs for the remaining Objects, they are “Shed-Work, Pipe lining, Worker”.



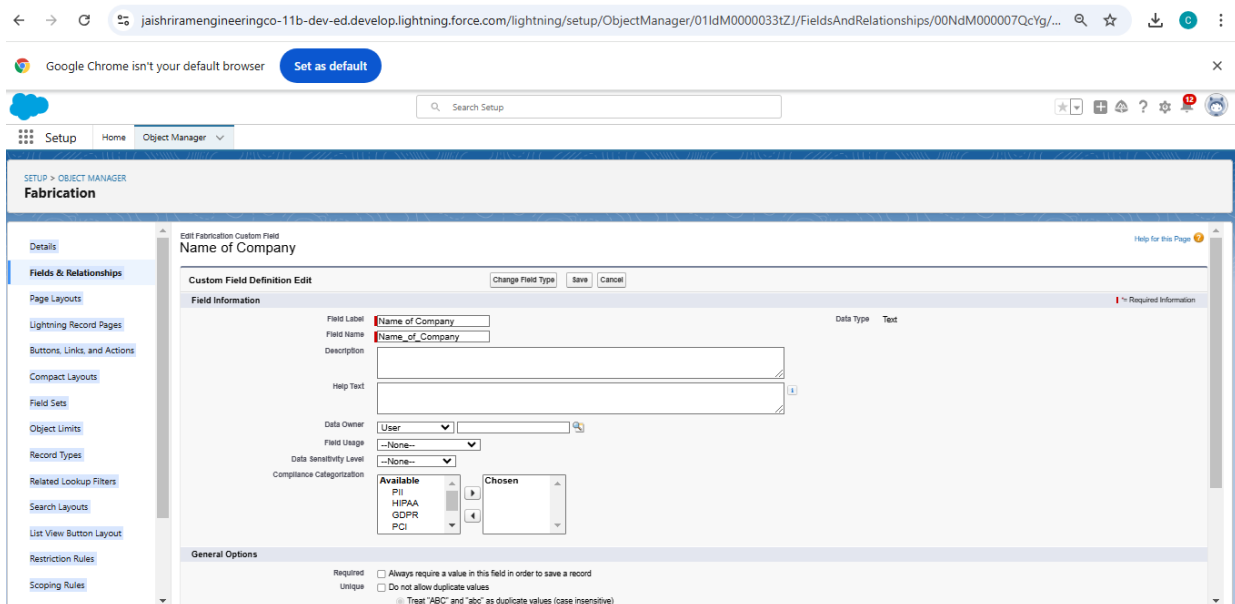
3. The Lightning App



4. Fields

Creation of fields for the Fabrication object

Name of company, Name of owner, length, breadth, width, area, cost per meter, amount, material type, final price, email.



jaishriramengineeringco-11b-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01dM0000033tZJ/FieldsAndRelationships/00NdM000007QeaT/...

Google Chrome isn't your default browser [Set as default](#)

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
Fabrication

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
List View Button Layout
Restriction Rules
Scoping Rules

Edit Fabrication Custom Field
Width

Custom Field Definition Edit [Change Field Type](#) [Save](#) [Cancel](#)

Field Information

Field Label **Width**
Field Name **Width**
Description
Help Text
Data Owner **User**
Field Usage **--None--**
Data Sensitivity Level **--None--**
Compliance Categorization

Available
PII
HIPAA
GDPR
PCI

Chosen

General Options

Required ☒ Always require a value in this field in order to save a record
Unique ☐ Do not allow duplicate values
External ID ☐ Set this field as the unique record identifier from an external system

jaishriramengineeringco-11b-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01dM0000033tZJ/FieldsAndRelationships/00NdM000007Qedh/...

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SETUP > OBJECT MANAGER
Fabrication

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Page Layouts
Lightning Record Pages
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List View Button Layout
Restriction Rules
Scoping Rules

Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.
Example: $Fahrenheit = 1.8 * Celsius_c + 32$ [More Examples...](#)

Simple Formula | Advanced Formula

Area (Number) = **Length_c** * **Breadth_c** * **Width_c**

Check Syntax

Insert Field

Insert Operator

Functions
-- All Function Categories --
ABS
ACOS
ADDMONTHS
AND
ASCII
ASIN
[Insert Selected Function](#)

jaishriramengineeringco-11b-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01dM0000033tZJ/FieldsAndRelationships/00NdM000007Qell/e/...

Google Chrome isn't your default browser [Set as default](#)

Search Setup

Setup Home Object Manager

SETUP > OBJECT MANAGER
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Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules

Edit Fabrication Custom Field
Cost per Meter

Custom Field Definition Edit [Change Field Type](#) [Save](#) [Cancel](#)

Field Information

Field Label **Cost per Meter**
Field Name **Cost_per_Meter**
Description
Help Text
Data Owner **User**
Field Usage **--None--**
Data Sensitivity Level **--None--**
Compliance Categorization

Available
PII
HIPAA
GDPR
PCI

Chosen

General Options

Required ☐ Always require a value in this field in order to save a record
Unique ☐ Do not allow duplicate values
External ID ☐ Set this field as the unique record identifier from an external system

jaishriramengineeringco-11b-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01IdM0000033tZJ/FieldsAndRelationships/00NdM000007QeRC...

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Setup Home Object Manager

SETUP > OBJECT MANAGER
Fabrication

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

List View Button Layout

Restriction Rules

Scoping Rules

Help for this Page

Custom Field Definition Edit

Field Information

Field Label: Quantity

Field Name: Quantity

Description:

Help Text:

Data Owner: User

Field Usage: --None--

Data Sensitivity Level: --None--

Compliance Categorization:

Available: PII, HIPAA, GDPR, PCI

Chosen:

Data Type: Number

General Options

Required: ☒ Always require a value in this field in order to save a record

Unique: ☐ Do not allow duplicate values

External ID: ☐ Set this field as the unique record identifier from an external system

jaishriramengineeringco-11b-dev-ed.develop.lightning.force.com/lightning/setup/ObjectManager/01IdM0000033tZJ/FieldsAndRelationships/00NdM000007Qf3V/...

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Setup Home Object Manager

SETUP > OBJECT MANAGER
Fabrication

Details

Fields & Relationships

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Buttons, Links, and Actions

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Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

Help for this Page

Custom Field Definition Edit

Field Information

Field Label: Amount

Field Name: Amount

Description:

Help Text:

Data Owner: User

Field Usage: --None--

Data Sensitivity Level: --None--

Compliance Categorization:

Available: PII, HIPAA, GDPR, PCI

Chosen:

Formula Options

Formula Return Type: Currency

Decimal Places: 2

Welcome to Salesforce: Verify y x Home | Salesforce x Fabrication | Salesforce x - Student x +

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Search Layouts

List View Button Layout

Restriction Rules

Scoping Rules

Help for this Page

Custom Field Definition Edit

Field Information

Field Label: Material Type

Field Name: Material_Type

Description:

Help Text:

Data Owner: User

Field Usage: --None--

Data Sensitivity Level: --None--

Compliance Categorization:

Available: PII, HIPAA, GDPR, PCI

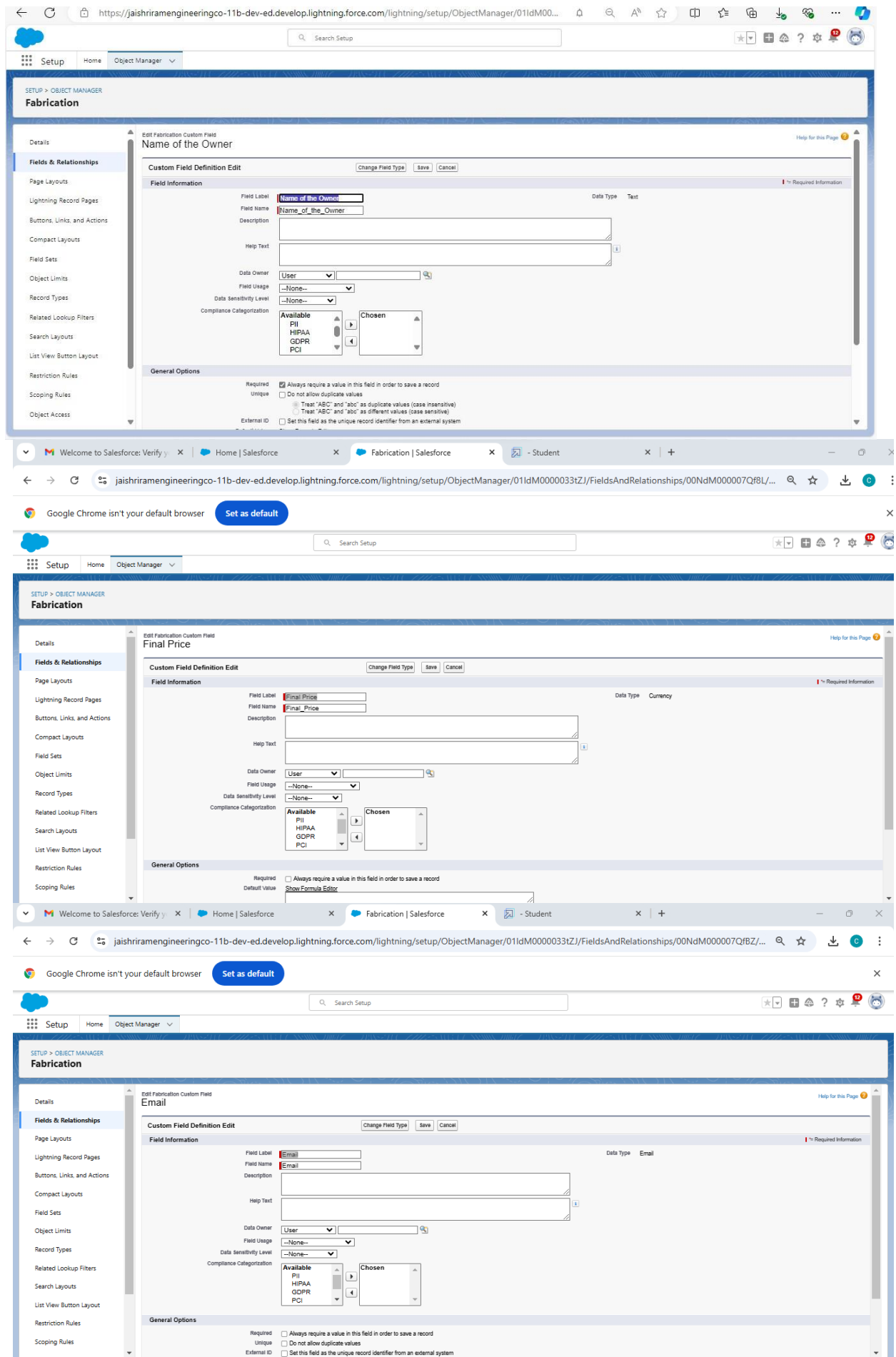
Chosen:

Data Type: Picklist

General Options

Required: ☐ Always require a value in this field in order to save a record

Default Value: [Show Formula Editor](#)



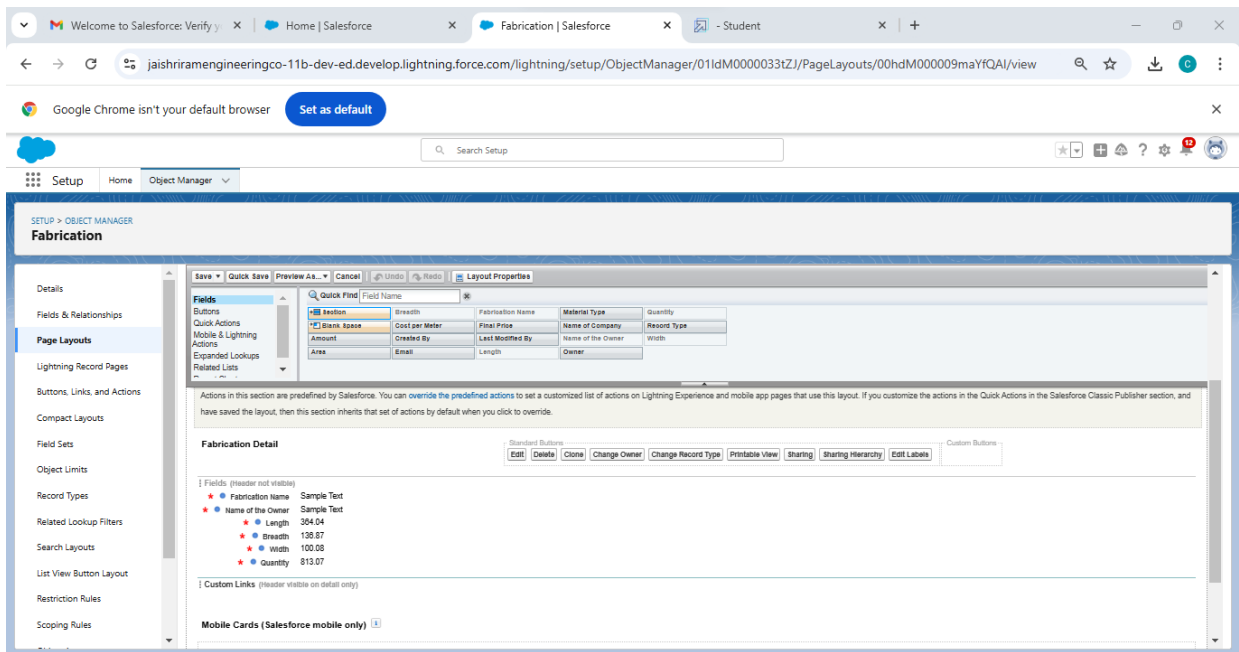
Similarly create fields for the Shed-Work object, fields for the Pipe Lining object, and fields for

the Worker object.

Creation of Lookup fields for Fabrication, Shed-Work, Pipe Lining.

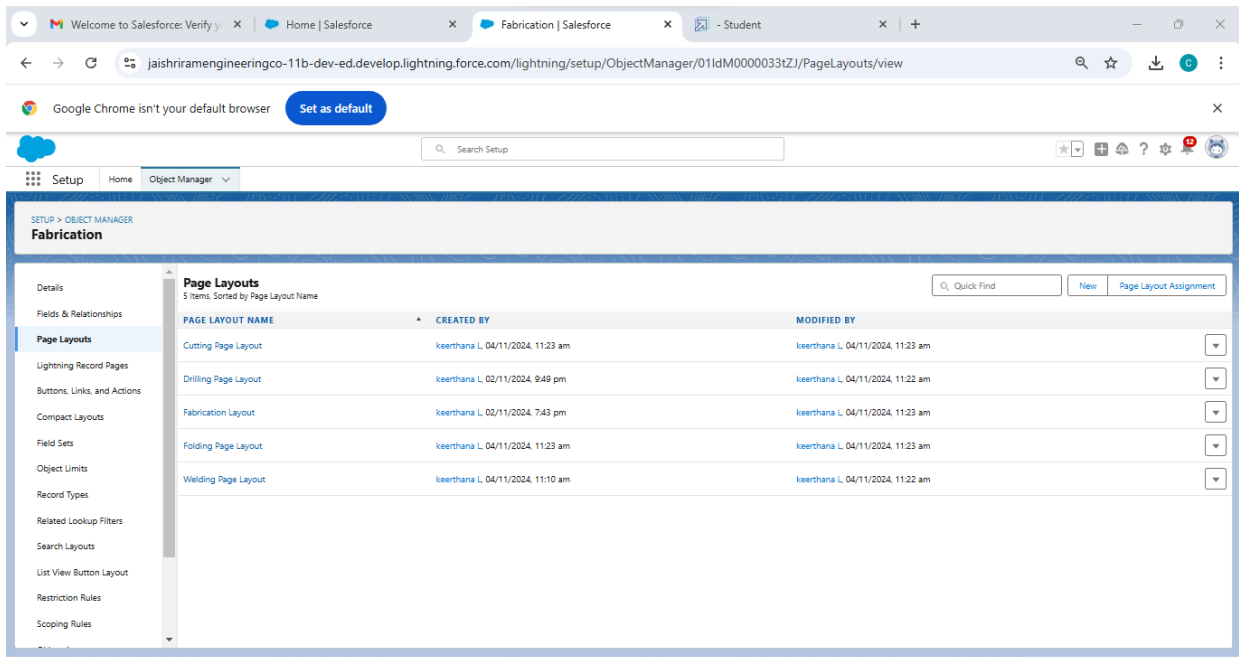
5. Creation of Page Layouts:

To create a Page Layout in Fabrication Object for Drilling



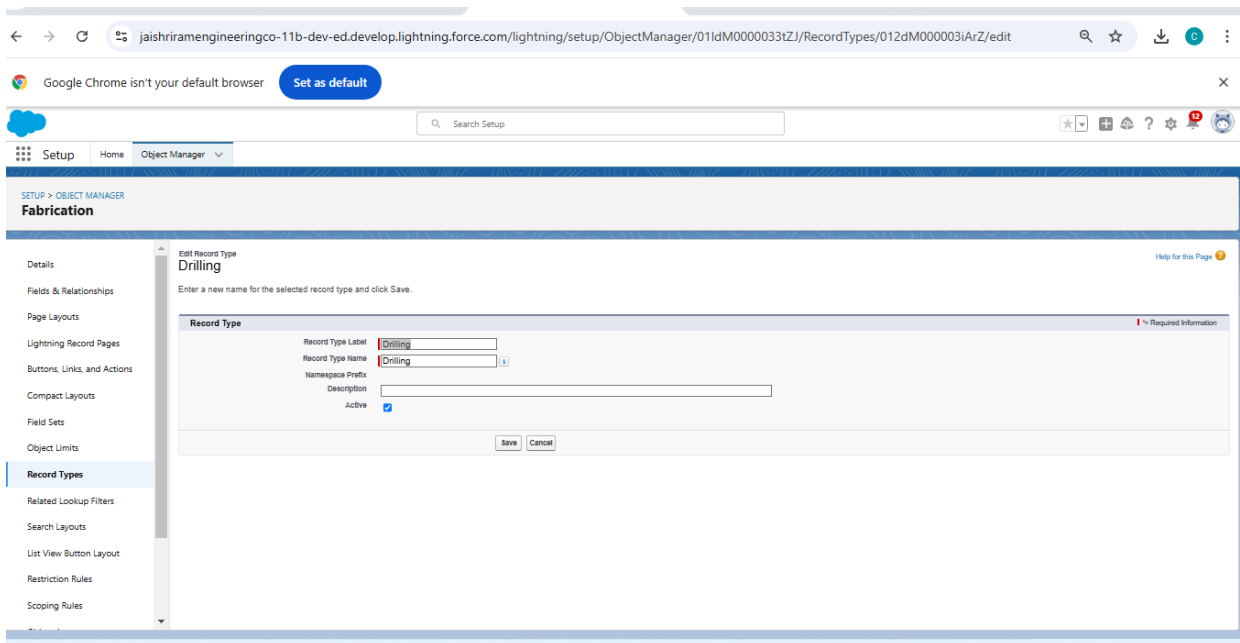
Similarly create page layout for create a Page Layout in Fabrication Object for Welding Page

Layout in Fabrication Object for Cutting Page Layout in Fabrication Object for Folding

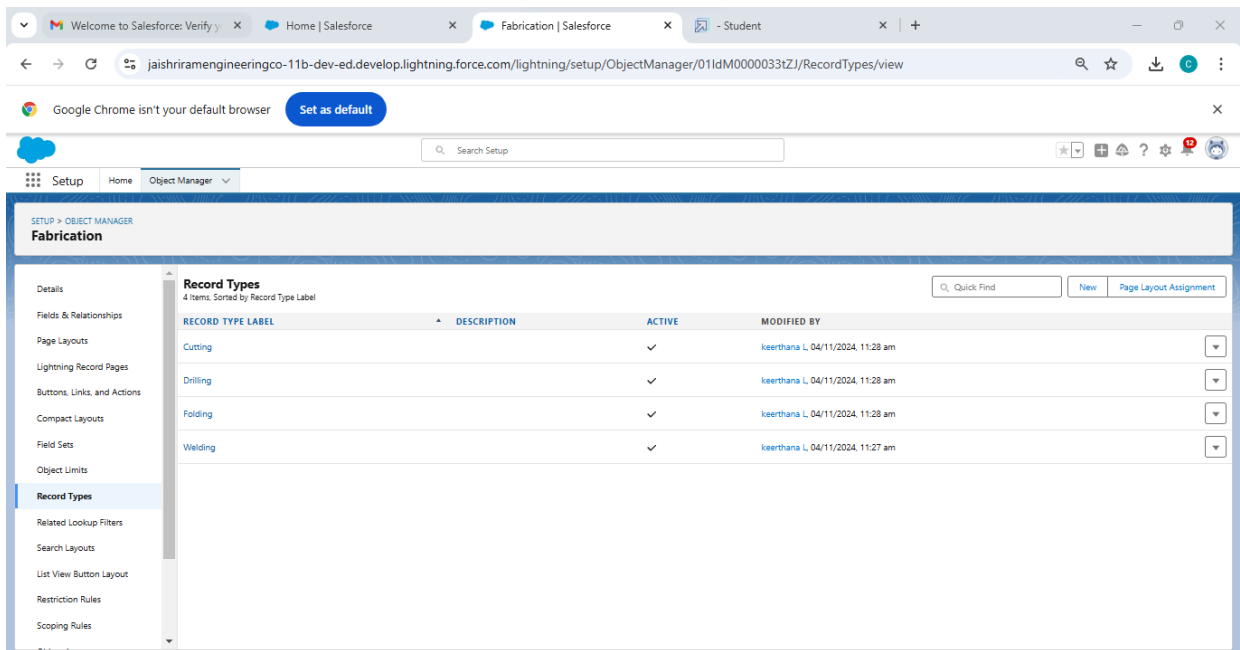


6. CREATION OF RECORD TYPES:

To create a Record Types in Fabrication Object

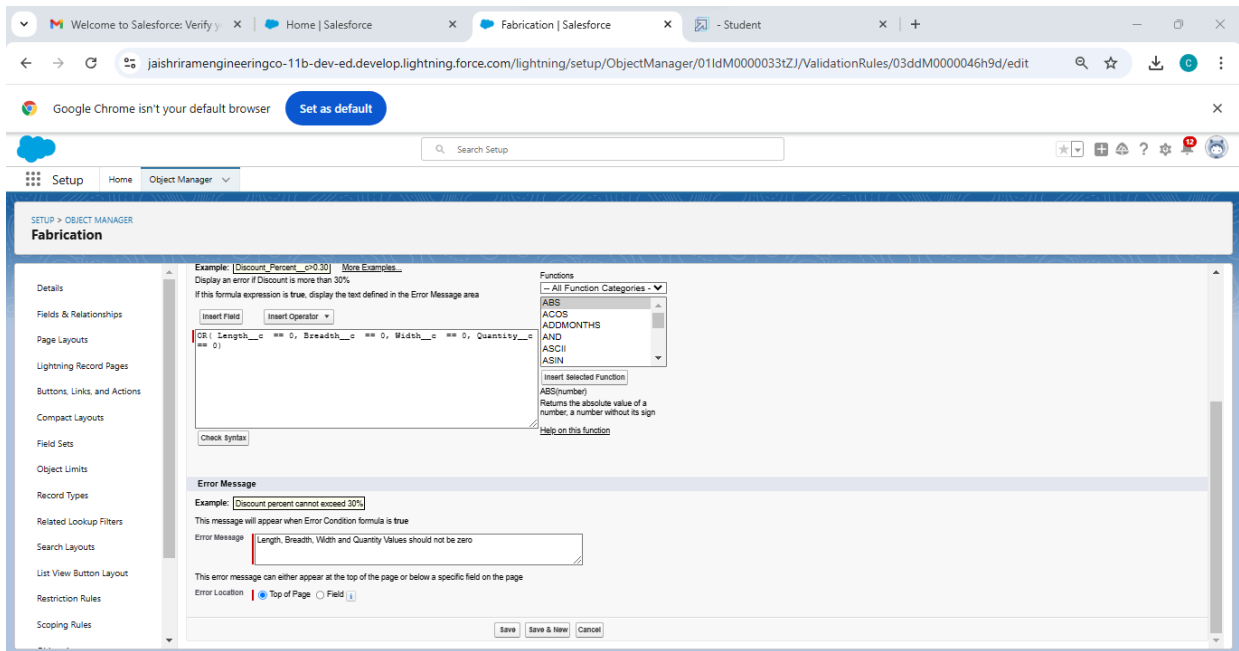


Similarly, Create the Record Types on Welding Page Layout, Cutting Page Layout and Folding Page Layout

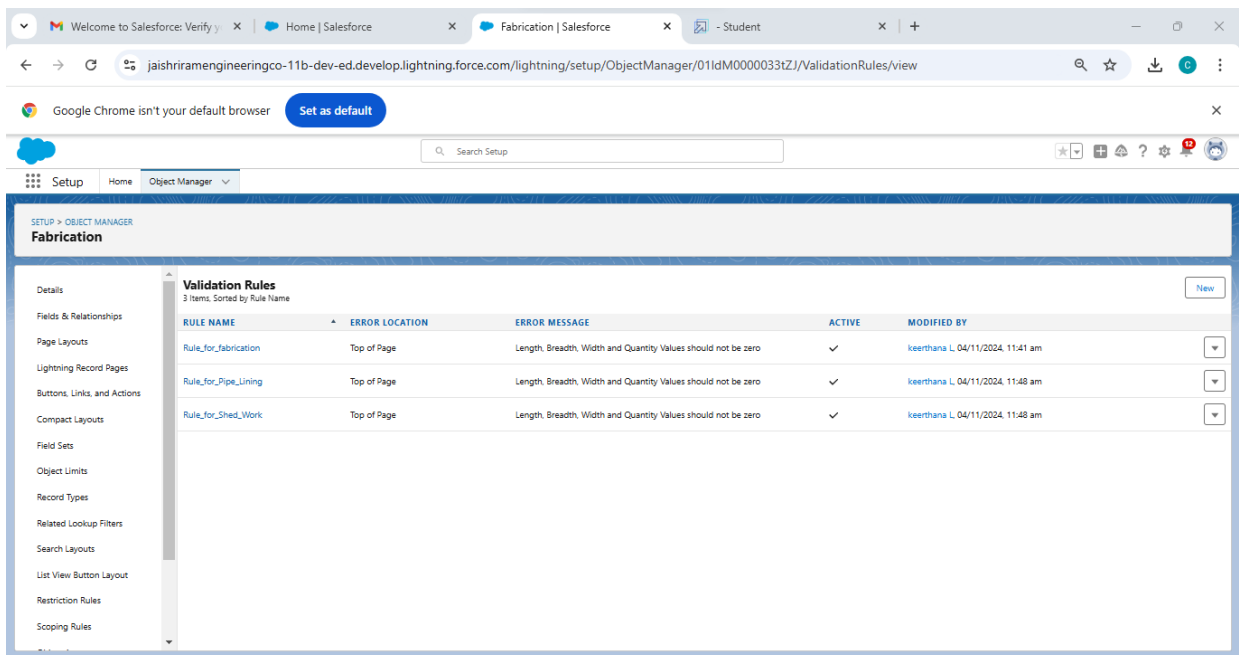


7. Validation rule

To create a validation rule to an Fabrication Object

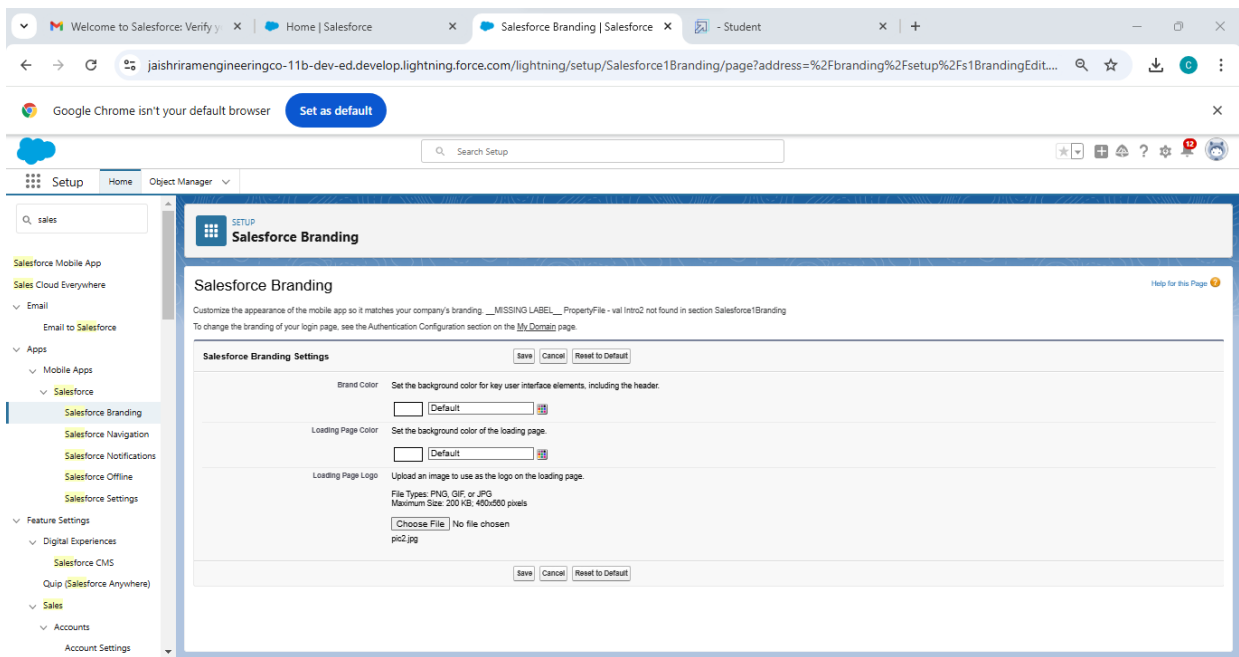


Create the Validation Rule for Shed-Work and Pipe Lining Object Similarly

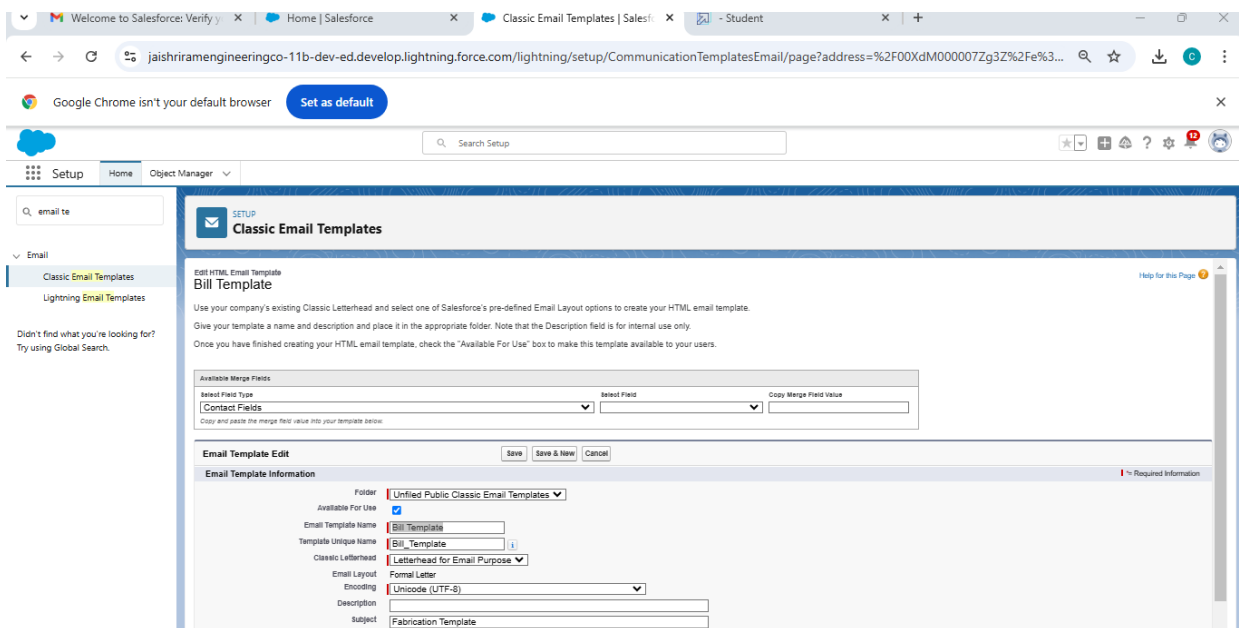


8. Email Templates

Upload Logo into Sales force

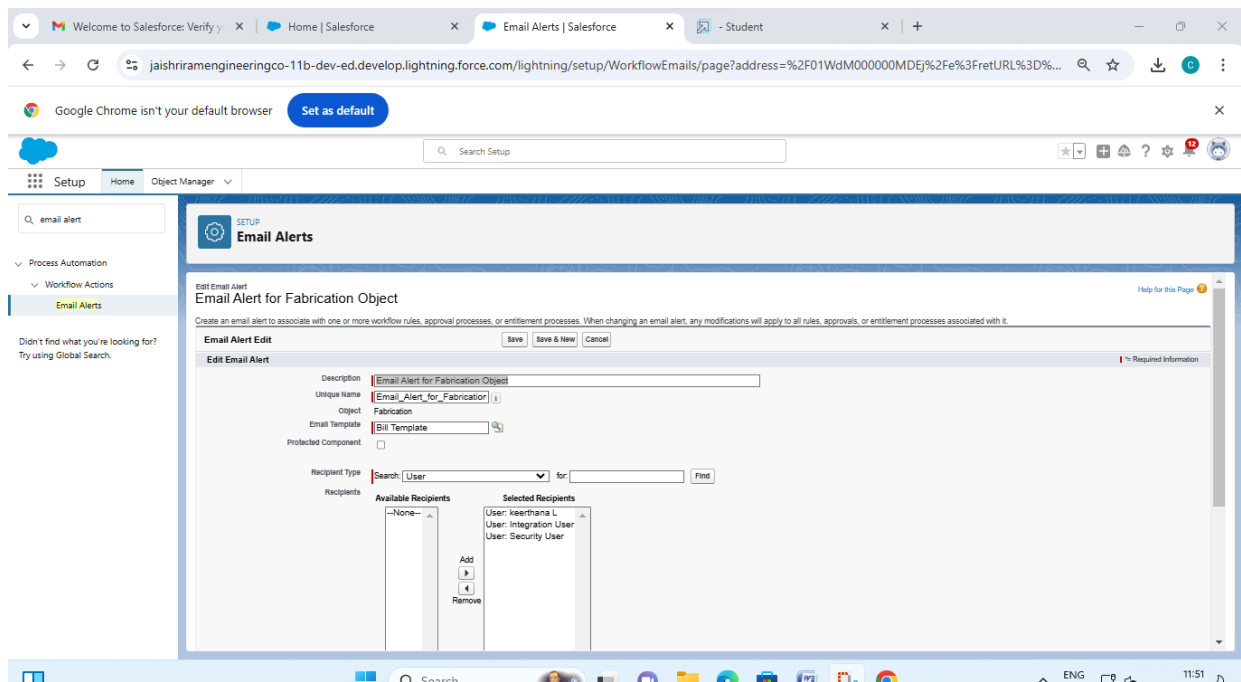


Creation of Letter head for Email purpose.

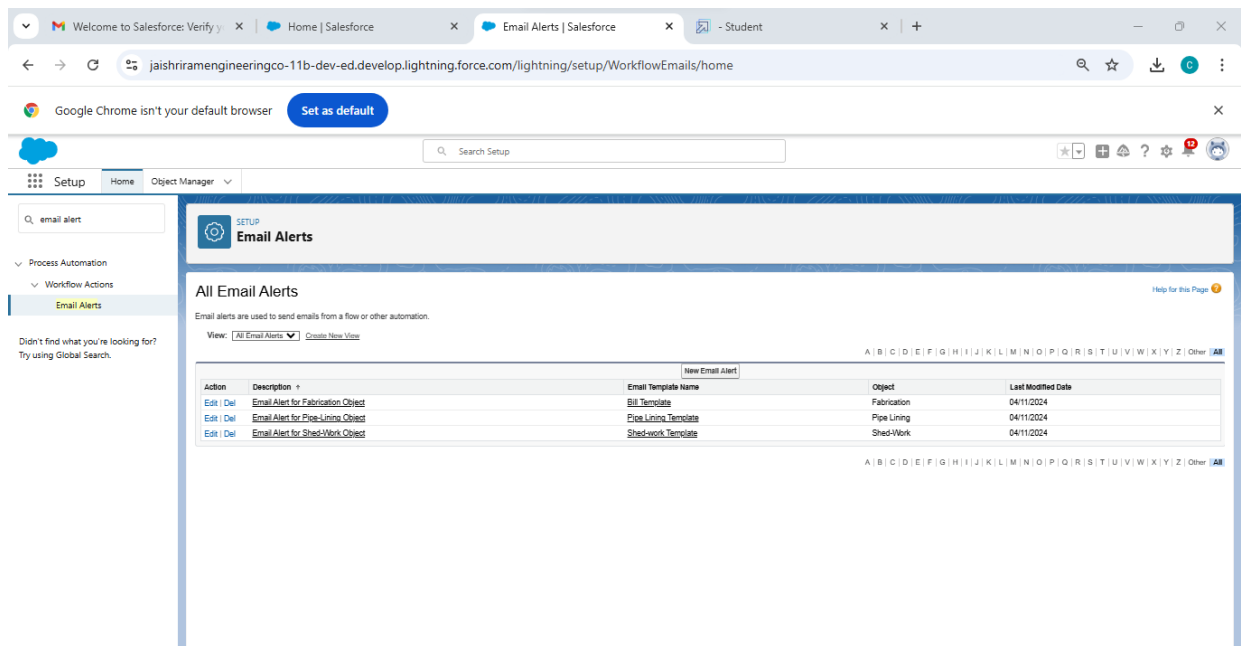


Similarly Create an Email Template for Shed-work Object and Pipe Lining Object.

Email alert:

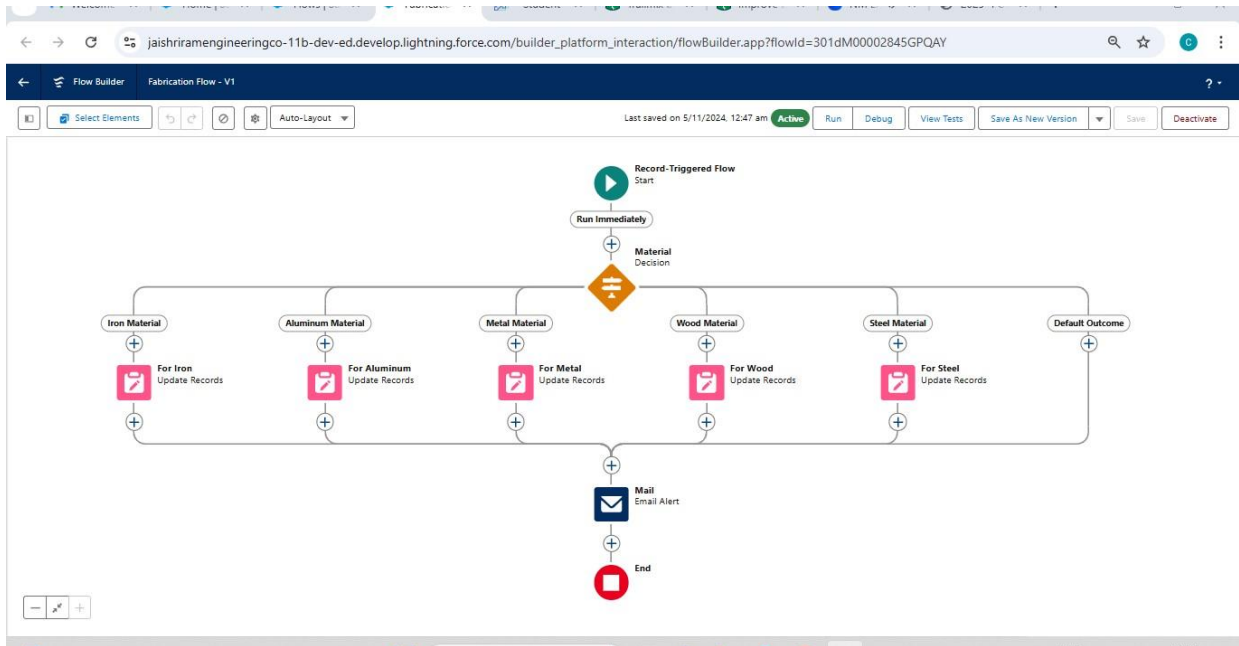


Similarly create for Pipe-Lining and Shed-Work objects

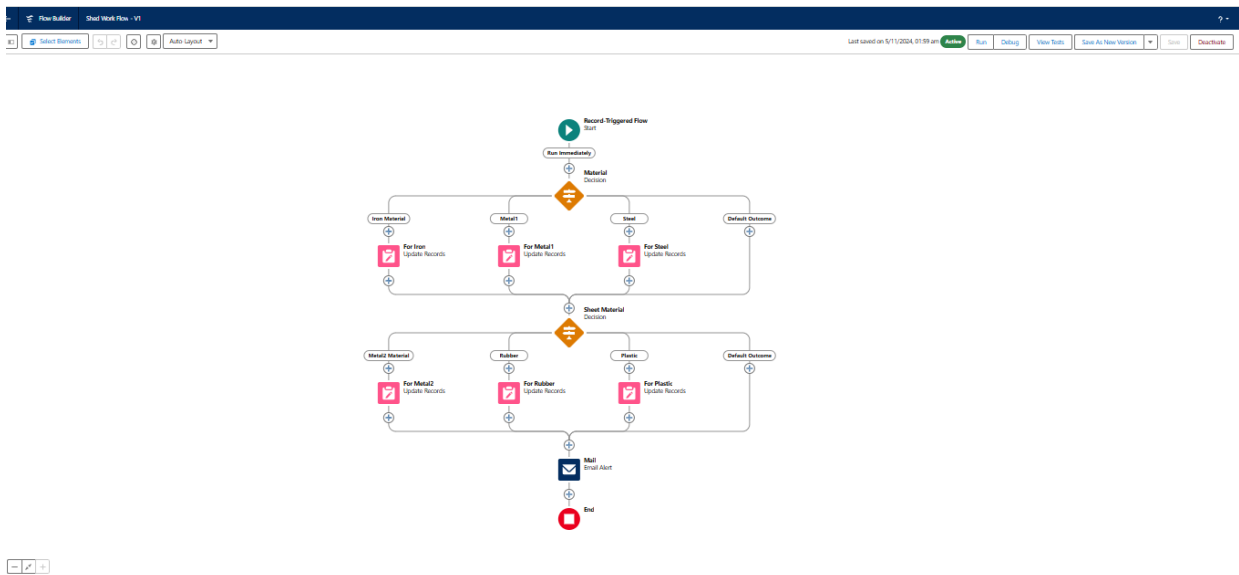


9. FLOWS:

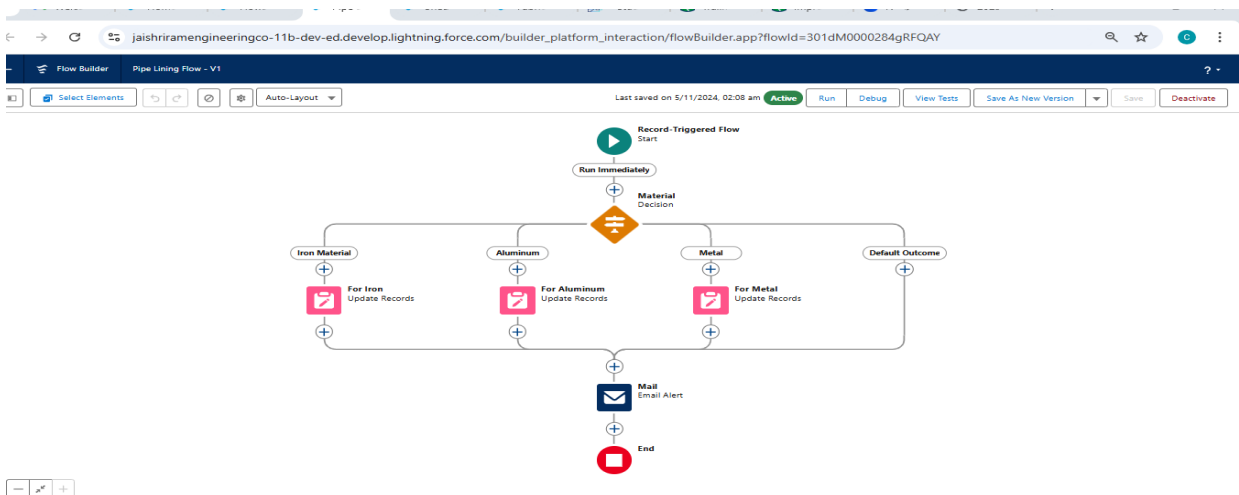
Create Flow to calculate Final Price on Fabrication Object based on Material Type



Create Flow to calculate Final Price on Shed Work Object based on Material Type



Create Flow to calculate Final Price on Pipe Lining Object based on Material Type



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.