

Field Service Work Order Optimization

Project Name- Field Service Work Order Optimization MANAGEMENT

Name of the Students	Role	Email id
PUJARI VANAJA	TEAM LEADER	Vanajapujari5@gmail.com
KALYANKAR REKHA BAI	MEMBER	Kr637918@gmail.com
PENABADI HARATHI	MEMBER	Pharathi879@gmail.com

Field Service Work Order Optimization

INTRODUCTION:

The Field Service Work Order Optimization System streamlines operations for a company providing installations and repairs. Utilizing a robust database, the system efficiently matches work orders with skilled technicians based on technician's location, availability, and skills. The system employs a prioritization algorithm, focusing on assigning tasks to technician. Automated communication keeps technicians informed, while analytics offer insights for continuous improvement. Overall, this solution maximizes efficiency, reduces operational costs, and improves customer satisfaction in the dynamic realm of field service operations.

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Creating a Salesforce Developer Edition org allows developers to experiment, innovate, and build customized solutions within a controlled environment. With access to Sales force's powerful development tools and features, developers can prototype, test, and refine their applications, empowering them to deliver robust and tailored solutions to meet unique business requirements. As a Sales force Developer for an organization you must have a Sales force developer edition org in order to do all the required works.

ACTIVITY 1: Creating Developer Account

Creating a developer org in Sales force .

1. Go to <https://developer.salesforce.com/signup>
2. On the sign up form ,enter the following details:

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Build enterprise-quality apps fast and get hands-on with Agentforce and Data Cloud.

Sign up for your Developer Edition.

- ✓ Build apps fast with drag-and-drop tools
- ✓ Go further with Apex code
- ✓ Build AI agents with Agentforce
- ✓ Harmonize your data with Data Cloud
- ✓ Ground Agentforce with structured and unstructured data
- ✓ Integrate with anything using APIs

Sign up for your Developer Edition

A free Salesforce Platform environment with Agentforce and Data Cloud

First name: vanaja ✓ Last name: pujari ✓

Job title: DEVELOPER ✓ Work email: vanajapujari5@gmail.com ✓

Company: GAYATRI DEGREE CO ✓ Country/Region: India ✓

Your org may be provisioned on or migrated to Hyperforce, Salesforce's public cloud infrastructure.

☐ I agree to the [Main Services Agreement – Developer Services](#) and [Salesforce Program Agreement](#). I acknowledge, as described in the [Developer Documentation](#): (1) the Developer Edition includes autonomous and other generative AI features; and (2) Salesforce may limit use of those features and the org, and may terminate any org that has been inactive for 45 days.

Fields to fill in:

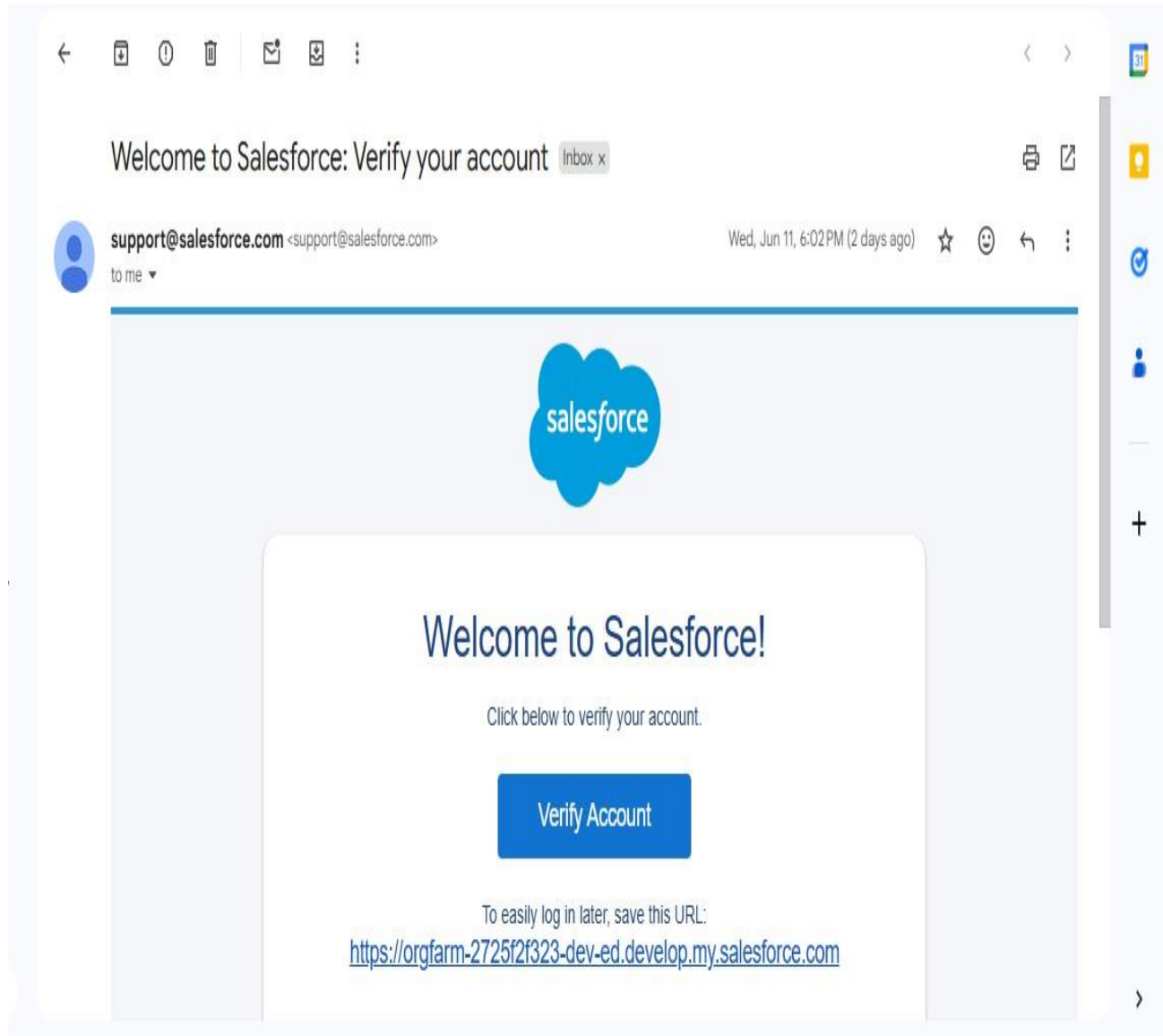
1. First Name : Vanaja
2. Last Name : pujari
3. Email: vanajapujari5@gmail.com
4. Role :Developer
5. Company :GAYATRIDEGREECOLLEGE
6. Country: India

This need not be an actual Email ID, you can give anything in the format :username@organization.com
Click on sign me up after filling these.

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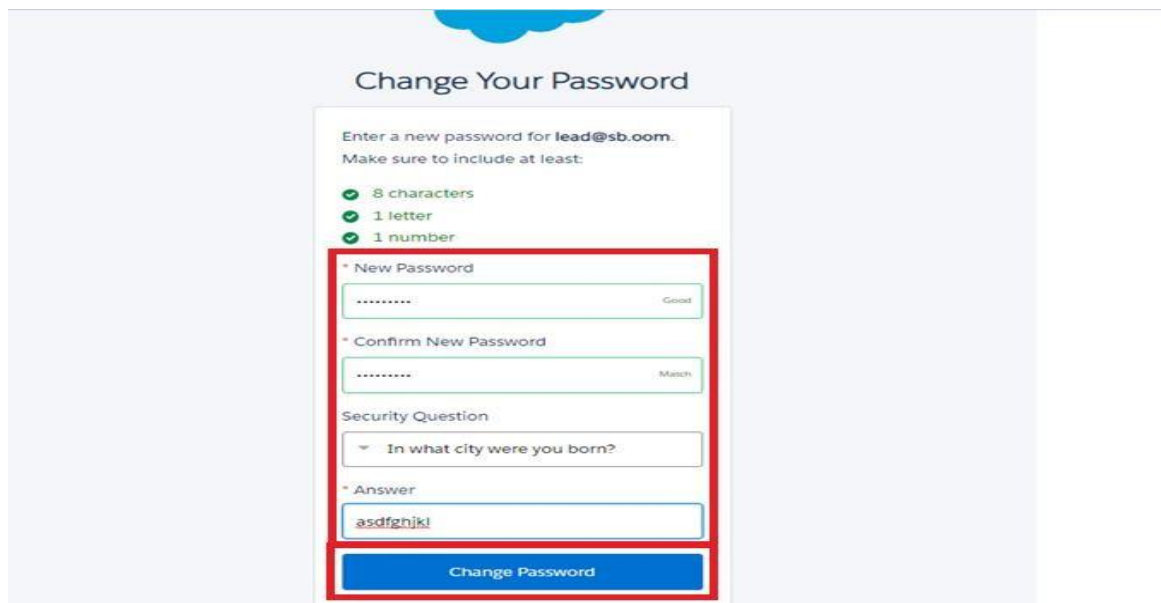
ACTIVITY2:Account Activation

1. Goto the inbox of the email that you used while signing up. Click on the verify account to activate your account. The email may take 5-10mins.



2. Click on Verify Account
3. Give a password and answer a security question and click on change password.

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Change Your Password

Enter a new password for **lead@sb.com**.
Make sure to include at least:

- ✓ 8 characters
- ✓ 1 letter
- ✓ 1 number

* New Password
..... Good

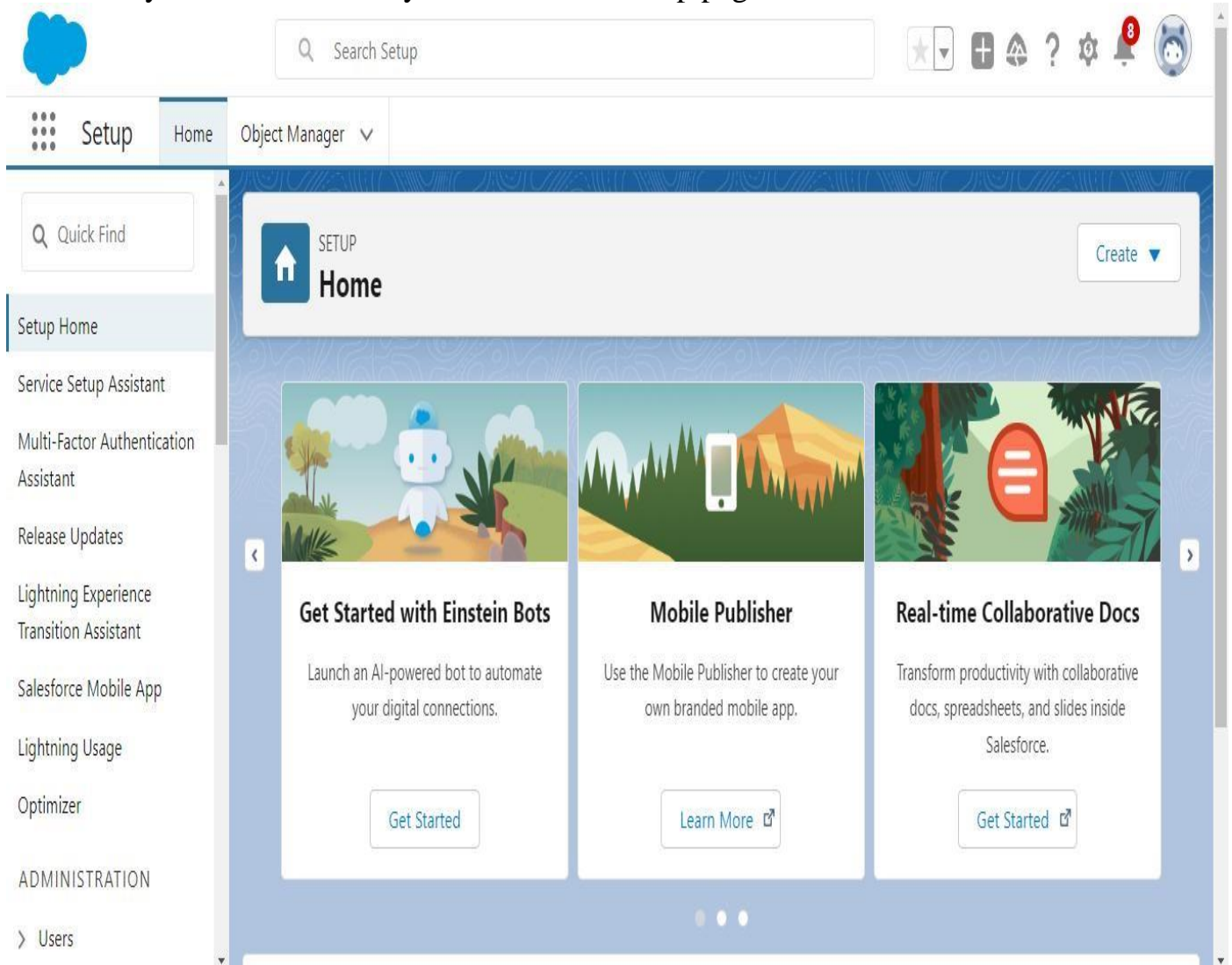
* Confirm New Password
..... Match

Security Question
▼ In what city were you born?

* Answer
asdfghjkl

Change Password

4. Then you will redirect to your Sales force setup page.



Setup Home

Search Setup

Setup Home

Service Setup Assistant

Multi-Factor Authentication Assistant

Release Updates

Lightning Experience Transition Assistant

Salesforce Mobile App

Lightning Usage

Optimizer

ADMINISTRATION

Users

SETUP Home

Create

Get Started with Einstein Bots

Launch an AI-powered bot to automate your digital connections.

Get Started

Mobile Publisher

Use the Mobile Publisher to create your own branded mobile app.

Learn More

Real-time Collaborative Docs

Transform productivity with collaborative docs, spreadsheets, and slides inside Salesforce.

Get Started

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Object: To store the data as per business requirement.

ACTIVITY1:Create Technician Object

1. Download and open [this spreadsheet](#), edit the email column(provide your email for at least one or two records) and save it as Technician.csv.
2. Login to your sales force account ,click on Gear icon ,then select Setup.
3. Click the Object Manager tab.



4. Click Create.
5. Select Custom Object from Spreadsheet.

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6. Click Login With Sales force.
7. Enter your Salesforce account username and password. (which you have created in the Milestone 1, Activity 1)
8. Click Log In.
9. Click Allow.
10. Click Upload.
11. Navigate to the Technician.csv file you downloaded and upload it. Salesforce automatically detects the fields and populates all its record data. Choose Technician ID as the Record Name field and make sure all fields are with the proper data types as below as they are.

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CSV File Details

Encoding Format ¹ Values Separated By Field Label Source ☐ Enter manually ☒ Detect from row * Field Labels Row Import 5 rows of Data? ¹ ☒ No, skip import ☐ Yes, import data Record Name Field ¹

Fields 7 of 7 to import ☐ Hide mapped fields

IMPORT FILE FIELD NAME		SALESFORCE FIELD NAME	SALESFORCE FIELD TYPE	ADD TO LAYOUTS ¹	FIELD PREVIEW
✓ Technician ID	×	Technician ID	<input type="text" value="Text"/>	<input checked="" type="checkbox"/>	T-0001
✓ Name	×	Name	<input type="text" value="Text"/>	<input checked="" type="checkbox"/>	Raghu
✓ Phone	×	Phone	<input type="text" value="Phone"/>	<input checked="" type="checkbox"/>	7892341560
✓ Email	×	Email	<input type="text" value="Email"/>	<input checked="" type="checkbox"/>	example@gmail.com
✓ Location	×	Location	<input type="text" value="Picklist"/>	<input checked="" type="checkbox"/>	Hyderabad
✓ Availability	×	Availability	<input type="text" value="Picklist"/>	<input checked="" type="checkbox"/>	Available
✓ Skills	×	Skills	<input type="text" value="Picklist"/>	<input checked="" type="checkbox"/>	Machine Installation

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12. Click Next and enter the following settings.

13. Click Finish. The Technician object is successfully created and data imported, all within minutes.

ACTIVITY 2: Create Work Order Object

Create Work Order object, just as we have created Technician Object using

CSV File Details

Encoding Format ¹ Values Separated By Field Label Source ☐ Enter manually ☒ Detect from row * Field Labels Row Import 0 rows of Data? ¹ ☒ No, skip import ☐ Yes, import data Record Name Field ¹

Fields 7 of 7 to import ☐ Hide mapped fields

IMPORT FILE FIELD NAME		SALESFORCE FIELD NAME	SALESFORCE FIELD TYPE	ADD TO LAYOUTS ¹	FIELD PREVIEW
✓ WorkOrder ID	×	WorkOrder ID	<input type="text" value="Text"/>	<input checked="" type="checkbox"/>	
✓ Email	×	Email	<input type="text" value="Email"/>	<input checked="" type="checkbox"/>	
✓ Service Type	×	Service Type	<input type="text" value="Picklist"/>	<input checked="" type="checkbox"/>	
✓ Description	×	Description	<input type="text" value="Text Area (Long)"/>	<input checked="" type="checkbox"/>	
✓ Location	×	Location	<input type="text" value="Picklist"/>	<input checked="" type="checkbox"/>	
✓ Priority	×	Priority	<input type="text" value="Picklist"/>	<input checked="" type="checkbox"/>	
✓ Status	×	Status	<input type="text" value="Picklist"/>	<input checked="" type="checkbox"/>	

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To create an object:

1. From the setup page --> Click on Object Manager --> Click on Create --> Click on Custom Object.

1. Enter the label name --> Assignment
2. Plural label name --> Assignments

Custom Object Definition Edit ⇒ Save Save & New Cancel

Custom Object Information

The singular and plural labels are used in tabs, page layouts, and reports.

Label **Example: Account**

Plural Label **Example: Accounts**

Starts with vowel sound ☐

The Object Name is used when referencing the object via the API.

Object Name **Example: account**

Description

Context-Sensitive Help Setting ☒ Open the standard Salesforce.com Help & Training window ☐ Open a window using a Visualforce page

Content Name

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2. Click on Allow reports,
Allow search --> Save.

3. Enter Record Name Label and Format

- Record Name-->Assignment ID
- Data Type --> AutoNumber
- Display Format-->A-{0000}
- Starting Number-->1

Enter Record Name Label and Format

The Record Name appears in page layouts, key lists, related lists, lookups, and search results. For example, the Record Name for Account is "Account Name" and

Record Name

Assignment ID

Example: Account Name

Data Type

Auto Number ▼

Display Format

A-{0000}

Example: A-{0000} What Is This?

Starting Number

1

Tabs

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

ACTIVITY 1: Creating a Custom Tab

To create a Tab:(Assignment)

1. Go to setup page -->type Tabs in Quick Find bar -->click on tabs--

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>New(under custom object tab)

Custom Tabs

You can create new custom tabs to extend Salesforce functionality or to build new application functionality.

Custom Object tabs look and behave like the standard tabs provided with Salesforce. Web tabs allow you to embed external content, such as Visualforce pages. Lightning Component tabs allow you to add Lightning components to the navigation bar. Lightning Page tabs allow you to add Lightning Pages to Lightning Experience and the mobile app.

The screenshot displays two sections of the Salesforce configuration interface. The top section, titled 'Custom Object Tabs', features a 'New' button highlighted with a red square, followed by a link 'What Is This?'. Below this, a message states 'No Custom Object Tabs have been defined'. The bottom section, titled 'Web Tabs', also features a 'New' button and a 'What Is This?' link, with a message below stating 'No Web Tabs have been defined'.

2. Select Object(Assignment) -->Select any tab style -->Next(Add to profiles page) keep it as default --> Next (Add to Custom App) keep it as default --> Save.

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New Custom Object Tab

Step 1. Enter the Details

Choose the custom object for this new custom tab. Fill in other details.

Select an existing custom object or [create a new custom object now](#).

Object	Assignment ▼
Tab Style	--None-- Assignment

(Optional) Choose a Home Page Custom Link to show as a splash page the first time your users click on this tab.

Splash Page Custom Link	--None-- ▼
-------------------------	------------

Note :Tabs for Work Order & Technician objects do get created automatically .We do not need to create tabs for those objects.

The Lightning App:

Well done you have reached close to your organization all requirement by creating the objects to store the organization's data . Making a data base for an organization is just no ten oughto reach out the requirements, the task is how the users at the organization can access the objects you have created for them

ACTIVITY1:Createa Lightning App

To create a lightning app page:

1. Go to setup page -->search "app manager "in quick find -->select "app manager"-->click on New lightning App.

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App Manager | Salesforce

sbcom-5e-dev-ed.develop.lightning.force.com/lightning/setup/NavigationMenus/home

Search Setup

Setup Home App Manager

Q app manager

App Manager

Lightning Experience App Manager

New Lightning App New Connected App

Clone App (Beta)

Quickly create new Lightning apps by cloning existing apps. To use the beta feature, indicate that you're read at legal requirements and agree to participate by toggling Enable App Cloning. See additional details and terms in the [Winter '23 release notes](#).

Enable App Cloning ☐ Disabled

35 Items • Sorted by App Name • Filtered by All app owners • Tablet Type

App Name ↑	Developer Name	Description	Last Modified ..	App Type	VL
1. All Tabs	AllTabSet		04/12/2022, 10:13 am	Classic	
2. Analytics Studio	Insights	Build CRM Analytics dashboards and apps	04/12/2022, 10:13 am	Classic	✓
3. App Launcher	AppLauncher	App Launcher tabs	04/12/2022, 10:13 am	Classic	✓
4. Best Solutions	LightningKit	Discover and manage business solutions designed for your industry.	04/12/2022, 10:16 am	Lightning	✓
5. Chatter Desktop	ChatterDesktop	Chatter Desktop is an Adobe AIR-based desktop application that lets Chatter users stay connecte..	28/12/2022, 4:04 pm	Connected (Managed)	
6. Chatter Mobile for BlackBerry	ChatterforBlackBerry	The Salesforce.com Chatter Mobile app lets you access Chatter data on the go. Use it to view fee..	28/12/2022, 4:05 pm	Connected (Managed)	
7. College Management System	ixademo	demo app	08/12/2022, 4:16 pm	Lightning	✓
8. Community	Community	Salesforce CRM Communities	04/12/2022, 10:13 am	Classic	✓
9. Content	Content	Salesforce CRM Content	04/12/2022, 10:13 am	Classic	✓
10. Data Manager	DataManager	Use Data Manager to view limits, monitor usage, and manage recpet.	04/12/2022, 10:13 am	Lightning	✓

[Salesforce.com: Read and develop Lightning force.com apps from your web browser](#)

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2. Fill the app name in app details and branding as follows.

App Name :Field Service Work Order Optimization

Developer Name : this will auto populated

Description : Give a meaning full description

Image: optional(if you want to give any image you can other wise not mandatory)
Primary color hex value : keep this default

3. Then click Next-->(App option page)keep it as default -->Next-->(Utility Items)keep it as default --> Next.

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New Lightning App

App Details & Branding

Give your Lightning app a name and description. Upload an image and choose the highlight color for its navigation bar.


App Details


* App Name ⓘ
Name your app...

* Developer Name ⓘ
Enter a developer name...

Description ⓘ
Enter a description...

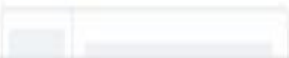
App Branding




Image ⓘ

Upload

Primary Color Hex Value ⓘ
 #007002

Org Theme Options
☐ Use the app's image and color instead of the org's custom theme

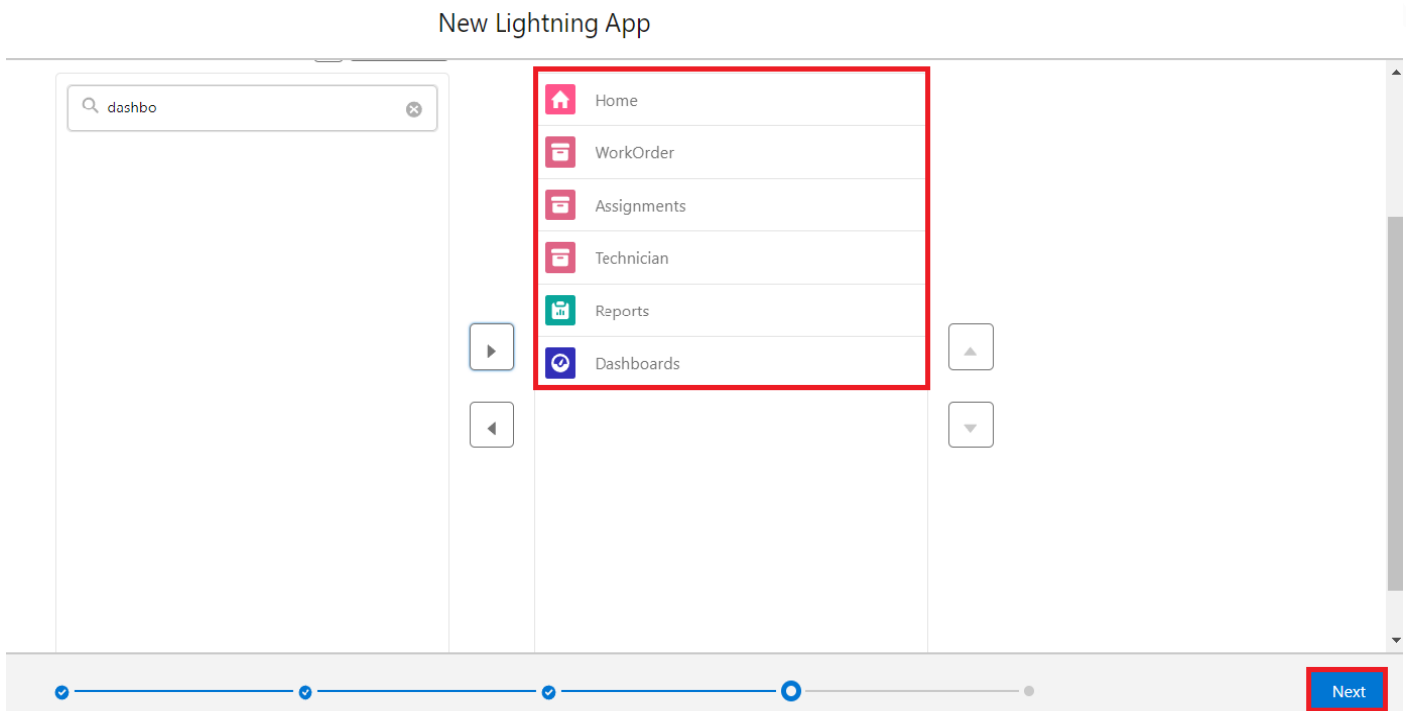
App Launcher Preview





4. To Add Navigation Items:

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Search the items in the search bar(Home ,Work Order ,Technician ,Assignment ,Reports, Dashboard) from the search bar and move it using the arrow button ? Next.
Note :select as set the custom object which we have created in the previous activity.

5. To Add User Profiles:

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New Lightning App

User Profiles

Choose the user profiles that can access this app.

Available Profiles

Selected Profiles

System administrator

System Administrator

▶

◀

Save & Finish

Search profiles(System administrator)in the search bar -->click on the arrow button -->save & finish.

Fields & Relationship:

Now it's time for you to think out of the box for your organization .You have successfully created

thedatabaseobjectsfortheorganizationbutnowalleyesturnonyouasyouhavetodefinewhat sort of information the objects store which you have created. As a life saver of your organization you come up with the idea of creating fields to store different types of data.

ACTIVITY1:Creating Lookup Field in Assignment Object

To create fields in an object:

1. Go to setup-->click on Object Manager-->type object name(Assignment)in quick find bar-->click on the object.

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The screenshot shows the Salesforce Object Manager interface. At the top, the navigation bar includes 'Setup', 'Home', and 'Object Manager' (highlighted with a red box and a red arrow pointing left). Below the navigation bar, the 'Object Manager' section header is visible, along with a search bar containing 'assignment' (highlighted with a red box and a red arrow pointing right), and buttons for 'Schema Builder' and 'Create'. Below the header, a table lists objects. The first row, 'Assignment', is highlighted with a red box and a red arrow pointing left. The second row, 'Location Group Assignment', is also visible.

LABEL	API NAME	TYPE	DESCRIPTION	LAST MODIFIED	DEPLOYED
Assignment	Assignment_c	Custom Object		20/11/2023	✓
Location Group Assignment	LocationGroupAssignment	Standard Object			

2. Now click on “Fields & Relationships” --> New

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The screenshot shows the Salesforce Setup interface. At the top, there are tabs for Setup, Home, and Object Manager. Below the tabs, the breadcrumb trail reads 'SETUP > OBJECT MANAGER' followed by 'Assignment'. On the left sidebar, under the 'Details' section, 'Fields & Relationships' is highlighted with a red box. The main content area is titled 'Fields & Relationships' and shows '4 Items, Sorted by Field Label'. Above the table, there are buttons for 'Quick Find', 'New' (highlighted with a red box), 'Deleted Fields', 'Field Dependencies', and 'Set History Tracking'. The table has five columns: FIELD LABEL, FIELD NAME, DATA TYPE, CONTROLLING FIELD, and INDEXED. It lists four fields: Assignment ID (Auto Number, indexed), Created By (Lookup(User)), Last Modified By (Lookup(User)), and Owner (Lookup(User Group), indexed).

FIELD LABEL	FIELD NAME	DATA TYPE	CONTROLLING FIELD	INDEXED
Assignment ID	Name	Auto Number		✓
Created By	CreatedById	Lookup(User)		
Last Modified By	LastModifiedById	Lookup(User)		
Owner	OwnerId	Lookup(User Group)		✓

3. Select Data type as “Lookup”.

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Step 1. Choose the field type

Step 1

Next Cancel

Specify the type of information that the custom field will contain.

Data Type

☐ None Selected

Select one of the data types below.

☐ Auto Number

A system-generated sequence number that uses a display format you define. The number is automatically incremented for each new record.

☐ Formula

A read-only field that derives its value from a formula expression you define. The formula field is updated when any of the source fields change.

☐ Roll-Up Summary 

A read-only field that displays the sum, minimum, or maximum value of a field in a related list or the record count of all records listed in a related list.

☒ Lookup Relationship

Creates a relationship that links this object to another object. The relationship field allows users to click on a lookup icon to select a value from a popup list. The other object is the source of the values in the list.

☐ Master-Detail Relationship

Creates a special type of parent-child relationship between this object (the child, or "detail") and another object (the parent, or "master") where:

- The relationship field is required on all detail records

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4. Click on Next
5. For field label related to :select “Work Order” object and click Next.

Note: Do not select other standard object with the same name for sake of ease copy the above and paste it.

Assignment

[Help for this Page](#) 

New Relationship

Step 2. Choose the related object

Step 2

Previous

Next

Cancel

Select the other object to which this object is related.

Related To

WorkOrder

▼

Previous

Next

Cancel

6. Give Field Label as “Work Order ID” and click Next.

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Assignment
New Relationship

[Help for this Page](#)

Step 3. Enter the label and name for the lookup field Step 3 of 6

[Previous](#) [Next](#) [Cancel](#)

Field Label ⓘ

Field Name ⓘ

Description

Help Text ⓘ

7. Next -->Next -->Save &New.

ACTIVITY2:Manage your pick list values

1. From the setup page go to object manager
2. Search and Select Work Order object.
3. Go to fields &relationship ,select Location field ,scroll down to values and click “New”.

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Values

New

Reorder

Replace

Printable View

Chart Colors ▼

Delete Selected

Deactivate Selected

Replace Selected

<input type="checkbox"/> Action	Values	API Name	Default	Chart Colors	Modified By
<input type="checkbox"/> Edit Del Deactivate	Pune	Pune	<input type="checkbox"/>	Assigned dynamically	<u>demo project</u> , 22/11/2023, 9:53 am
<input type="checkbox"/> Edit Del Deactivate	Hyderabad	Hyderabad	<input type="checkbox"/>	Assigned dynamically	<u>demo project</u> , 22/11/2023, 9:53 am

4. Add the below values:

Nasik
Warangal
Nanded

5. Click Save.

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Add Picklist Values

Location

Add one or more picklist values below. Each value should be on its own line and it is used for both a value's label and API name.

If a value matches an inactive value's API name, that value is reactivated with its previous label.

If a value matches an inactive value's label but not the API name, a new value is created.



ACTIVITY3:Manage your pick list values

Add following values to the respective fields in Work Order object:

Field	Values
Priority	High
Service Type	Hardware repair Troubleshoot/Debug ging Lane- Management

ACTIVITY4:Creating Formula Field in Work Order Object

1. Repeatstep1and2mentionedinactivity1
2. Select Data type as “Formula ”and click Next.
3. GiveFieldLabelandFieldNameas“Date”andselectformulareturntypeas“Date”
And click next.

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Step 2. Choose output type

Step 2 of 5

Previous Next Cancel

Field Label

Field Name

Auto add to custom report type ☒ Add this field to existing custom report types that contain this entity [i](#)

Formula Return Type

☐ None Selected

Select one of the data types below.

☐ Checkbox

Calculate a boolean value.

Example: `TODAY() > CloseDate`

☐ Currency

Calculate a dollar or other currency amount and automatically format the field as a currency amount.

Example: `Gross Margin = Amount - Cost c`

☒ Date

Calculate a date, for example, by adding or subtracting days to other dates.

Example: `Reminder Date = CloseDate - 7`

☐ Date/Time

Calculate a date/time, for example, by adding a number of hours or days to another date/time.

Example: `Next = NOW() + 1`

☐ Number

Calculate a numeric value.

Example: `Fahrenheit = 1.8 * Celsius c + 32`

☐ Percent

Calculate a percent and automatically add the percent sign to the number.

Example: `Discount = (Amount - Discounted Amount c) / Amount`

☐ Text

Create a text string, for example, by concatenating other text fields.

Example: `Full Name = LastName & ", " & FirstName`

☐ Time

Calculate a time, for example, by adding a number of hours to another time.

Example: `Next = TIMEVALUE(NOW()) + 1`

4. Under Advanced Formula write down the formula and click “Check Syntax”

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Formula: Created Date

The screenshot shows a web-based formula editor. At the top, there are two tabs: 'Simple Formula' and 'Advanced Formula'. Below the tabs is an 'Insert Field' button. The main area contains the text 'Date (Date) =' followed by a red-bordered box containing the text 'CreatedDate'. At the bottom, there is a 'Check Syntax' button, also with a red border, followed by a green message: 'No syntax errors in merge fields or functions. (Compiled size: 20 characters)'.

5. Next-->Next-->Save.

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ACTIVITY5: Creating Remaining fields for the respective objects

Now create the remaining fields using the data types mentioned in the table.

Sl No	Object Name	Field	
		Field Name	Data type
1	Assignment	<ul style="list-style-type: none">Technician IDAssignment DateCompletion Date	<p>Lookup(Technician)</p> <p>Formula: return type : Date (Work Order_IDr.Datec)</p> <p>Formula: return type : Date IF(ISPICKVAL(Work Order_IDr.Statusc,'Resolved'), Work Order_IDr.LastModifiedDate , NULL)</p>

Profiles

Profile defines what an user is at ble to do or see in the Sales force Org

ACTIVITY1: Technician Profile

1. Go to setup-->type profiles in quick find box -->click on profiles -->click on new profile.

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Profiles

Help for this Page

All Profiles ▾ Edit | Delete | Create New View

New Profile

A

B

C

D

E

F

G

H

I

J

K

L

M

N

O

P

Q

R

S

T

U

V

W

X

Y

Z

Other

A

<input type="checkbox"/> Action	Profile Name ↑	User License	Custom
<input type="checkbox"/> Edit Clone	<u>Analytics Cloud Integration User</u>	Analytics Cloud Integration User	<input type="checkbox"/>
<input type="checkbox"/> Edit Clone	<u>Analytics Cloud Security User</u>	Analytics Cloud Integration User	<input type="checkbox"/>
<input type="checkbox"/> Edit Clone	<u>Authenticated Website</u>	Authenticated Website	<input type="checkbox"/>
<input type="checkbox"/> Edit Clone	<u>Authenticated Website</u>	Authenticated Website	<input type="checkbox"/>
<input type="checkbox"/> Edit Del ...	<u>B2B Reordering Portal Buyer Profile</u>	External Apps Login	<input checked="" type="checkbox"/>

2. .Select ‘StandardPlatformUser’ forexistingprofileandgive ‘Technician’ forProfileNameand Click on Save.

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Clone Profile

Enter the name of the new profile.

You must select an existing profile to clone from.

Existing Profile	<input type="text" value="Standard Platform User"/>
User License	Salesforce Platform
Profile Name	<input type="text"/>

3. While still on the profile page ,then click Edit.
4. Scroll down to Custom Object Permissions and Give Read only access permissions for Technician ,Work Order and Assignment objects and field access permission as shown below:

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Custom Object Permissions							
	Basic Access				Data Administration		
	Read	Create	Edit	Delete	View All	Modify All	
Assets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Asset Services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Assignments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Billings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bookings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Candidates	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Child object	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Crews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Customer Orders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Employees	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Employment Websites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Flights	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Items	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Jewel Customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Job Applications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Lead Scoring Rules	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

	Basic Access				Data Administration		
	Read	Create	Edit	Delete	View All	Modify All	
Leaves	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Parent object 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Parent object 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Passengers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Positions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Prices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Projects	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
ProjectTasks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Reviews	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Students	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
StudentSessions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Technician	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Trainers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
WorkOrder	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Field Service Work Order Optimization

5. Scroll down and Click on Save.
6. Now from the profile detail page scroll down to custom field level security click on view next to Work Order object.

Custom Field-Level Security	
Asset [View]	Lead Scoring Rule [View]
Asset Service [View]	Leave [View]
Assignment [View]	Parent object 1 [View]
Billing [View]	Parent object 2 [View]
Booking [View]	Passenger [View]
Candidate [View]	Position [View]
Child object [View]	Price [View]
Crew [View]	Project [View]
Customer Order [View]	ProjectTask [View]
Employee [View]	Review [View]
Employment Website [View]	Sessions [View]
Flight [View]	Student [View]
Item [View]	StudentSession [View]
Jewel Customer [View]	Technician [View]
Job Application [View]	Trainer [View]
Knowledge [View]	WorkOrder [View]

7. Click on Save.

Field Service Work Order Optimization

Users:

Users are defined as the employees of your organization

ACTIVITY1:CreateUser

1. Go to setup-->type users in quick find box-->select users-->click New user.
2. Fill in the fields
 1. First Name :Elina
 2. Last Name: Gilbert
 3. Alias :Give a Alias Name
 4. Email id: Give your Personal Email id
 5. User name :User name should be in this form :text@text.text
 6. Nick Name :Give a Nick name
 7. Role:
 8. User license :Sales force Platform
 9. Profiles :Technician

Field Service Work Order Optimization

New User

[Help for this Page](#)

User Edit

Save

Save & New

Cancel

General Information

= Required Information

First Name

Elina

Last Name

Gilbert

Alias

elina

Email

nadeem@thesmartbridge.com

Username

elina@smart.com

Nickname

elina

Title

Company

Department

Division

Role

<None Specified>

User License

Salesforce Platform

Profile

Technician

Active

☒

Marketing User

☐

Offline User

☐

Knowledge User

☐

Flow User

☐

Service Cloud User

☐

Site.com Contributor User

☐

Site.com Publisher User

☐

WDC User

☐

3. Save

Field Service Work Order Optimization

Apex Trigger

ACTIVITY 1: Create an Apex Class

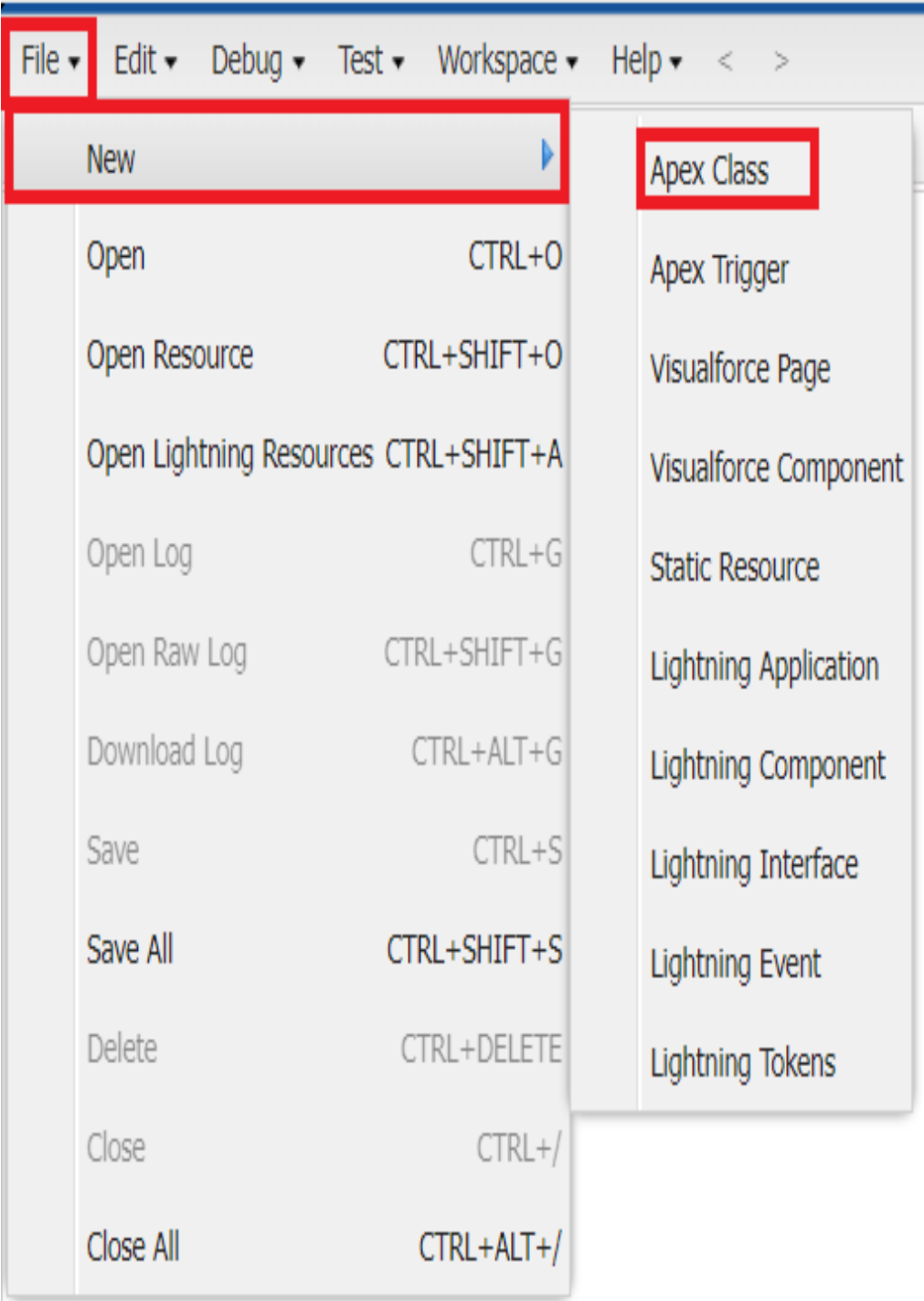
1. Go to Setup-->Click on the gear icon-->Select Developer Console.



2. Then we can see the Developer console .Click on the developer console and you will navigate to a new console window.

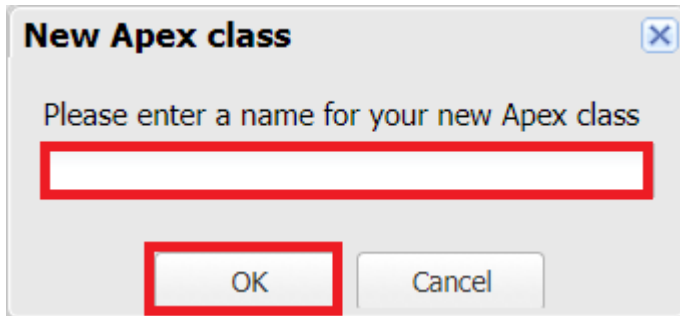
3. To create a new Apex Class follow the below steps:
Click on the file --> New --> Apex Class.

Field Service Work Order Optimization



Field Service Work Order Optimization

4. Give the Apex Class name as "Work OrderClass".



New Apex class [X]

Please enter a name for your new Apex class

OK Cancel

5. Click ok.

6. Now write the code logic here

Field Service Work Order Optimization

```
File • Edit • Debug • Test • Workspace • Help • < >
WorkOrderTrigger.apxc WorkOrderClass.apxc
Code Coverage: None • API Version: 59 • Go

1 public class WorkOrderClass {
2     public static void workOrder(List<WorkOrder__c> newListWorkOrder){
3         Map<Integer, List<String>> maptotech = new Map<Integer, List<String>>();
4         integer num = 0;
5         List<WorkOrder__c> properWo = new List<WorkOrder__c>();
6         List<Assignment__c> lstAssignment = new List<Assignment__c>();
7         List<Technician__c> technicianToAssignment = new List<Technician__c>();
8         for(WorkOrder__c iter : newListWorkOrder){
9             List<String> lststring = new List<String>();
10            If(iter.Service_Type__c != null && iter.Location__c != null ){
11                num = num+1;
12                properWo.add(iter);
13                lststring.add(iter.Service_Type__c);
14                lststring.add(iter.Location__c);
15
16                maptotech.put(num, lststring);
17            }
18        }
19        Map<integer, Id> techId = new Map<integer, Id>();
20        Map<Id, Technician__c> allTechnician = new Map<Id, Technician__c>([SELECT Id, Name, Phone__c, Location__c, Skills__c, Availability__c, Name__c, Email__c FROM Technician__c]);
21        integer num2 = 0;
22        For(Technician__c T : allTechnician.values()){
23            num2 = num2+1;
24            if(maptotech.get(num2) != null){
25                List<String> valofmap = maptotech.get(num2);
26                system.debug('error 1 ----> the maptotech is empty ----> ' + maptotech.get(num2));
27                if(valofMap.contains(t.Skills__c) && ValofMap.contains(t.Location__c) && t.Availability__c == 'Available'){
28                    techid.put(num2, t.Id);
29                }
30            }
31        }
32    }
33    integer num3 = 0;
34    For(WorkOrder__c W : properWo){
```

Field Service Work Order Optimization

Source Code:

```
Public class Work Order Class{
    public static void Work Order(List<Work OrderC> newListWork
        Order){
        Map<Integer,List<String>>maptotech=newmap<Integer,List<
        String>>(); integer num = 0;
        List<Work Orderc> properWo = new List<Work Orderc>();
        List<Assignmentc>          lstAssignment          =          new
        List<Assignmentc>();
        List<Technicianc>techniciantoAssignment=newList<Technici
        anc>(); for(Work Orderc iter : newListWork Order){
            List<String> lststring = new List<string>();
            If(iter.Service_Typecl!=null&&iter.Locationcl!=n
            ull){
                num          =          num+1;
                properWo.add(iter);
                lststring.add(iter.Service_Typecl);
                lststring.add(iter.Locationcl);

                maptotech.put(num,lststring);
            }
        }
        Map<integer,Id>techId=newMap<integer,Id>();
        Map<Id,Technicianc>allTechnician=newMap<Id,Technicianc>([SELECTId,Name,P
        honec, Locationcl, Skillsc,Availibilityc, Namecl, Emailc FROMTechnicianc]);
        integernum2=0;
        For(TechniciancT:allTechnician.value
            s()){ num2 = num2+1;
            if(maptotech.get(num2)!=null){
                List<string>valofmap=maptotech.get(num2);
                system.debug('error 1 ----> the maptotech is empty ---> ' + maptotech.get(num2));
                if(valofMap.contains(t.Skillsc)&&ValofMap.contains(t.Locationcl)&&t.Availibilityc=
                ='Available'){
                    techid.put(num2,t.Id);
```

Field Service Work Order Optimization

```
}  
}  
  
}  
integernum3=0;  
For(Work  
    OrdercW:properWo){    num3  
    = num3 + 1;  
    AssignmentcA=newAssignmentc();  
    A.Work    Order_IDc    =    W.Id;  
    A.Technician_IDc        =  
    techid.get(num3);  
    lstAssignment.add(A);  
}  
If(!lstAssignment.IsEmpty(  
    )){ insert lstAssignment;  
}  
}  
}
```

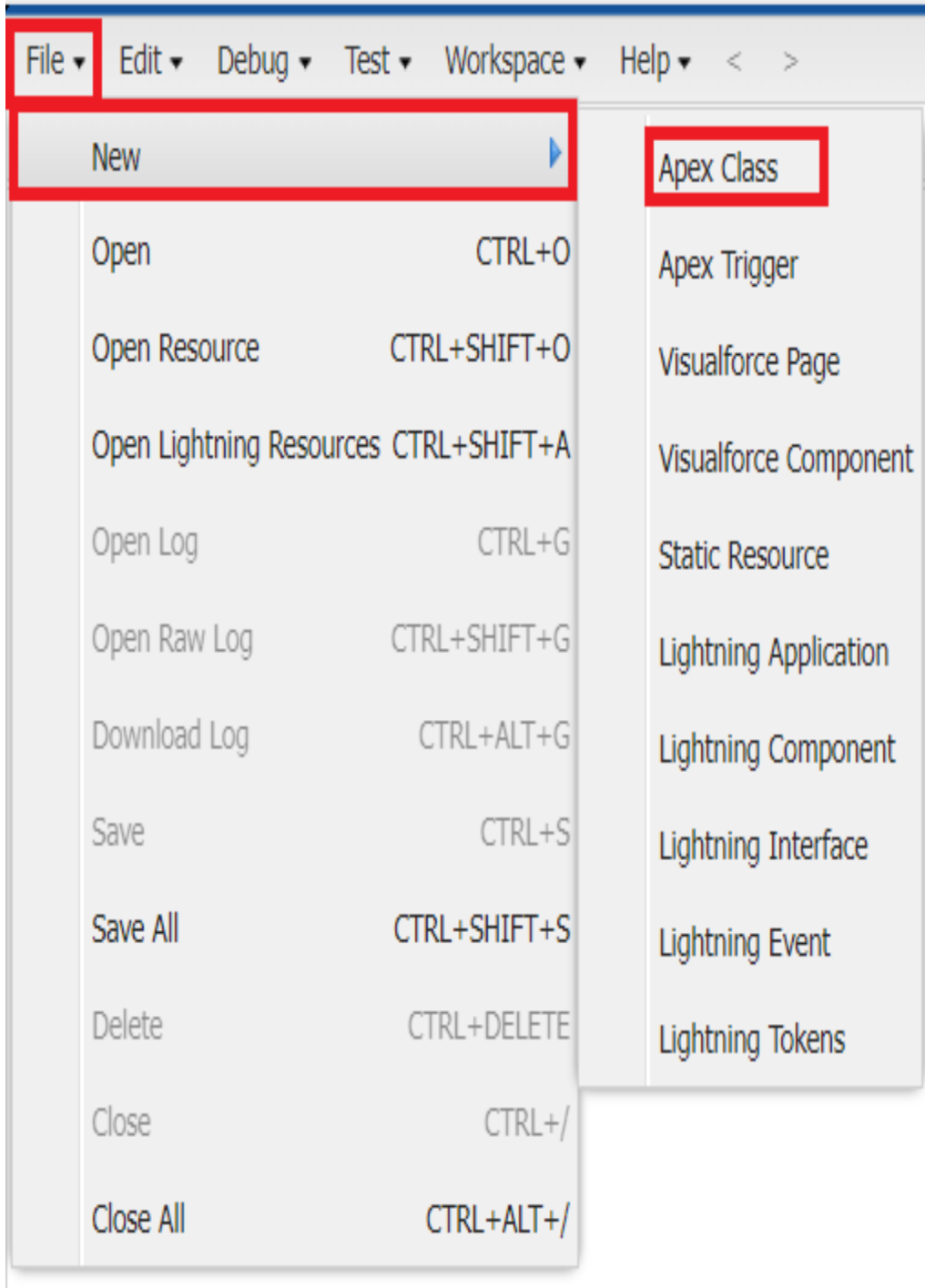
7. Save the code.(click on file--> Save)

Field Service Work Order Optimization

ACTIVITY2: Createan Apex Trigger


1. To create a new Apex Class follow the below steps:

Click on the file-->New-->Apex Class.




2. Give the Apex Trigger name as “Work Order Trigger ”,and select “Work Order__c” from The drop down for Object.

Field Service Work Order Optimization

New Apex Trigger 

Name:

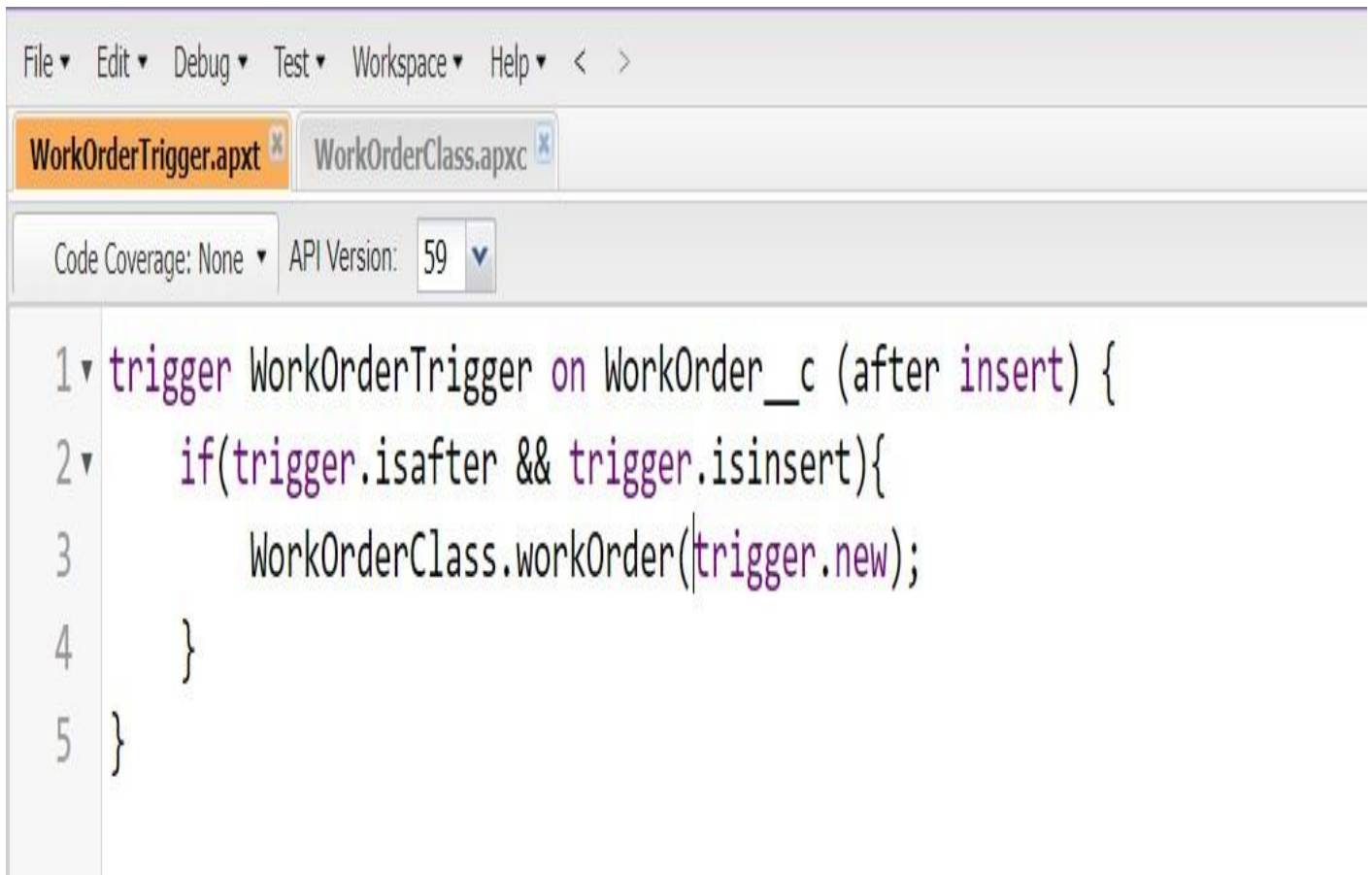
sObject:



Submit

3. Click Submit.
4. Now write the code logic here

Field Service Work Order Optimization



```
File ▾ Edit ▾ Debug ▾ Test ▾ Workspace ▾ Help ▾ < >
WorkOrderTrigger.apxt x WorkOrderClass.apxc x
Code Coverage: None ▾ API Version: 59 ▾
1 ▾ trigger WorkOrderTrigger on WorkOrder__c (after insert) {
2 ▾     if(trigger.isafter && trigger.isinsert){
3         WorkOrderClass.workOrder(trigger.new);
4     }
5 }
```

Source Code:

```
trigger Work Order Trigger on Work Order__c(afterinsert){
    if(trigger.isafter && trigger.isinsert){
        Work OrderClass.Work Order(trigger.new);
    }
}
```

5. Save the code.(click on file-->Save)

Field Service Work Order Optimization

ACTIVITY3: Create an Apex Class

1. Go to Setup-->Click on the gear icon-->Select Developer Console.



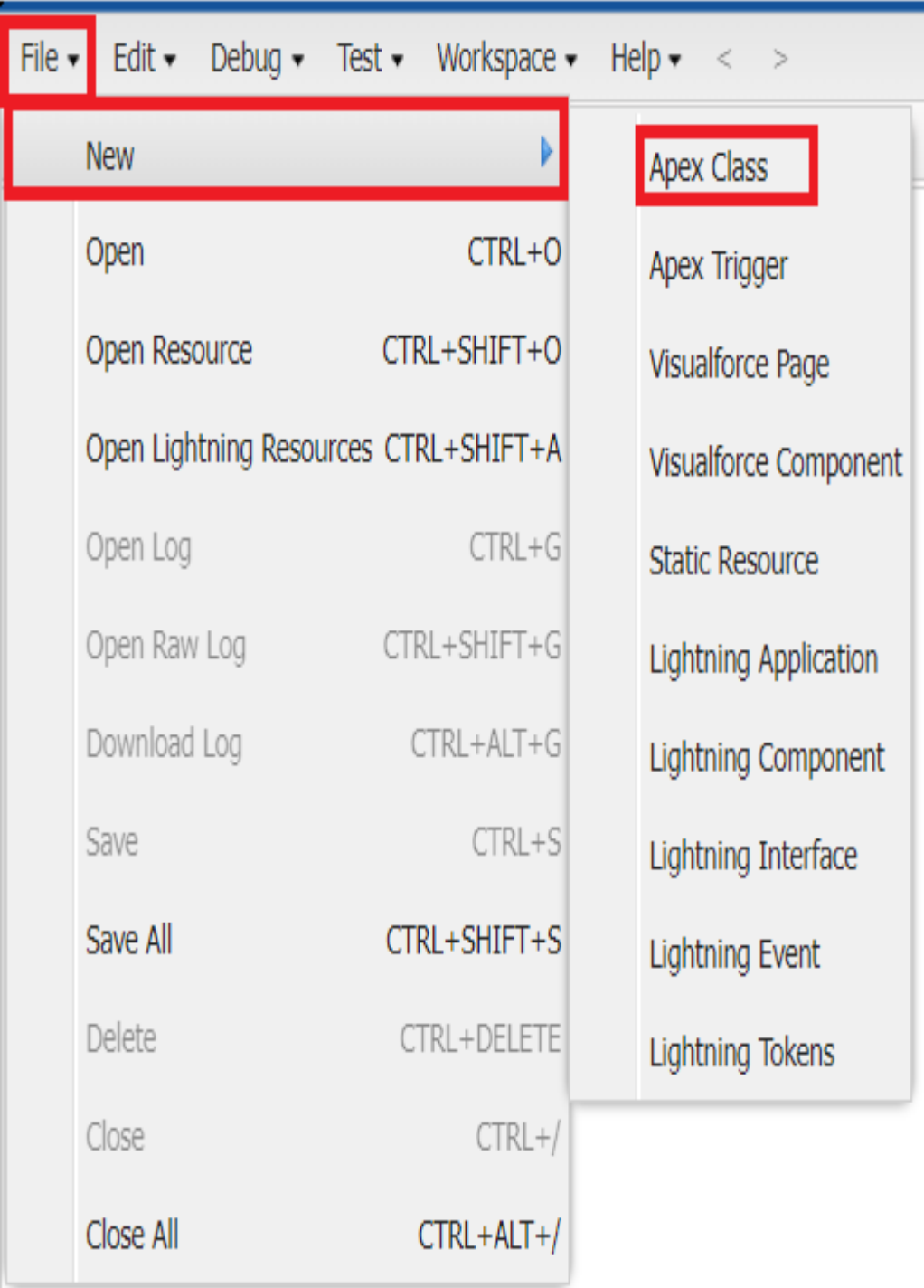
2. Then we can see the Developer console. Click on the developer console and you will navigate to a new console window.

3. To create a new Apex Class follow the below steps:

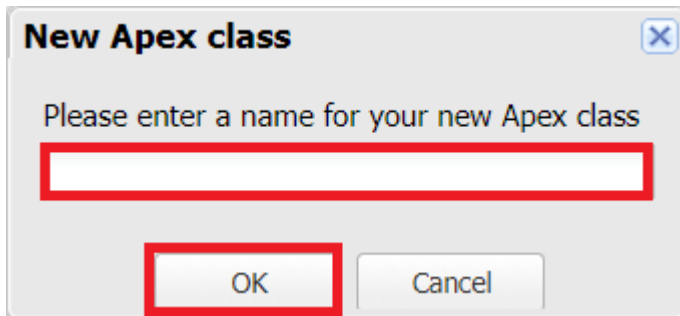
Click on the file --> New --> Apex Class.

4. Give the Apex Class name as "Assigning Email".

Field Service Work Order Optimization



Field Service Work Order Optimization



4. Click ok.

5. Now writethecodelogichere

```
File • Edit • Debug • Test • Workspace • Help • < >
AssigningEmail.apxc
Code Coverage: None • API Version: 59
1 public class AssigningEmail {
2     public static void sendEmailmsg(List<Assignment__c> assRec){
3         List<messaging.SingleEmailMessage> myVar = new List<messaging.SingleEmailMessage>();
4         Map<Id,Technician__c> technicians = new Map<Id,Technician__c>([SELECT Id, Phone__c, Location__c, Skills__c, Name__c, Email__c, Availability__c, Name FROM Technician__c]);
5         try{
6             for(Assignment__c con : assRec){
7                 if(con.Technician_ID__c != null){
8                     messaging.SingleEmailMessage mail = new messaging.SingleEmailMessage();
9                     List<String> sendTo = new List<String>();
10                    sendTo.add(tecnicians.Get(con.Technician_ID__c).Email__c);
11                    mail.setToAddresses(sendTo);
12                    string subject = ' email sub';
13                    mail.setSubject(subject);
14                    string body = 'email body ';
15                    mail.setHTMLbody(body);
16                    myVar.add(mail);
17                }
18            }
19            Messaging.sendEmail(myvar);
20        }
21        catch(exception e){
22            system.debug('Error -----> ' + e.getMessage());
23        }
24    }
25 }
26 }
```

Field Service Work Order Optimization

Source Code:

```
public class AssigningEmail {
    public static void sendEmailmsg(List<Assignment> assRec) {
        List<messaging.SingleEmailMessage> myVar = new List<messaging.SingleEmailMessage>();
        Map<id, Technician> technicians = new Map<id, Technician>([SELECT Id, Phone, Location, Skill, Name, Email, Availability, Name FROM Technician]);
        try {
            for (Assignment con :
                assRec) {
                if (con.Technician_IDc != null) {
                    messaging.SingleEmailMessage mail = new messaging.SingleEmailMessage();
                    List<String> sendTo = new List<String>();
                    sendTo.add(technicians.Get(con.Technician_IDc).Email);
                    mail.setToAddresses(sendTo);
                    string subject = 'Work Order Assignment';
                    mail.setSubject(subject);
                    string body = 'The following Work Order has been assigned to you';
                    mail.setHTMLbody(body);
                    myVar.add(mail);
                }
            }
            Messaging.sendEmail(myVar);
        } catch (Exception e) {
            System.Debug('Error >' + e.getMessage());
        }
    }
}
```

Source Code:

```
public class AssigningEmail {
    public static void sendEmailmsg(List<Assignment> assRec) {
        List<messaging.SingleEmailMessage> myVar = new List<messaging.SingleEmailMessage>();
        Map<id, Technician> technicians = new Map<id, Technician>([SELECT Id, Phone, Location, Skill, Name, Email, Availability, Name FROM Technician]);
        try {
```

Field Service Work Order Optimization

```
for(Assignment con :
    assRec){
    if(con.Technician_IDc!=null){
        messaging.SingleEmailMessage mail=new messaging.SingleEmailMessage();
        List<String> sendTo = new List<String>();
        sendTo.add(tecnicos.Get(con.Technician_IDc).Emailc);
        mail.setToAddresses(sendTo);
        string subject='Work Order Assignment';
        mail.setSubject(subject);
        string body='The following Work Order has been assigned to you'; mail.setHTMLbody(body);
        myVar.add(mail);
    }
}
Messaging.sendEmail(myvar);
}
catch(exception e){
    system.debug('Error >'+ e.getMessage());
}
}
```

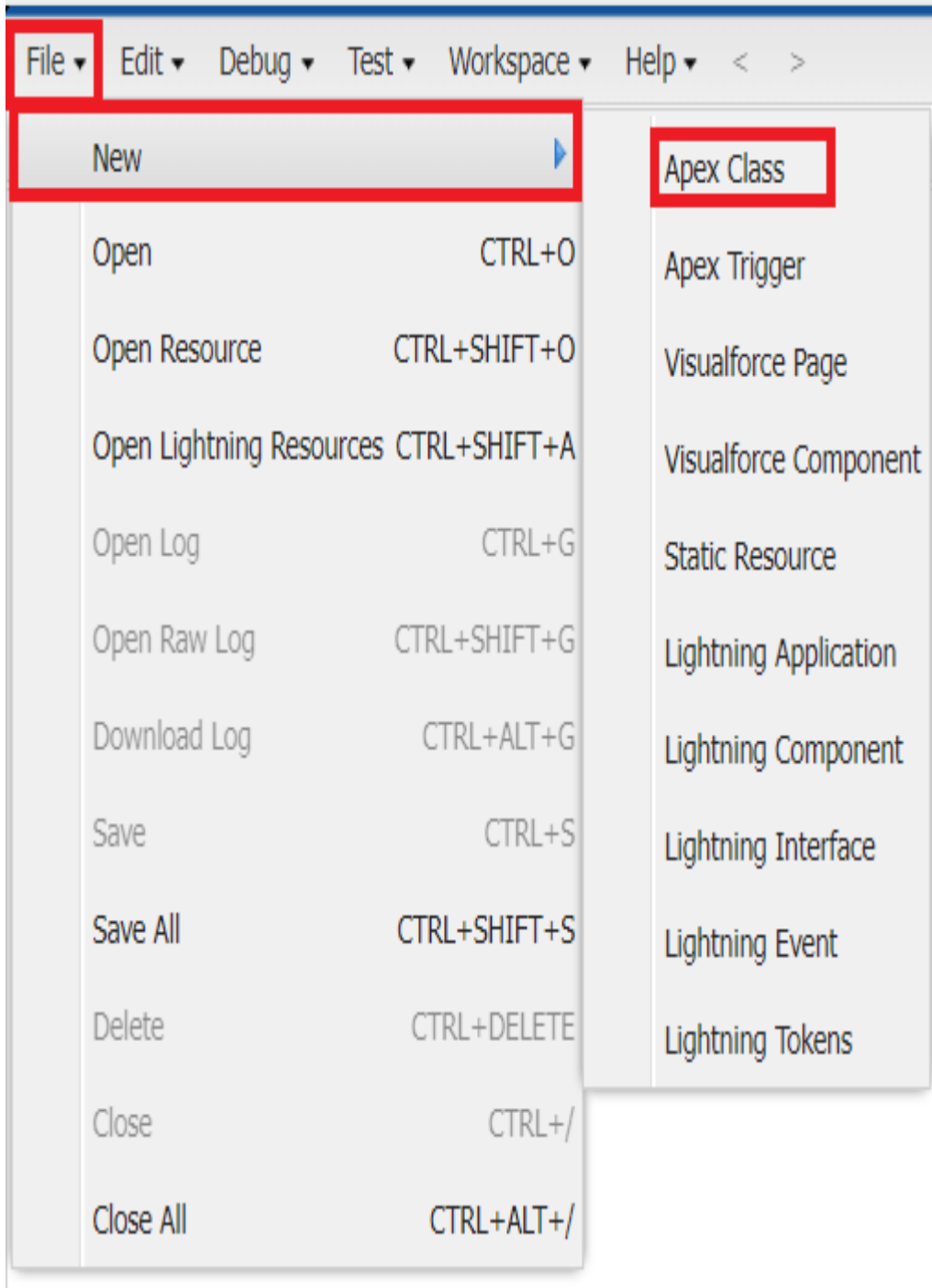
6. Save the code.(click on file--> Save)

Field Service Work Order Optimization

ACTIVITY4: Create an Apex Trigger


To create a new Apex Class follow the below steps:

1. Click on the file-->New-->Apex Class.




2. Give the Apex Trigger name as "AssignmentTrigger", and select "Assignment__c" from the Drop down for as Object.

Field Service Work Order Optimization

New Apex Trigger 

Name:

sObject:



Submit

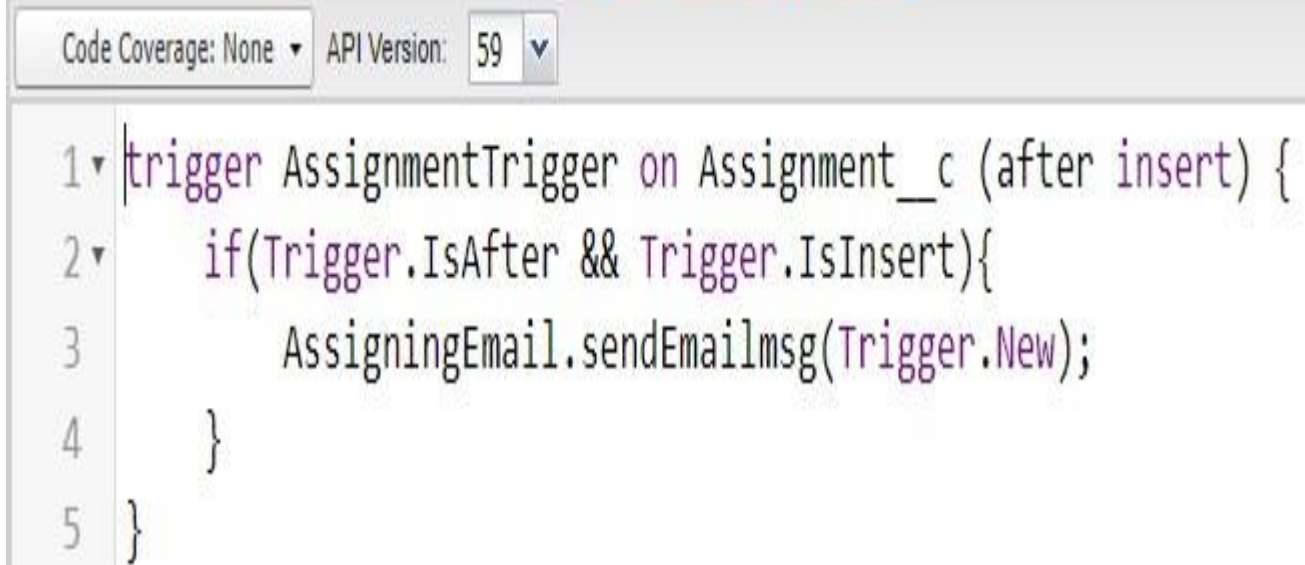
3. Click Submit.

4. Now write the code logic here

Field Service Work Order Optimization

ACTIVITY5: Create an Apex Class

1. Goto Setup-->Click on the gear icon-->Select Developer Console.



The screenshot shows the Salesforce Developer Console interface. At the top, there are tabs for 'Source', 'Run', 'Test', and 'Console'. The 'Source' tab is active, displaying the Apex code for the 'AssignmentTrigger' class. The code is as follows:

```
1 trigger AssignmentTrigger on Assignment__c (after insert) {  
2     if (Trigger.IsAfter && Trigger.IsInsert) {  
3         AssigningEmail.sendEmailmsg(Trigger.New);  
4     }  
5 }
```

Source Code:

```
trigger    AssignmentTrigger    on    Assignment  
_____  
c(afterinsert){  
    if(Trigger.IsAfter && Trigger.IsInsert){  
        AssigningEmail.sendEmailmsg(Trigger.New);  
    }  
}
```

5. Save the code.(click on file-->Save)

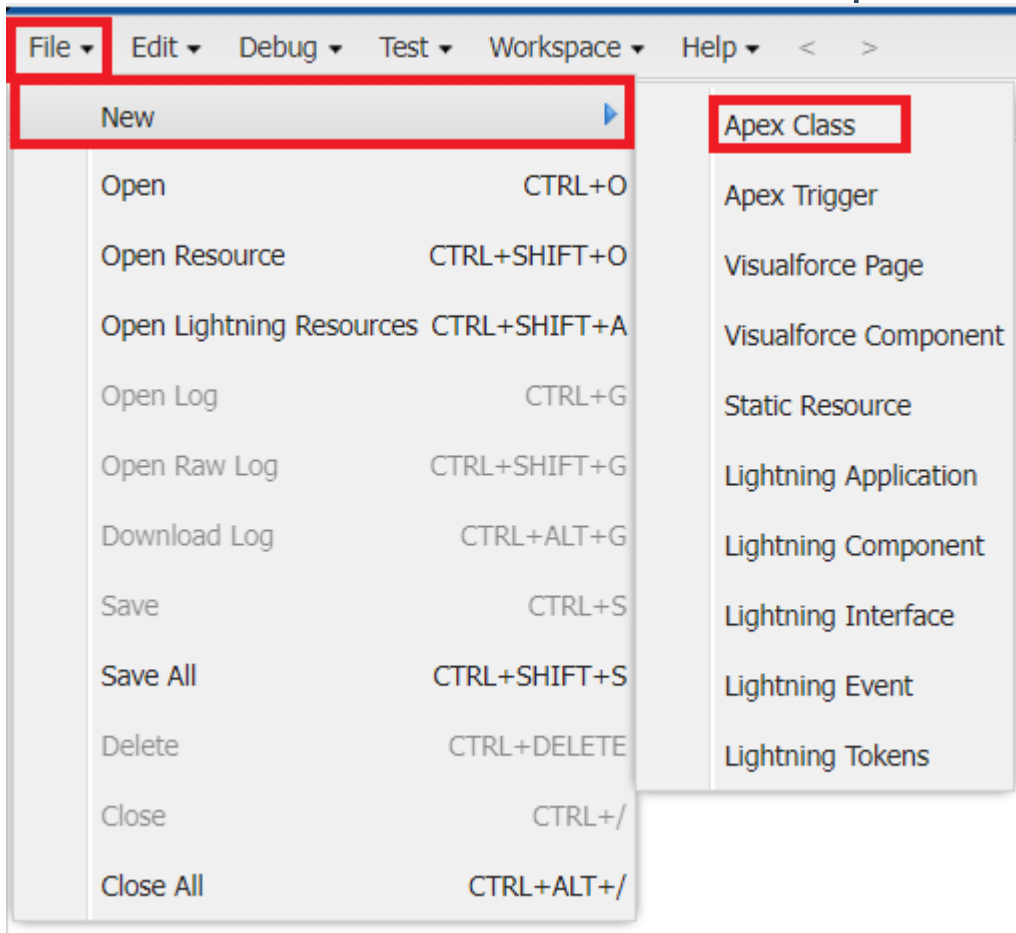
Field Service Work Order Optimization



2. Then we can see the Developer console .Click on the developer console and you will navigate to a new console window.

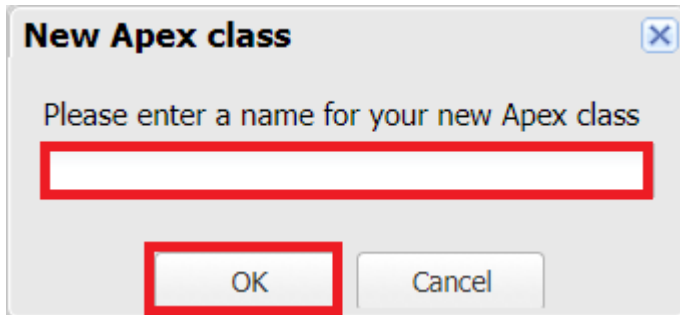
3. To create a new Apex Class follow the below steps:
Click on the file --> New --> Apex Class.

Field Service Work Order Optimization



4. Give the Apex Class name as “Completion Mail”.

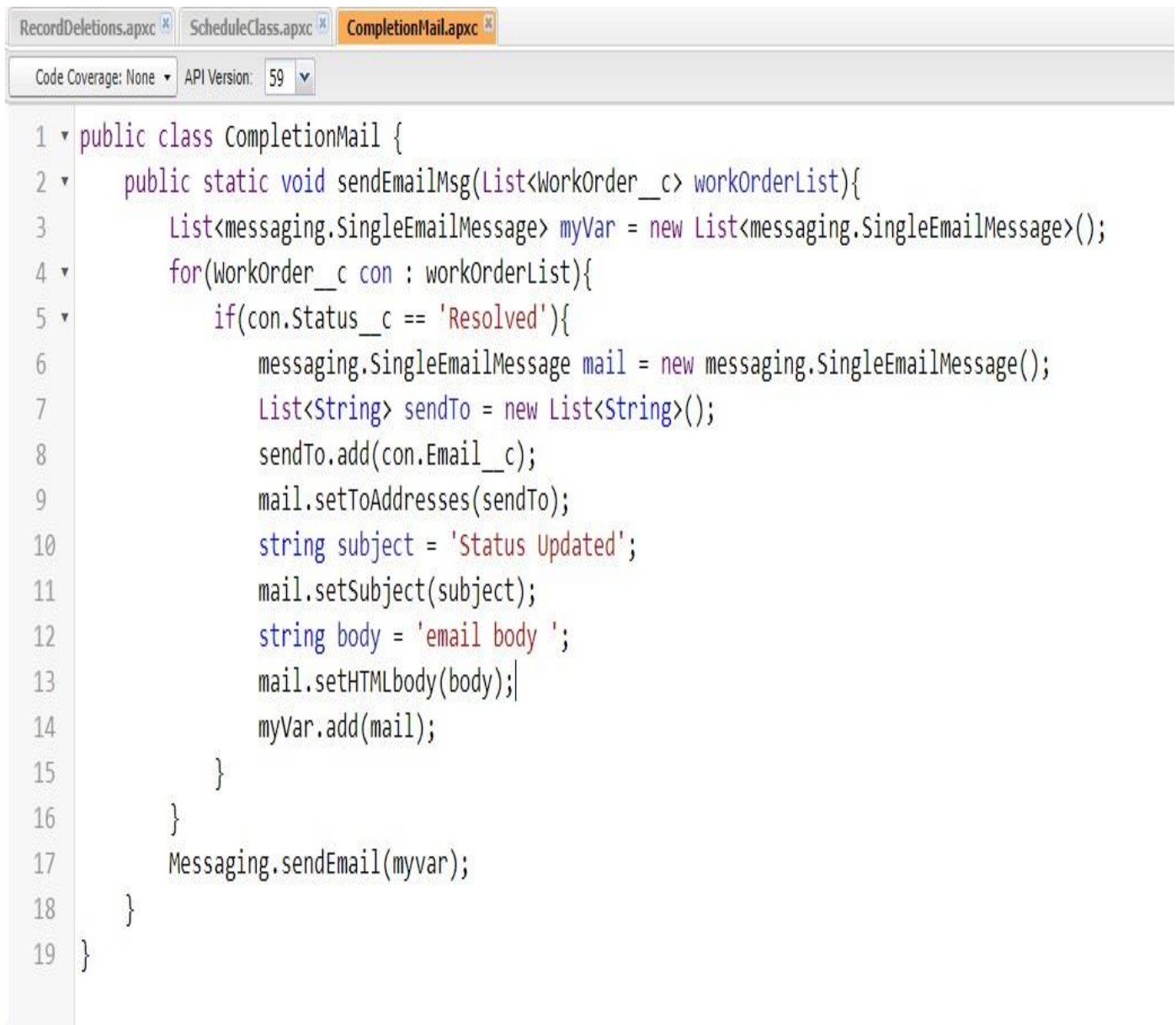
Field Service Work Order Optimization



A dialog box titled "New Apex class" with a close button (X) in the top right corner. It contains a text prompt "Please enter a name for your new Apex class" above a text input field. Below the input field are two buttons: "OK" and "Cancel". The "OK" button is highlighted with a red rectangular border.

5. Click ok.

6. Now write the code logic here



The image shows an IDE window with three tabs: "RecordDeletions.apxc", "ScheduleClass.apxc", and "CompletionMail.apxc". The "CompletionMail.apxc" tab is active. Below the tabs is a toolbar with "Code Coverage: None" and "API Version: 59". The main area displays the following Apex code:

```
1 public class CompletionMail {
2     public static void sendEmailMsg(List<WorkOrder__c> workOrderList){
3         List<messaging.SingleEmailMessage> myVar = new List<messaging.SingleEmailMessage>();
4         for(WorkOrder__c con : workOrderList){
5             if(con.Status__c == 'Resolved'){
6                 messaging.SingleEmailMessage mail = new messaging.SingleEmailMessage();
7                 List<String> sendTo = new List<String>();
8                 sendTo.add(con.Email__c);
9                 mail.setToAddresses(sendTo);
10                string subject = 'Status Updated';
11                mail.setSubject(subject);
12                string body = 'email body ';
13                mail.setHTMLbody(body);
14                myVar.add(mail);
15            }
16        }
17        Messaging.sendEmail(myvar);
18    }
19 }
```

Field Service Work Order Optimization

Source Code:

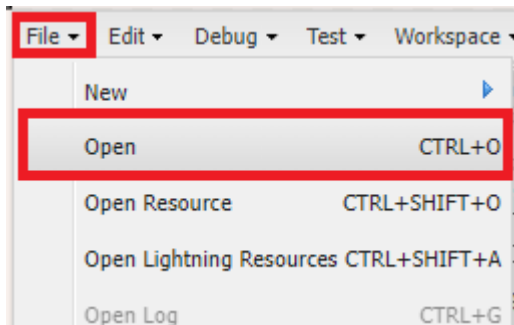
```
Public class Completion Mail {
    public static void sendEmailMsg(List<Work Order__c>Work
        OrderList){ List<messaging.SingleEmailMessage> myVar = new
List<messaging.SingleEmailMessage>();
    for(Work Order__ccon:Work
        OrderList){
        if(con.Status__c=='Resolved'){
            messaging.SingleEmailMessagemail=newmessaging.SingleEmailMessage();
            List<String> sendTo = new List<String>();
            sendTo.add(con.Email__c);
            mail.setToAddresses(sendTo);
            stringsubject='StatusUpdated';
            mail.setSubject(subject);
            stringbody='emailbody';
            mail.setHTMLbody(body)
            ; myVar.add(mail);
        }
    }
    Messaging.sendEmail(myvar);
}
```

7. Savethecode.(clickonfile--> Save)

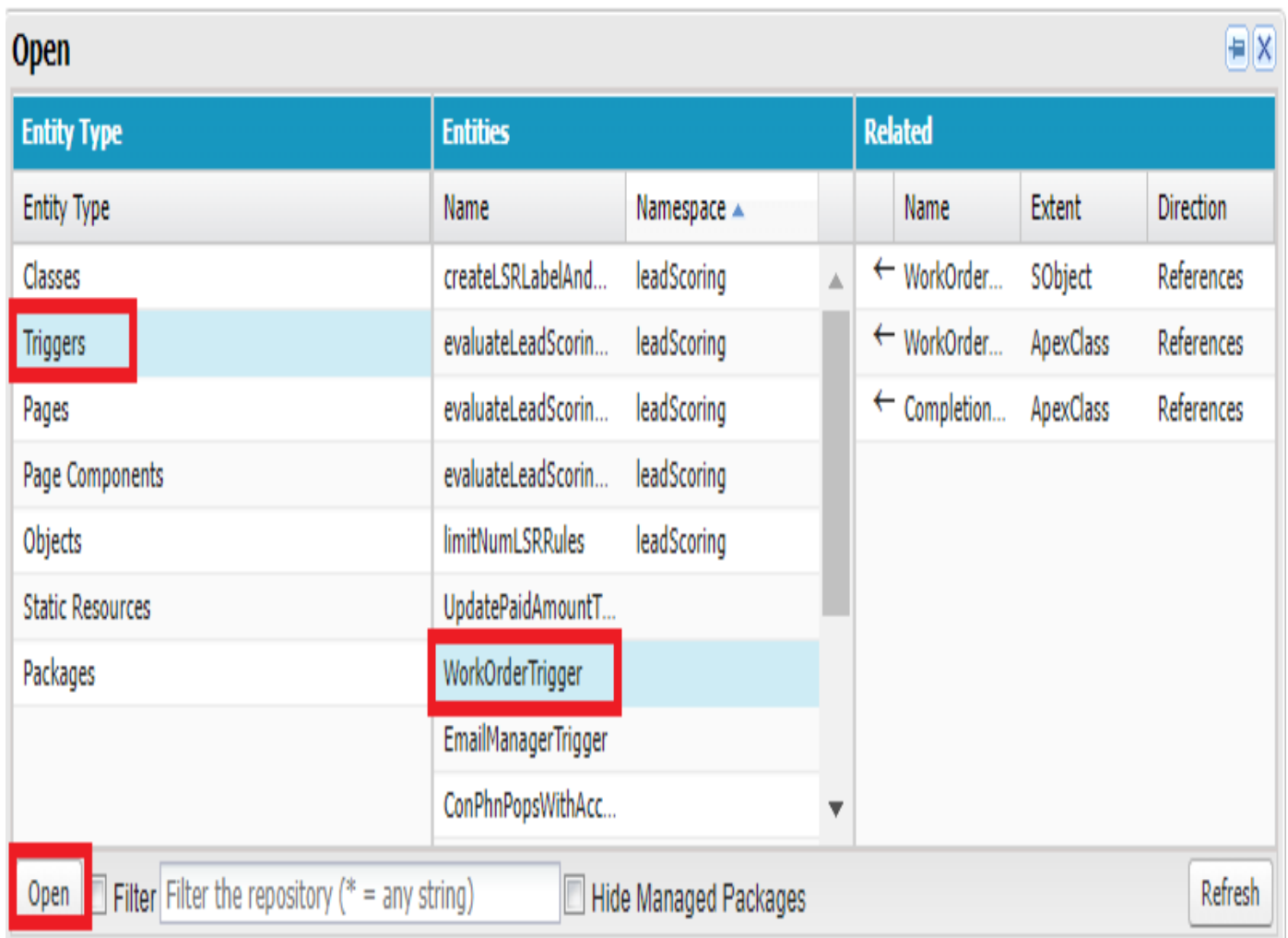
Field Service Work Order Optimization

ACTIVITY6: Create an Apex Trigger

1. Click on the file --> Open.



2. A popup window opens click on Triggers ,then select “Work Order Trigger” and click on “Open”



Field Service Work Order Optimization

3. Now writethecode logic here.



```
RecordDeletions.apxc x ScheduleClass.apxc x CompletionMail.apxc x WorkOrderTrigger.apxt x
Code Coverage: None v API Version: 59 v
1 trigger WorkOrderTrigger on WorkOrder__c (after insert, after update) {
2     if (Trigger.IsAfter && Trigger.IsInsert) {
3         WorkOrderClass.workOrder(trigger.new);
4     }
5     if (Trigger.IsAfter && Trigger.IsUpdate) {
6         CompletionMail.sendEmailMsg(trigger.new);
7     }
8 }
```

Field Service Work Order Optimization

```
Work Order Class .Work Order(trigger. new);  
    }  
    if(Trigger .Is After && Trigger .Is Update){ Completion Mail  
        .send Email Msg (Trigger .New);  
    }  
}
```

4. Save the code.(click on file-->Save)

ACTIVITY7:CreateanAsynchronousApexClass

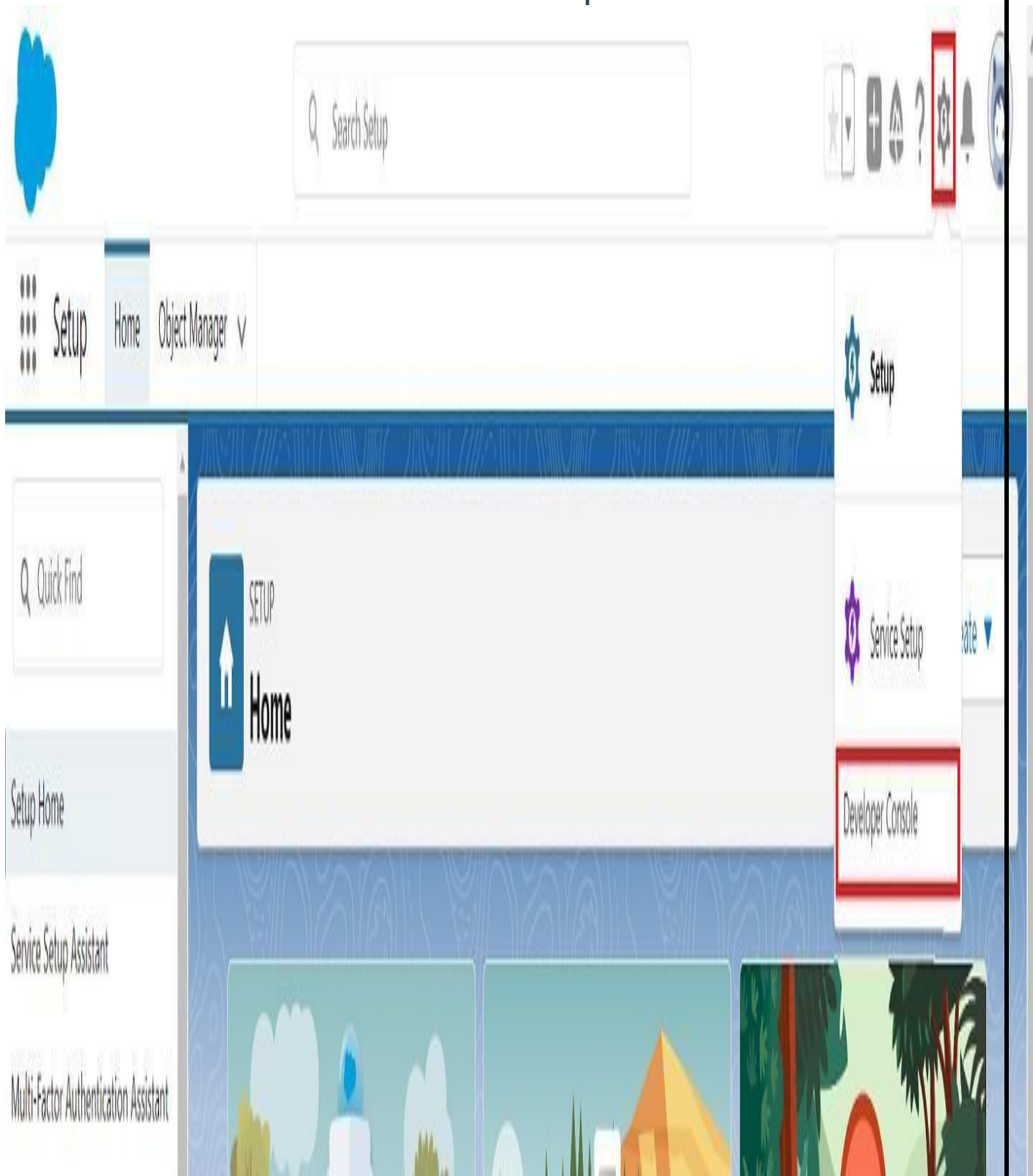
Create an Apex Class to Delete all the Work Order records which meets the following criteriaL

1. Completeddateshouldbemorethan30days.
2. Status should be 'Resolved'.

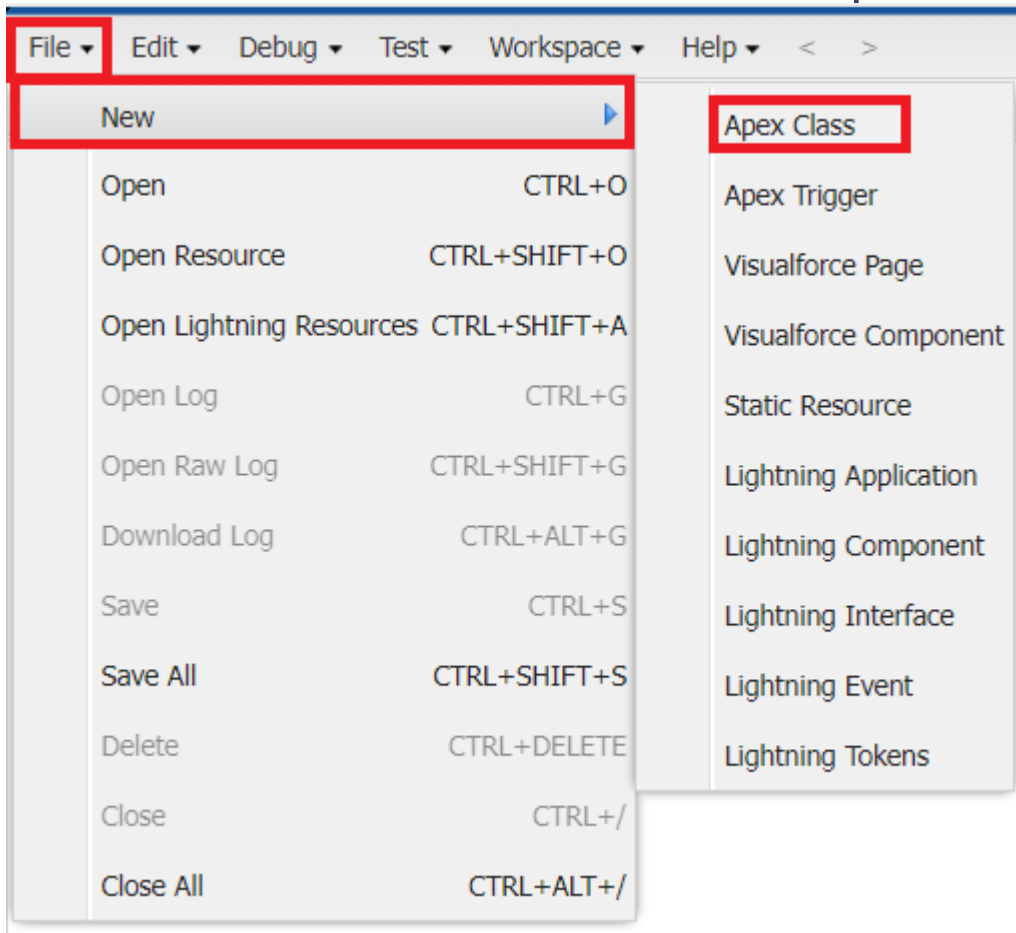
Create an Apex Class

1. Go to Setup -->Click on the gear icon-->Select Developer Console.

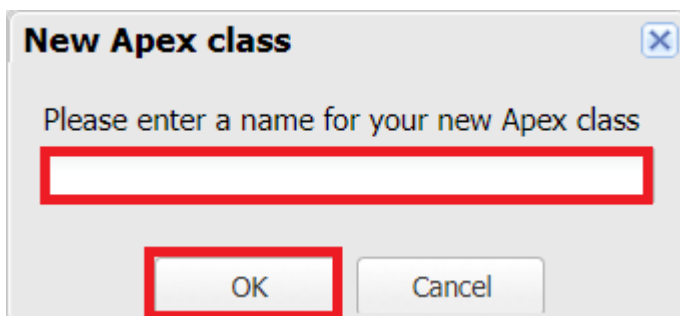
Field Service Work Order Optimization



Field Service Work Order Optimization



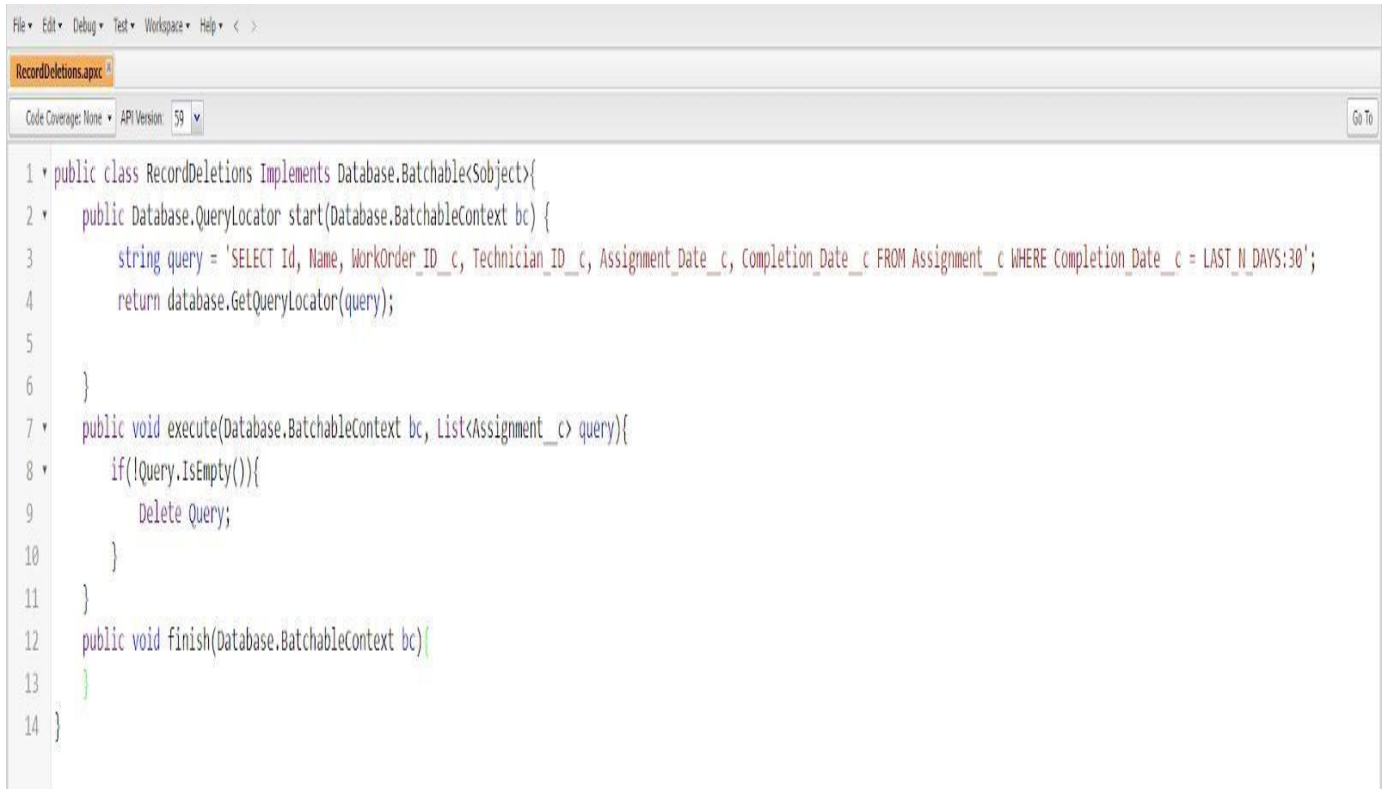
4. Give the Apex Class name as “Record Deletion”.



5. Click ok.

6. Now write the code log is here

Field Service Work Order Optimization



The screenshot shows a code editor window for a file named `RecordDeletions.apxc`. The editor has a menu bar with `File`, `Edit`, `Debug`, `Test`, `Workspace`, and `Help`. Below the menu bar, there is a toolbar with `Code Coverage: None`, `API Version: 59`, and a `Go To` button. The code is written in Apex and is as follows:

```
1 public class RecordDeletions Implements Database.Batchable<Sobject>{
2     public Database.QueryLocator start(Database.BatchableContext bc) {
3         string query = 'SELECT Id, Name, WorkOrder_ID__c, Technician_ID__c, Assignment_Date__c, Completion_Date__c FROM Assignment__c WHERE Completion_Date__c = LAST_N_DAYS:30';
4         return database.GetQueryLocator(query);
5     }
6 }
7 public void execute(Database.BatchableContext bc, List<Assignment__c> query){
8     if(!query.IsEmpty()){
9         Delete query;
10    }
11 }
12 public void finish(Database.BatchableContext bc){
13 }
14 }
```

Field Service Work Order Optimization

Source Code:

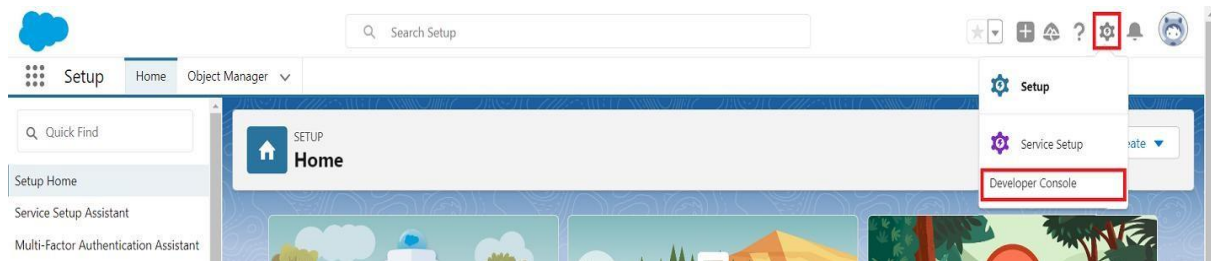
```
public class Record Deletions Implements Database .Batchable <Sobject>{
    public Database .Query Locator start(Database .Batchable Context bc) {
        string query = 'SELECT Id, Name, Work Order_ID____c,
        Technician_ID____c, Assignment_Date__c, Completion_Date__c FROM
        Assignment____cWHERE Completion_Date__c          =
        LAST_N_DAYS:30';
        return database .Get Query Locator(query);
    }
    public void execute(Database .Batchable Context bc, List<Assignment
    _____c>query){
        if(!Query .Is Empty()){
            Delete Query;
        }
    }
    Public void finish(Database .Batchable Context bc){
    }
}
```

7. Save the code.(click on file-->Save)

Field Service Work Order Optimization

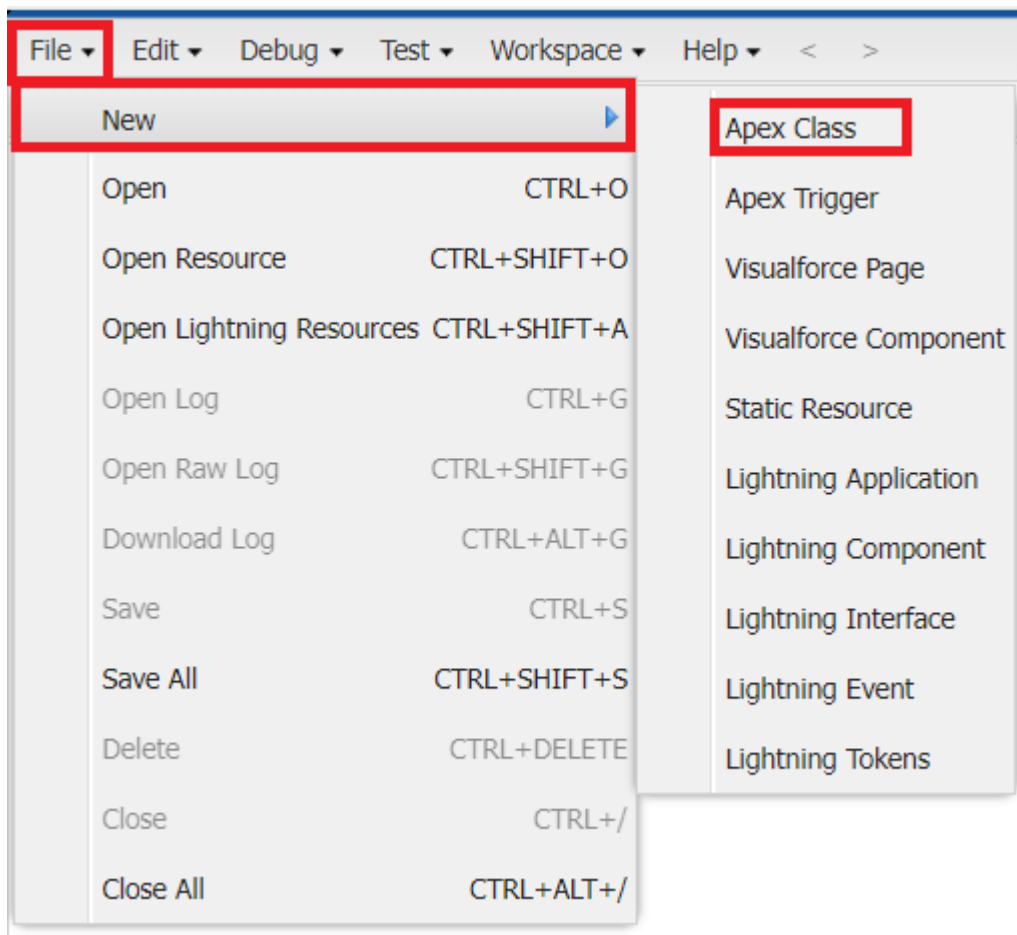
ACTIVITY8: Create an Apex Schedule Class

1. Go to Setup-->Click on the gear icon-->Select Developer Console.



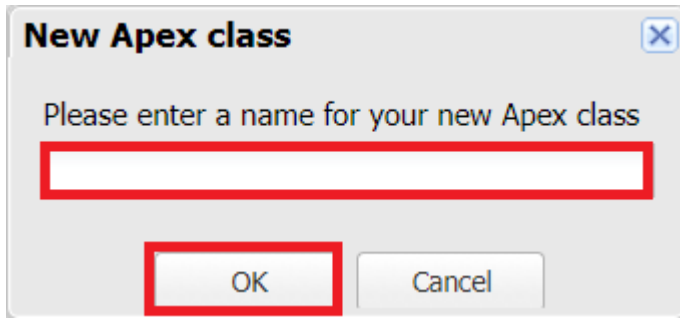
2. Then we can see the Developer console. Click on the developer console and you will navigate to a new console window.

3. To create a new Apex Class follow the below steps: Click on the file --> New --> Apex Class.



4. Give the Apex Class name as “Schedule Class”.

Field Service Work Order Optimization



New Apex class [X]

Please enter a name for your new Apex class

OK Cancel

5. Click ok.

6. Now write the code logic here

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```
RecordDeletions.apxc x ScheduleClass.apxt x
Code Coverage: None API Version: 59
1 global class ScheduleClass implements Schedulable {
2     global void execute(SchedulableContext SC) {
3         RecordDeletions delrec = new RecordDeletions();
4         database.executeBatch(delrec, 200);
5     }
6 }
```

Source Code:

```
Global class Schedule Class implements Schedulable{
    global void execute(SchedulableContext SC) {
        RecordDeletionsdelrec=newRecordDeletions();
        database.executeBatch(delrec, 200);
    }
}
```

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}

7. Save the code.(click on file? Save)

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ACTIVITY9: Create a Schedule Apex

1. Schedule the Apex class:
2. From the Setup page search for “Apex Classes” in quick search.
3. Click on “Schedule Apex” as shown below.

Search Setup

Setup Home Object Manager

apex class

Custom Code

Apex Classes

Didn't find what you're looking for?
Try using Global Search.

Apex Classes

Apex Code is an object oriented programming language that allows developers to develop on-demand business applications on the Lightning Platform.

Percent of Apex Used: 0.19%
You are currently using 11,223 characters of Apex Code (excluding comments and @isTest annotated classes) in your organization, out of an allowed limit of 6,000,000 characters. Note that the amount in use includes both Apex Classes and Triggers defined in your organization.

[Estimate your organization's code coverage](#)

[Compile all classes](#)

View: All Create New View

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Other All

Action	Name	Namespace Prefix	Api Version	Status	Size Without Comments	Last Modified By	Has Trace Flags
Edit Del Security	Apex101		59.0	Active	181	demo project , 26/10/2023, 12:38 pm	<input type="checkbox"/>

Developer Console New Generate from WSDL Run All Tests **Schedule Apex**

Field Service Work Order Optimization

4. Click on Schedule Apex and enter the Job name.

- a. Job Name :Delete Assignment Schedule
- b. ApexClass: Schedule Class(fromclickingonlookup icon)
- c. Frequency: Monthly
- d. Preferred StartTime : Selectanytime

SETUP
Apex Classes

Schedule Apex

Schedule an Apex class that implements the 'Schedulable' interface to be automatically executed on a weekly or monthly interval.

Save Cancel

Job Name DeleteAssignmentSchedule

Apex Class ScheduleClass

Schedule Apex Execution

Frequency ☐ Weekly ☒ Monthly

On day 1 of every month On the 1st Sunday of every month

Start 06/12/2023 [06/12/2023]

End 06/01/2024 [06/12/2023]

Preferred Start Time 4:00 pm

Exact start time will depend on job queue activity.

Save Cancel

5. ClickSave.

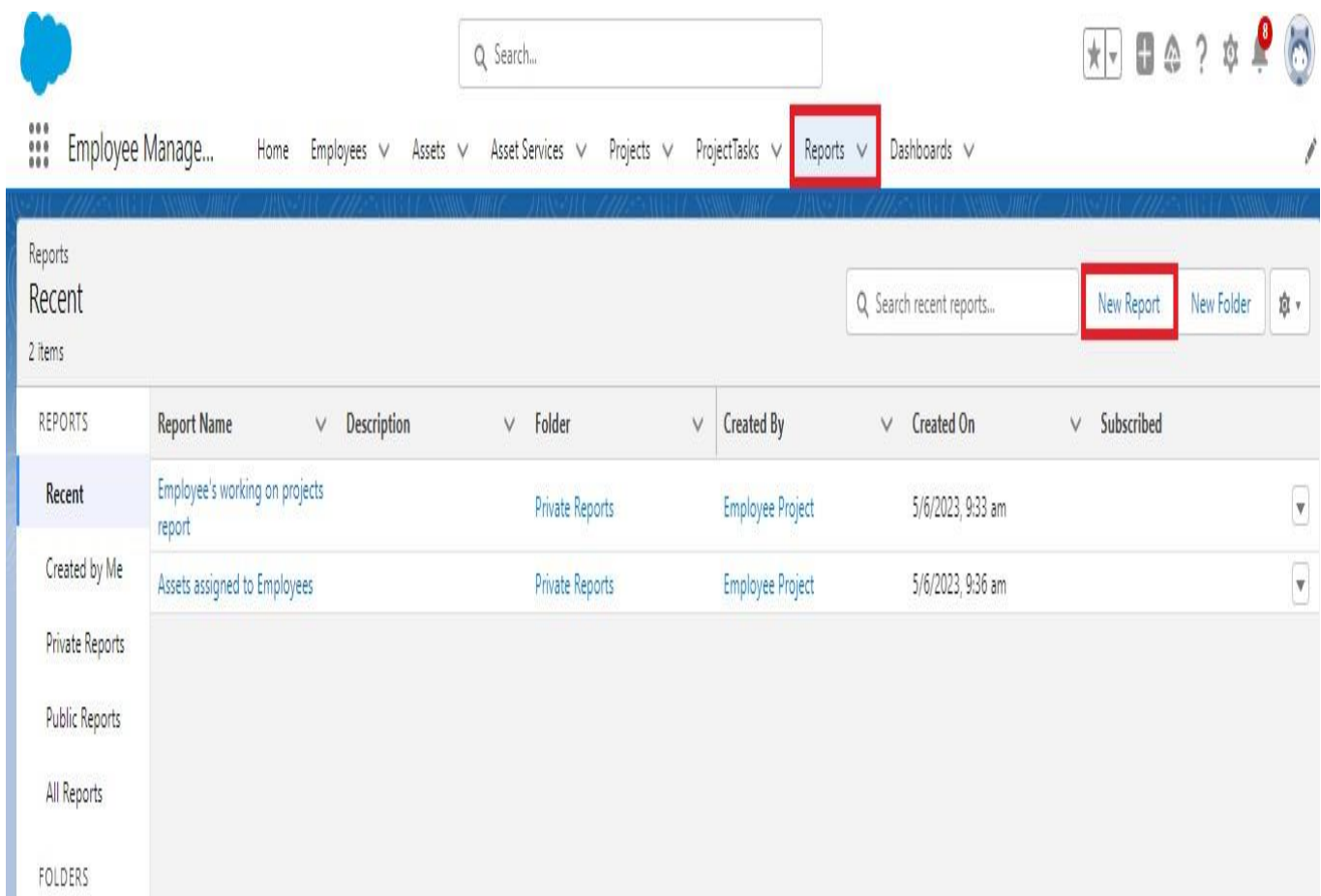
Field Service Work Order Optimization

Reports&Dashboards

Sales force Reports and Dashboard sare powerful tools that empower users to visualize and analyze data within the Sales force platform. They play a crucial role in providing in sights, monitoring performance, and making informed business decisions.

ACTIVITY1:Report

1. Go to the app-->click on the reports tab
2. Click New Report.



The screenshot shows the Salesforce Reports and Dashboards interface. The top navigation bar includes the Salesforce logo, a search bar, and several icons. The 'Reports' tab is highlighted in the top navigation bar. Below the navigation bar, the 'Recent' reports section is visible. It includes a search bar for recent reports and a 'New Report' button, which is highlighted with a red box. Below the button is a table of recent reports.

REPORTS	Report Name	Description	Folder	Created By	Created On	Subscribed
Recent	Employee's working on projects report		Private Reports	Employee Project	5/6/2023, 9:33 am	
Created by Me	Assets assigned to Employees		Private Reports	Employee Project	5/6/2023, 9:36 am	
Private Reports						
Public Reports						
All Reports						
FOLDERS						

3. Select report type from category or from report type panal or from search panel -->click on start report.

Field Service Work Order Optimization

Create Report

Category

Recently Used

All1

Accounts & Contacts

Opportunities

Customer Support Reports

Leads

Campaigns

Activities

Contracts and Orders

Price Books, Products and Assets

Administrative Reports

Select a Report Type

assignment2

Report Type Name	Category
Assignments	Standard
Assignments with WorkOrder ID3	Standard
Assignments with Technician ID	Standard

Details

Assignments with WorkOrder ID

Standard Report Type

4

Start Report

Details

Fields (32)

Created By You

No Reports Yet

Created By Others

No Reports Yet

Objects Used in Report Type

Owner

WorkOrder

Field Service Work Order Optimization

4. Customize your report
- Add fields from left pane as shown below
 - Grouped by Work Order ID

The screenshot displays the 'Employee Management' report customization screen. The top navigation bar includes 'Employee Manage...', 'Home', 'Employees', 'Assets', 'Asset Services', 'Projects', 'Project Tasks', 'Reports', and 'Dashboards'. The 'Reports' menu is active, showing 'New Employees Report' and 'Employees'. A red box highlights the 'Save & Run', 'Save', 'Close', and 'Run' buttons. Below the buttons, a message states: 'Previewing a limited number of records. Run the report to see everything.' The main table area is outlined with a red box and contains the following data:

Employee	Employee Name	Employee ID	Reports to	Login Time	Logout Time	Mode of Work	LinkedIn Profile
1	Employee	4750000000000000					http://https://linkedin
2	Employee	4750000000000000		8:00 am	1:00 pm		http://https://linkedin

The left sidebar contains a 'Columns' section with a red box around the 'Add columns...' button. Below it, a list of fields is shown with checkboxes:

- Employee: Employee Name X
- Employee: ID X
- Reports to X
- Login Time X
- Logout Time X
- Mode of Work X
- LinkedIn Profile X

5. Save or run it.

Note: Reports may get varied from the above pictures as the data might be different.

Field Service Work Order Optimization

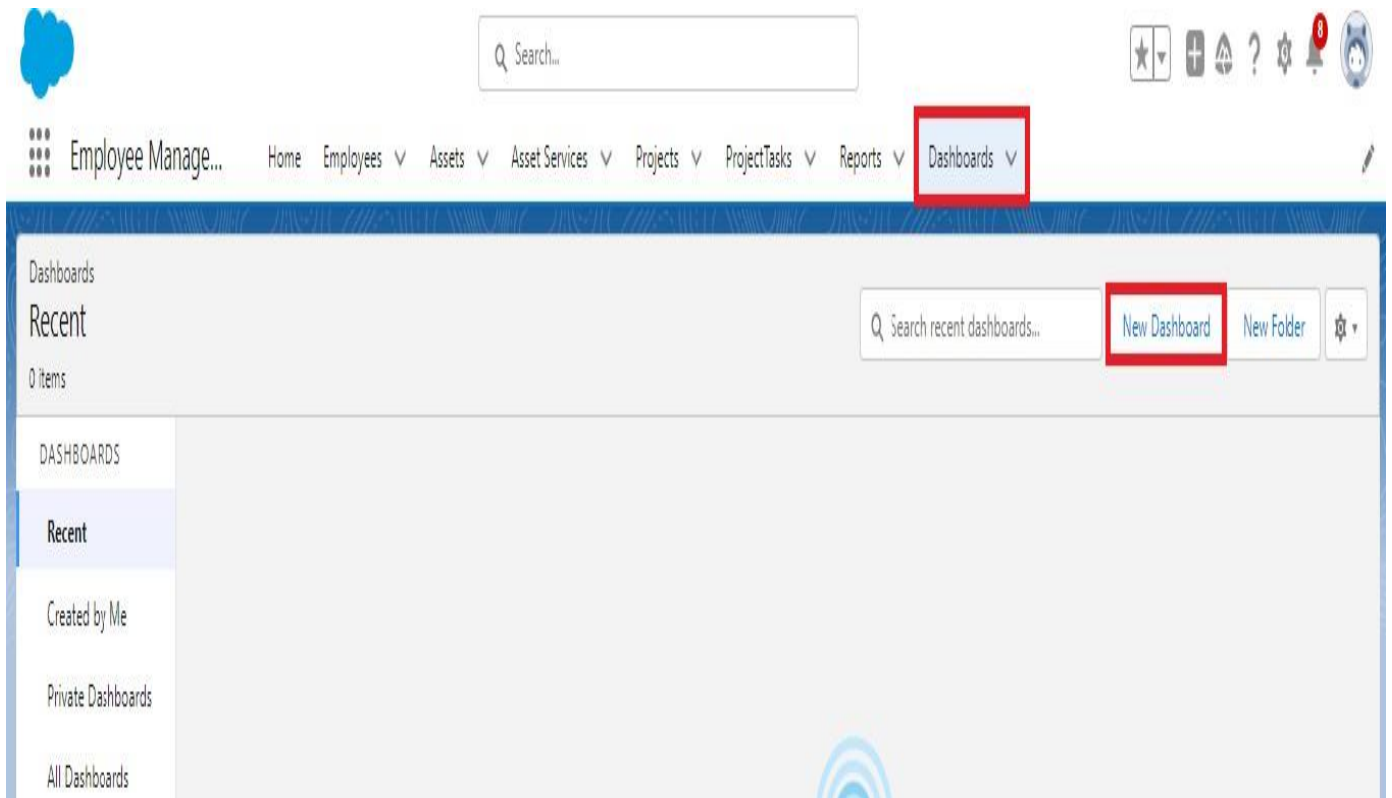
ACTIVITY2:CreateReports

1. Create are port with report type:“Work Orders Status Reports”.
2. Create are port with report type:“Technician and Assignment Details Reports”.

Field Service Work Order Optimization

ACTIVITY3:Dashboard

1. Goto the app --> click on the Dashboards tabs.



2. Give a Name and click on Create.

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New Dashboard

* Name

Dashboard 1

Description

Folder

Private Dashboards

Select Folder

Cancel

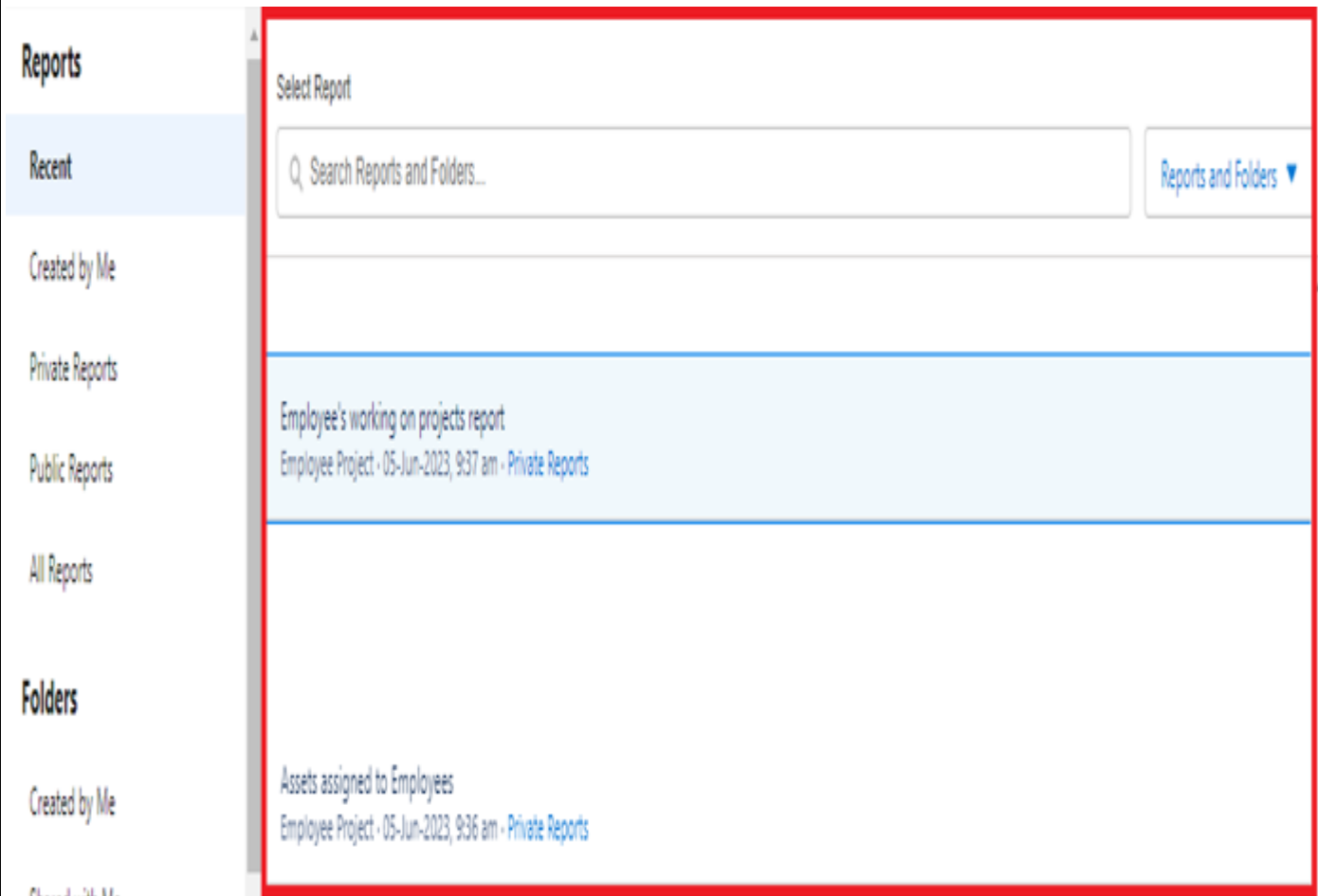
Create

3. Select add component.

The screenshot displays the main dashboard interface. At the top, there is a navigation bar with a hamburger menu icon on the left and a pencil icon on the right. The navigation bar contains the following items: 'Employee Manage...', 'Home', 'Employees' (with a dropdown arrow), 'Assets' (with a dropdown arrow), 'Asset Services' (with a dropdown arrow), 'Projects' (with a dropdown arrow), 'ProjectTasks' (with a dropdown arrow), 'Reports' (with a dropdown arrow), and 'Dashboards' (with a dropdown arrow). Below the navigation bar, there is a header section for 'Dashboard 1' with a pencil icon. To the right of the header, there is a red-bordered button labeled '+ Component'. Next to it are buttons for '+ Filter', a star icon, 'Save', and 'Done'. Below the header, there is a grid of 12 placeholder components arranged in two rows of six.

Field Service Work Order Optimization

4. Select a Report which we have created in the previous activities and click on select.



6. Click Add then click on Save and then click on Done.

ACTIVITY4: Create Dashboards

Create another Dashboard as we discussed in activity3 which Work Order status in a vertical bar graph. Shows the details of completed

Field Service Work Order Optimization

Github Link:

<https://github.com/vanajapujari5/field-service-workorder-optimization---LTVIP2025TMID29686>

Demo Video Link

<https://drive.google.com/file/d/1ll1zB1sKgvyhV35loPWtXPOP3l21xXx8/view?usp=drivesdk>