Capstone Project Report
On
"**Travel Approval App**"

Submitted by:

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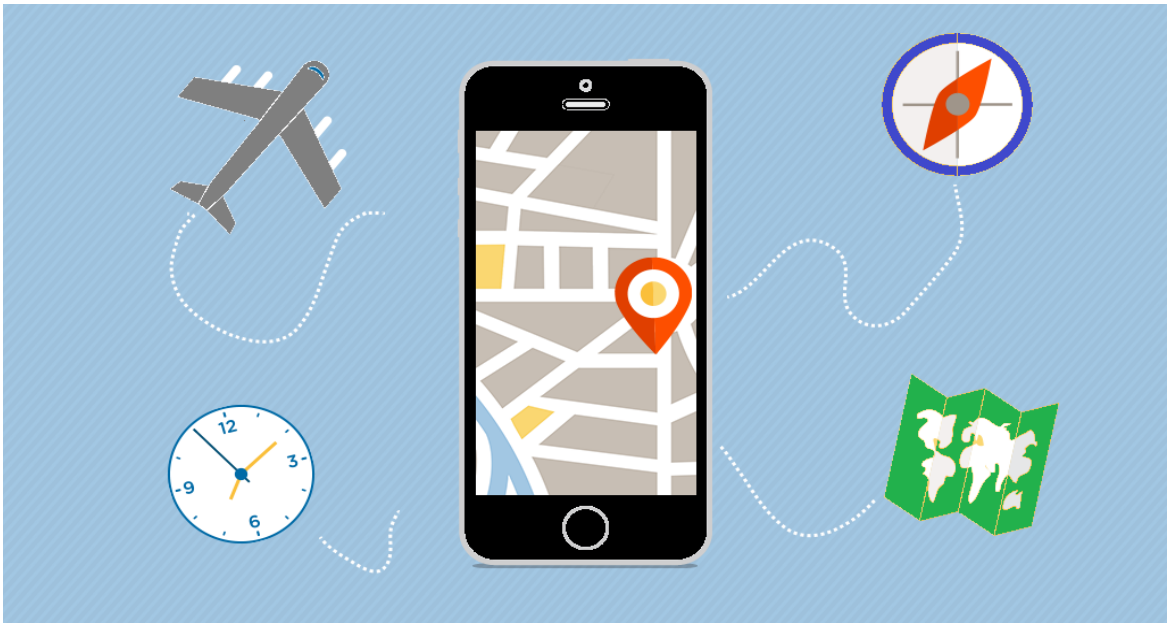
Abstract

The Travel Approval App for Salesforce is a comprehensive solution designed to streamline the travel approval process for sales teams. With this app, sales representatives can quickly and easily submit travel requests, including details on travel dates, destinations, and budgets, all from within the Salesforce platform. The app automates the approval process, ensuring that requests are routed to the appropriate approvers based on pre-defined rules and workflows. The app also provides real time visibility into travel requests and approvals, helping sales managers make informed decisions about their teams' travel plans. Overall, the Travel Approval App for Salesforce enables sales teams to save time, increase efficiency, and improve collaboration, all while ensuring that travel is managed in a compliant and cost-effective manner.

Introduction

In today's fast-paced business environment, sales teams often need to travel frequently to meet with clients, attend conferences, and conduct business. However, managing travel requests and approvals can be a time-consuming and error-prone process, particularly when done manually. To address this challenge, many organizations are turning to technology solutions such as the Travel Approval App for Salesforce



This app is a powerful tool that allows sales teams to easily submit and manage travel requests directly within the Salesforce platform. By automating the travel approval process, the app saves time and reduces the risk of errors and delays. It also provides sales managers with real-time visibility into their teams' travel plans, enabling them to make informed decisions about resource allocation and budgeting.

In this report, we will provide an overview of the Travel Approval App for Salesforce, including its features, benefits, and potential use cases. We will also explore how this app can help organizations improve their travel management processes, increase efficiency, and reduce costs. Finally, we will discuss best practices for implementing and using the app effectively.

Flow of the Project

The flow of the Travel Approval App for Salesforce typically involves several steps, which are as follows:

1.Travel Request Submission: Sales representatives submit travel requests using the Travel Approval App within the Salesforce platform. The request includes details such as travel dates, destinations, budgets, and purpose.

2.Automated Routing of Requests: The app automatically routes the travel request to the appropriate approvers based on pre-defined rules and workflows. This ensures that requests are reviewed by the right people, in the right order.

3.Review and Approval: Approvers receive notifications when a travel request requires their approval. They can review the request details and approve or reject it within the app.

4. Notification and Feedback: Sales representatives are notified of the approval or rejection of their travel request. If rejected, the app may allow the representative to revise and resubmit the request.

5.Real-Time Reporting: The app provides real-time visibility into travel requests and approvals, allowing sales managers to monitor travel spend and make informed decisions about their teams' travel plans. Overall, the Travel Approval App for Salesforce automates and streamlines the travel request and approval process, providing a seamless experience for sales representatives and managers while ensuring compliance and cost-effectiveness.

Software Requirements

For the fastest and most stable experience, we recommend:

- An Octane 2.0 score of 30,000 or greater
- Network latency of 150 ms or less
- Download speed of 3 Mbps or greater
- At least 8 GB of RAM, with 3 GB available for Salesforce browser tabs

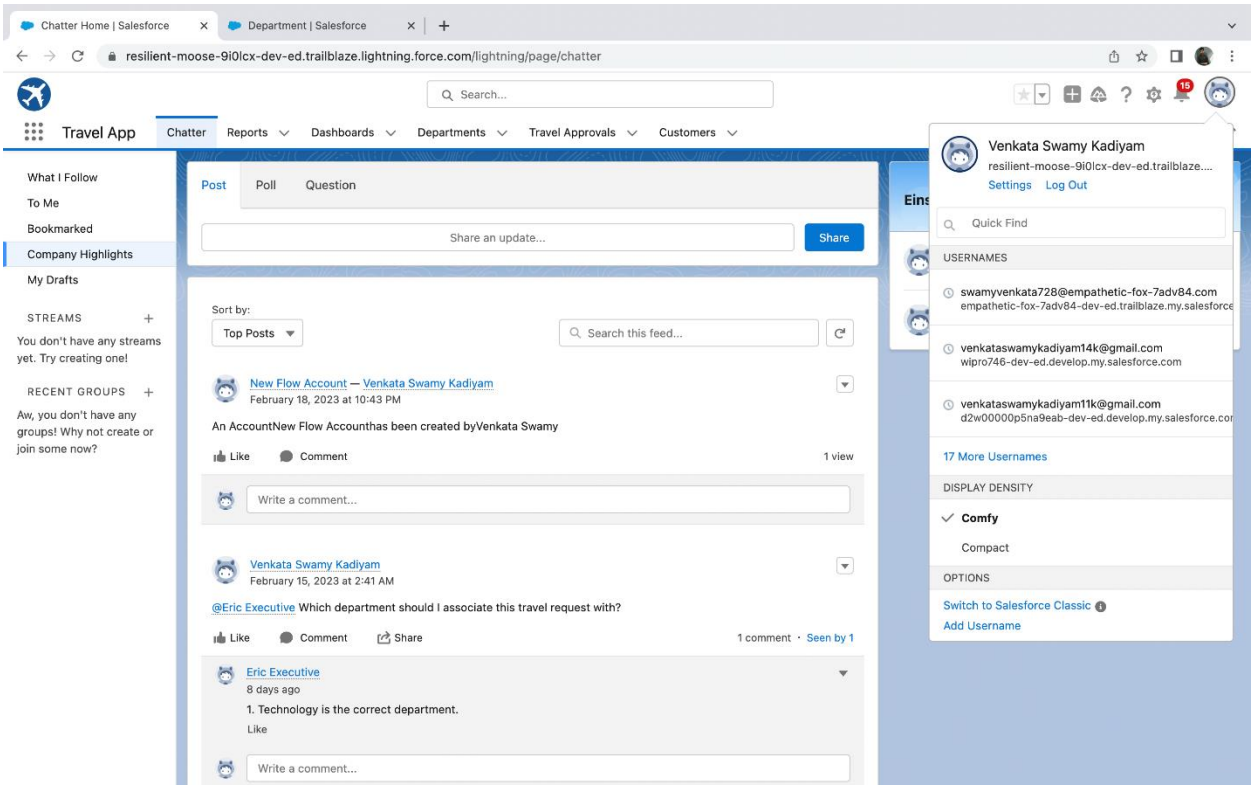
Minimum requirements are:

- An Octane 2.0 score of 20,000 or greater
- Network latency of 200 ms or less
- Download speed of 1 Mbps or greater
- At least 5 GB of RAM, with 2 GB available for Salesforce browser tabs

Module - 1

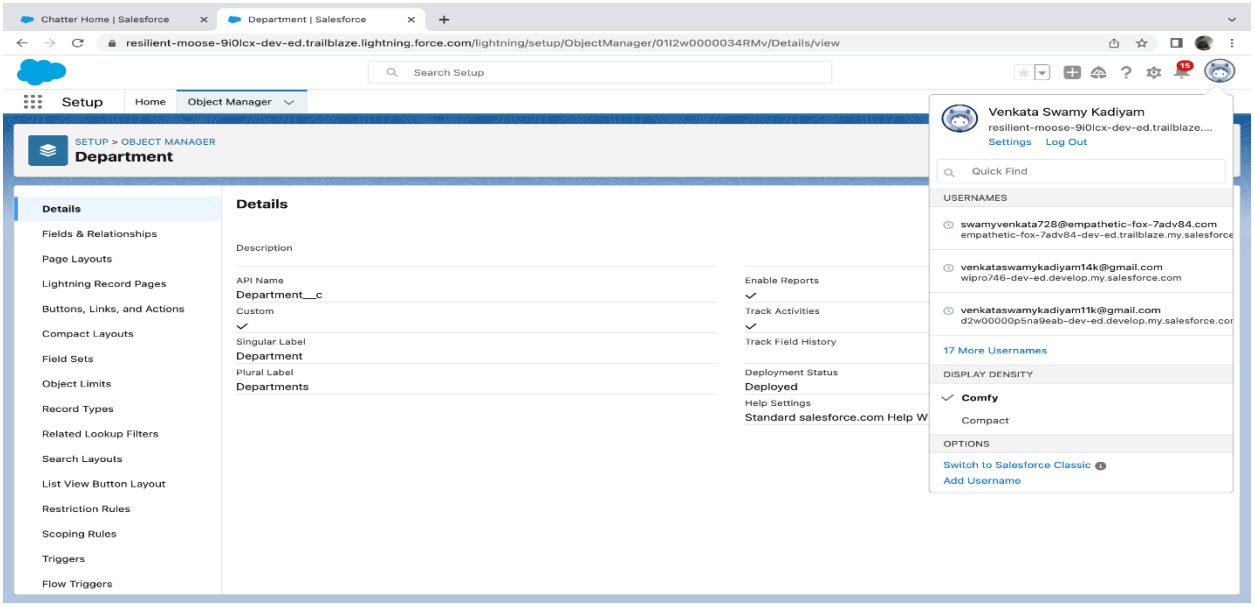
Exercise – 1

Step – 1 : Created Travel App Application

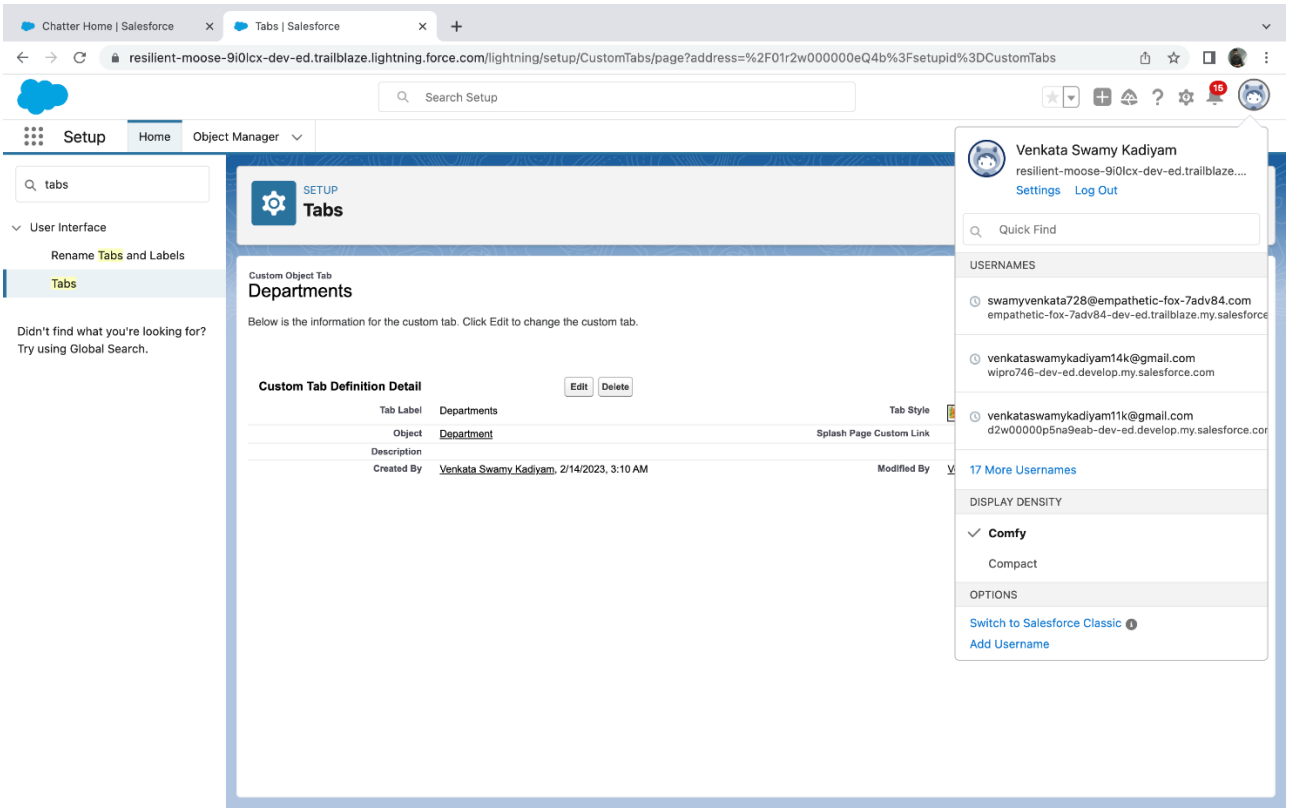


Step – 2

Created Department Custom Object

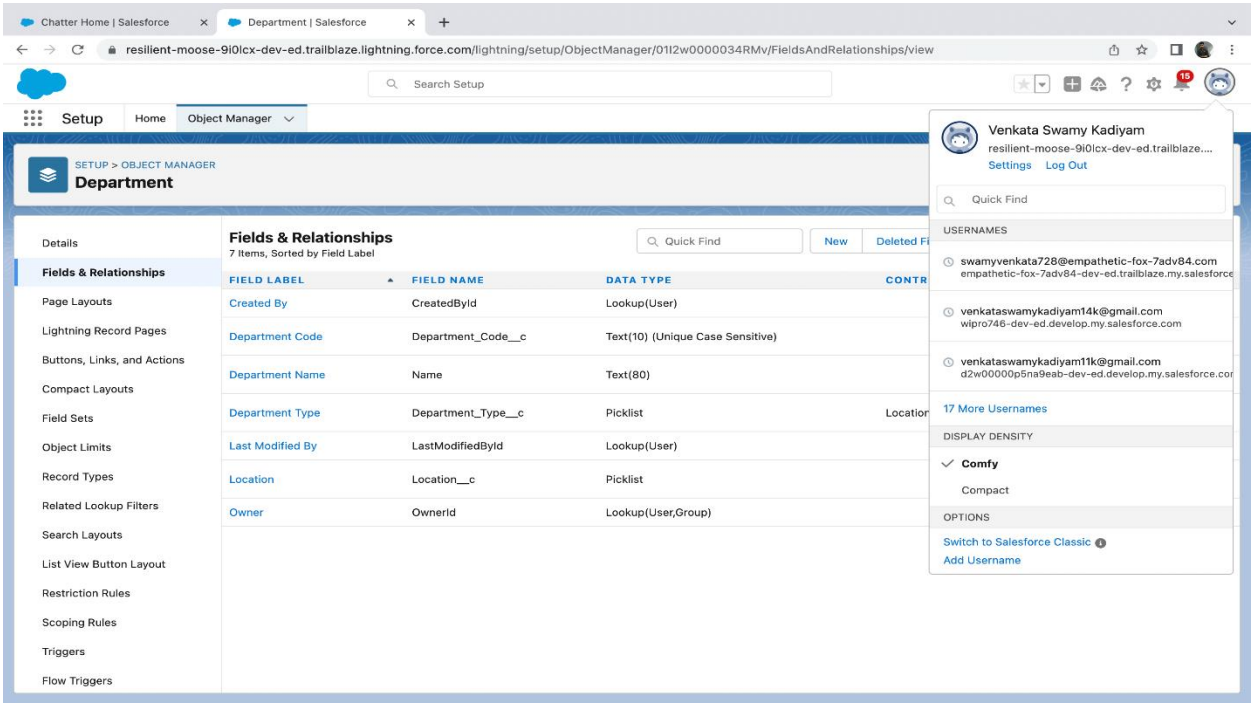


Created new Department custom Object tab

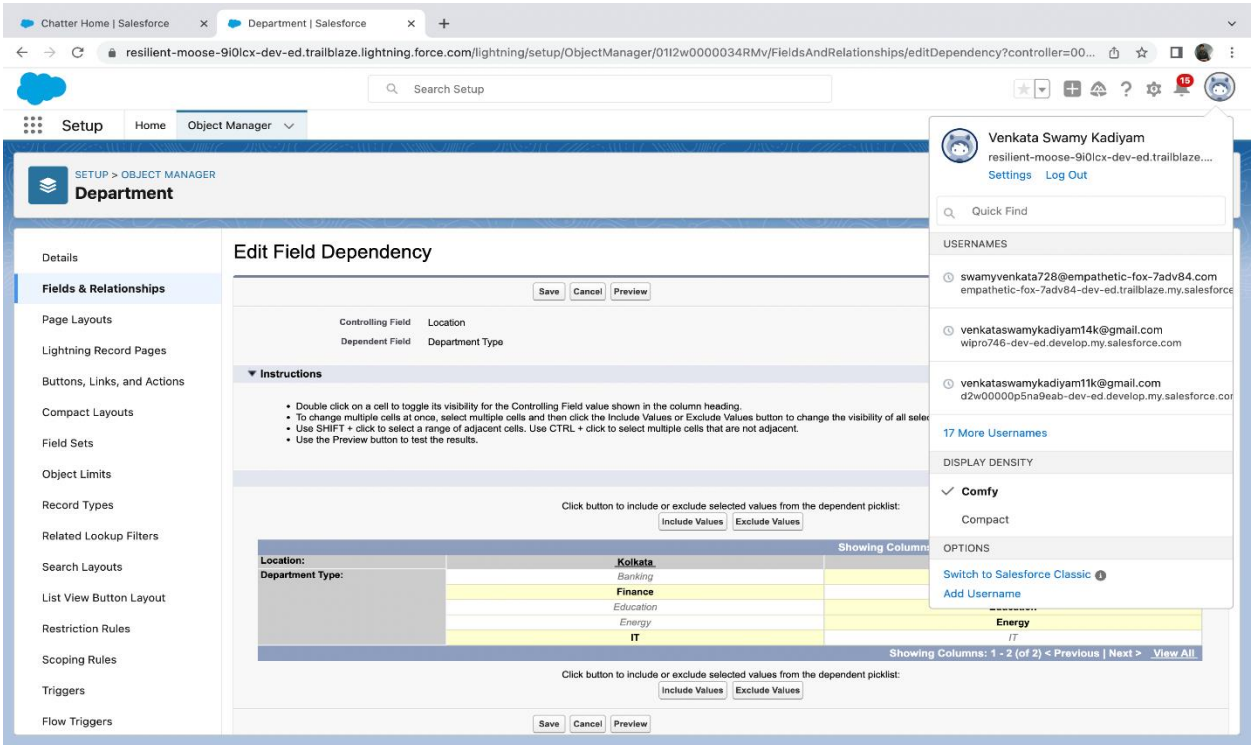


Step – 3

Created all the required Custom fields

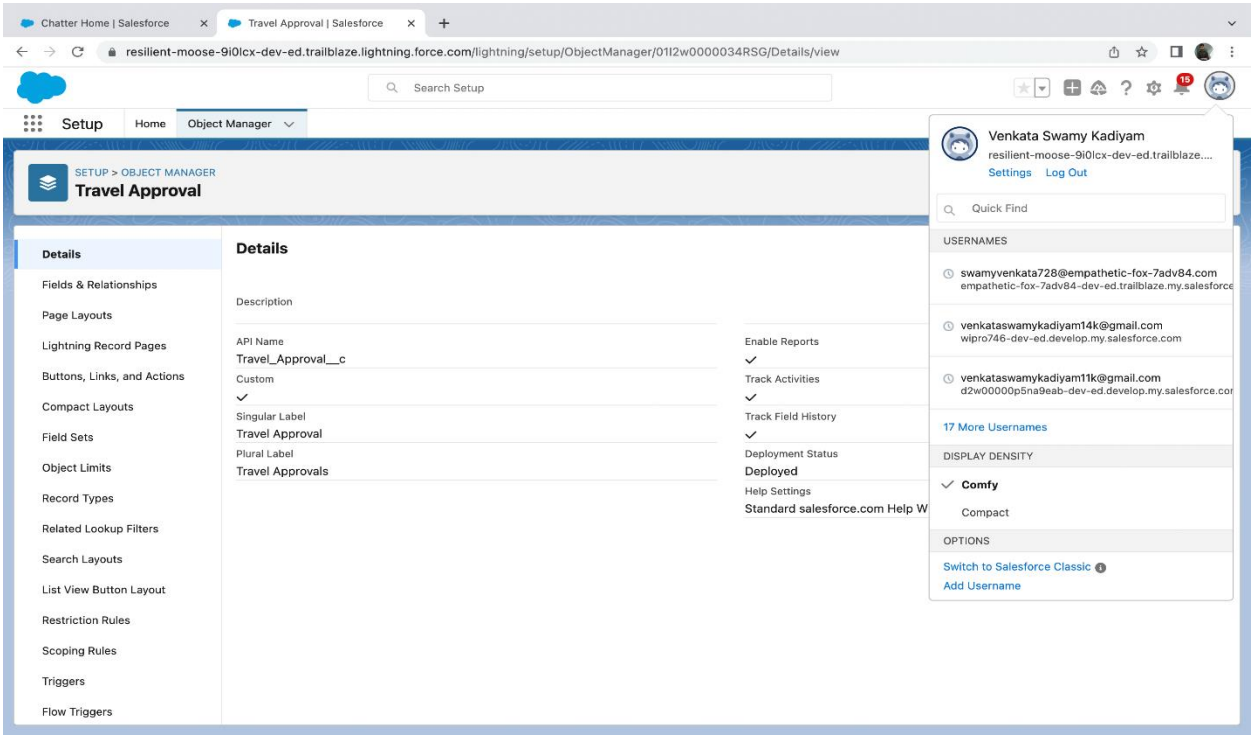


Created Field Dependency

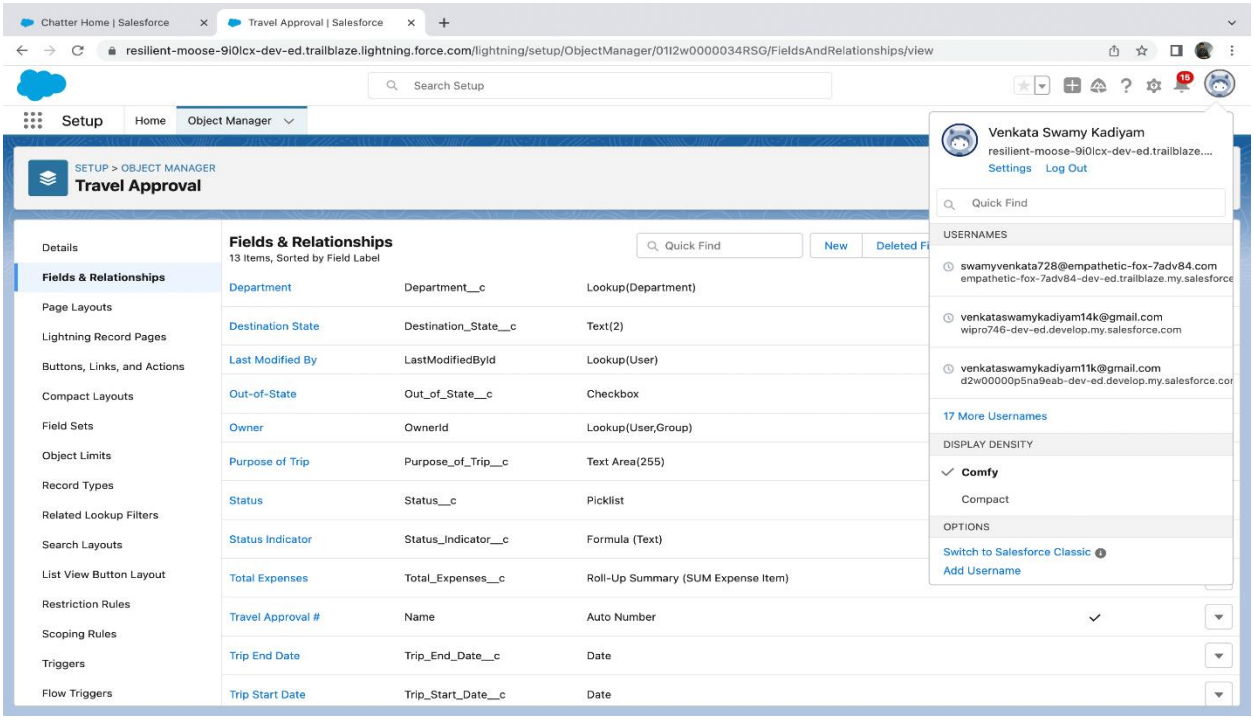


Step – 4

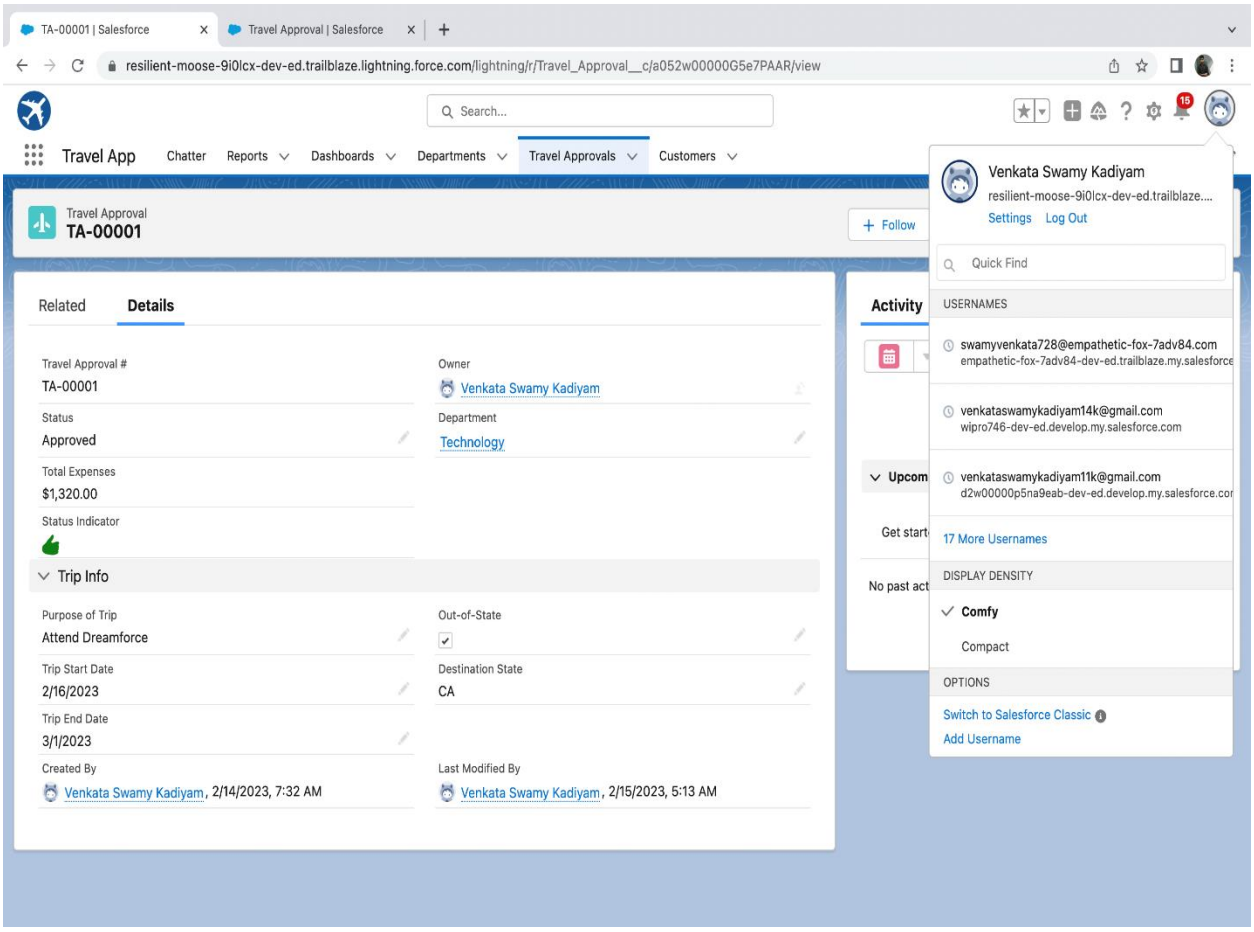
Created the required Travel Approval Object



Created the required fields

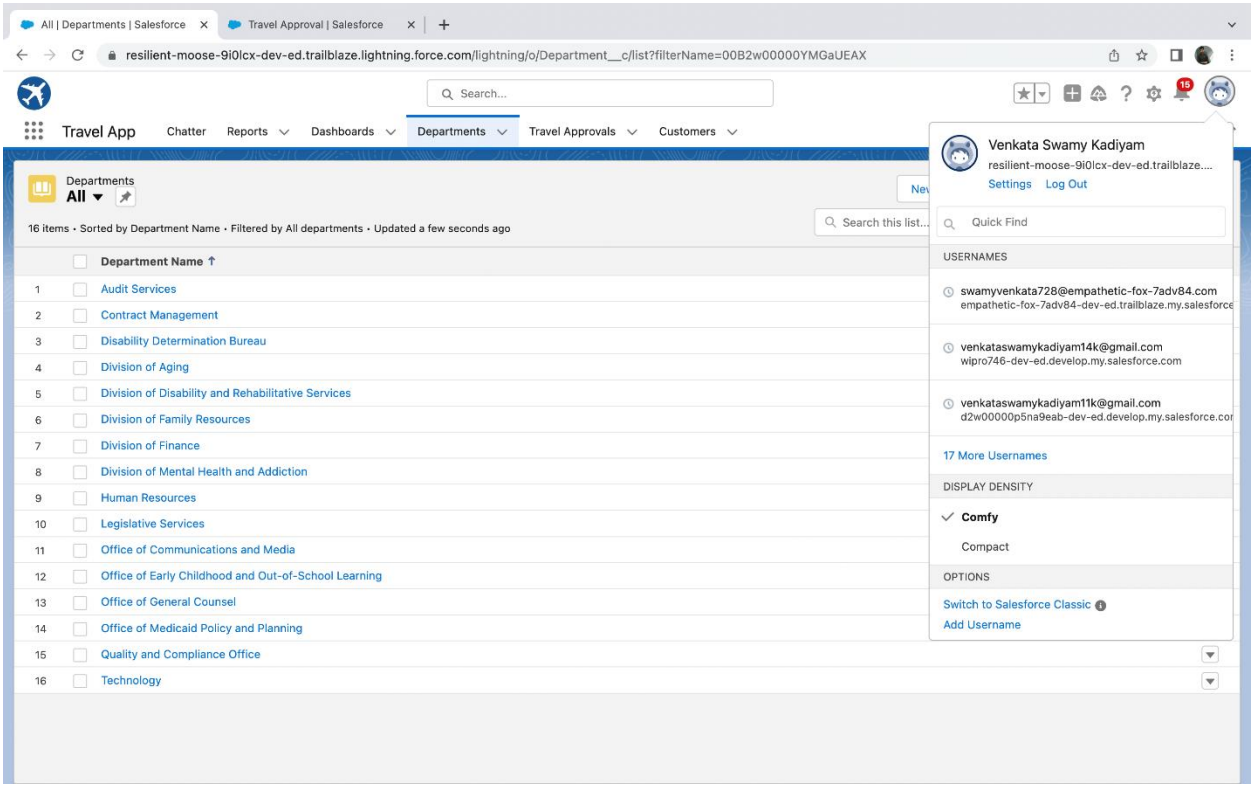


After Testing the App



Step – 5

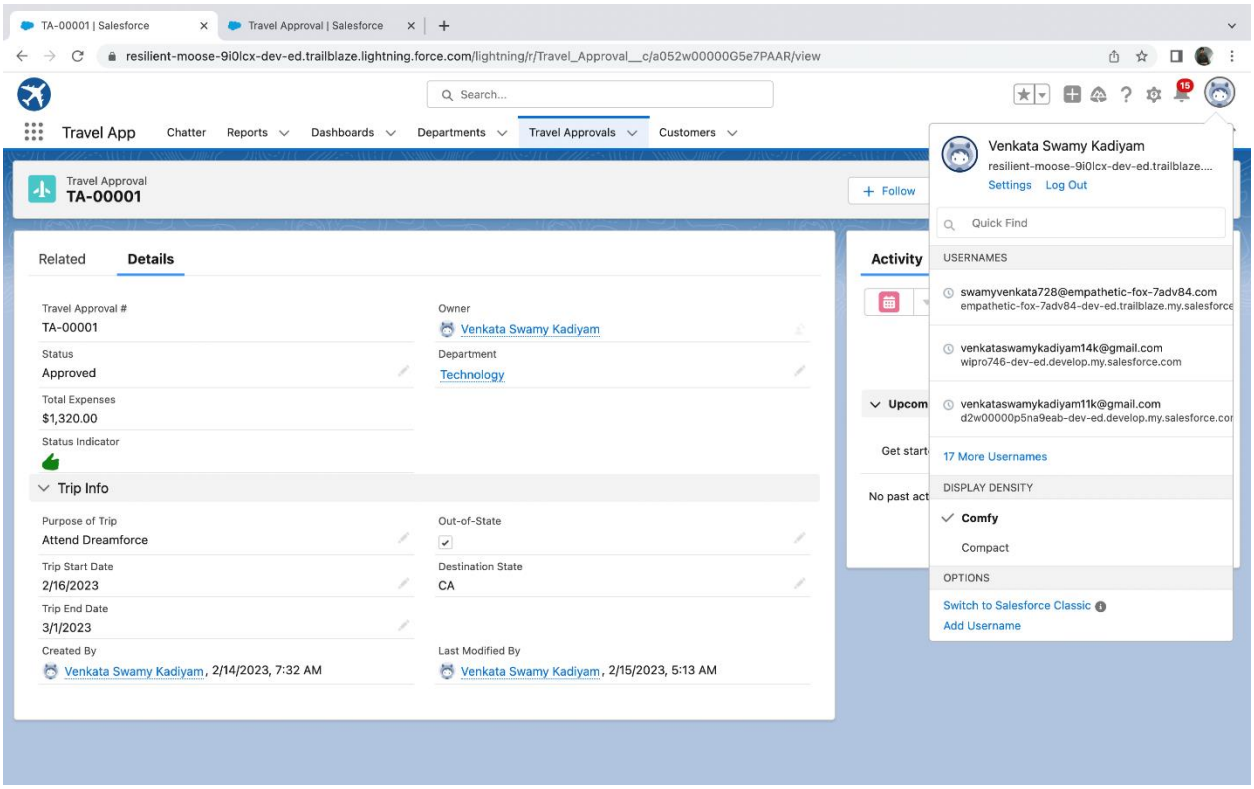
Imported Departments.CSV file using Data import Wizard



Exercise – 2

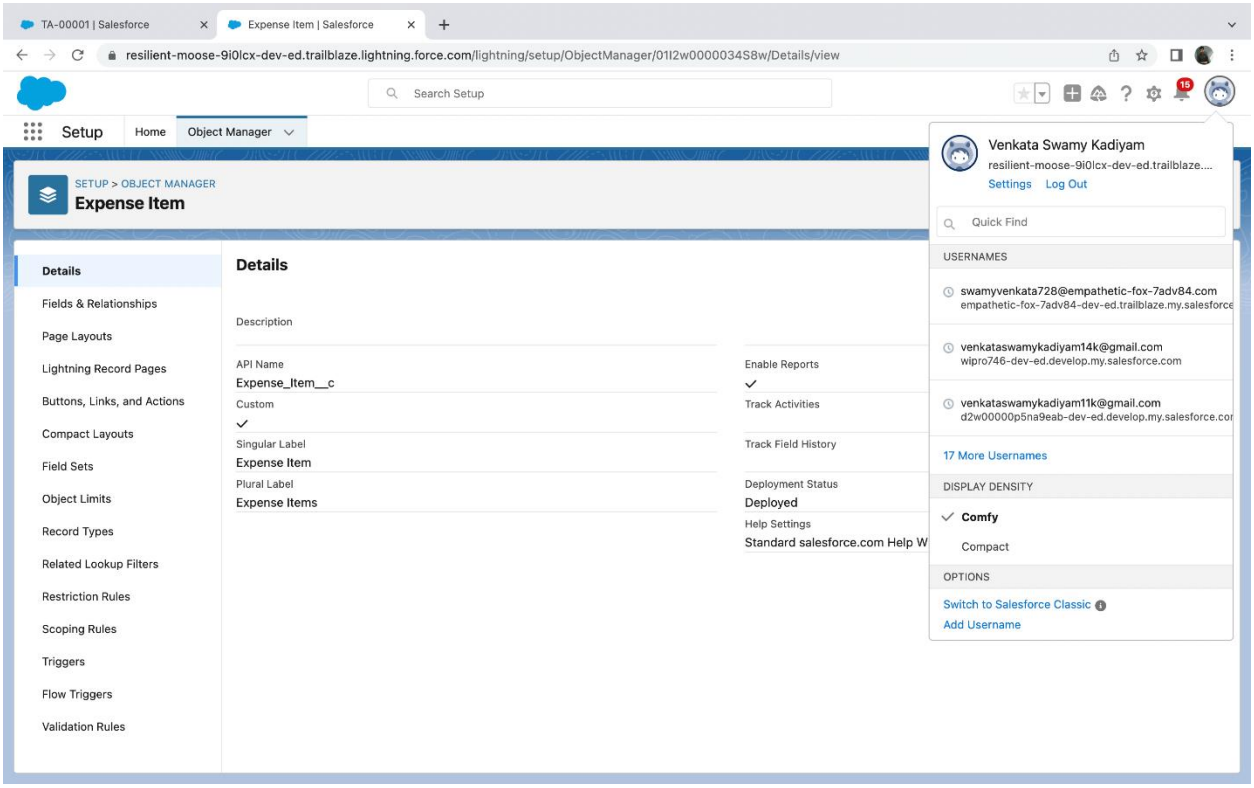
Step -1

Created Travel Approval Record



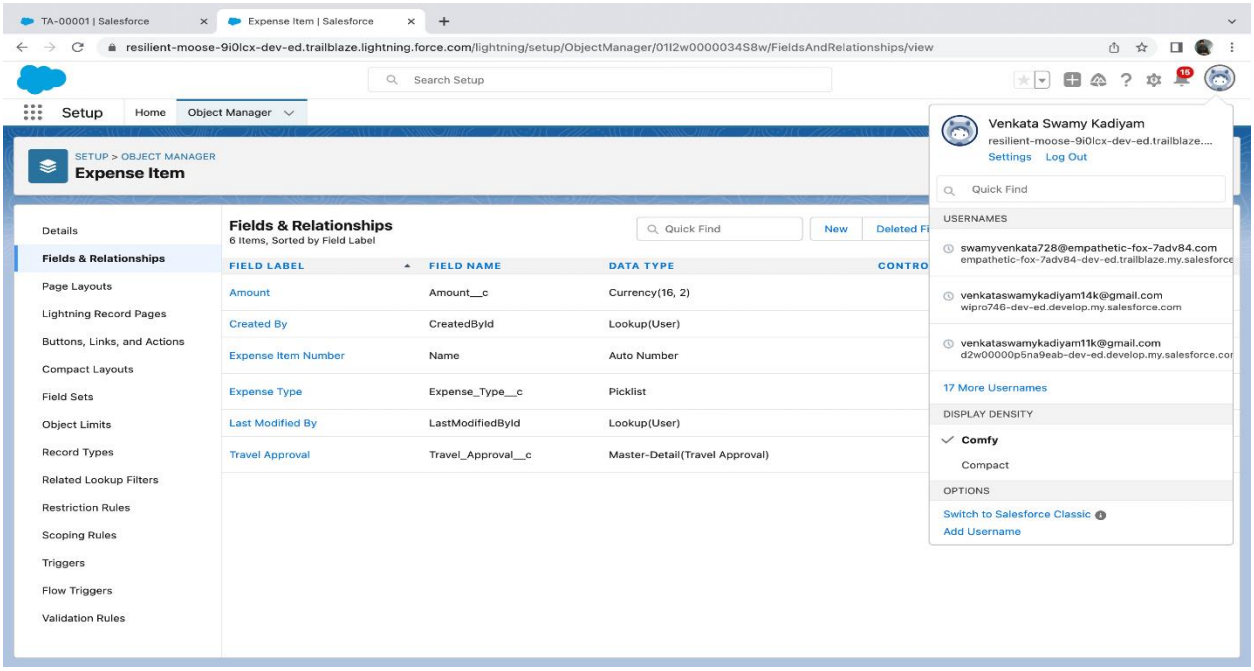
Step – 2

Created Expense Item Custom Object



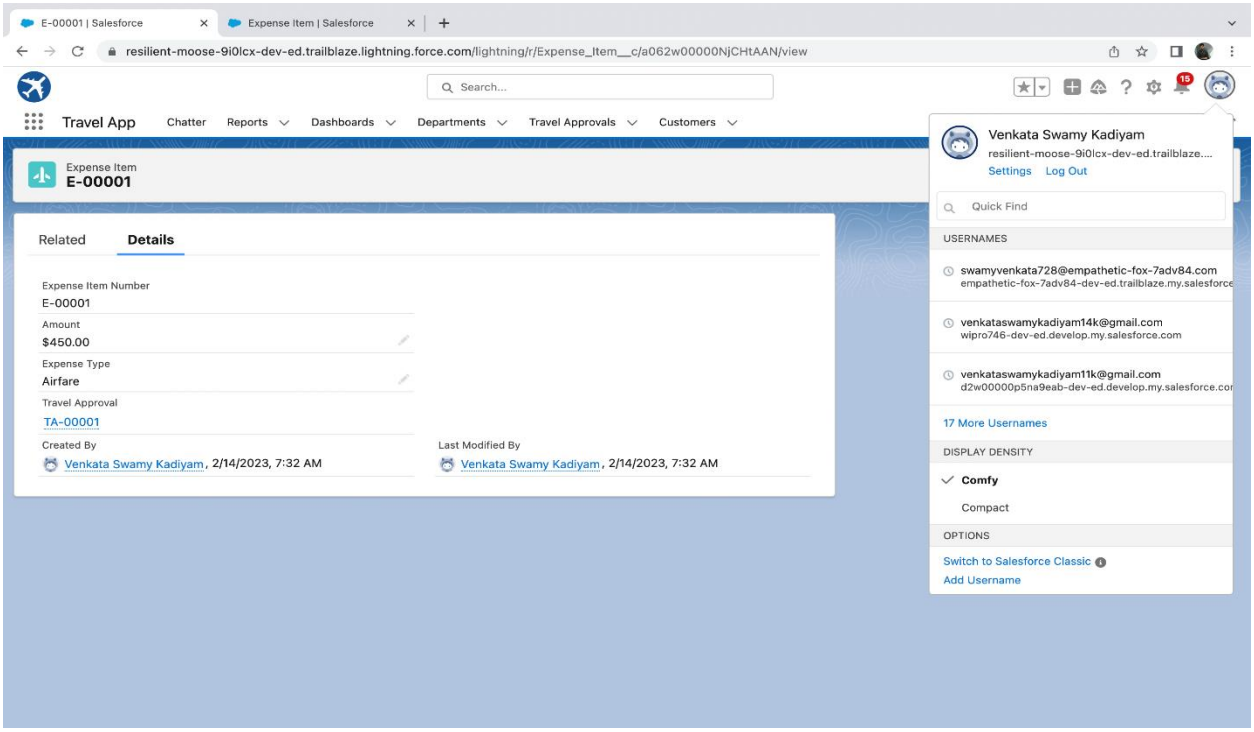
Step – 3

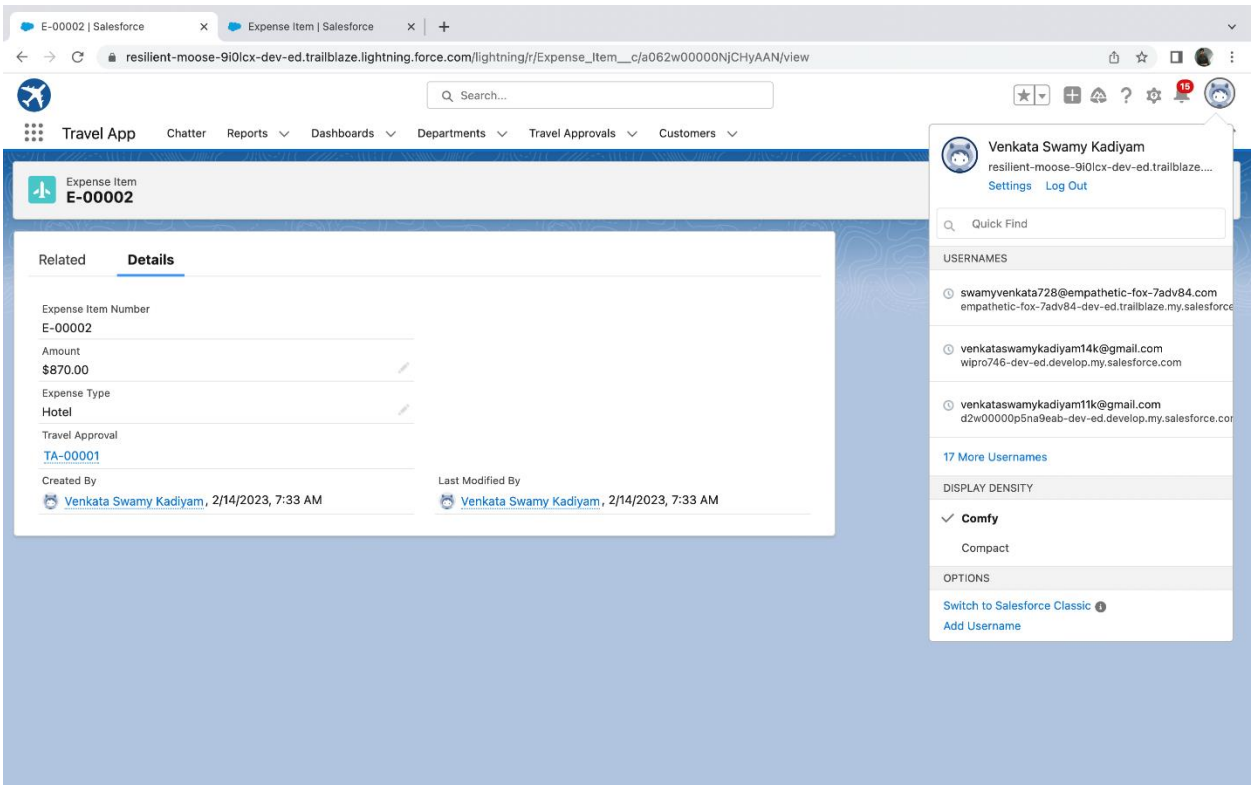
Created Custom fields



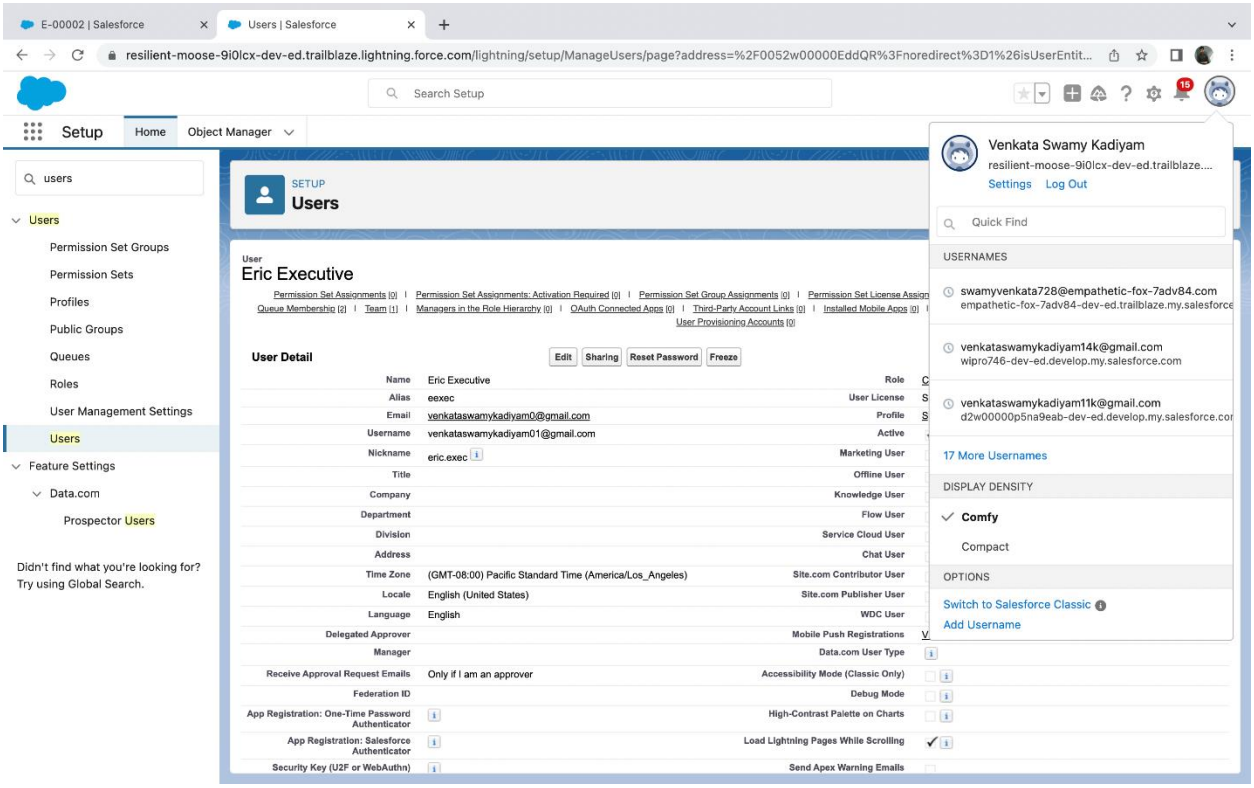
Step – 4

Created Records



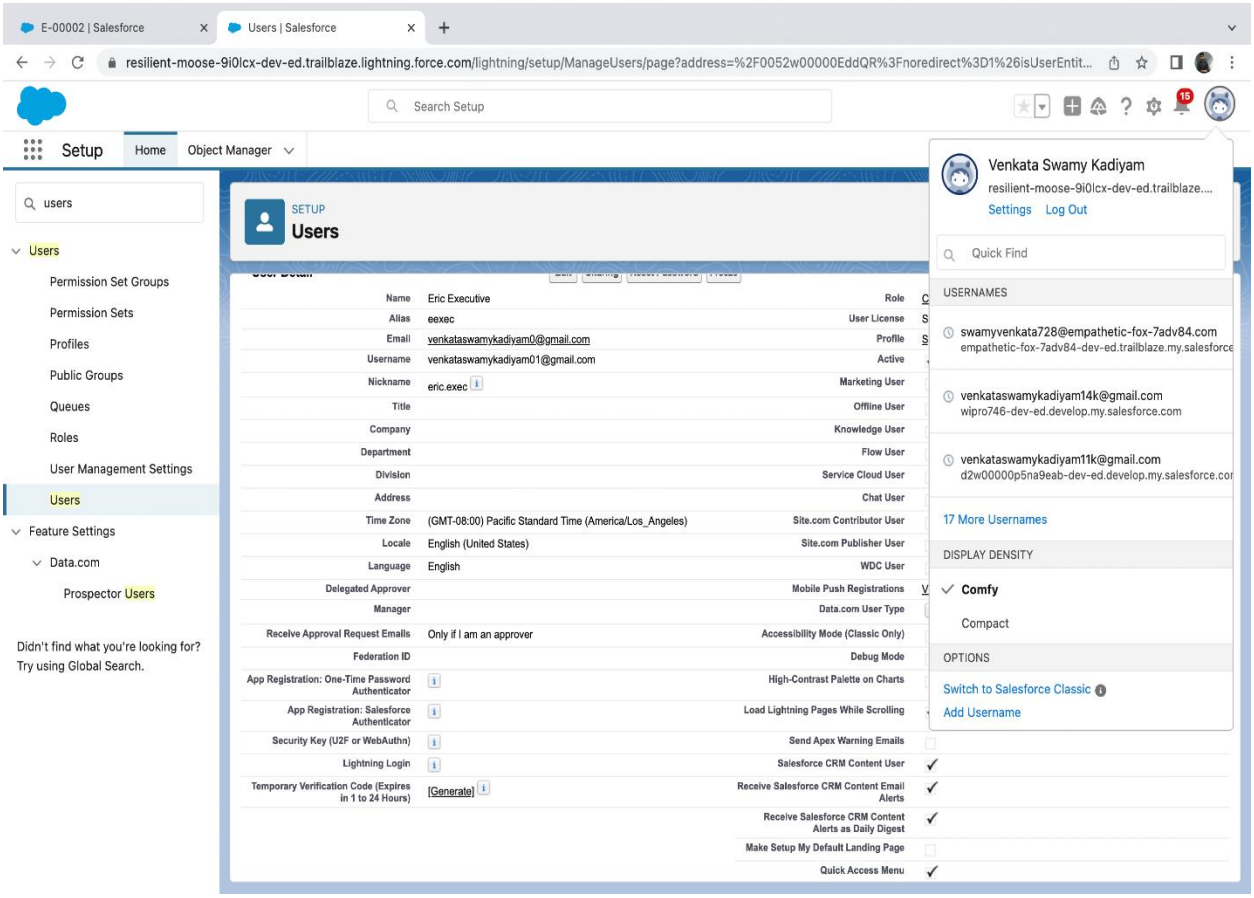


Created User Eric



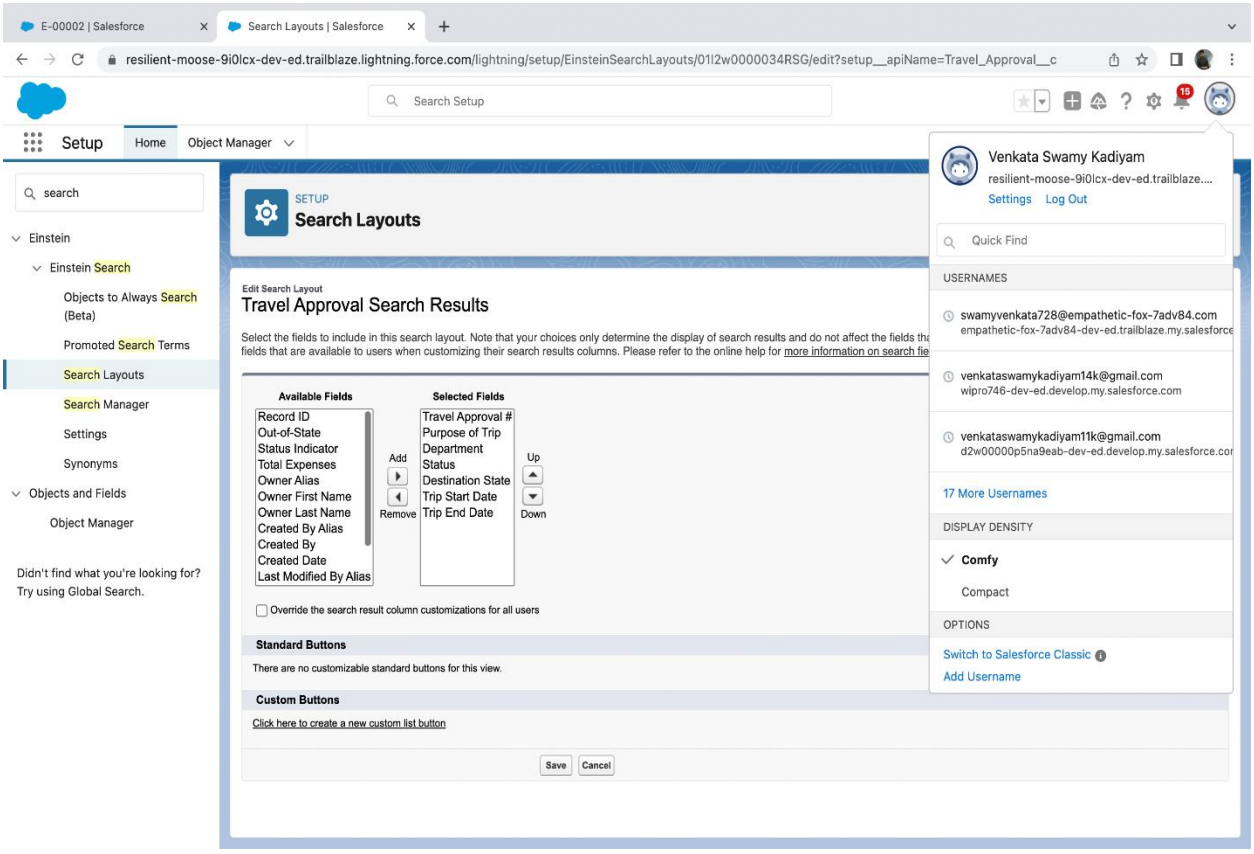
Step -6

Added Eric Executive as manager to System Administrator



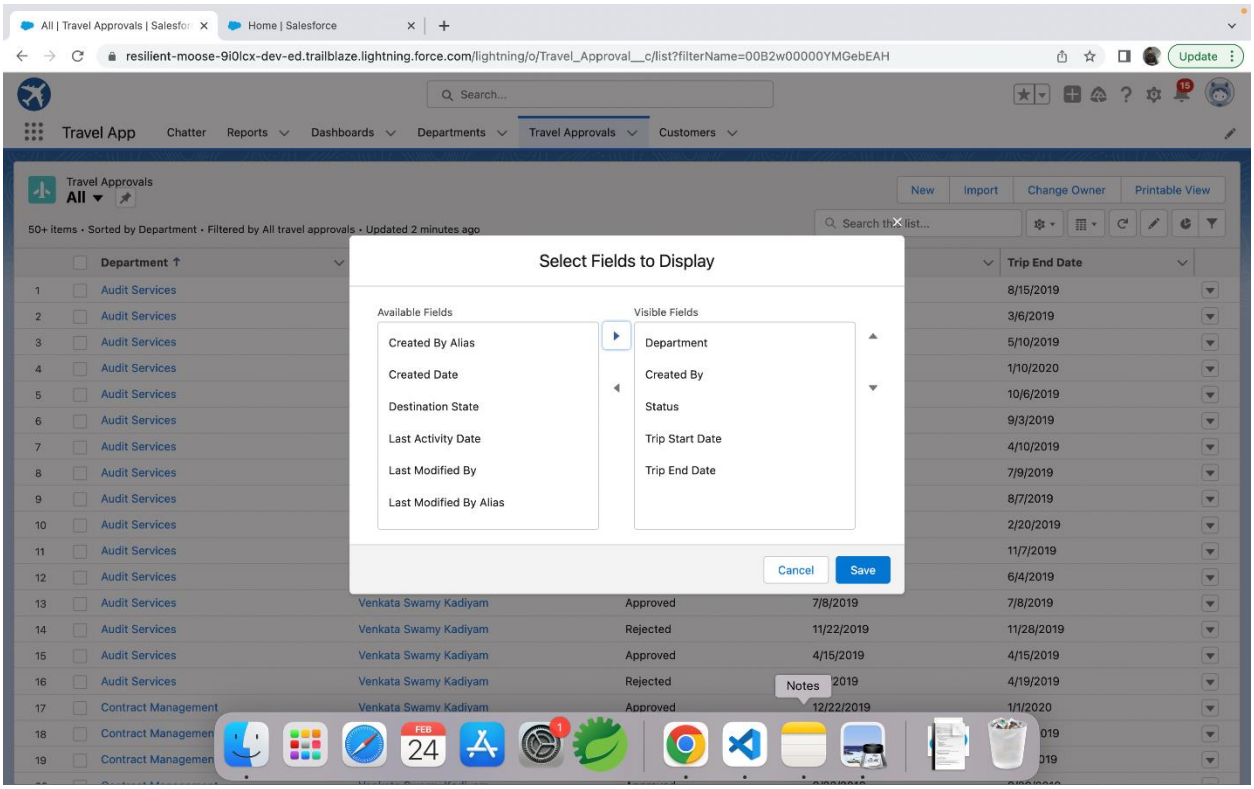
Step -7

Customized the Travel Approval Default Search



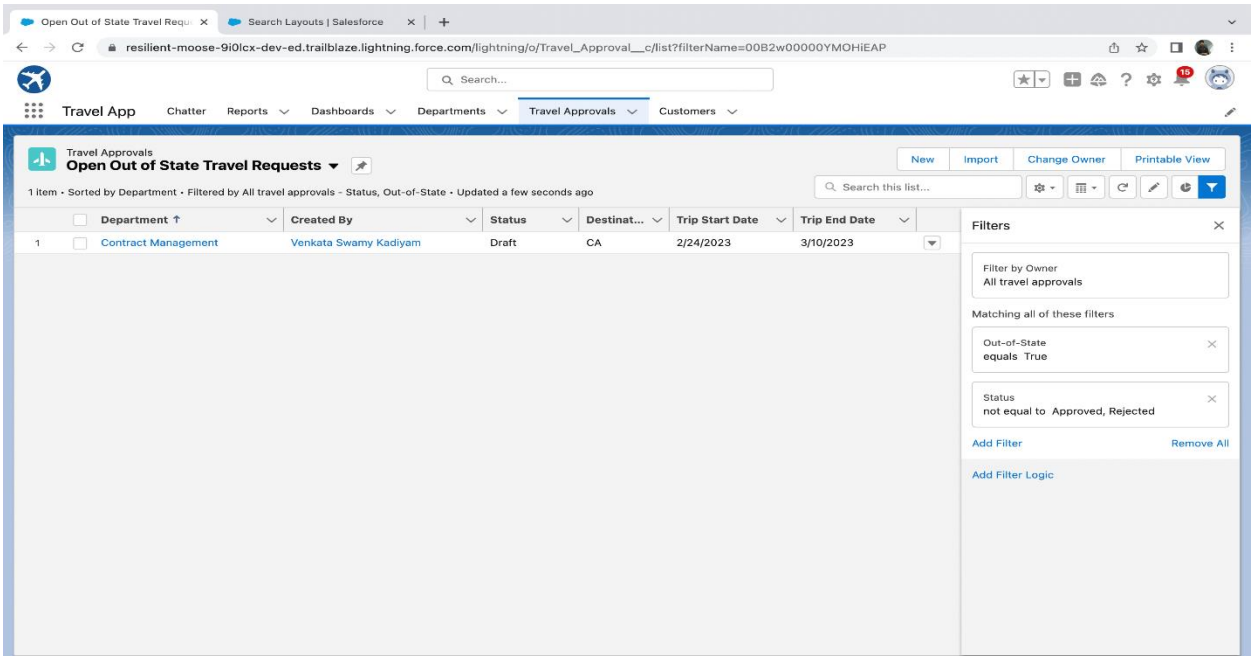
Step – 8

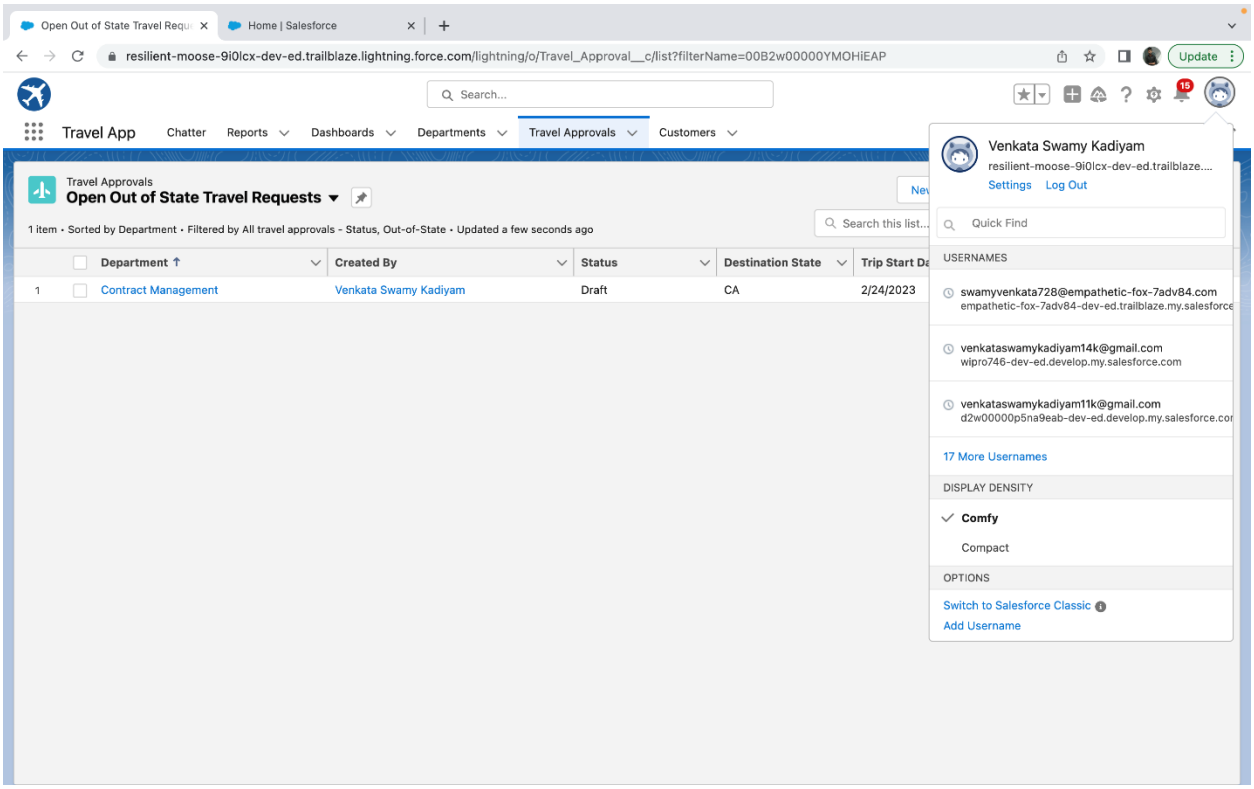
Selected all the fields to display



Step-9

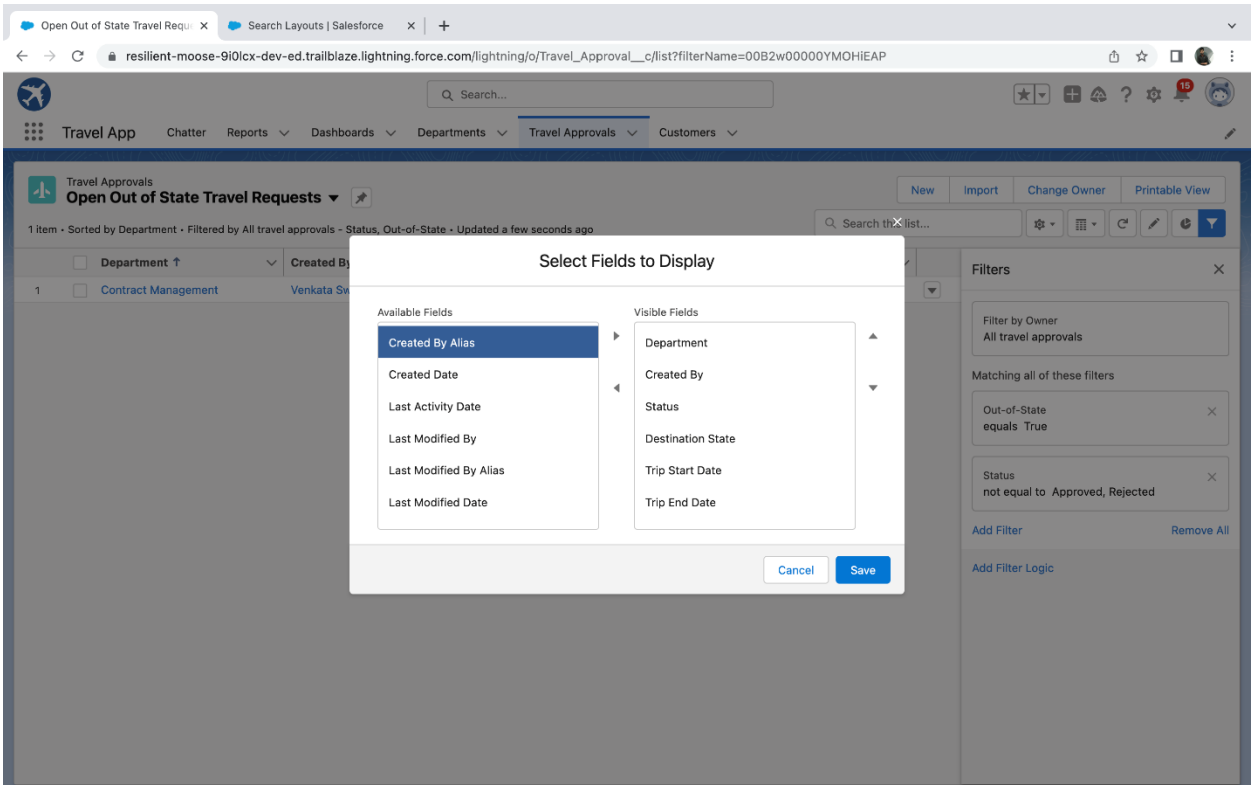
Created Travel approval custom List View Open Out of State Travel Requests





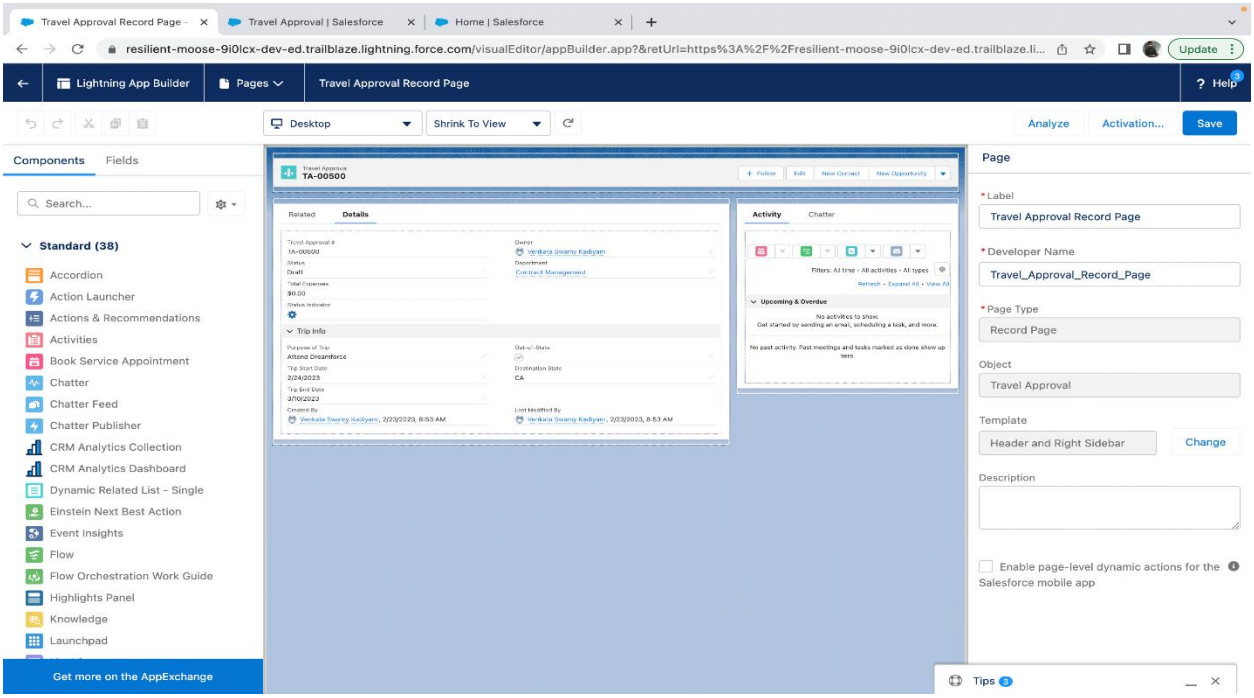
Step – 10

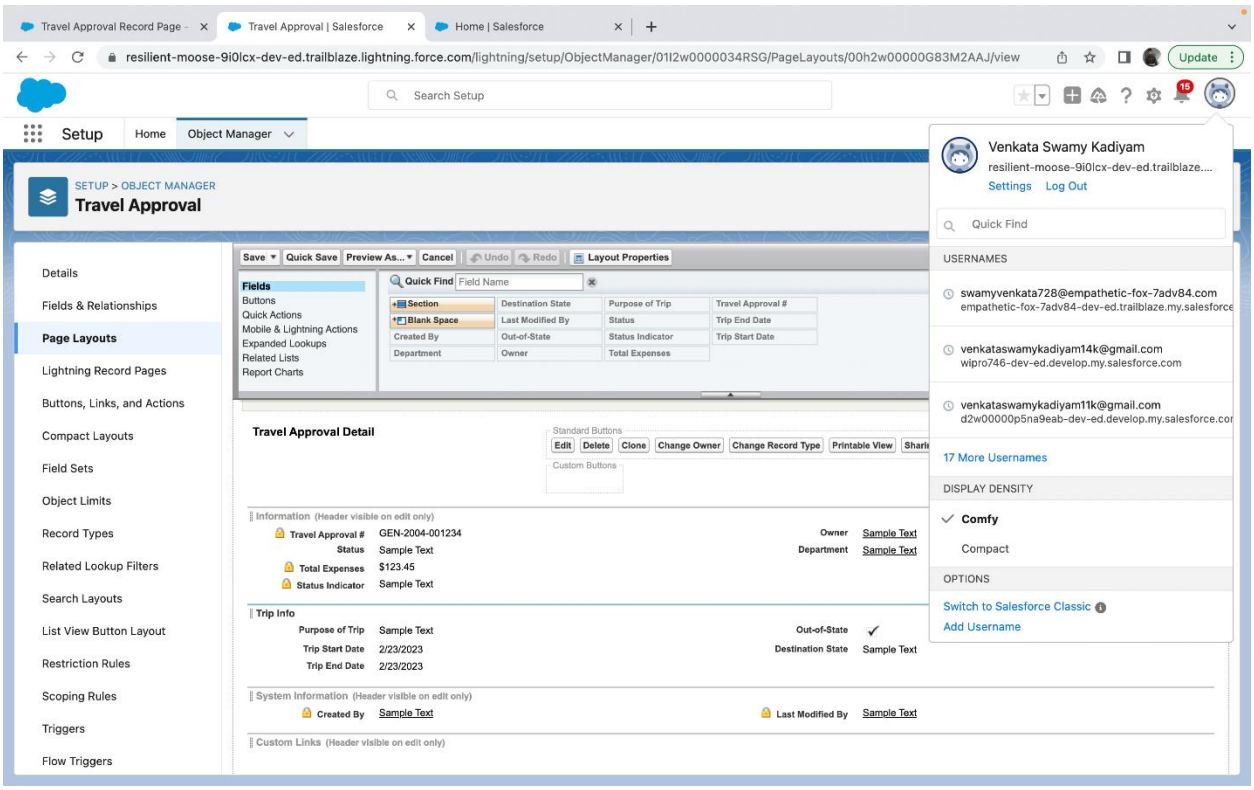
Selected fields to display in the Travel Approval Open out of State Travel Requests



Step – 11

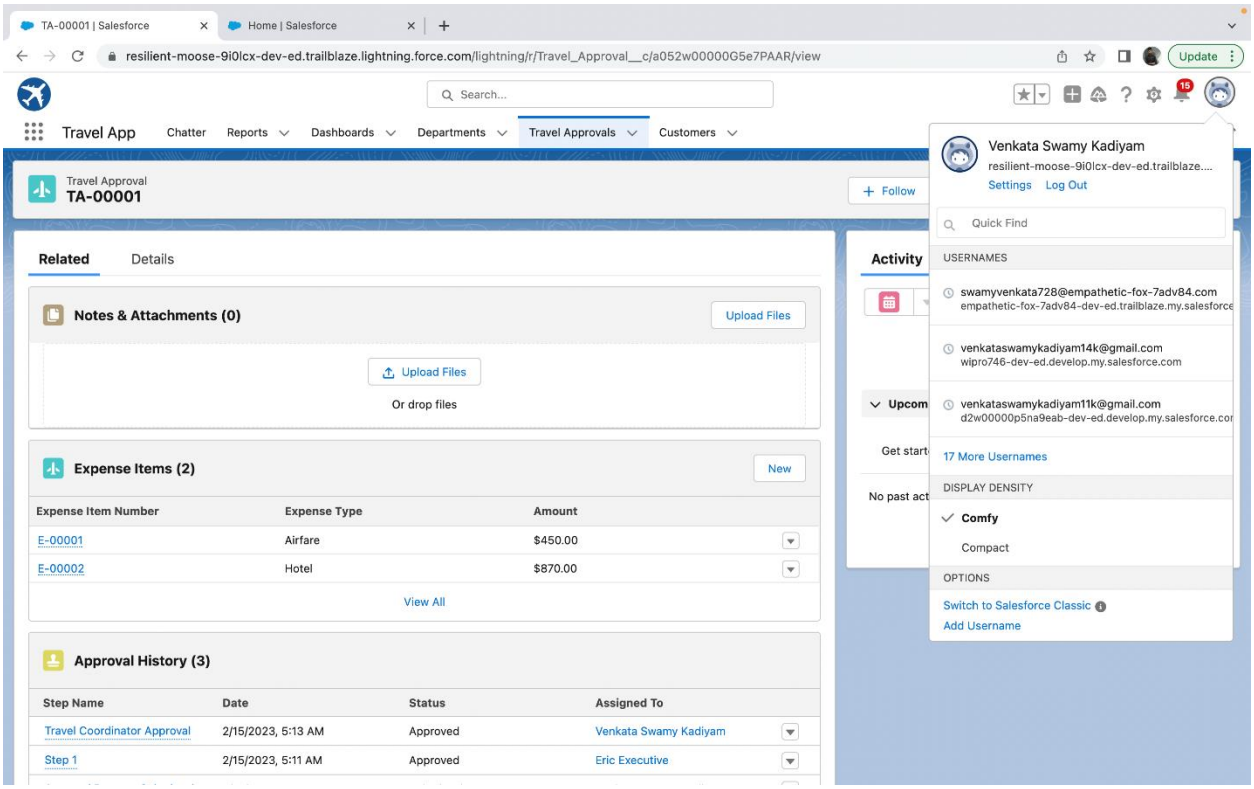
Customized Travel Approval Page Layout





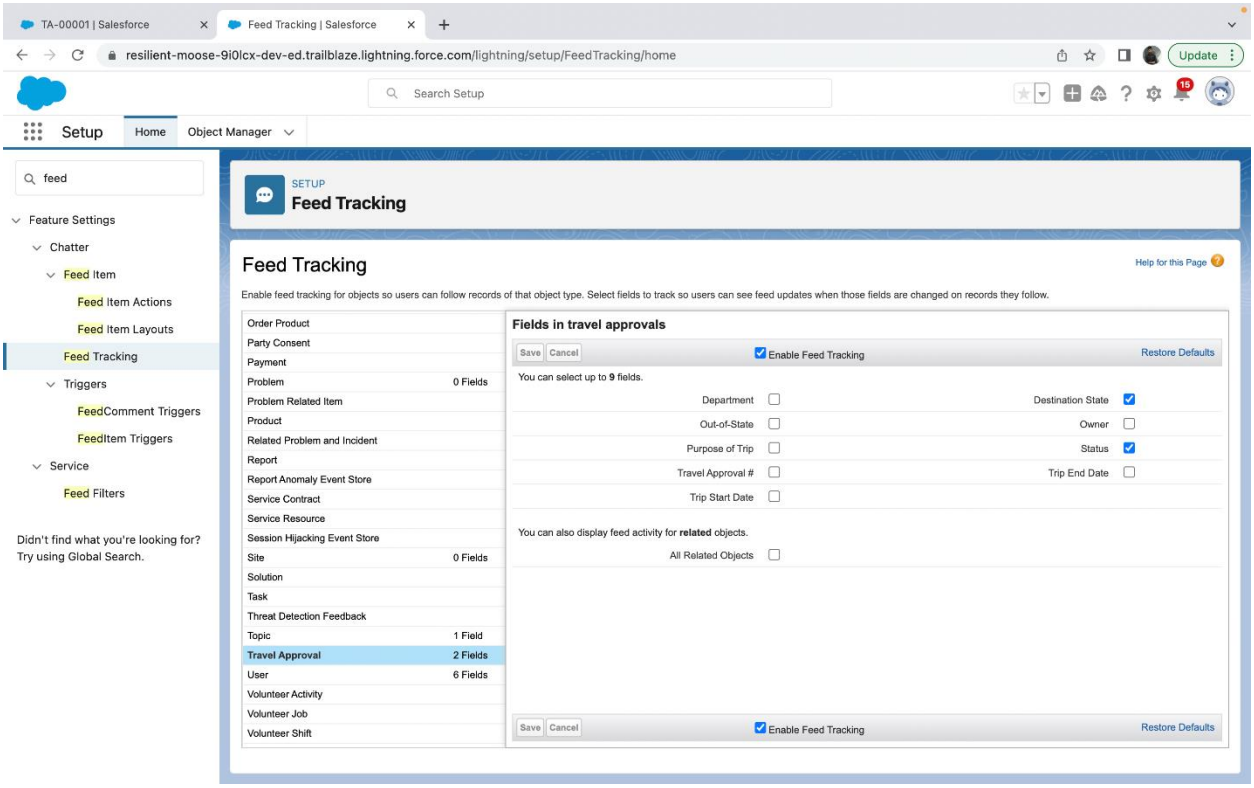
Step -12

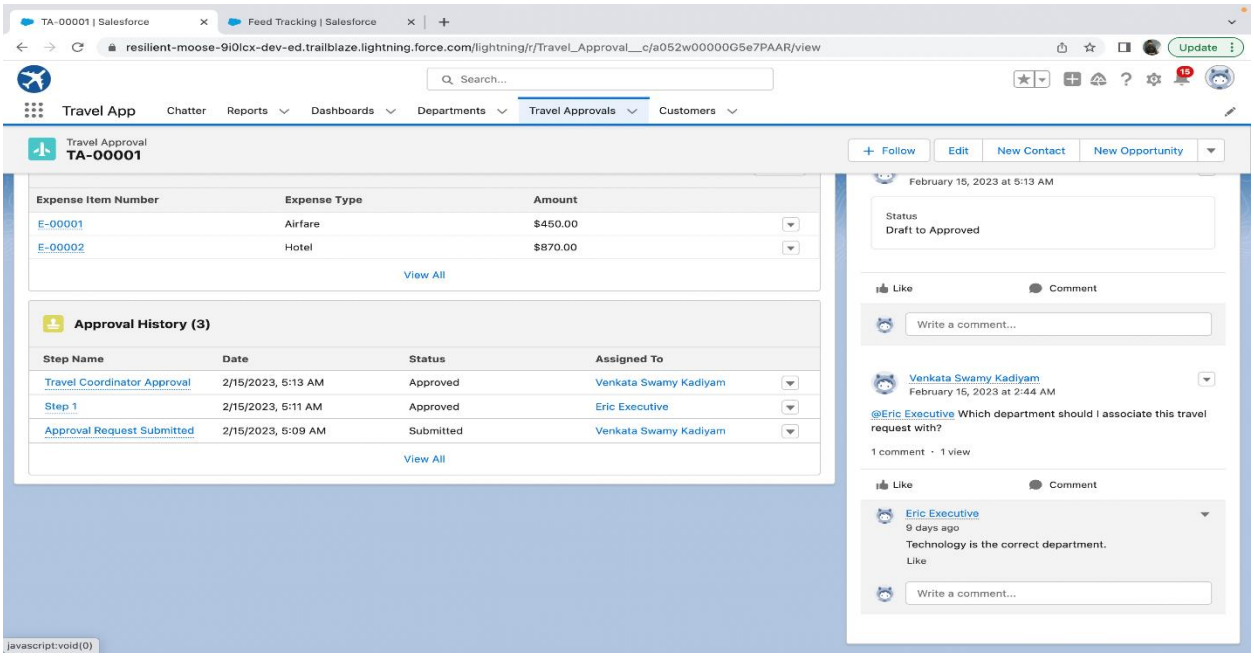
Customized the Expense Item Related list under Travel Approval page layout



Step – 13

Enabled Feed Tracking



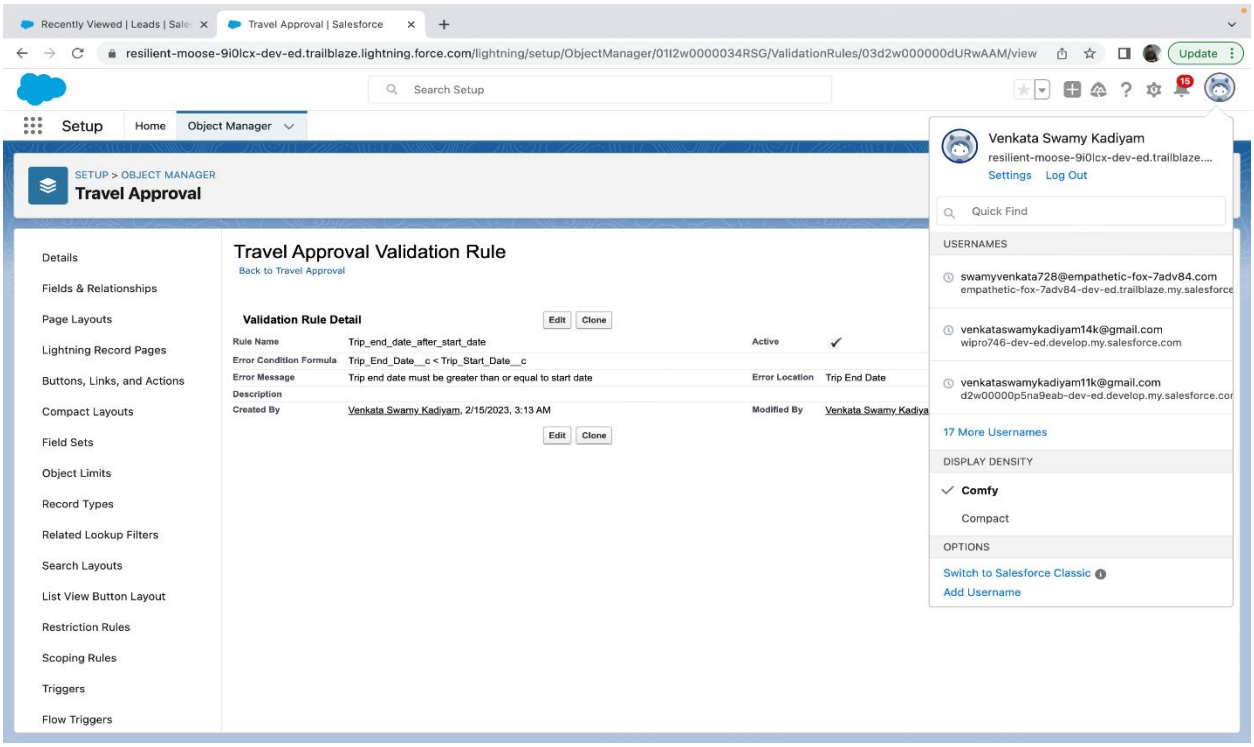


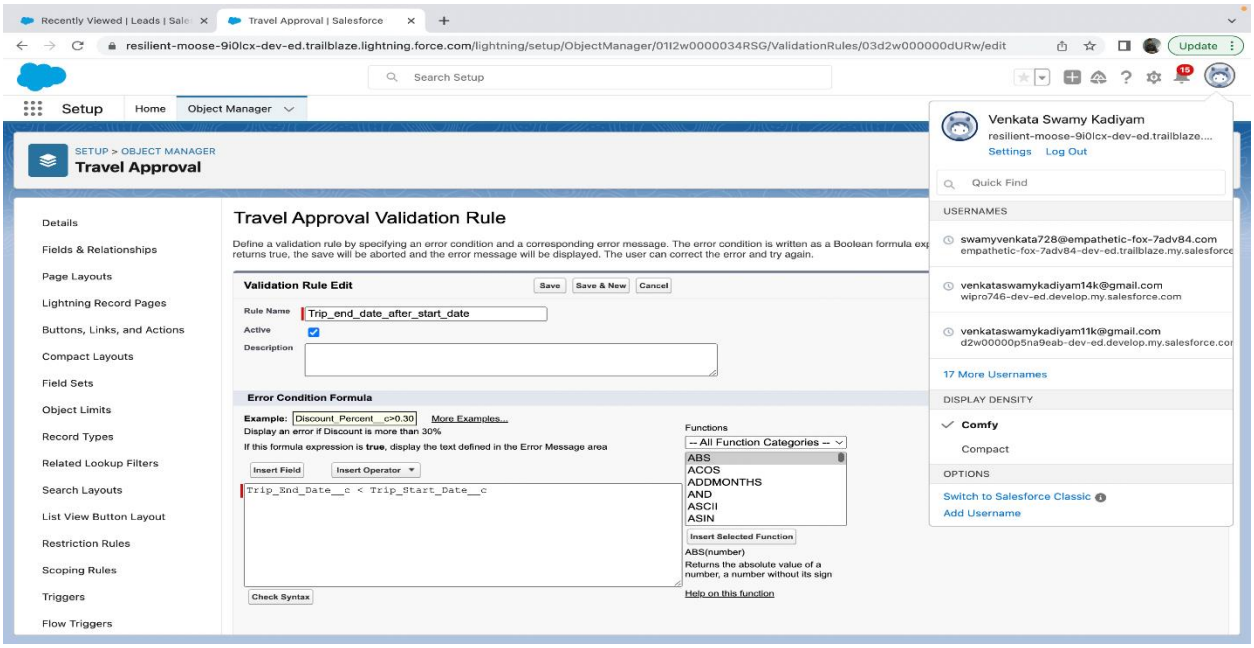
Module - 2

Exercise – 1

Step – 1

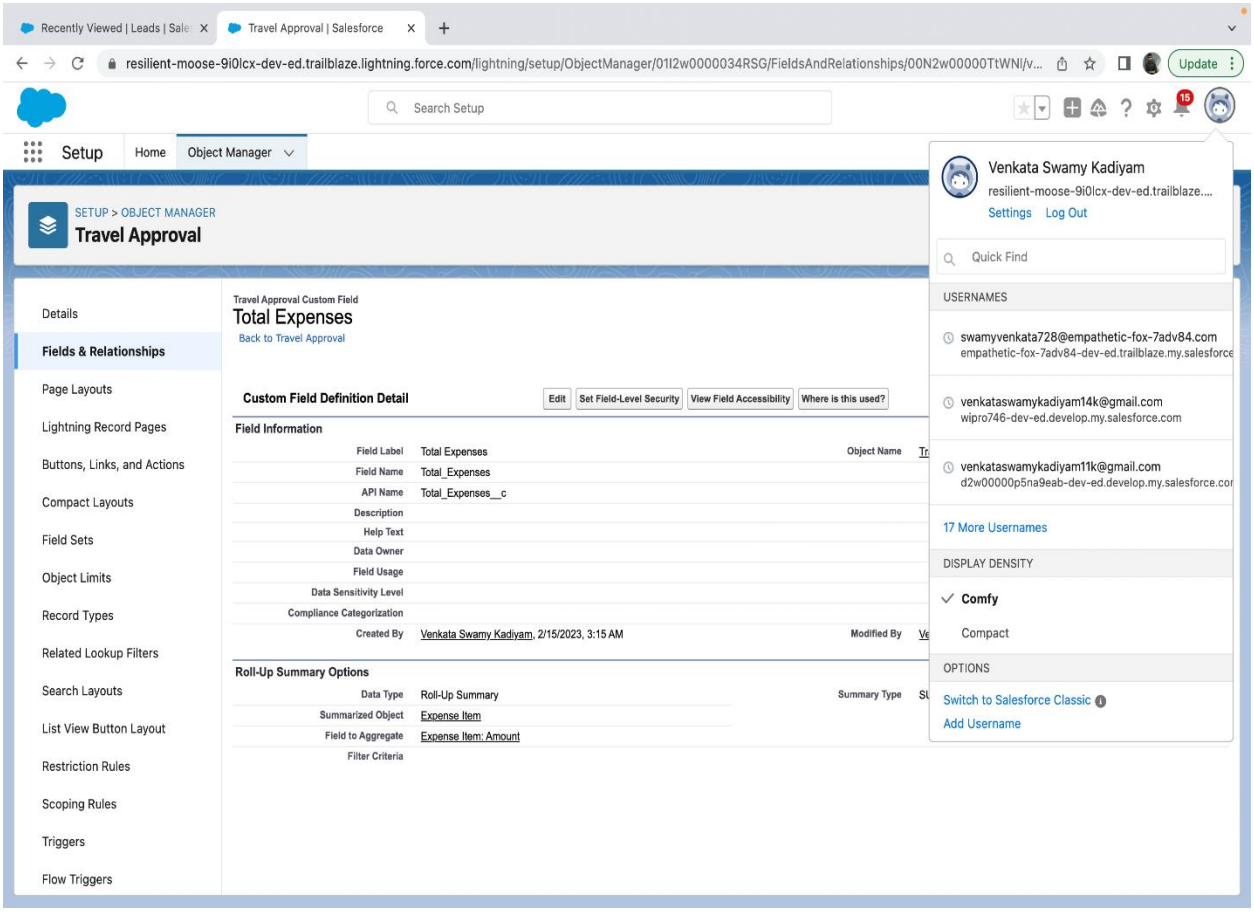
Created Trip end date after start date Validation Rule





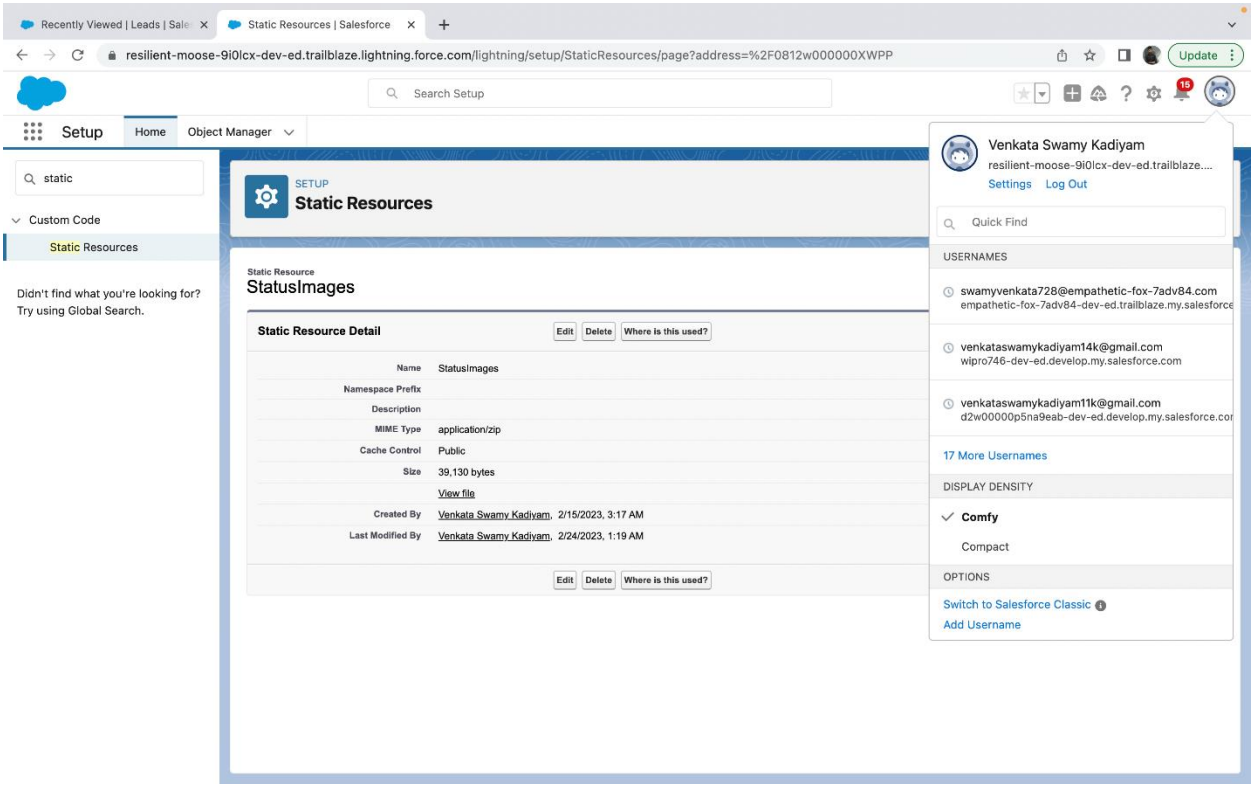
Step – 2

Created a Roll Up summary Field Total Expenses



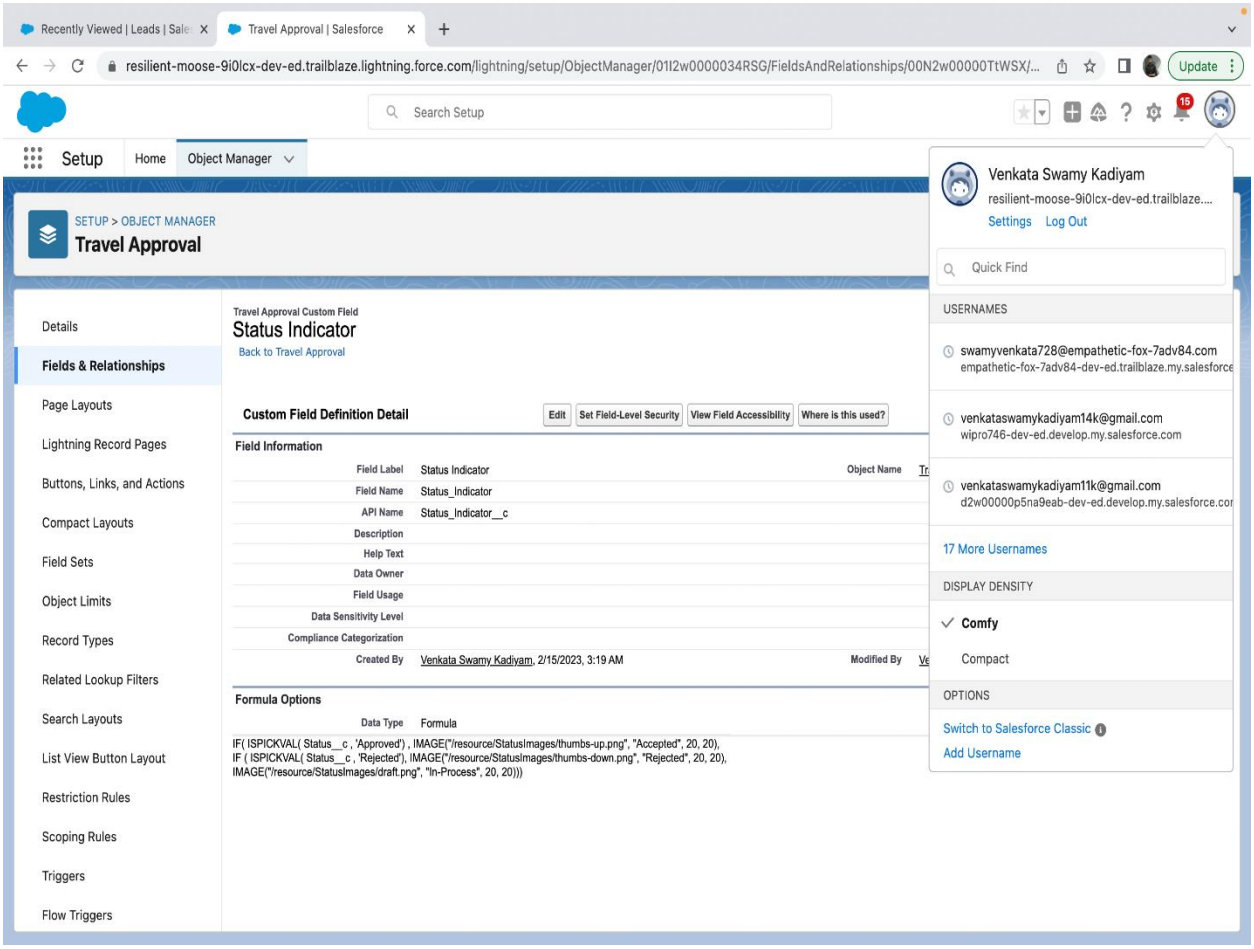
Step – 3

Created a formula field StatusImages



Step – 4

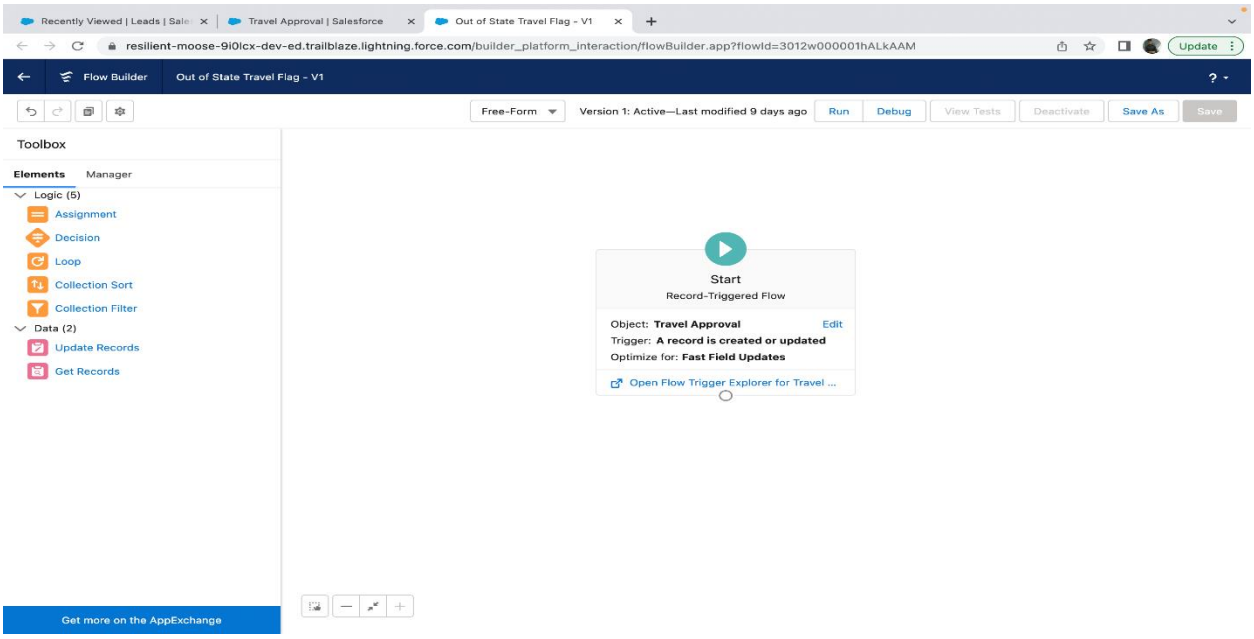
Created a formula field Status Indicator

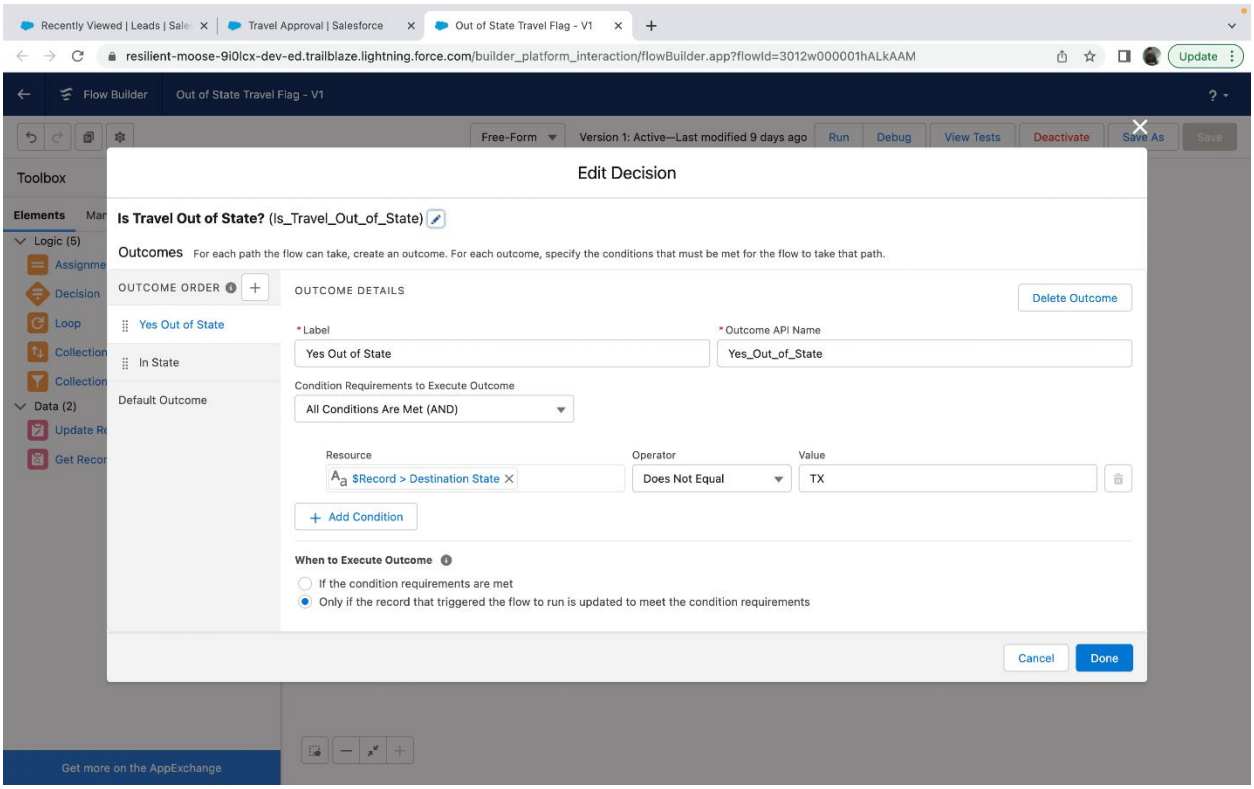


Step – 5

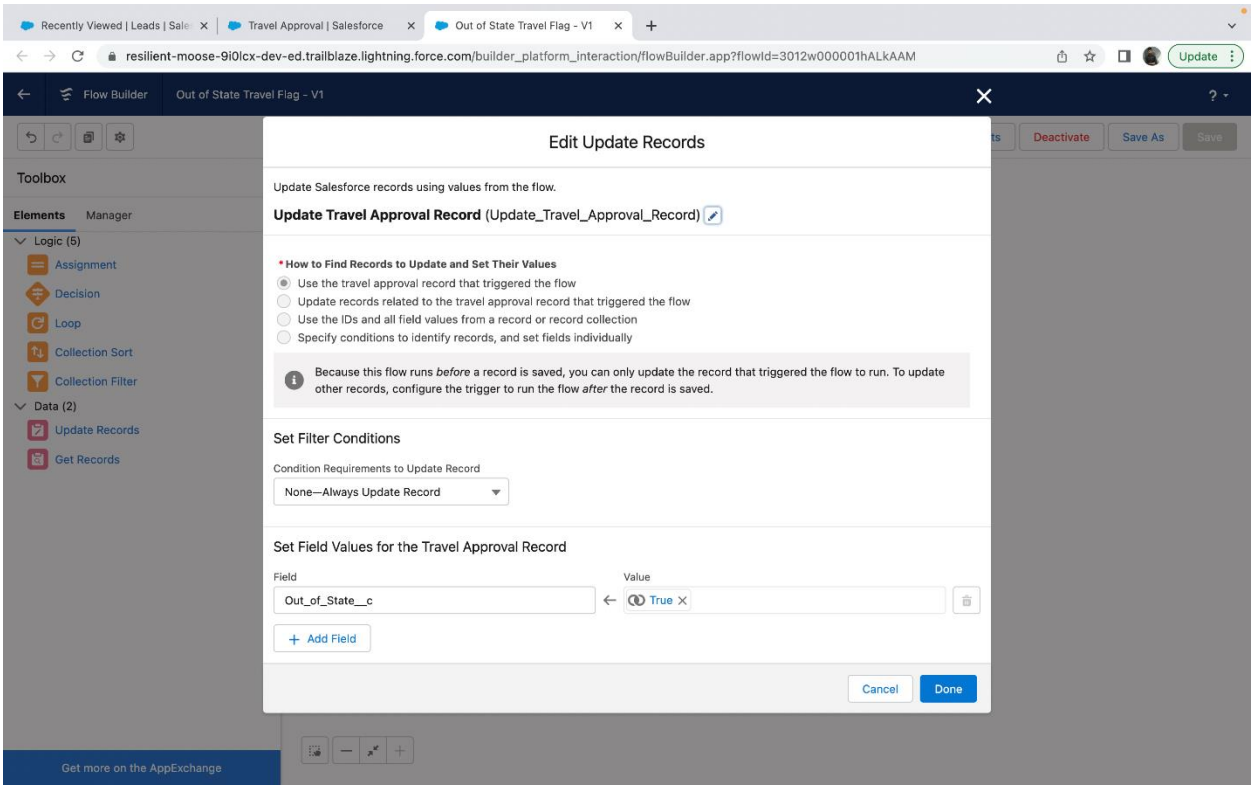
Created a Record – Triggered flow

Decision block

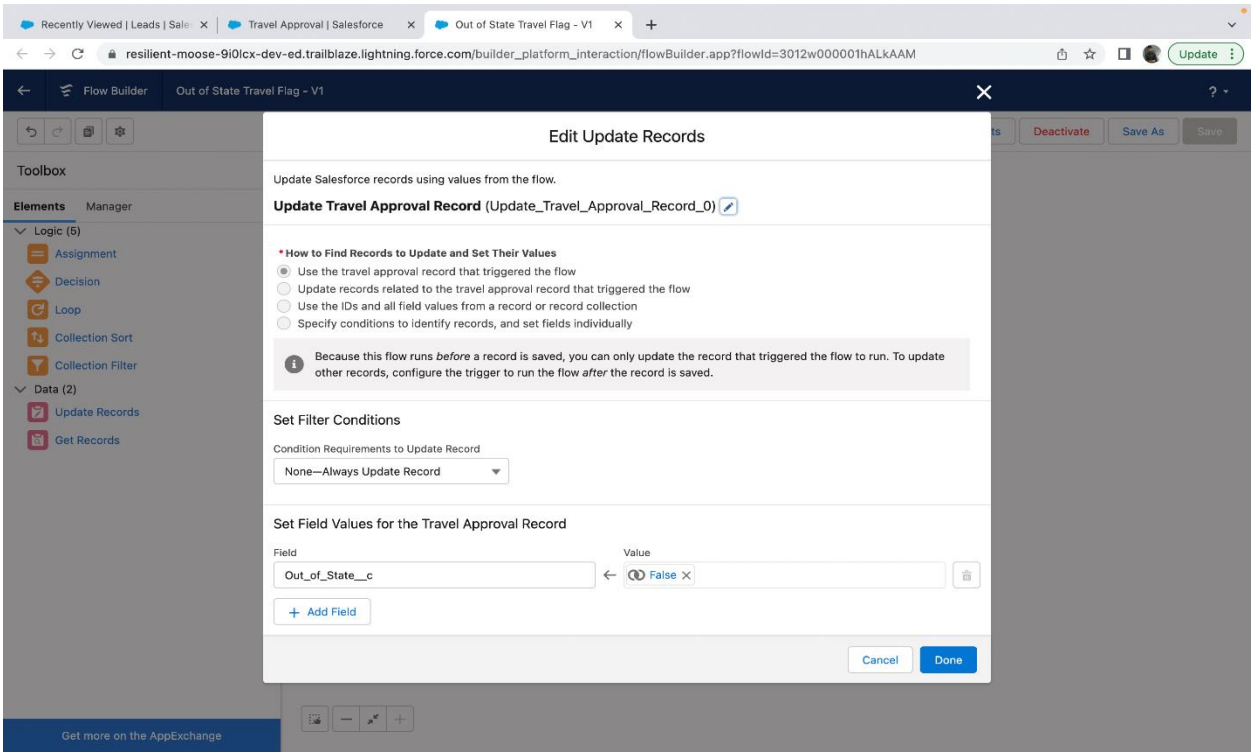




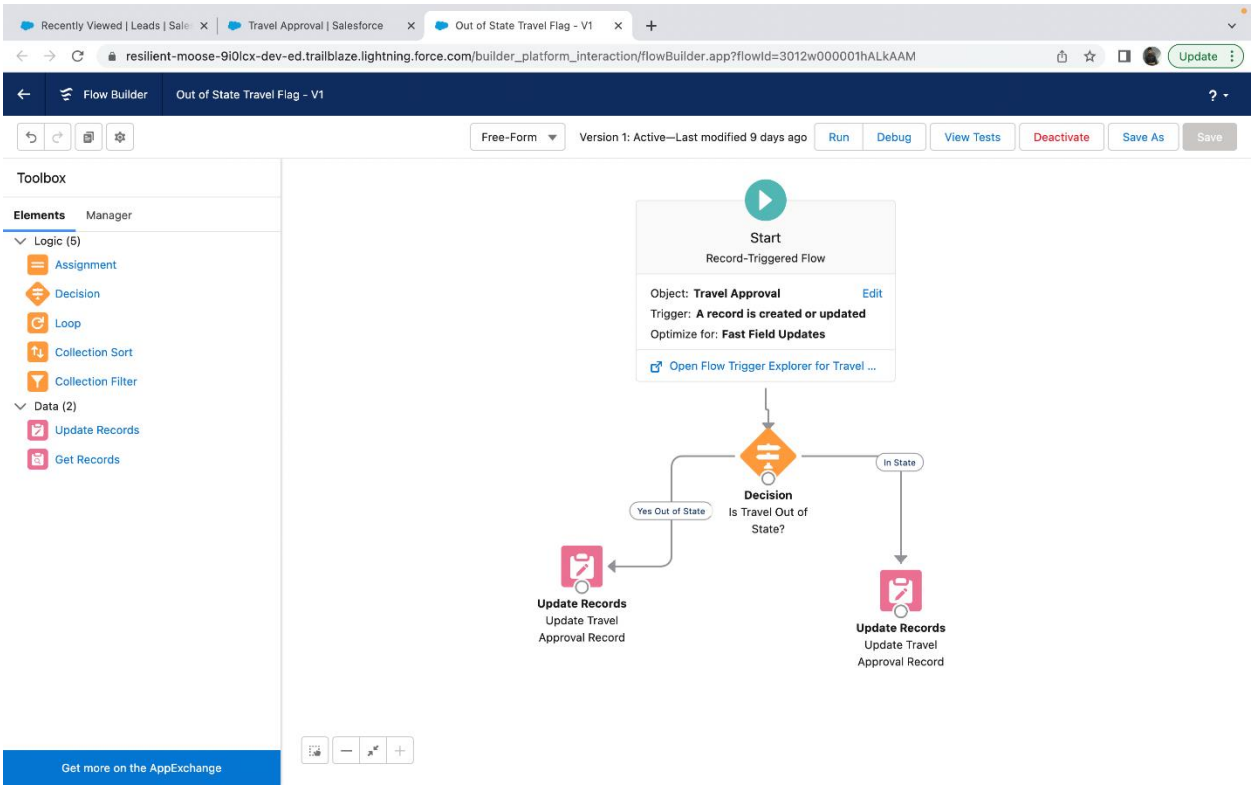
Updated Travel Approval Record(Yes out of State)



Updated Travel Approval Record (In State)

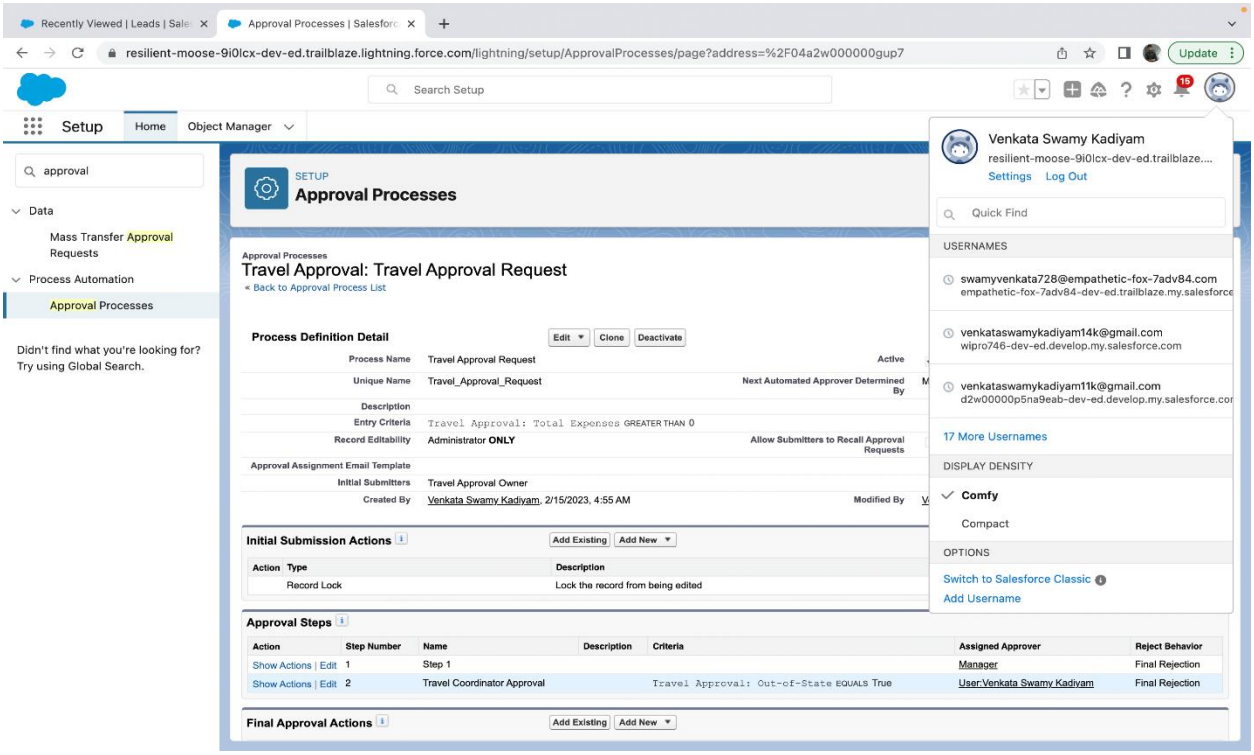


Out of State Travel Flag(Flow)

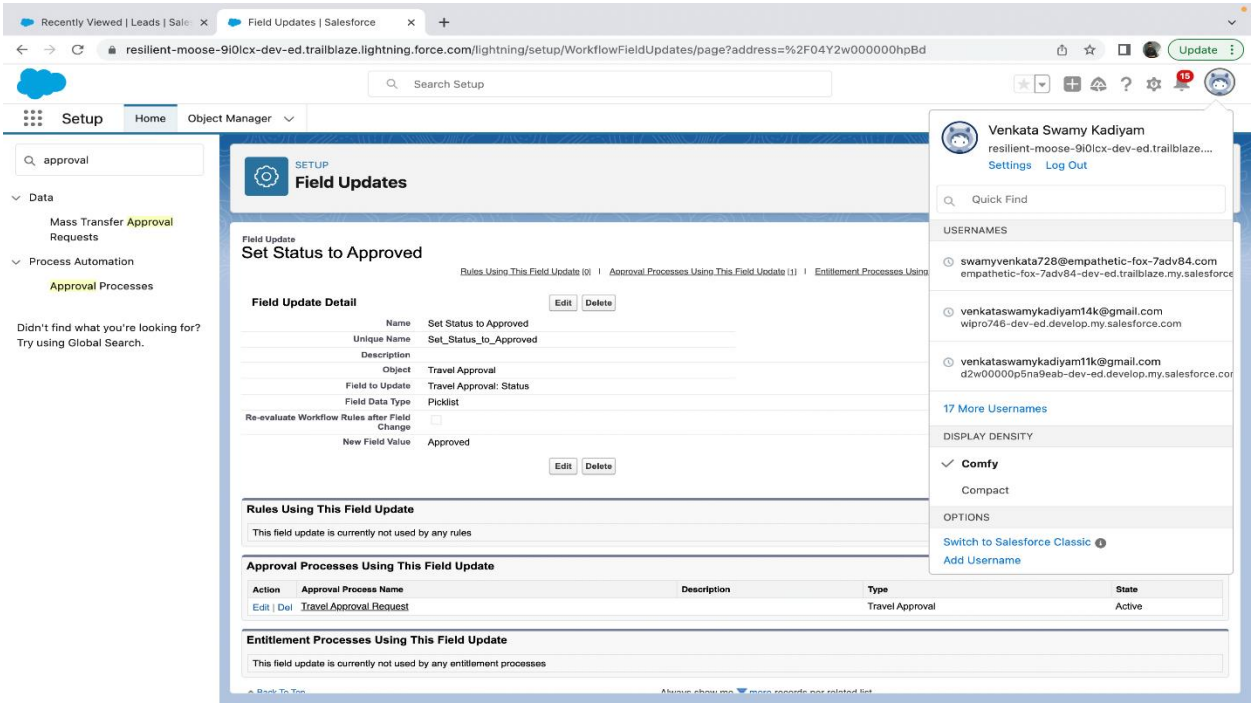


Step – 6

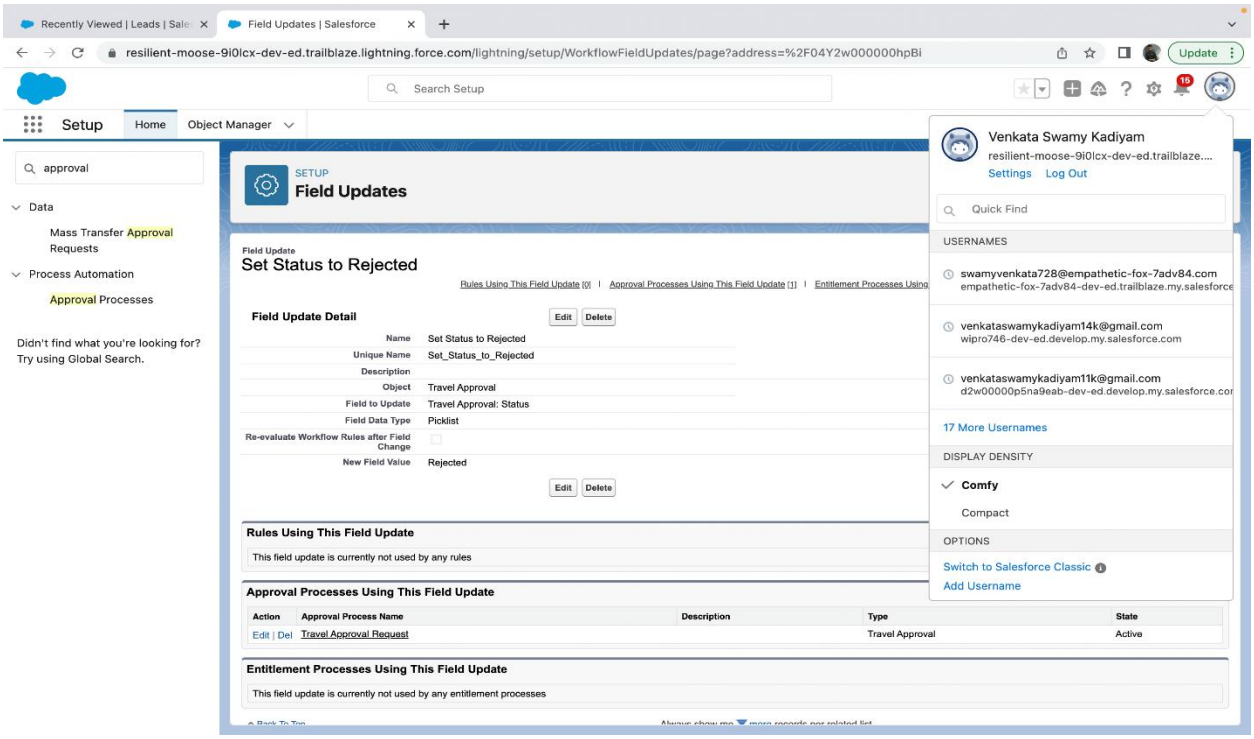
Created an approval process Travel Approval Request

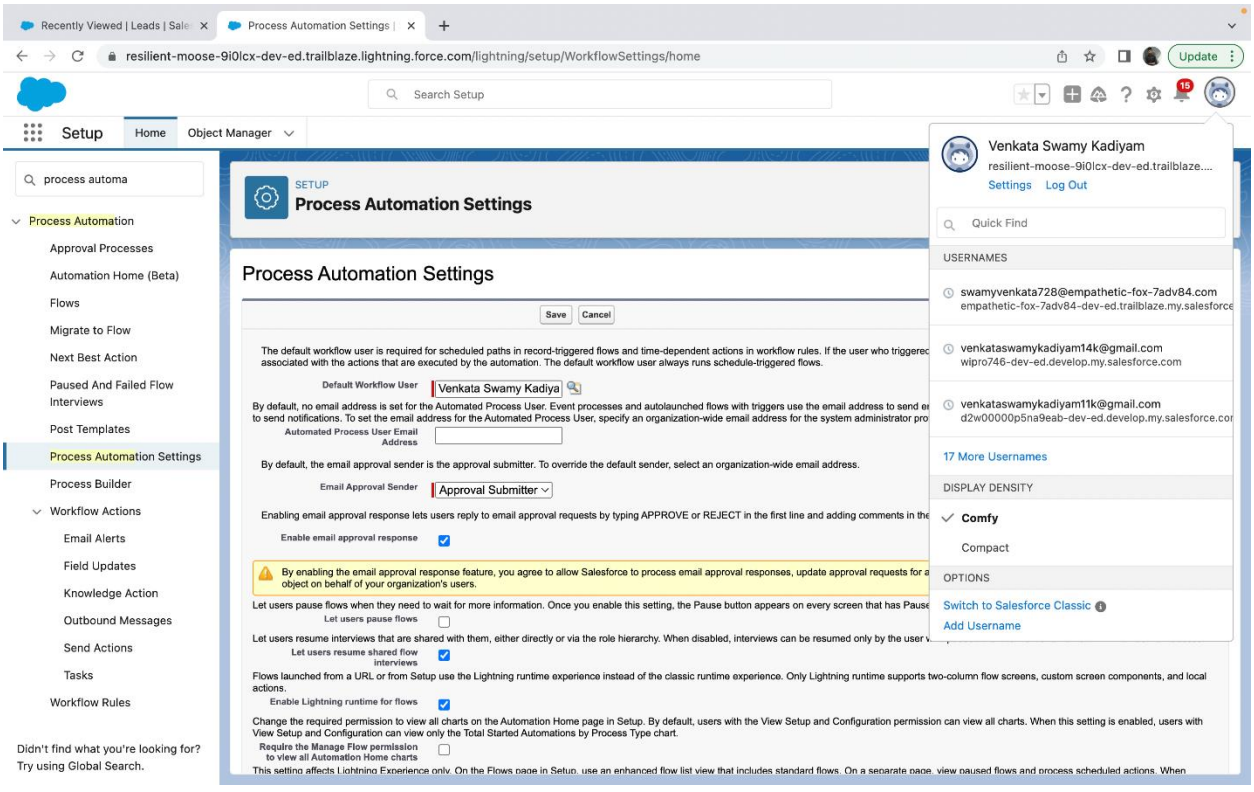


Final Approval Actions



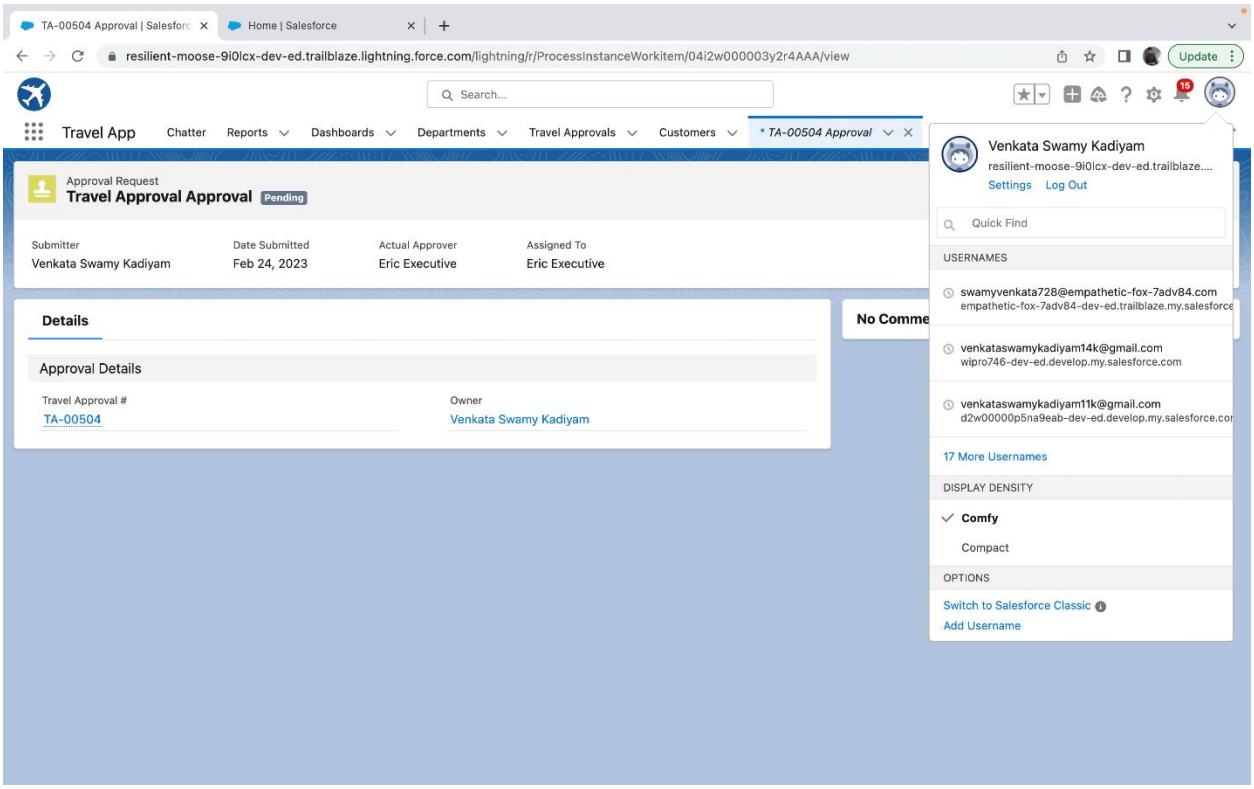
Final Rejection Actions



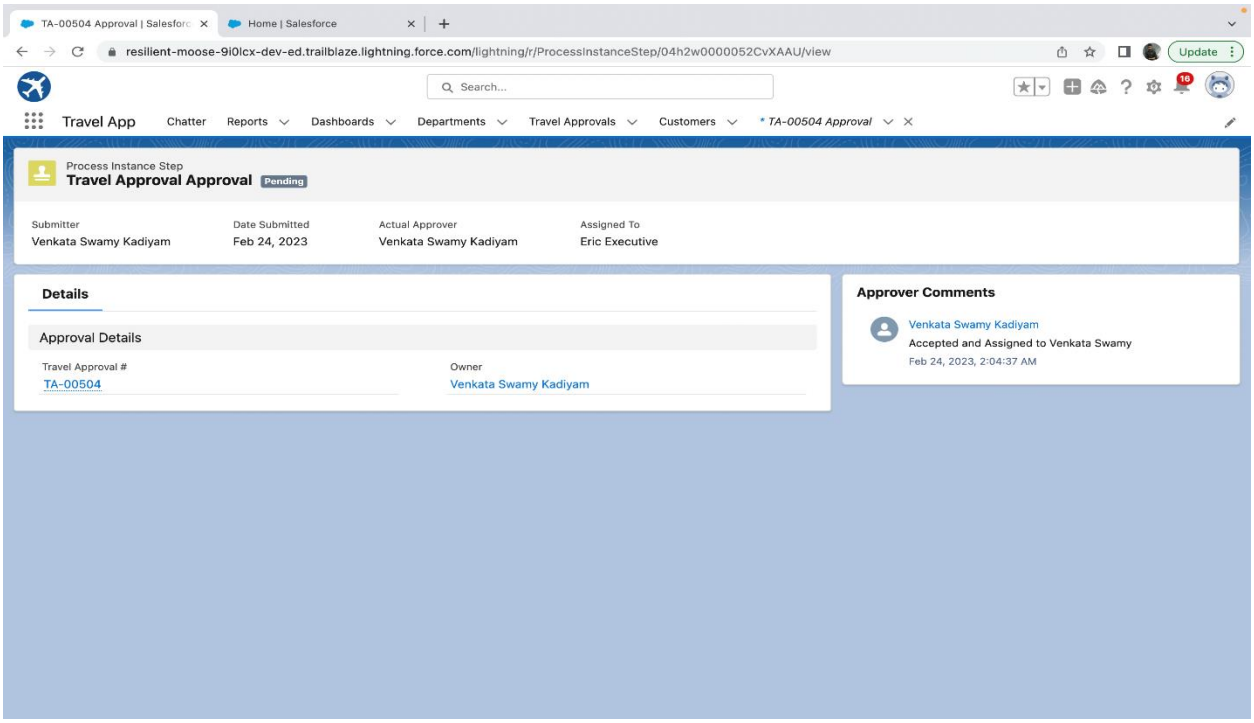


Testing the Approval Process

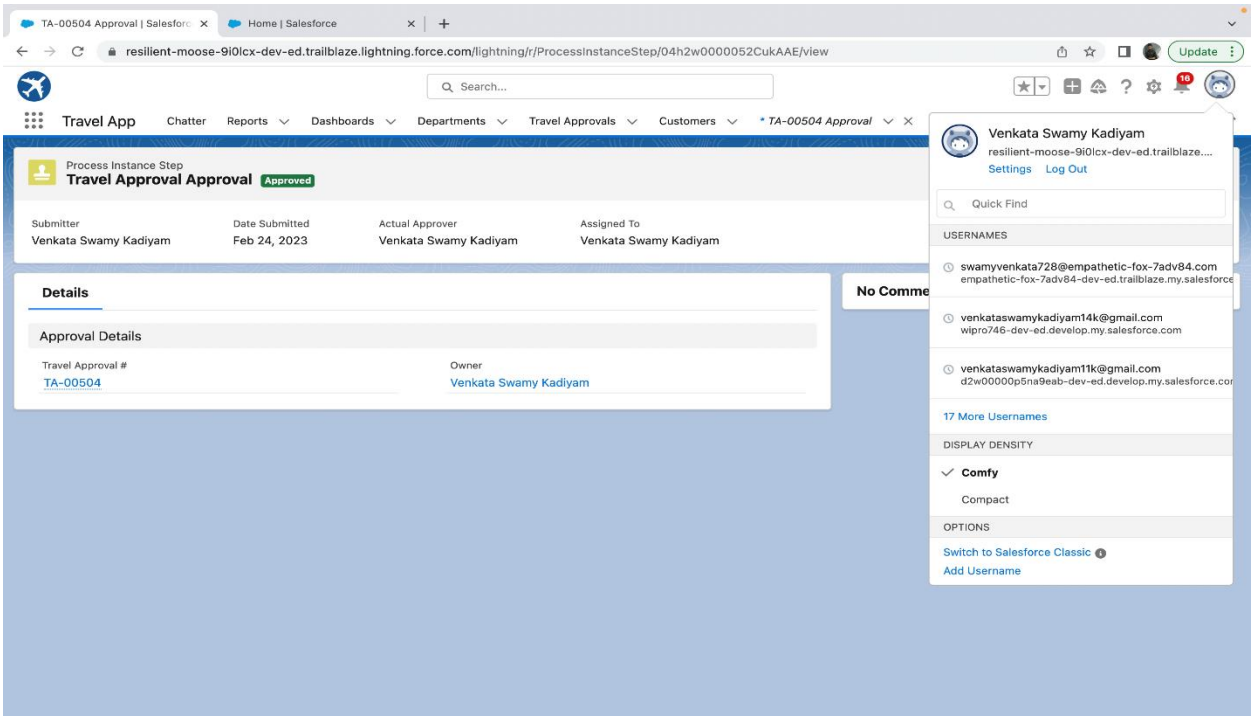
Assigned to Eric Executive



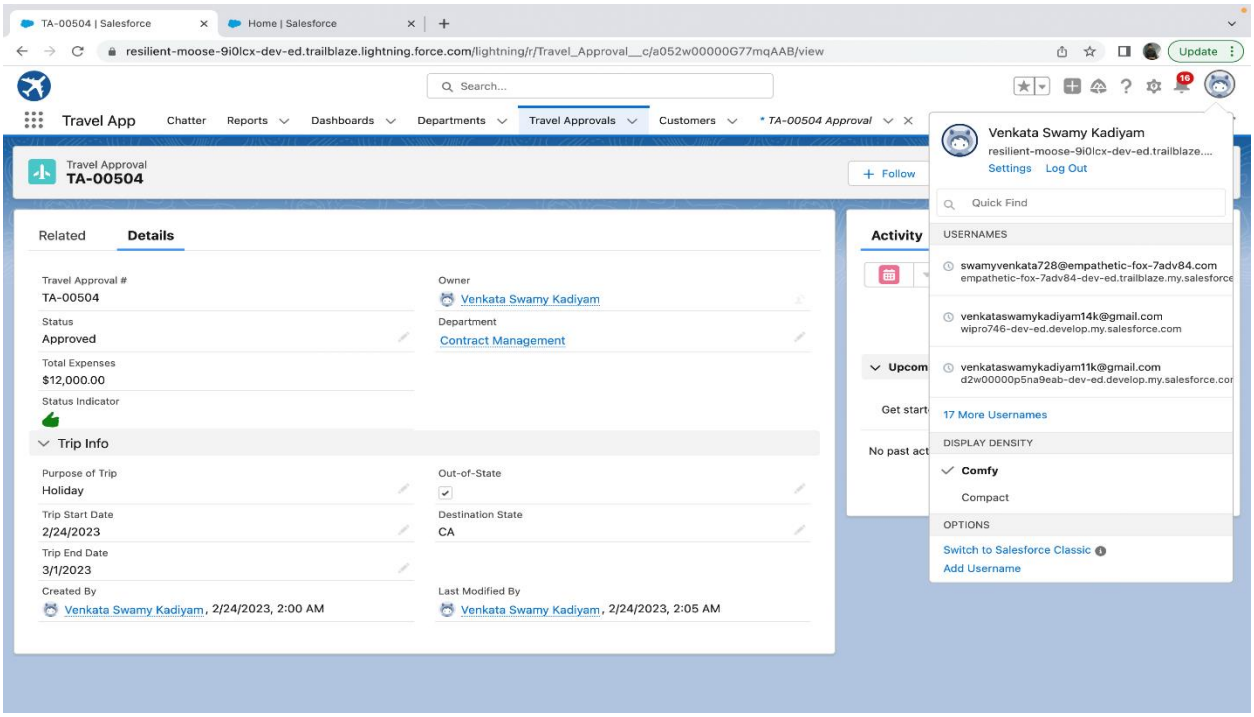
Assigned to Current User



After the Request approved



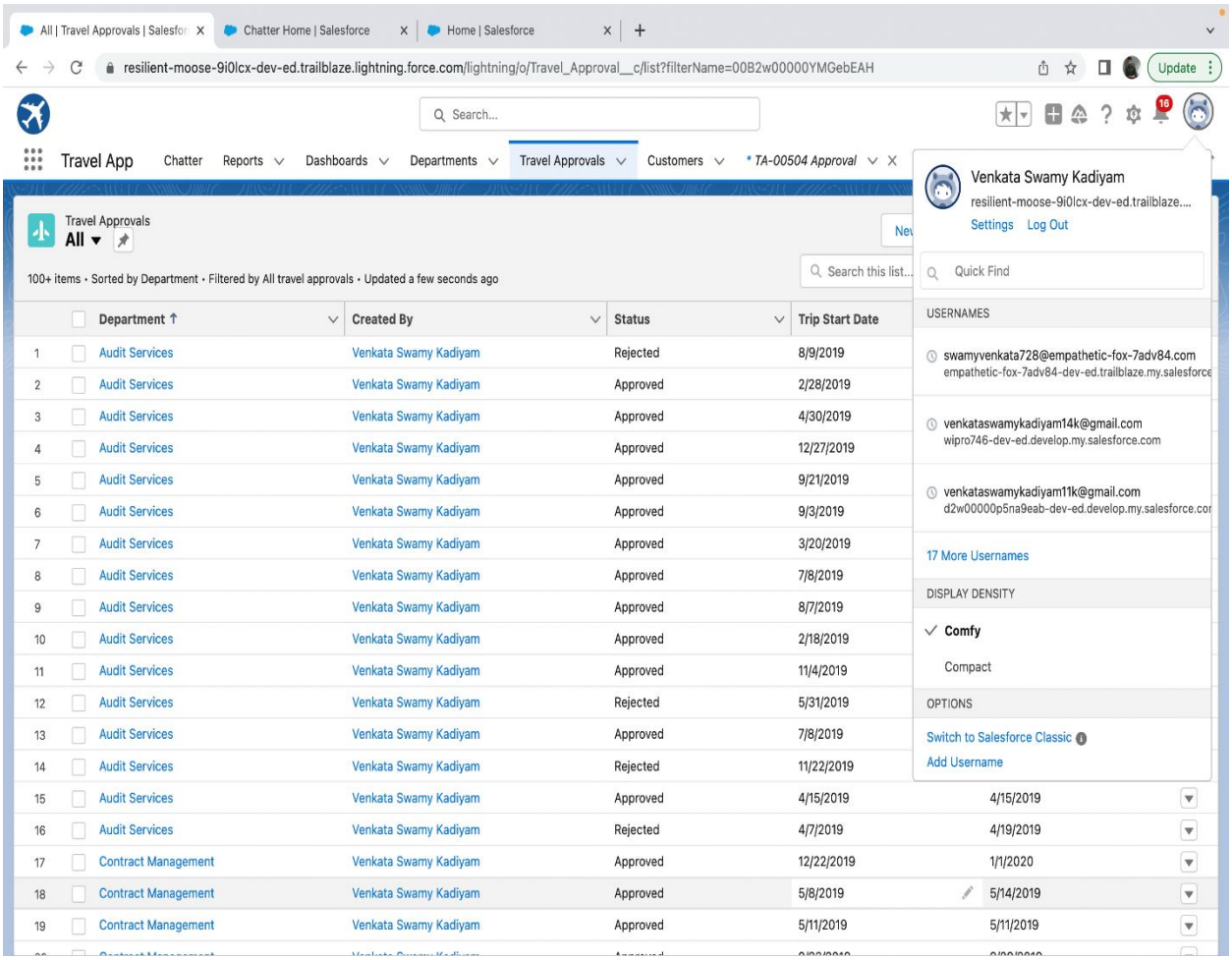
Fields got updated after approval



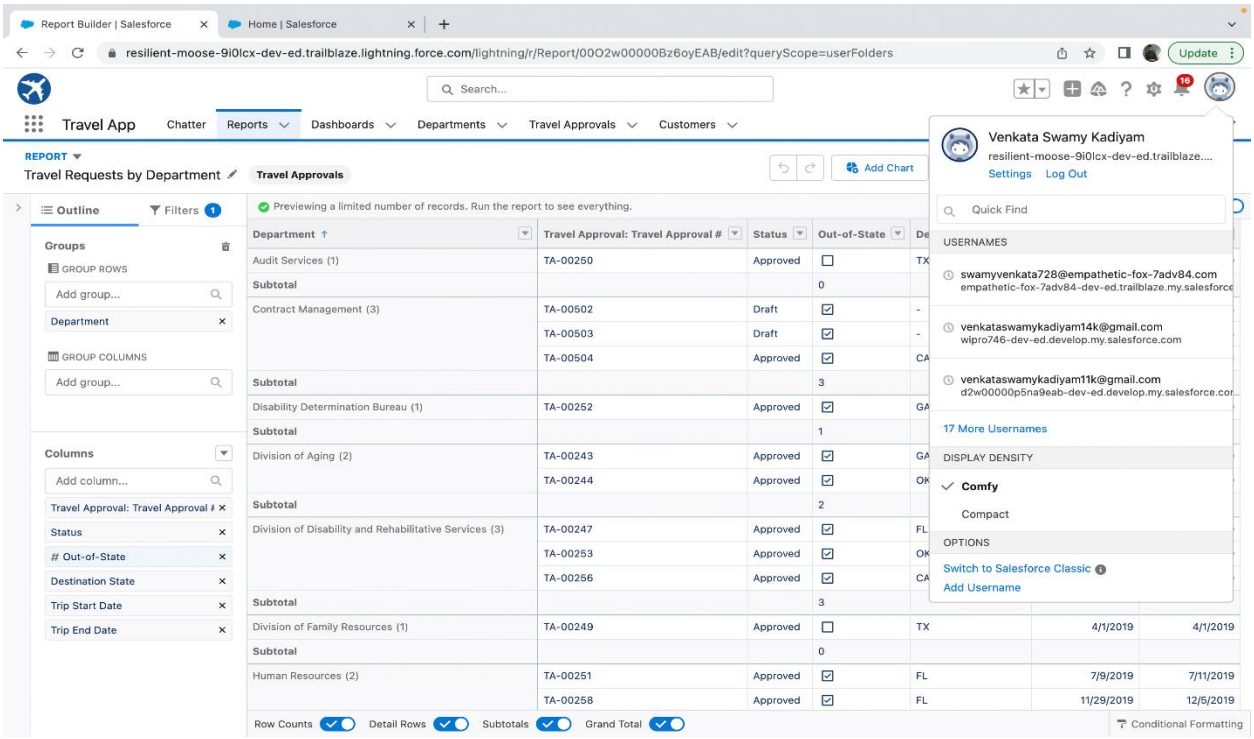
Exercise – 2

Step -1

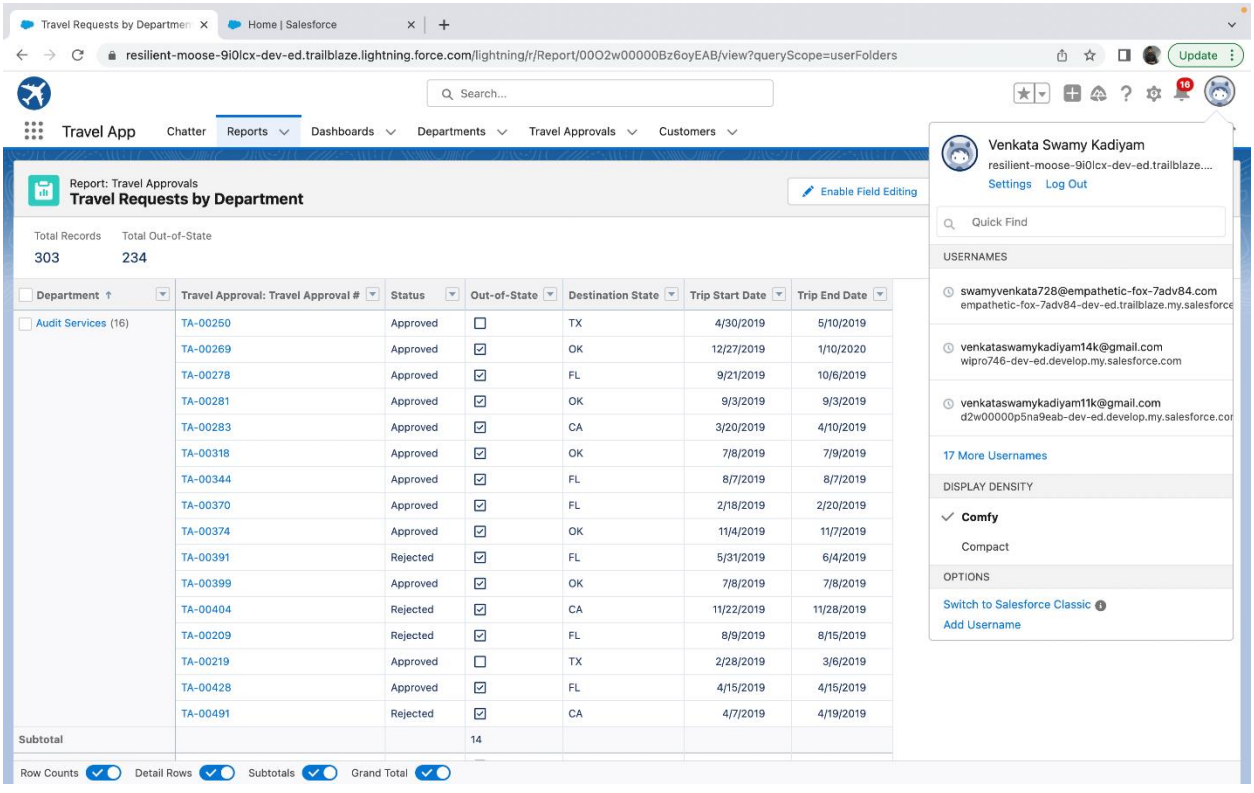
Imported Travel Approval Records

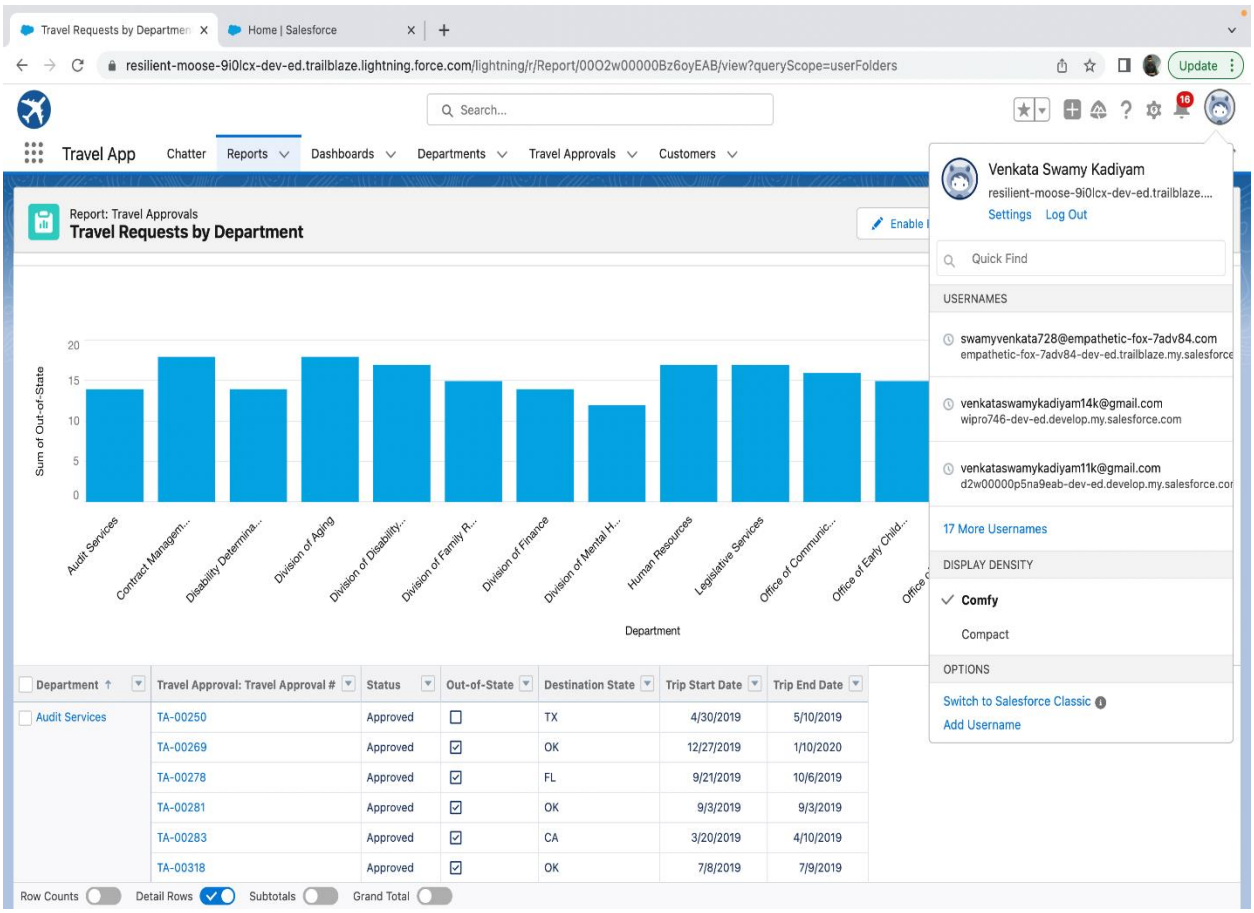


Step -2 Created a Report on Travel Requests by Department



After Testing




Travel Requests by Departmen
Home | Salesforce
resilient-moose-9i0lcx-dev-ed.trailblaze.lightning.force.com/lightning/r/Report/00O2w00000Bz6oyEAB/view?queryScope=userFolders
Update
Search...
Travel App
Chatter
Reports
Dashboards
Departments
Travel Approvals
Customers
Report: Travel Approvals
Travel Requests by Department
Enable
Sum of Out-of-State
20
15
10
5
0
Audit Services
Contract Managem...
Disability Determina...
Division of Aging
Division of Disability...
Division of Family R...
Division of Finance
Division of Mental H...
Human Resources
Legislative Services
Office of Communic...
Office of Early Child...
Department
Department
Travel Approval: Travel Approval #
Status
Out-of-State
Destination State
Trip Start Date
Trip End Date
Audit Services
TA-00250
Approved
TX
4/30/2019
5/10/2019
TA-00269
Approved
OK
12/27/2019
1/10/2020
TA-00278
Approved
FL
9/21/2019
10/6/2019
TA-00281
Approved
OK
9/3/2019
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TA-00283
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CA
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7/9/2019
Row Counts
Detail Rows
Subtotals
Grand Total
Venkata Swamy Kadiyam
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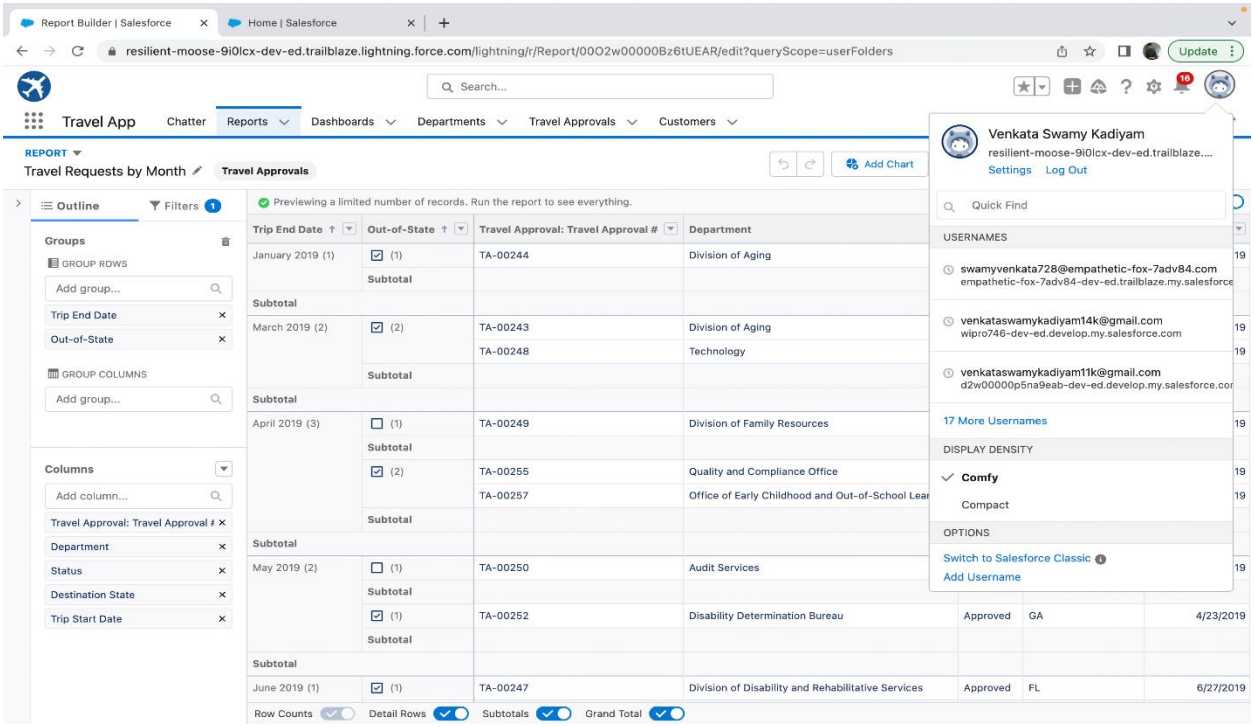
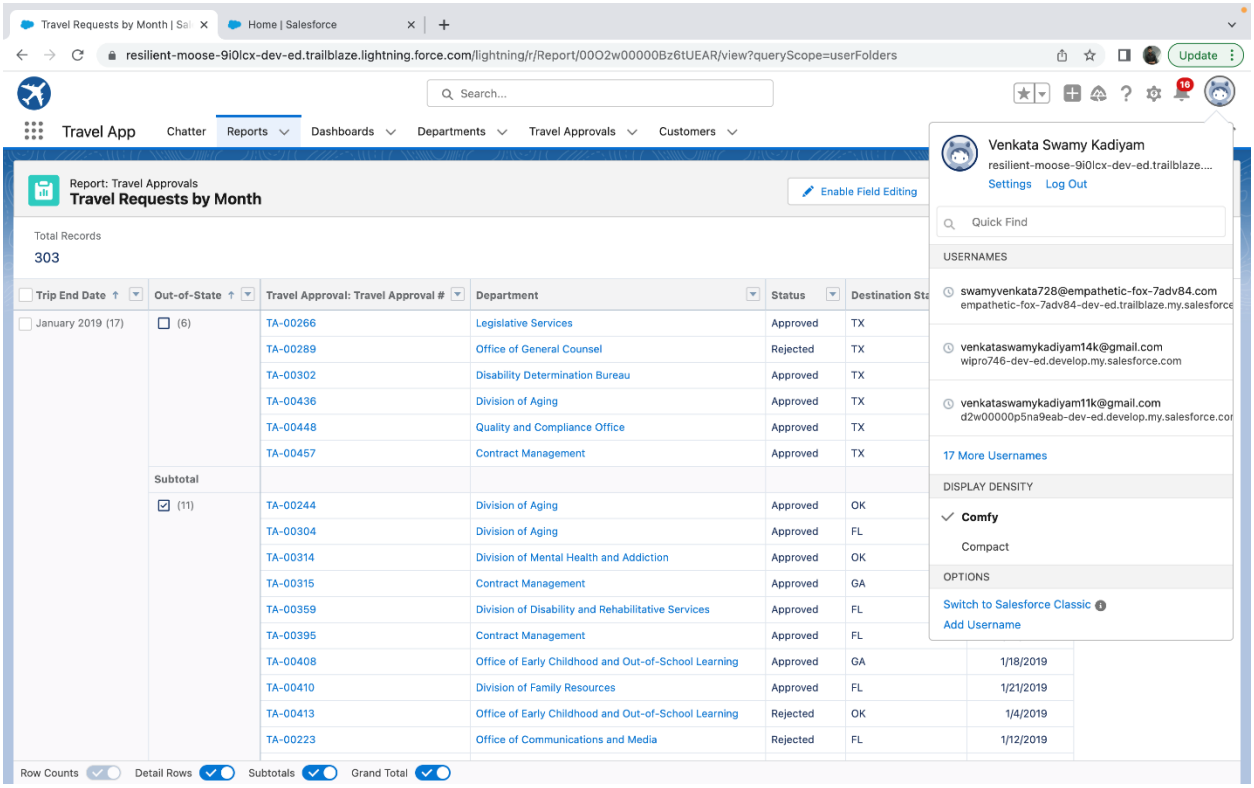
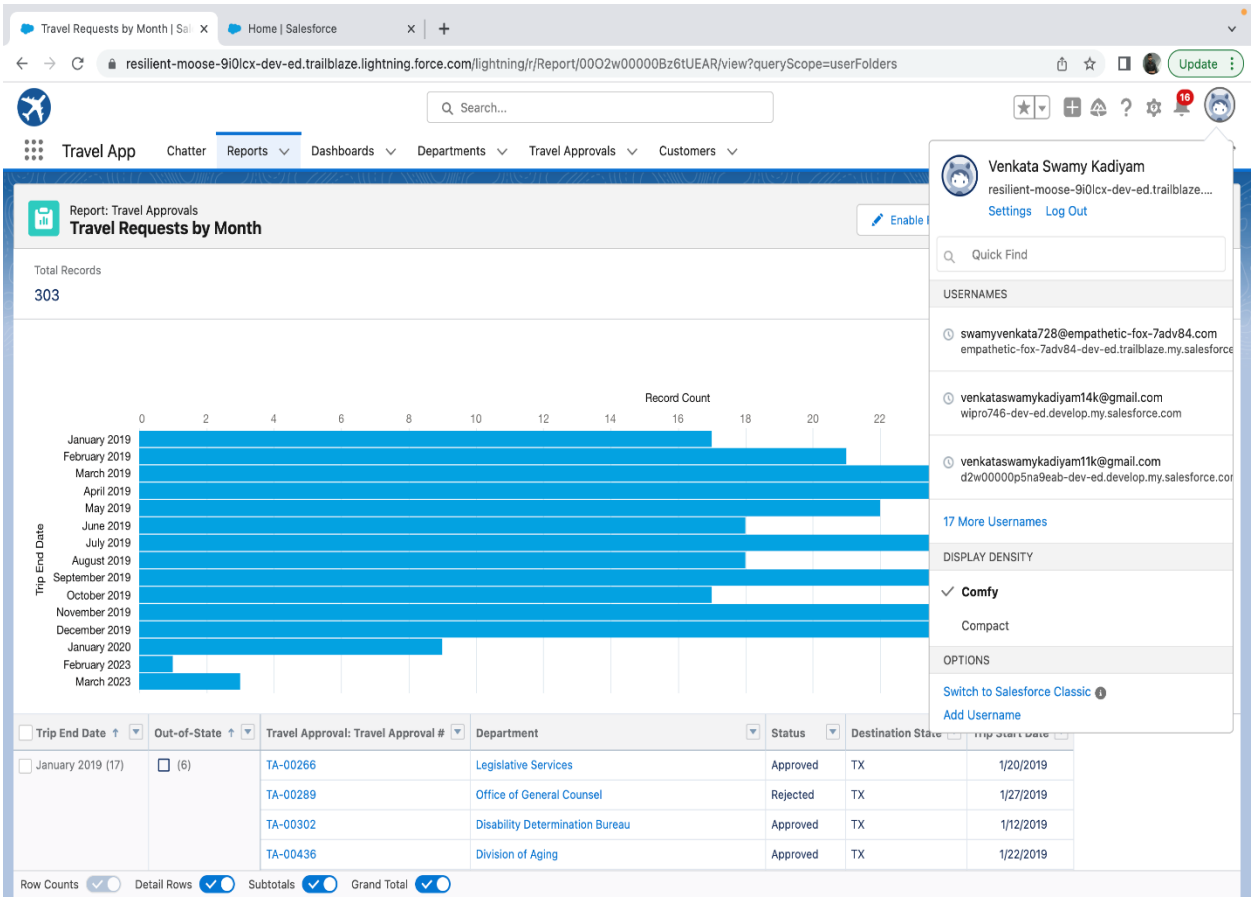
Settings
Log Out
Quick Find
USERNAMES
swamyvenkata728@empathetic-fox-7adv84.com
empathetic-fox-7adv84-dev-ed.trailblaze.my.salesforce
venkataswamykadiyam14k@gmail.com
wipro746-dev-ed.develop.my.salesforce.com
venkataswamykadiyam11k@gmail.com
d2w00000p5na9eab-dev-ed.develop.my.salesforce.cor
17 More Usernames
DISPLAY DENSITY
Comfy
Compact
OPTIONS
Switch to Salesforce Classic
Add Username

Step – 3

Created a Travel Requests by Monthly Report

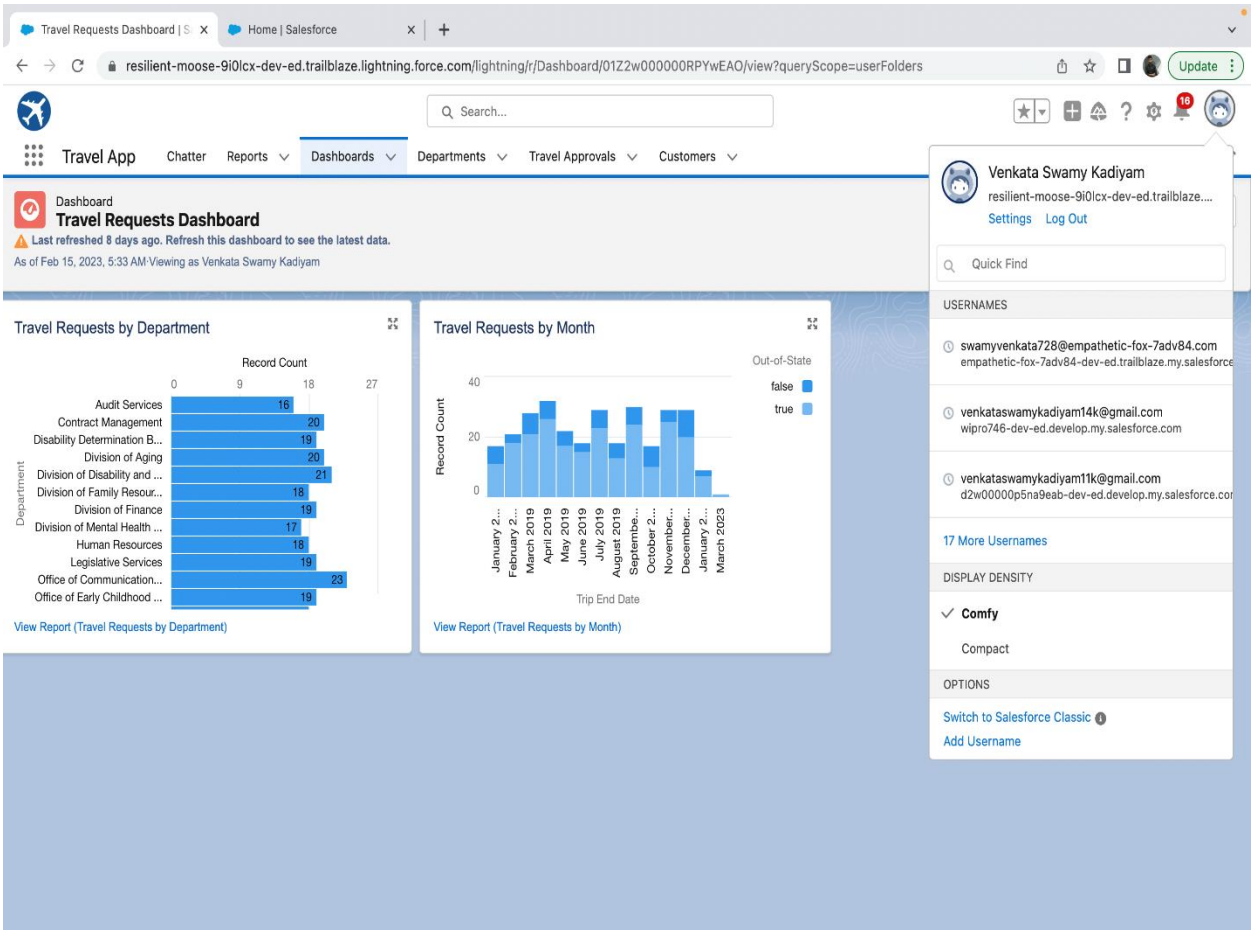





Travel Requests by Month | Sal
Home | Salesforce
resilient-moose-9i0lcx-dev-ed.trailblaze.lightning.force.com/lightning/r/Report/00O2w00000Bz6tUEAR/view?queryScope=userFolders
Update
Search...
Travel App
Chatter
Reports
Dashboards
Departments
Travel Approvals
Customers
Report: Travel Approvals
Travel Requests by Month
Total Records
303
Record Count
Trip End Date
January 2019
February 2019
March 2019
April 2019
May 2019
June 2019
July 2019
August 2019
September 2019
October 2019
November 2019
December 2019
January 2020
February 2023
March 2023
Venkata Swamy Kadiyam
resilient-moose-9i0lcx-dev-ed.trailblaze....
Settings
Log Out
Quick Find
USERNAMES
swamyvenkata728@empathetic-fox-7adv84.com
empathetic-fox-7adv84-dev-ed.trailblaze.my.salesforce
venkataswamykadiyam14k@gmail.com
wipro746-dev-ed.develop.my.salesforce.com
venkataswamykadiyam11k@gmail.com
17 More Usernames
DISPLAY DENSITY
Comfy
Compact
OPTIONS
Switch to Salesforce Classic
Add Username
Trip End Date
Out-of-State
Travel Approval: Travel Approval #
Department
Status
Destination State
January 2019 (17)
(6)
TA-00266
Legislative Services
Approved
TX
1/20/2019
TA-00289
Office of General Counsel
Rejected
TX
1/27/2019
TA-00302
Disability Determination Bureau
Approved
TX
1/12/2019
TA-00436
Division of Aging
Approved
TX
1/22/2019
Row Counts
Detail Rows
Subtotals
Grand Total

Step – 4

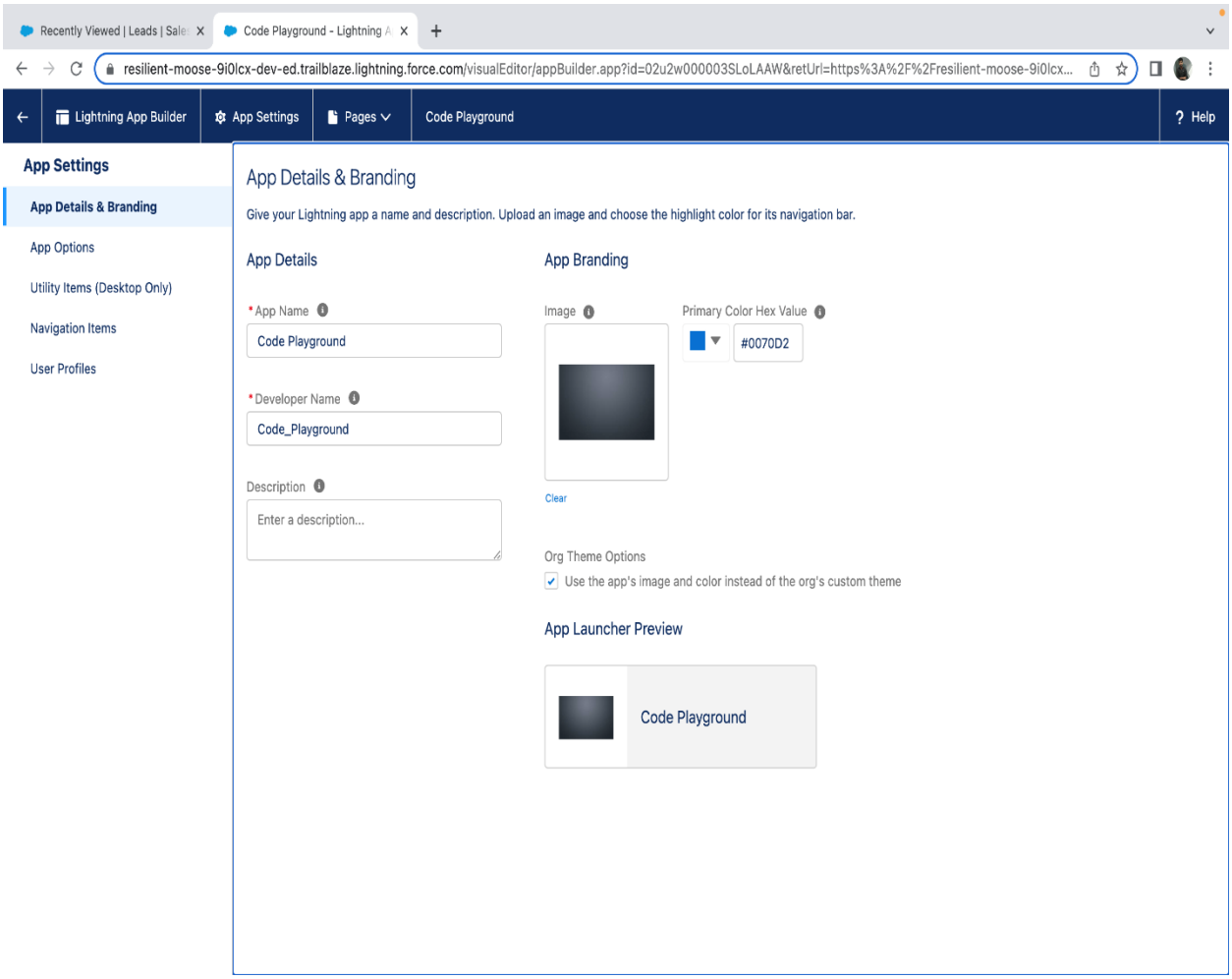
Created a Report and Dashboard for Travel Approvals



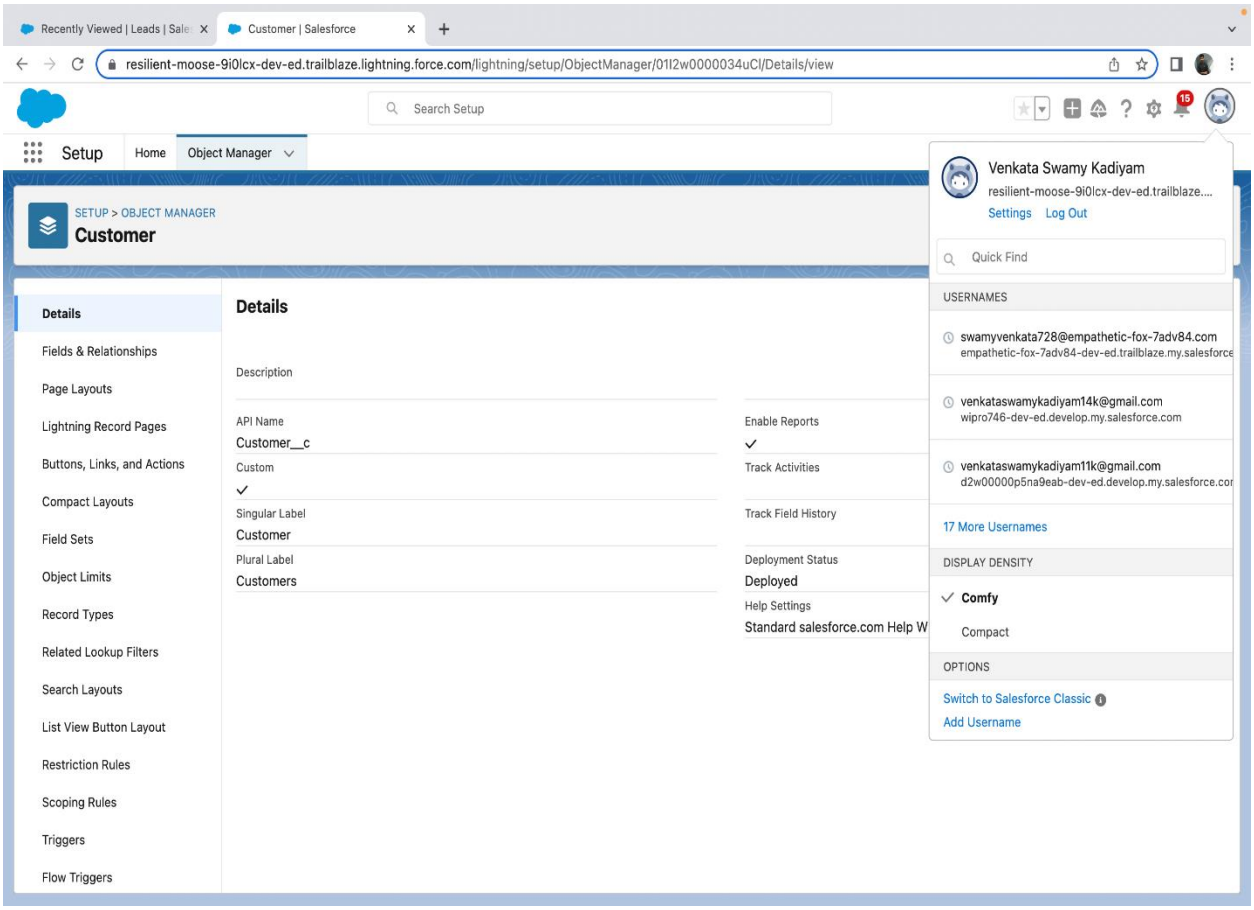
Module 3

Exercise – 1

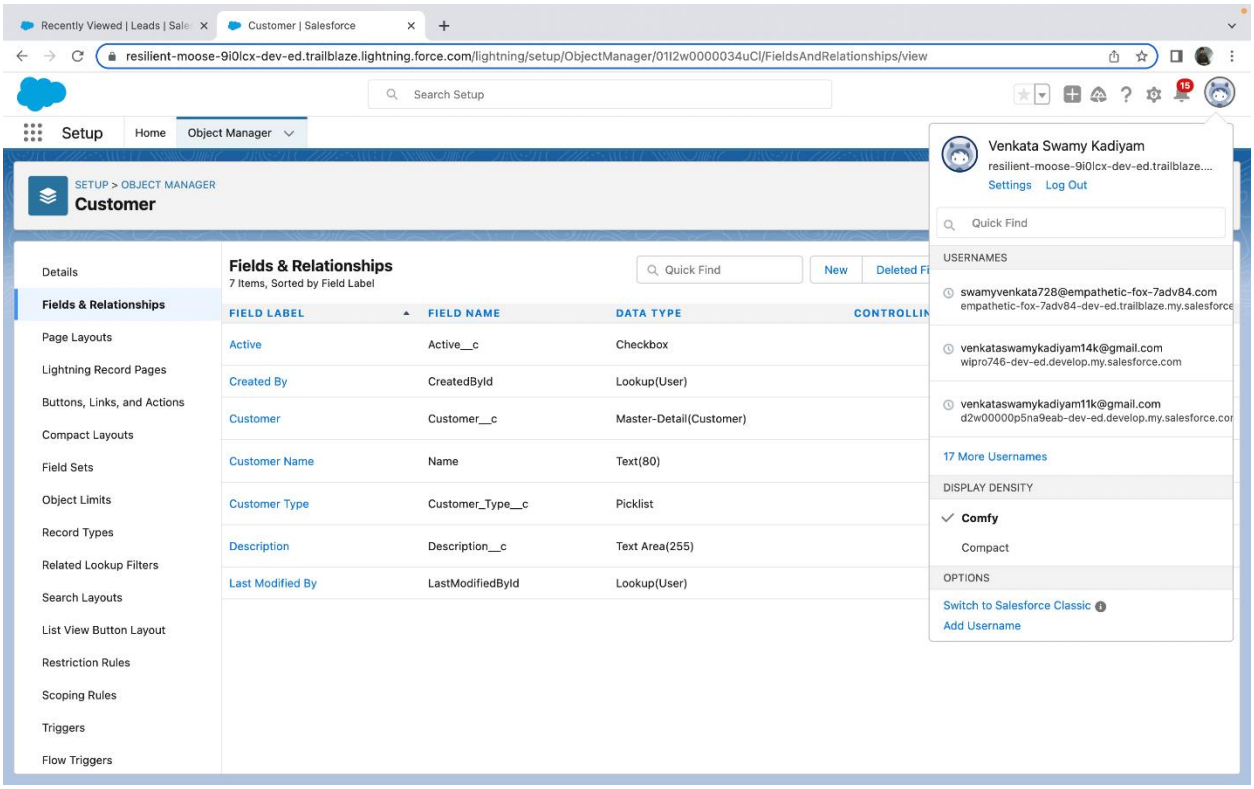
Created Code Playground App



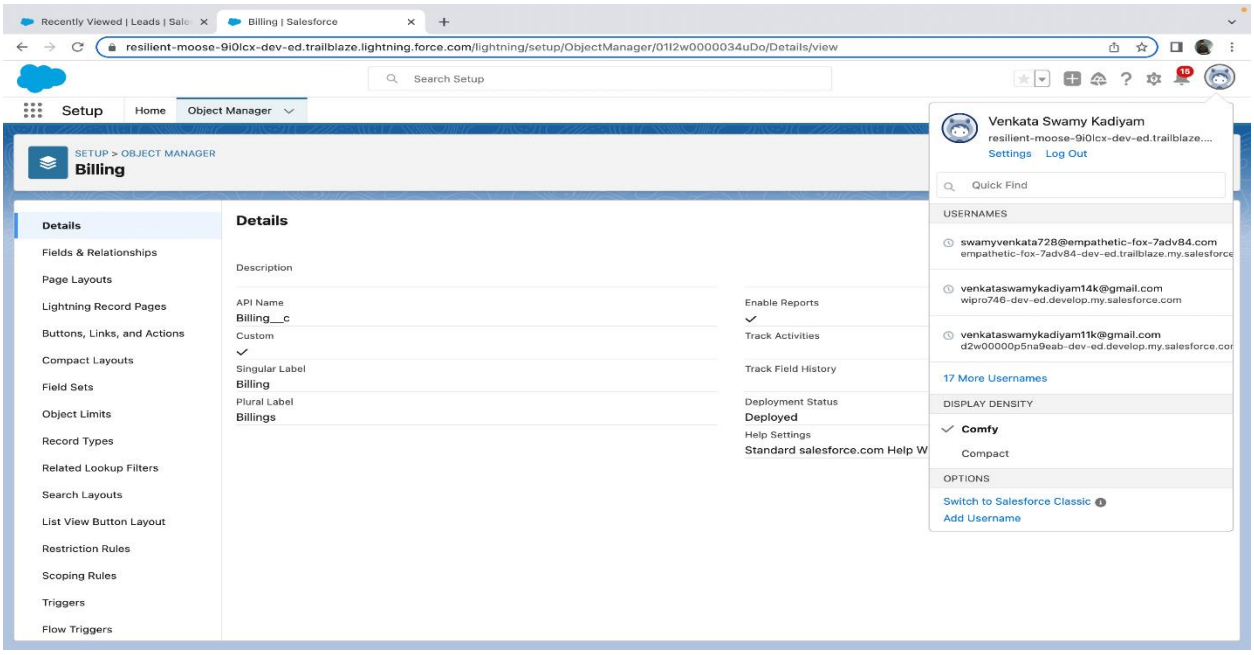
Created the Custom Object Customer



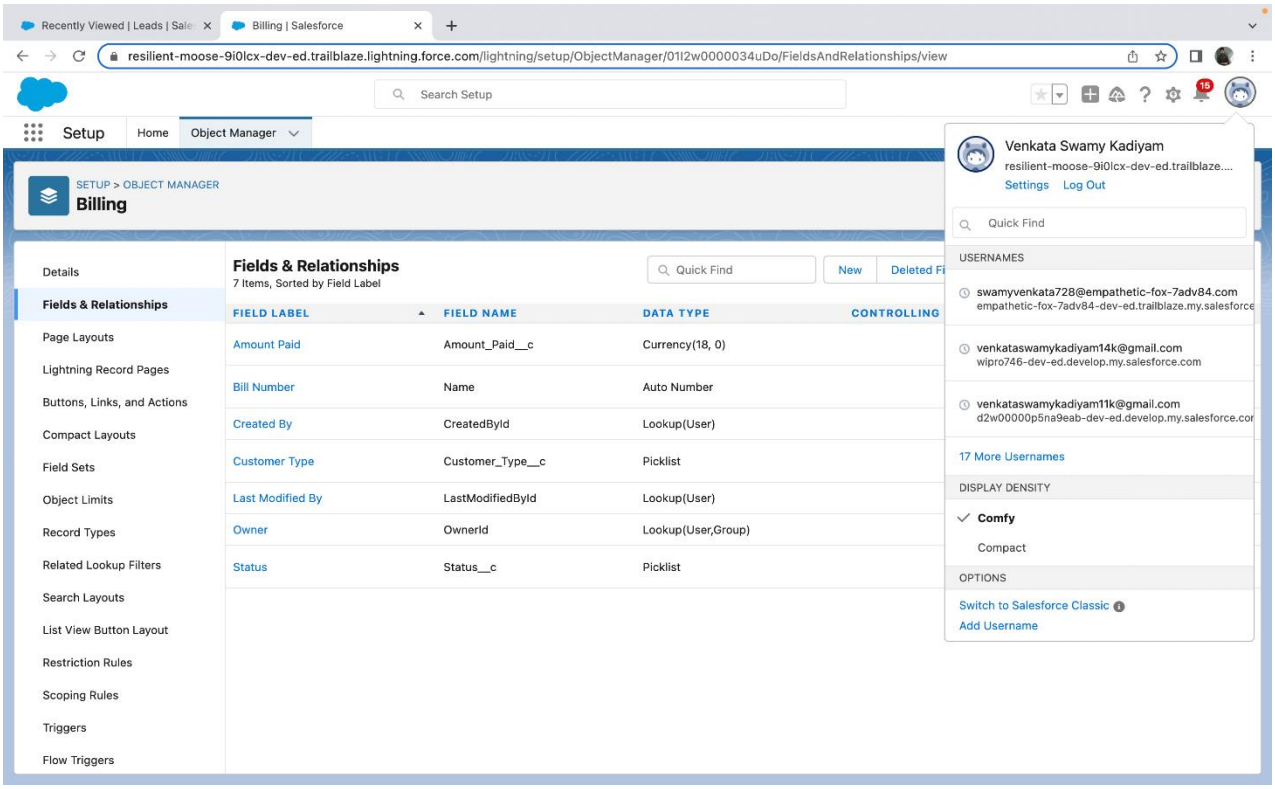
Created all the custom fields



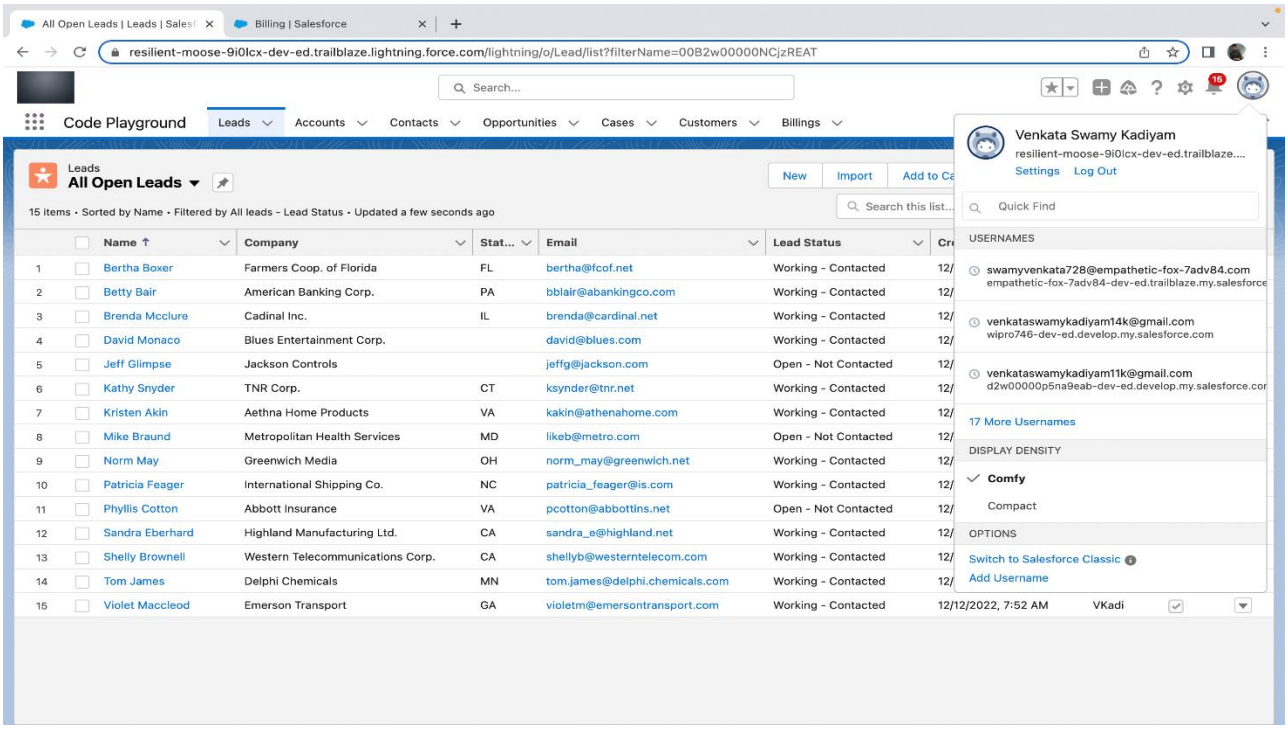
Created a Custom Object named Billing



Created Custom fields for billing object

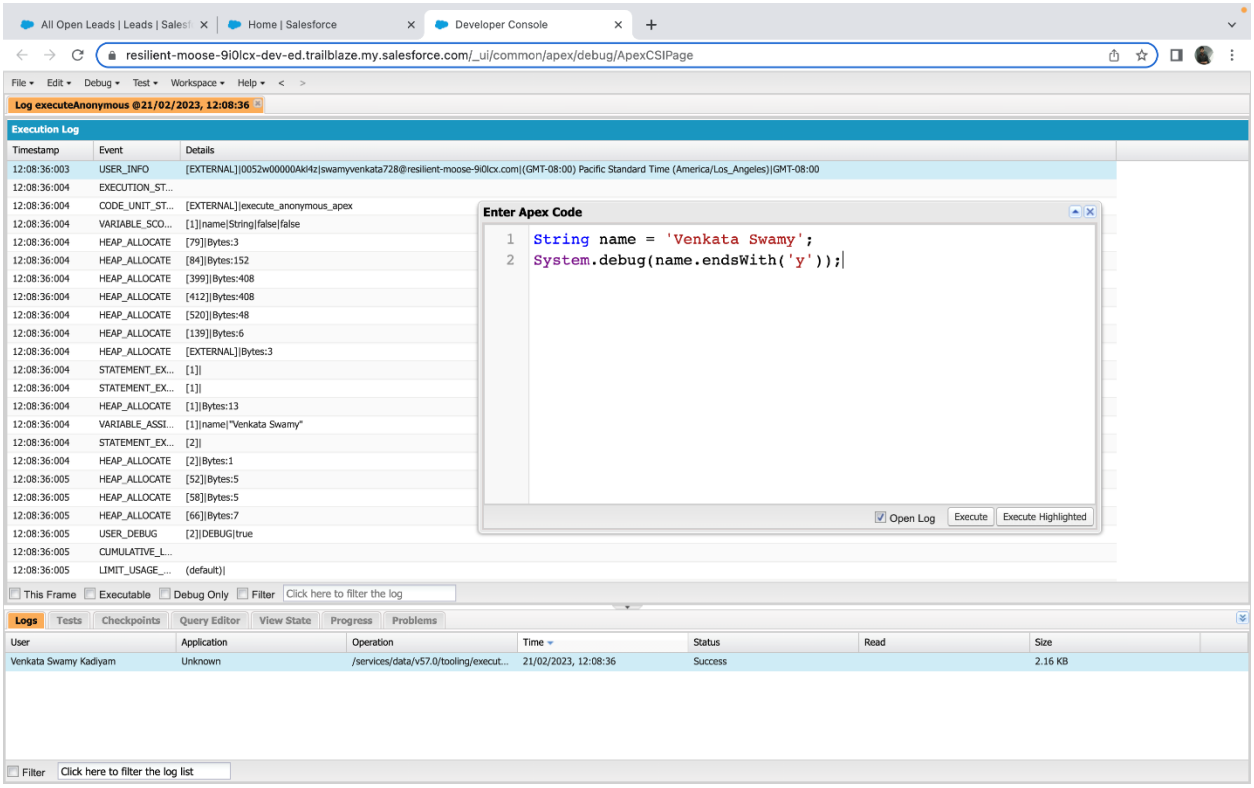


Code Playground App

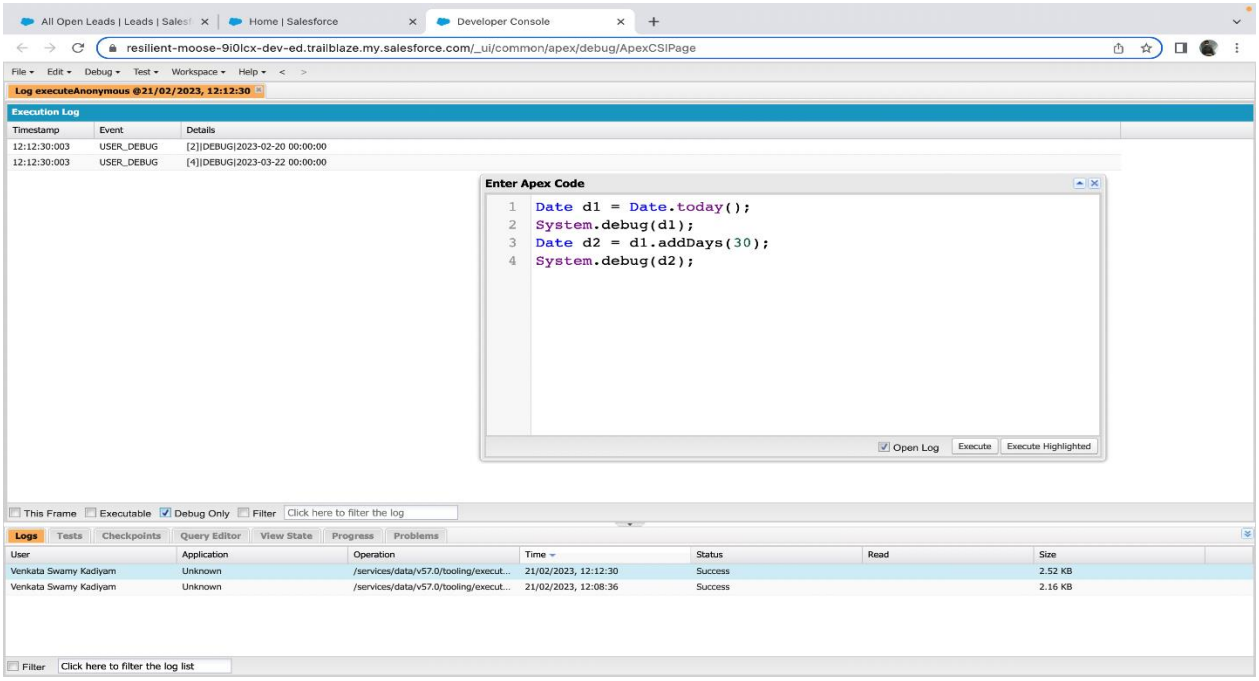


Exercise – 2

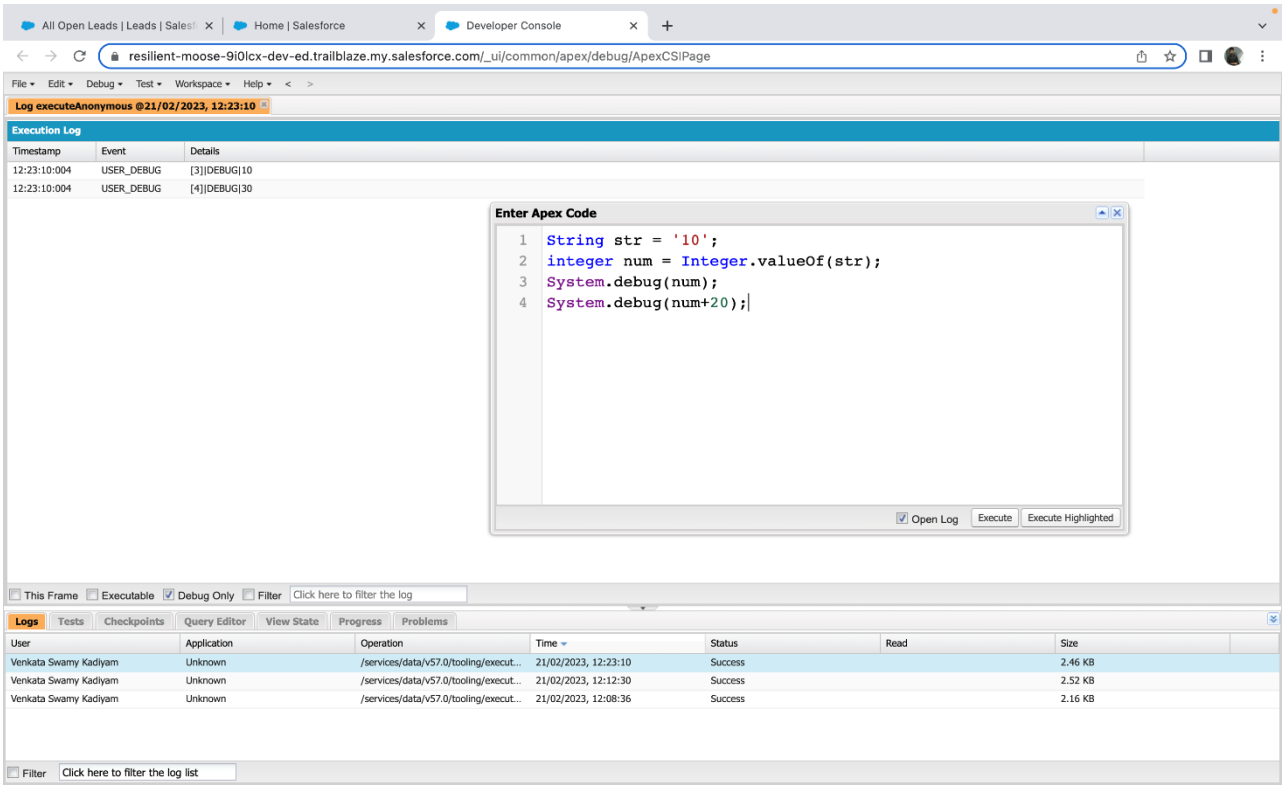
String Variable using endsWith() method



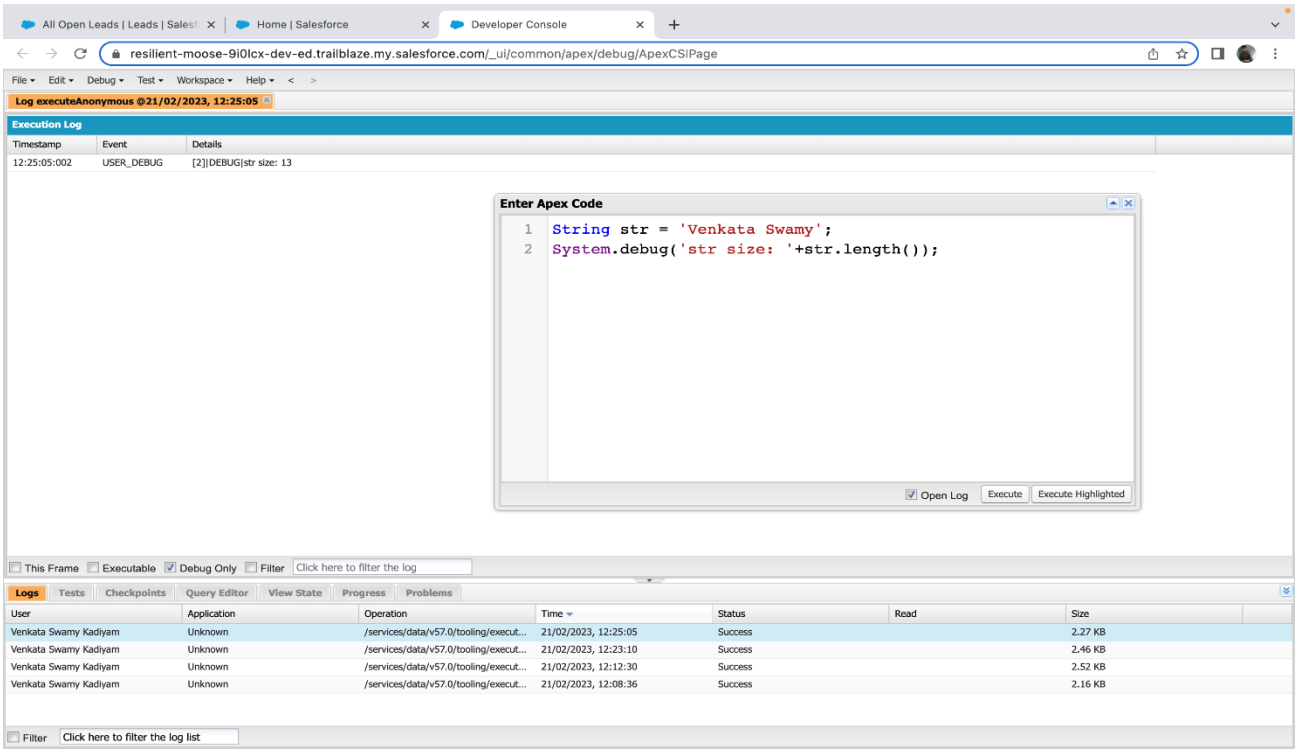
Used Date Method and displayed the date



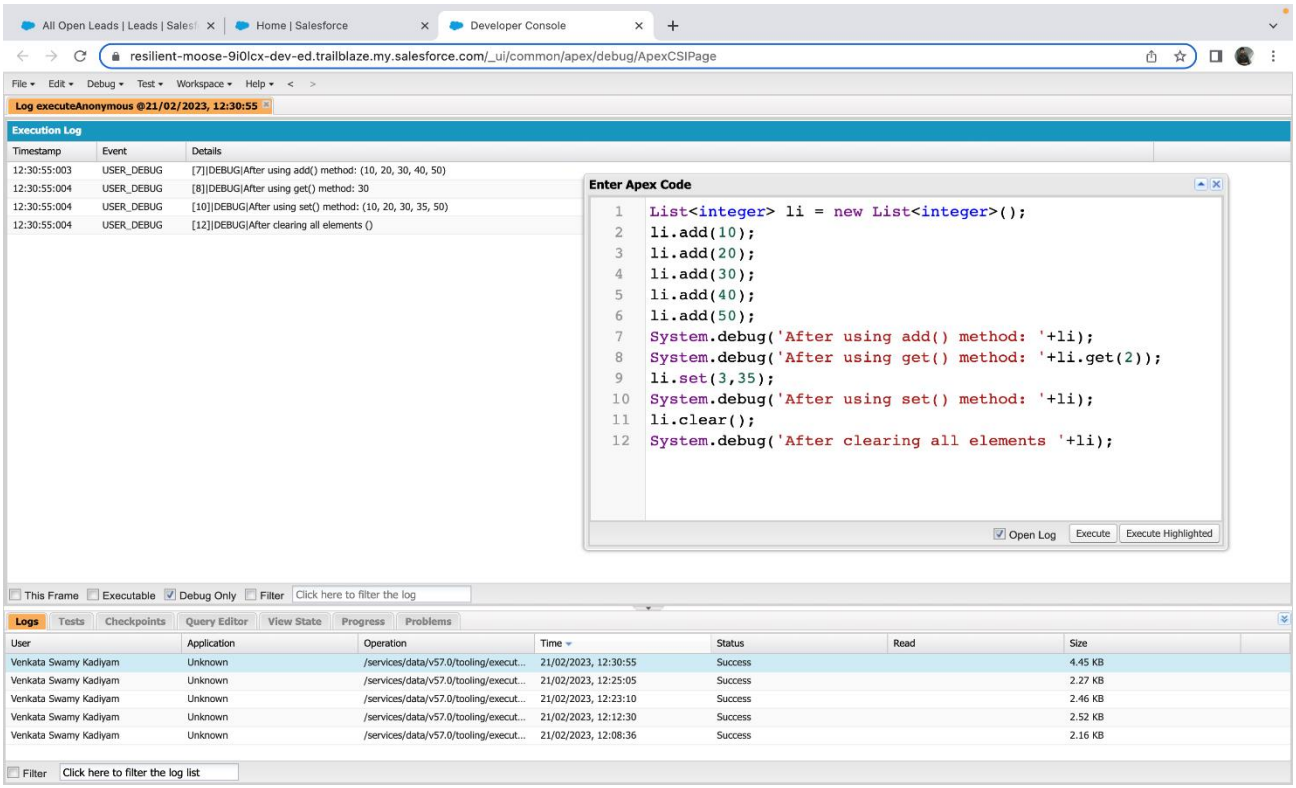
Converted the string into integer and added 20 to it



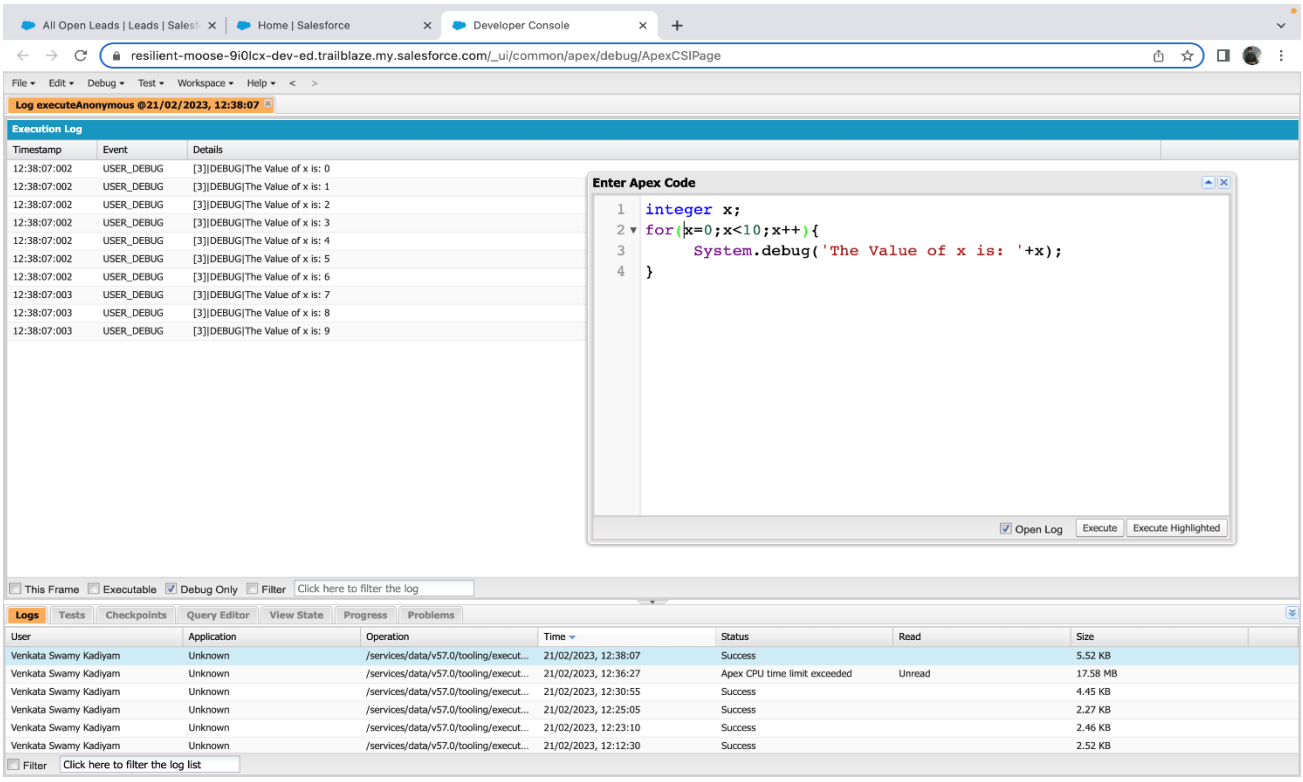
Used length method to display String length



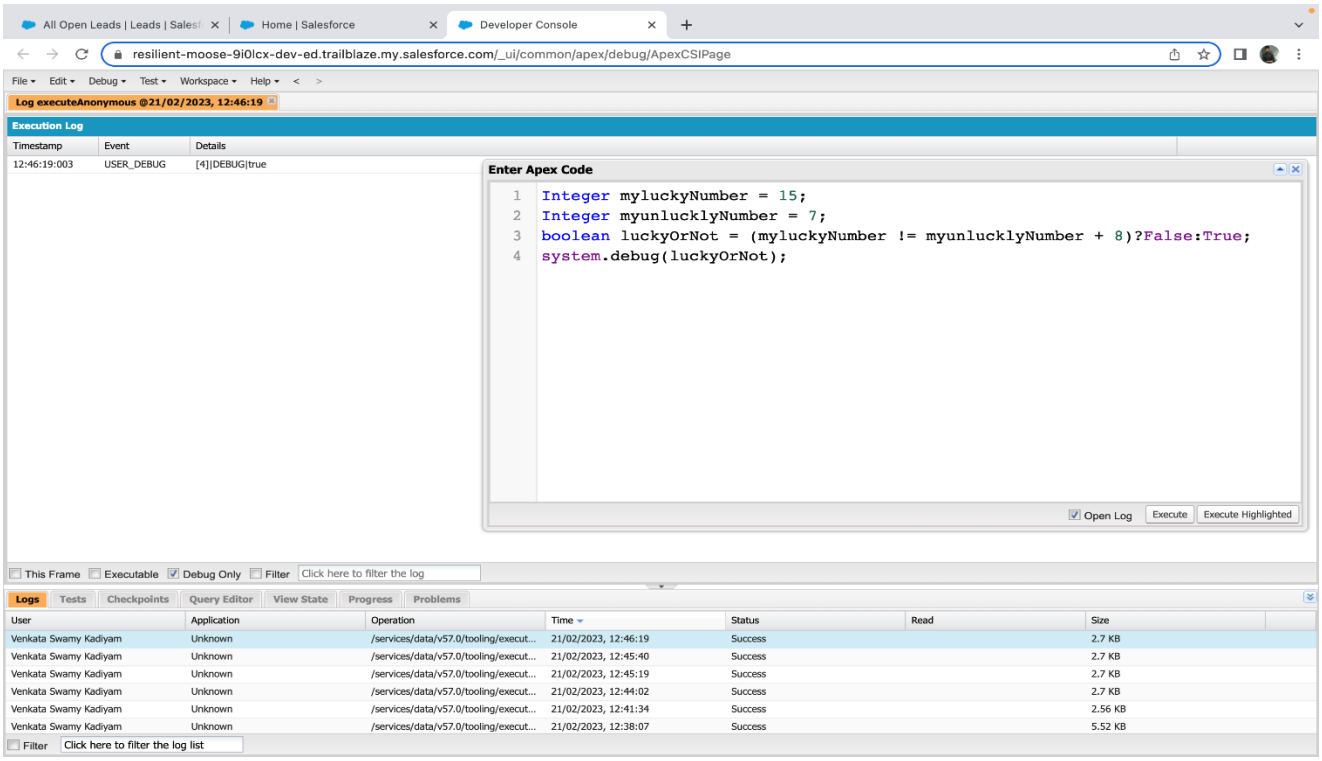
Defined a list and displayed the outputs using different methods



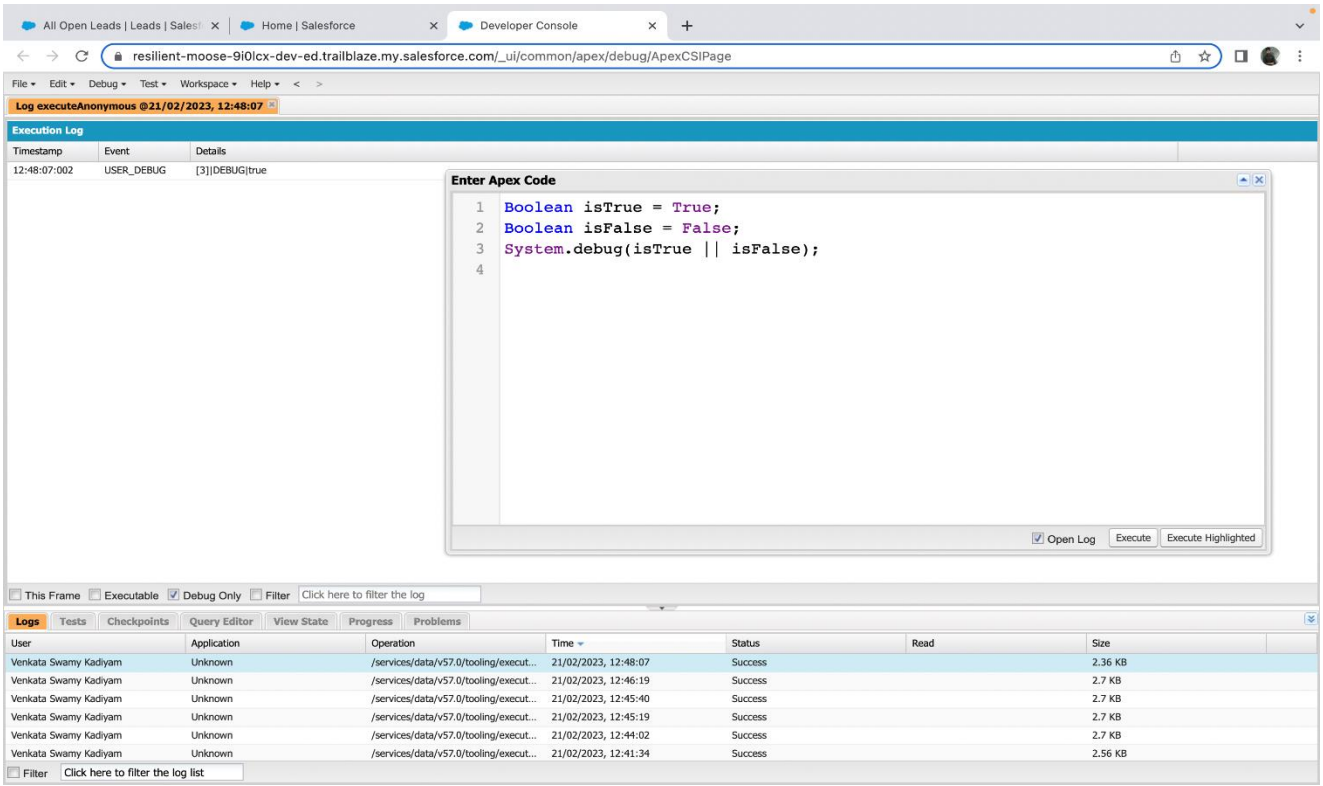
Printed numbers between 0 to 9



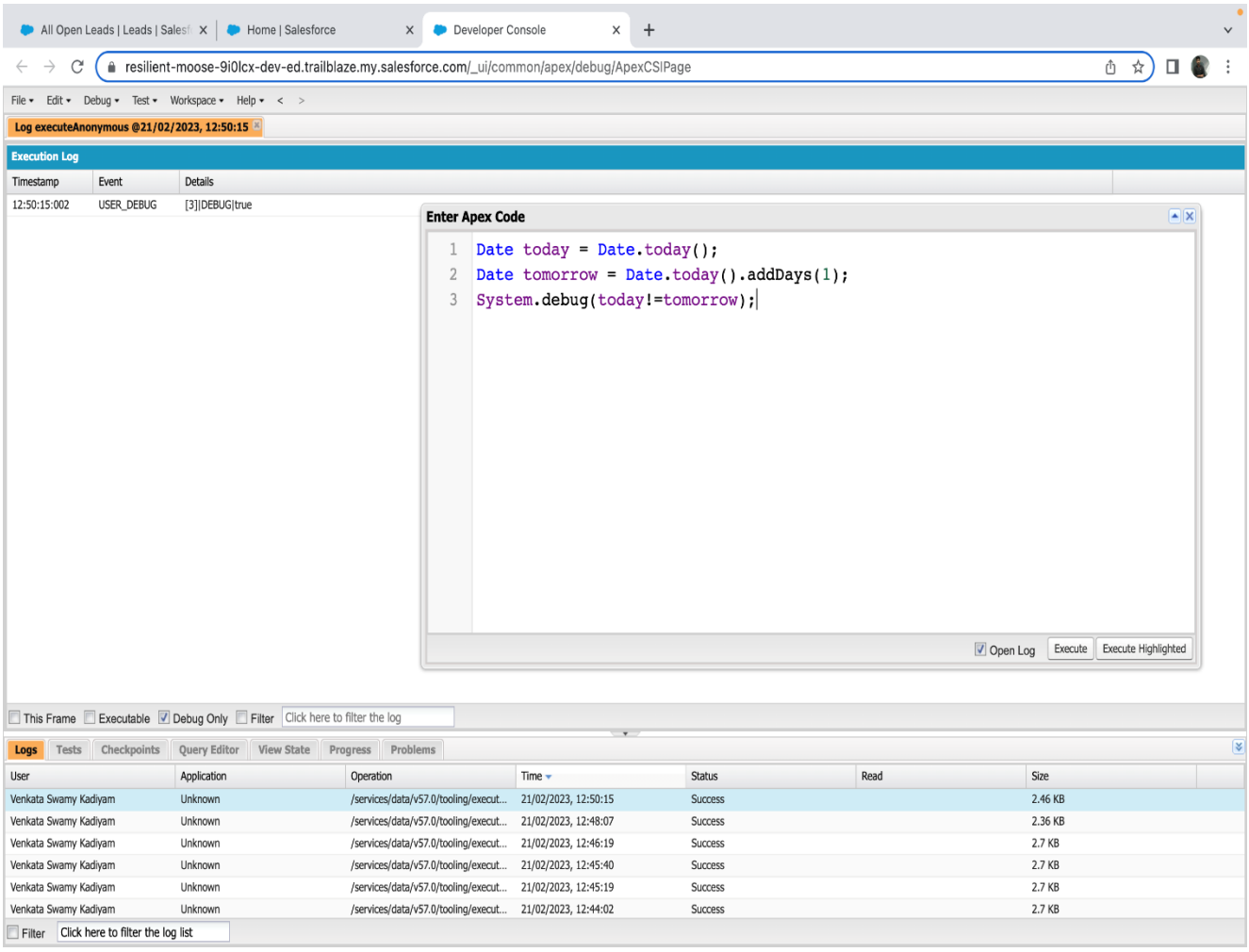
Exercise – 3



Exercise – 4

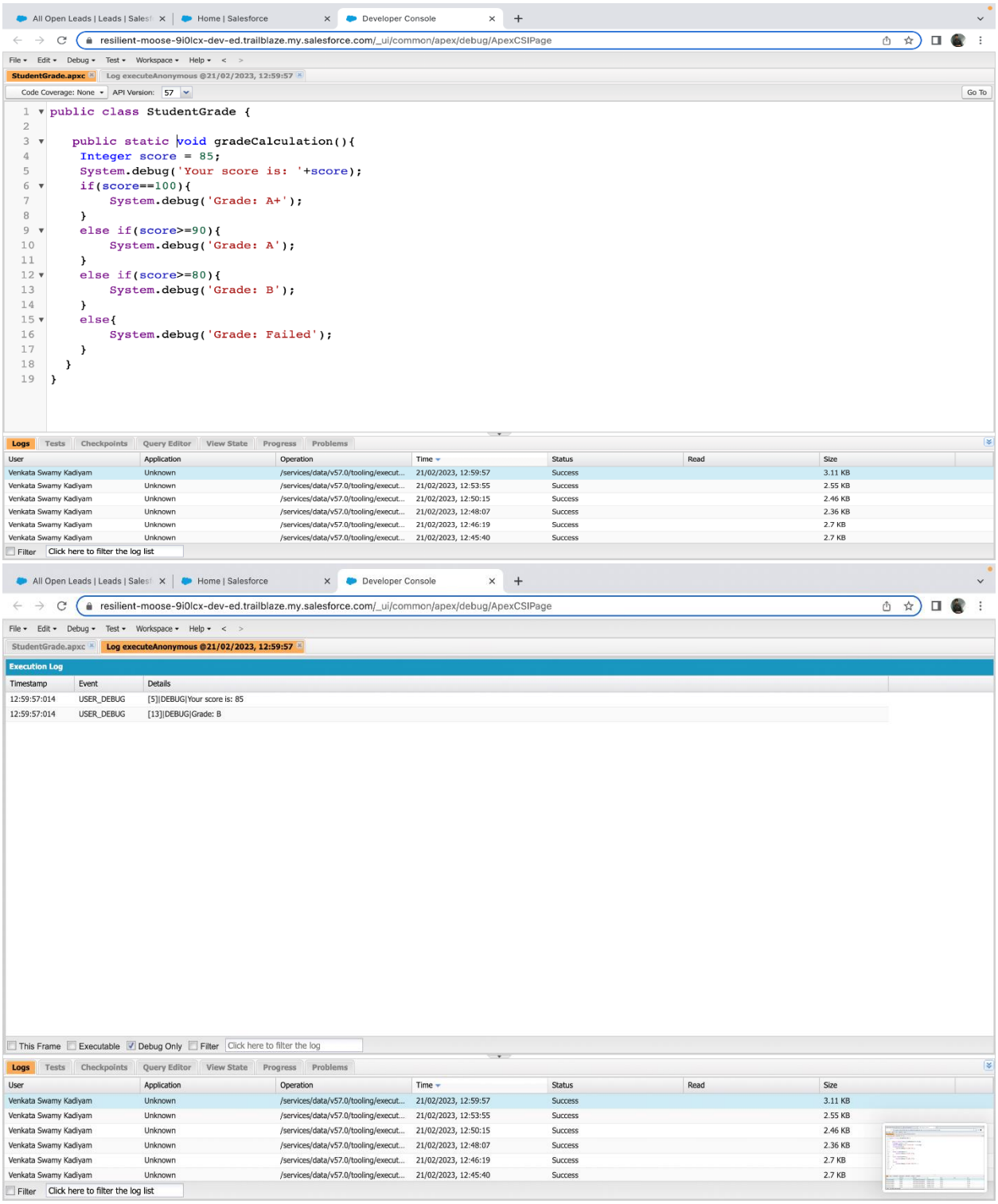


Exercise – 5


All Open Leads | Leads | Salesf
Home | Salesforce
Developer Console
resilient-moose-9i0lcx-dev-ed.trailblaze.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
Log executeAnonymous @21/02/2023, 12:50:15
Execution Log
Timestamp Event Details
12:50:15:002 USER_DEBUG [3]|DEBUG|true
Enter Apex Code
1 Date today = Date.today();
2 Date tomorrow = Date.today().addDays(1);
3 System.debug(today!=tomorrow);
Open Log
Execute
Execute Highlighted
This Frame
Executable
Debug Only
Filter
Click here to filter the log
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User Application Operation Time Status Read Size
Venkata Swamy Kadiyam Unknown /services/data/v57.0/tooling/execut... 21/02/2023, 12:50:15 Success 2.46 KB
Venkata Swamy Kadiyam Unknown /services/data/v57.0/tooling/execut... 21/02/2023, 12:48:07 Success 2.36 KB
Venkata Swamy Kadiyam Unknown /services/data/v57.0/tooling/execut... 21/02/2023, 12:46:19 Success 2.7 KB
Venkata Swamy Kadiyam Unknown /services/data/v57.0/tooling/execut... 21/02/2023, 12:45:40 Success 2.7 KB
Venkata Swamy Kadiyam Unknown /services/data/v57.0/tooling/execut... 21/02/2023, 12:45:19 Success 2.7 KB
Venkata Swamy Kadiyam Unknown /services/data/v57.0/tooling/execut... 21/02/2023, 12:44:02 Success 2.7 KB
Filter
Click here to filter the log list

Exercise – 6

Program for finding the Grade based on the Score



```
public class StudentGrade {

   public static void gradeCalculation(){
    Integer score = 85;
    System.debug('Your score is: '+score);
    if(score==100){
        System.debug('Grade: A+');
    }
    else if(score>=90){
        System.debug('Grade: A');
    }
    else if(score>=80){
        System.debug('Grade: B');
    }
    else{
        System.debug('Grade: Failed');
    }
  }
}
```

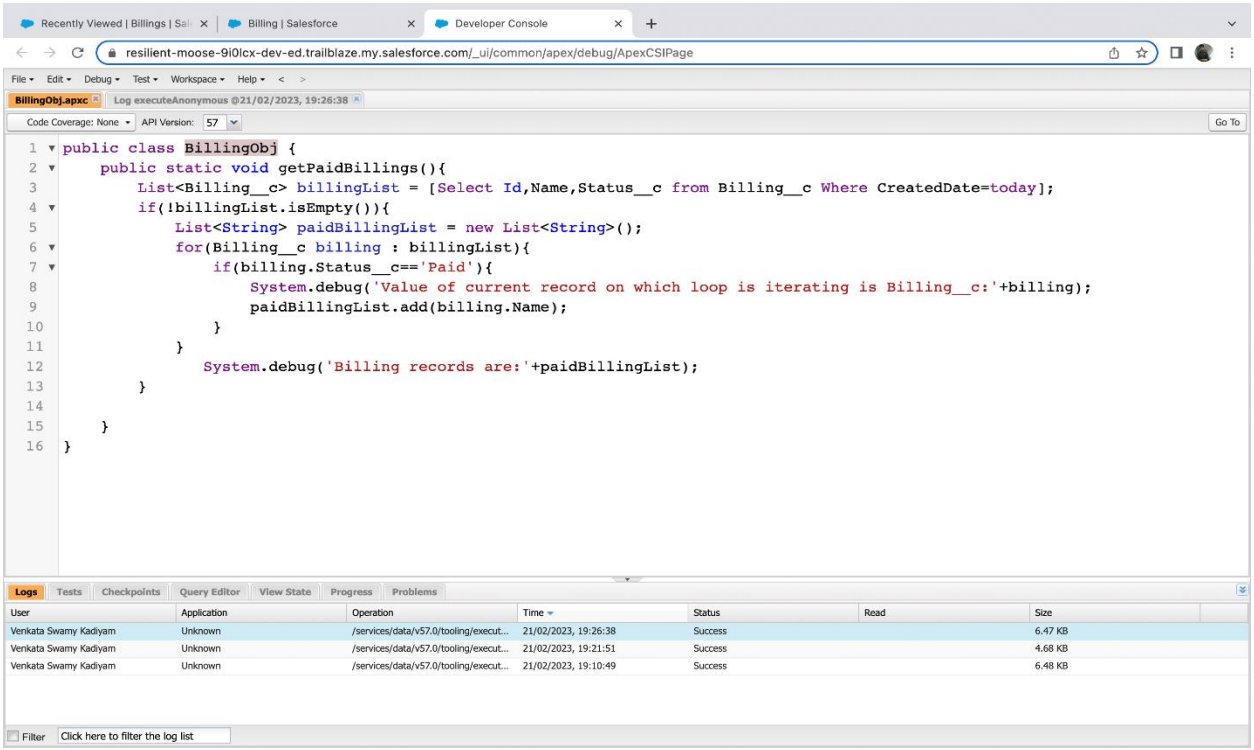
User	Application	Operation	Time	Status	Read	Size
Venkata Swamy Kadiyam	Unknown	/services/data/v57.0/tooling/execut...	21/02/2023, 12:59:57	Success		3.11 KB
Venkata Swamy Kadiyam	Unknown	/services/data/v57.0/tooling/execut...	21/02/2023, 12:53:55	Success		2.55 KB
Venkata Swamy Kadiyam	Unknown	/services/data/v57.0/tooling/execut...	21/02/2023, 12:50:15	Success		2.46 KB
Venkata Swamy Kadiyam	Unknown	/services/data/v57.0/tooling/execut...	21/02/2023, 12:48:07	Success		2.36 KB
Venkata Swamy Kadiyam	Unknown	/services/data/v57.0/tooling/execut...	21/02/2023, 12:46:19	Success		2.7 KB
Venkata Swamy Kadiyam	Unknown	/services/data/v57.0/tooling/execut...	21/02/2023, 12:45:40	Success		2.7 KB

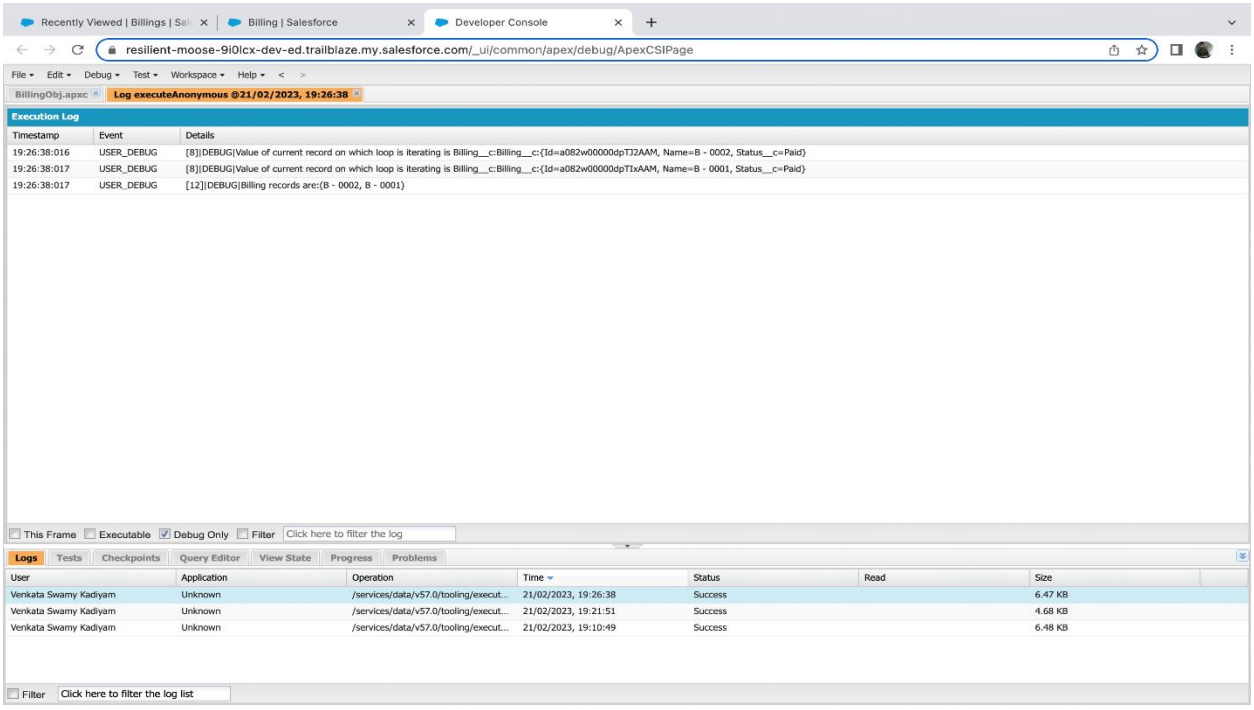
Execution Log

Timestamp	Event	Details
12:59:57:014	USER_DEBUG	[5]|DEBUG|Your score is: 85
12:59:57:014	USER_DEBUG	[13]|DEBUG|Grade: B

Exercise – 7

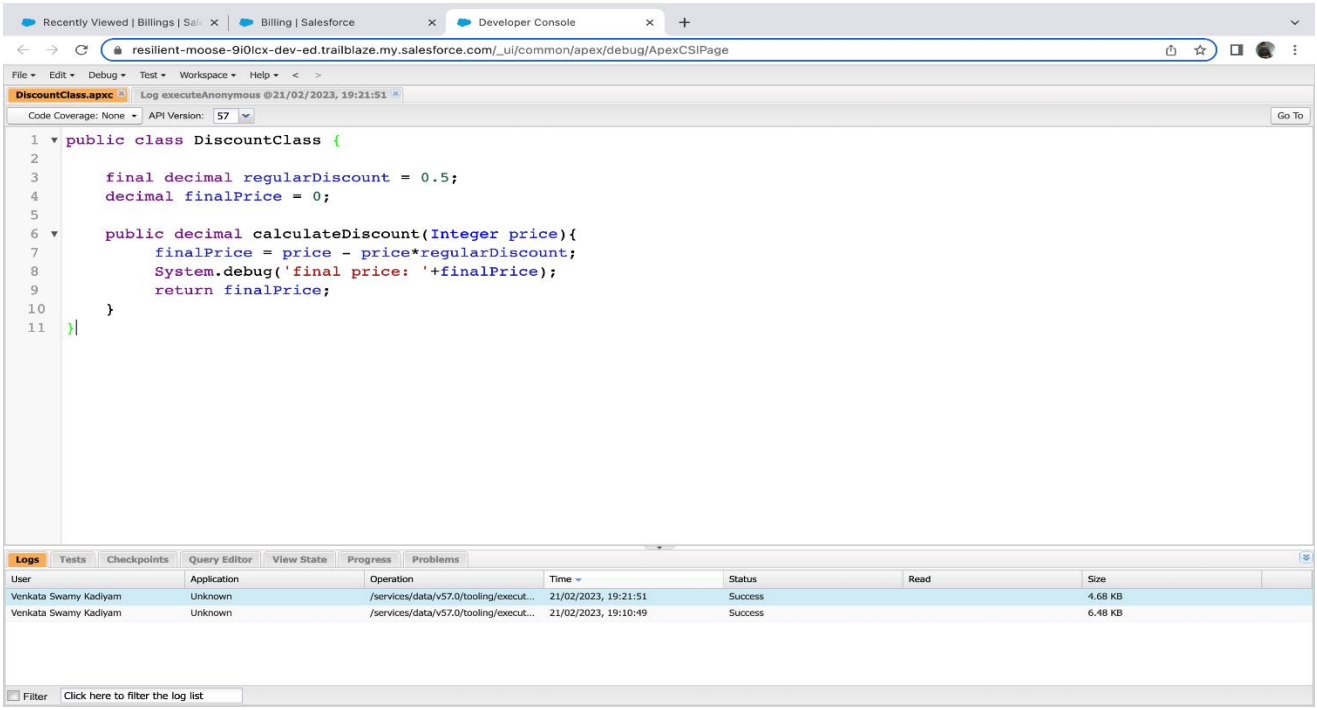
Program to execute Apex – for loop

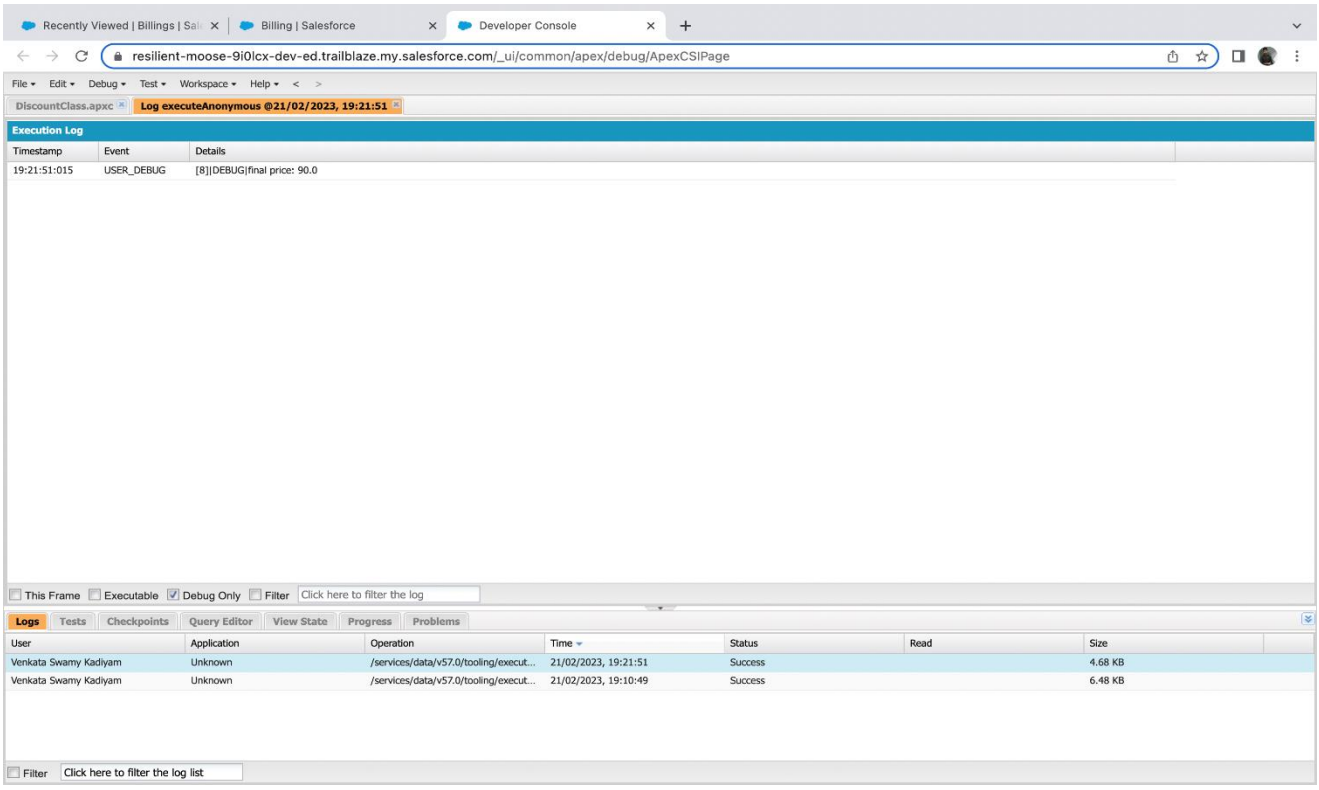




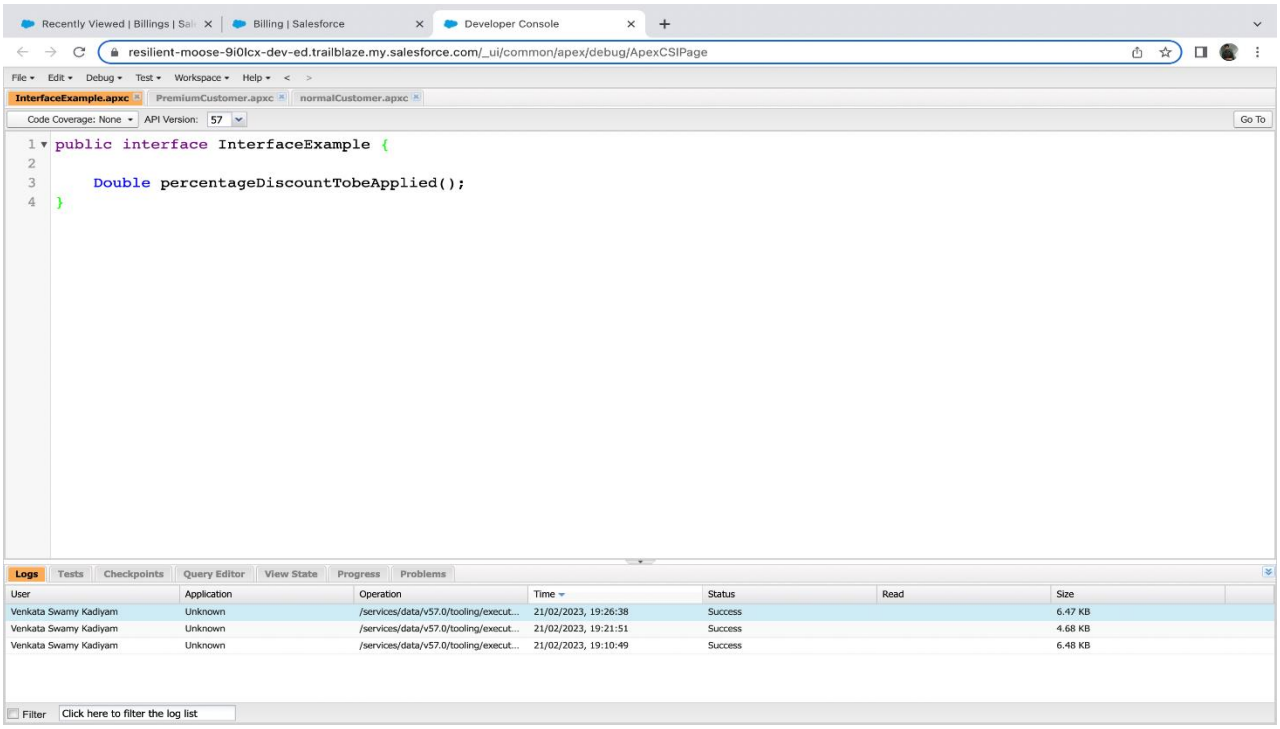
Exercise – 8

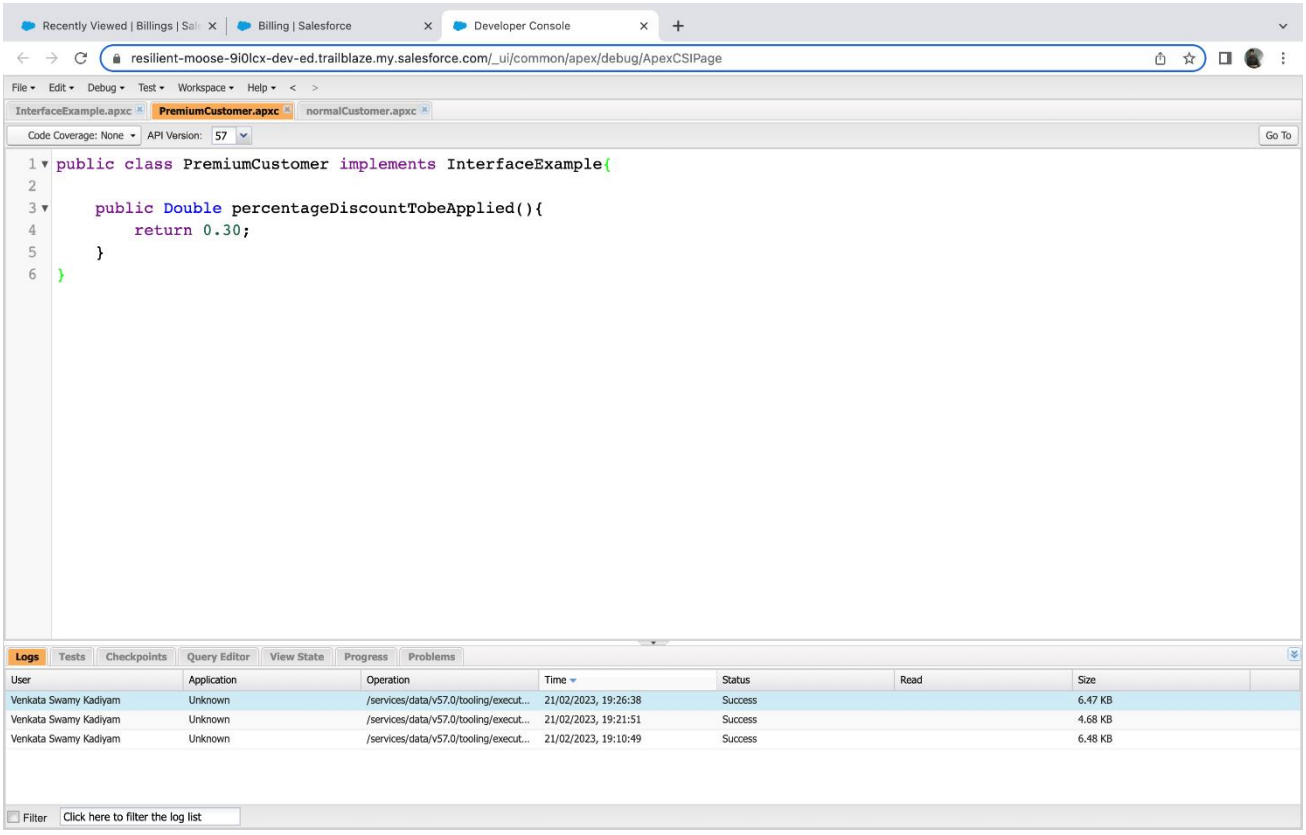
Created a Class to demonstrate constants in Apex

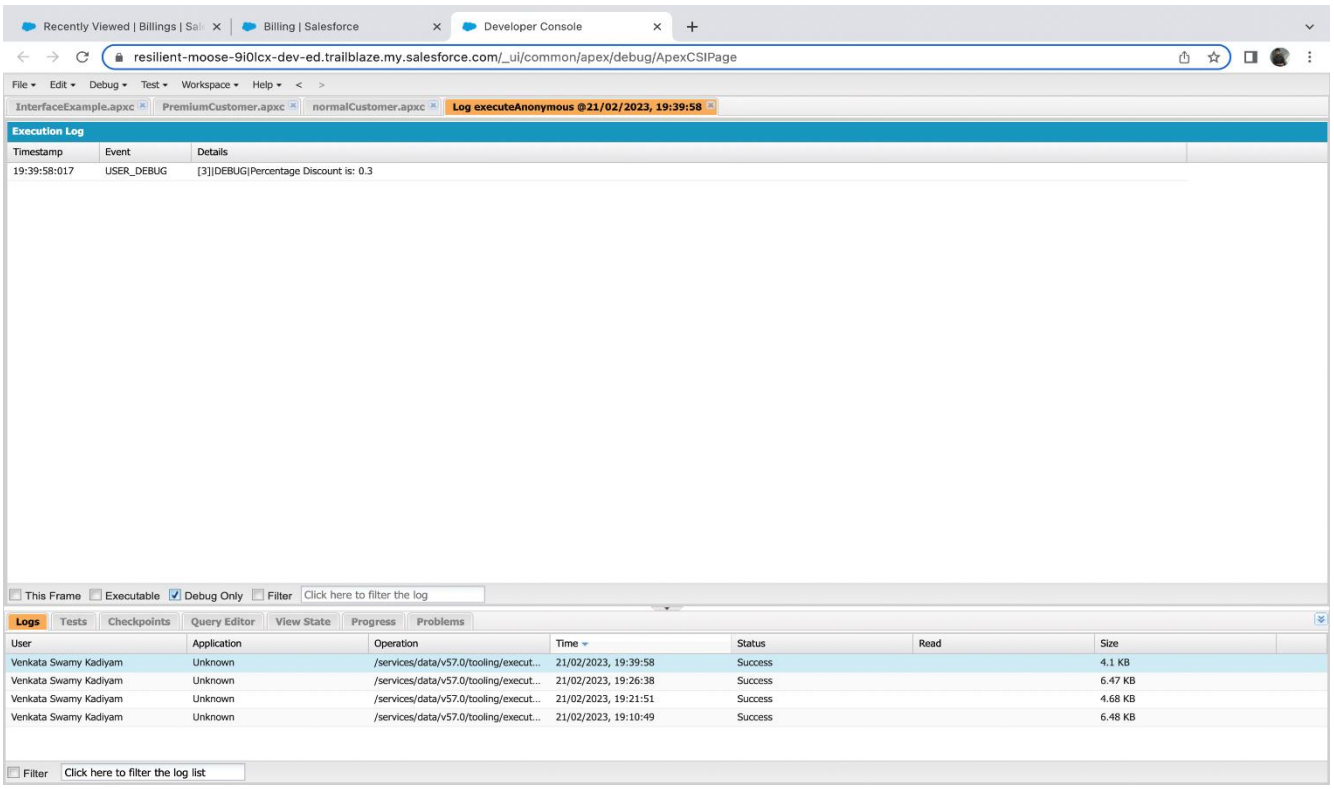


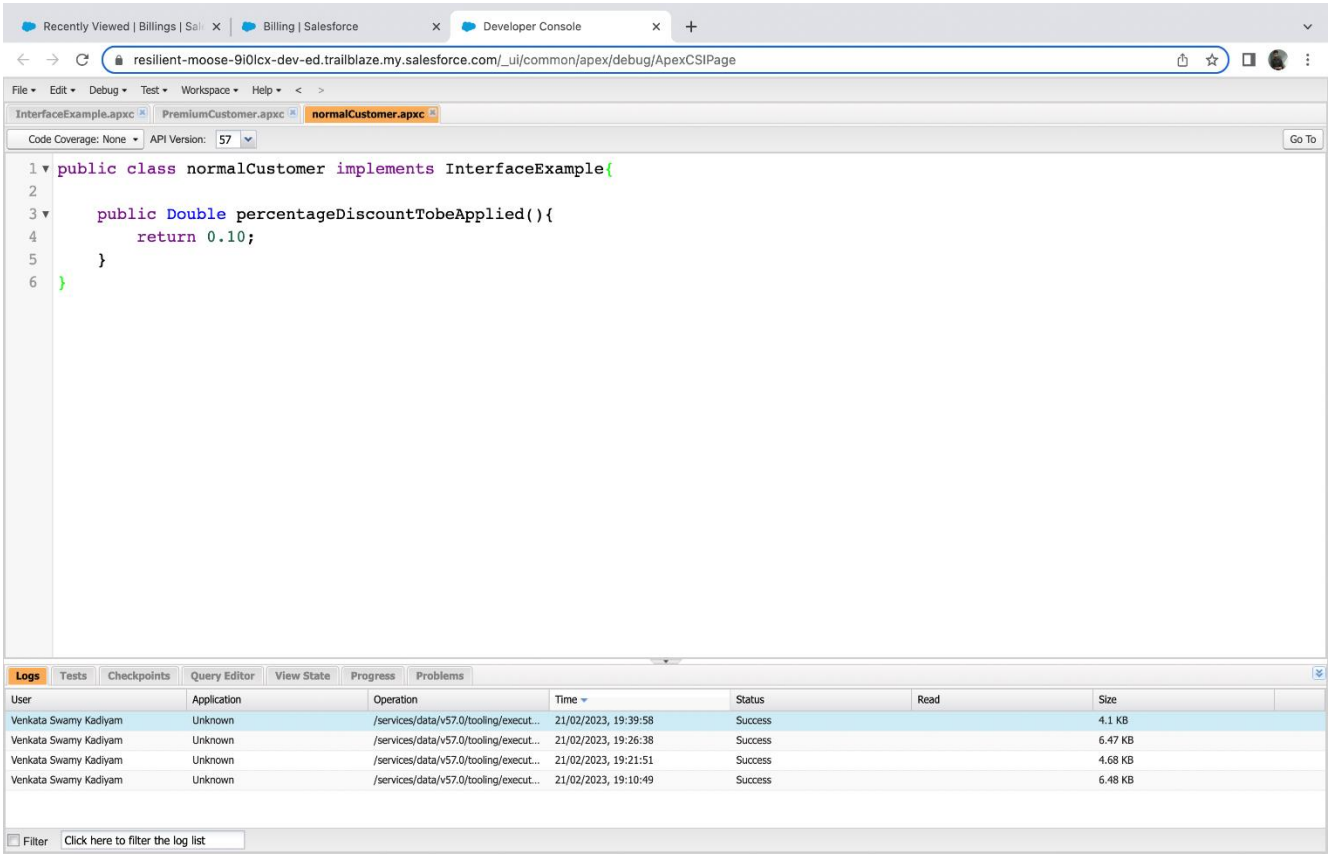


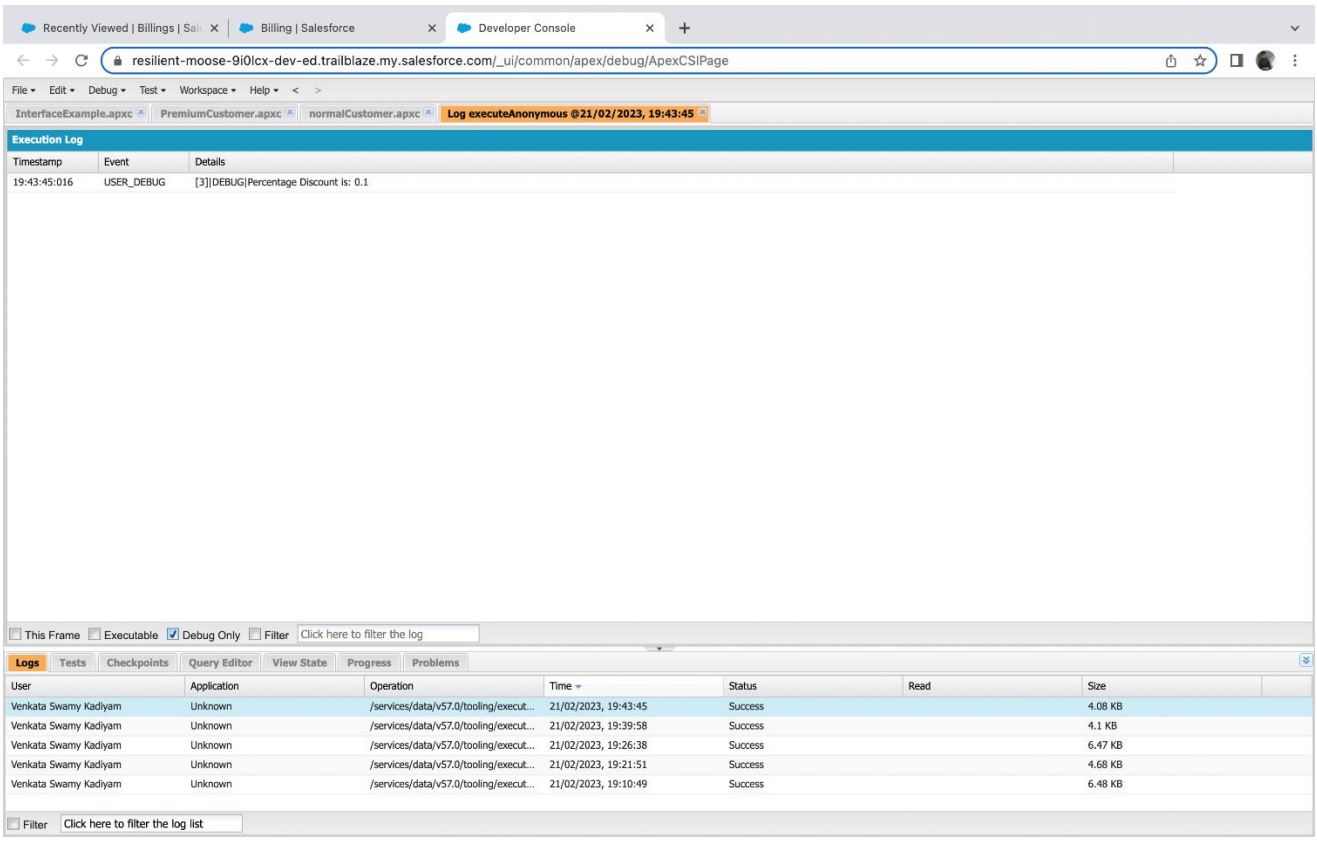
Exercise – 9


Recently Viewed | Billings | Sal
Billing | Salesforce
Developer Console
resilient-moose-9i0lcx-dev-ed.trailblaze.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
InterfaceExample.apxc
PremiumCustomer.apxc
normalCustomer.apxc
Code Coverage: None
API Version: 57
Go To
1 public interface InterfaceExample {
2
3 Double percentageDiscountTobeApplied();
4 }
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time
Status
Read
Size
Venkata Swamy Kadiyam
Unknown
/services/data/v57.0/tooling/execut...
21/02/2023, 19:26:38
Success
6.47 KB
Venkata Swamy Kadiyam
Unknown
/services/data/v57.0/tooling/execut...
21/02/2023, 19:21:51
Success
4.68 KB
Venkata Swamy Kadiyam
Unknown
/services/data/v57.0/tooling/execut...
21/02/2023, 19:10:49
Success
6.48 KB
Filter
Click here to filter the log list


Recently Viewed | Billings | Sal
Billing | Salesforce
Developer Console
resilient-moose-9i0lcx-dev-ed.trailblaze.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
InterfaceExample.apxc
PremiumCustomer.apxc
normalCustomer.apxc
Code Coverage: None
API Version: 57
Go To
1 public class PremiumCustomer implements InterfaceExample{
2
3 public Double percentageDiscountTobeApplied(){
4 return 0.30;
5 }
6 }
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time
Status
Read
Size
Venkata Swamy Kadiyam
Unknown
/services/data/v57.0/tooling/execut...
21/02/2023, 19:26:38
Success
6.47 KB
Venkata Swamy Kadiyam
Unknown
/services/data/v57.0/tooling/execut...
21/02/2023, 19:21:51
Success
4.68 KB
Venkata Swamy Kadiyam
Unknown
/services/data/v57.0/tooling/execut...
21/02/2023, 19:10:49
Success
6.48 KB
Filter
Click here to filter the log list

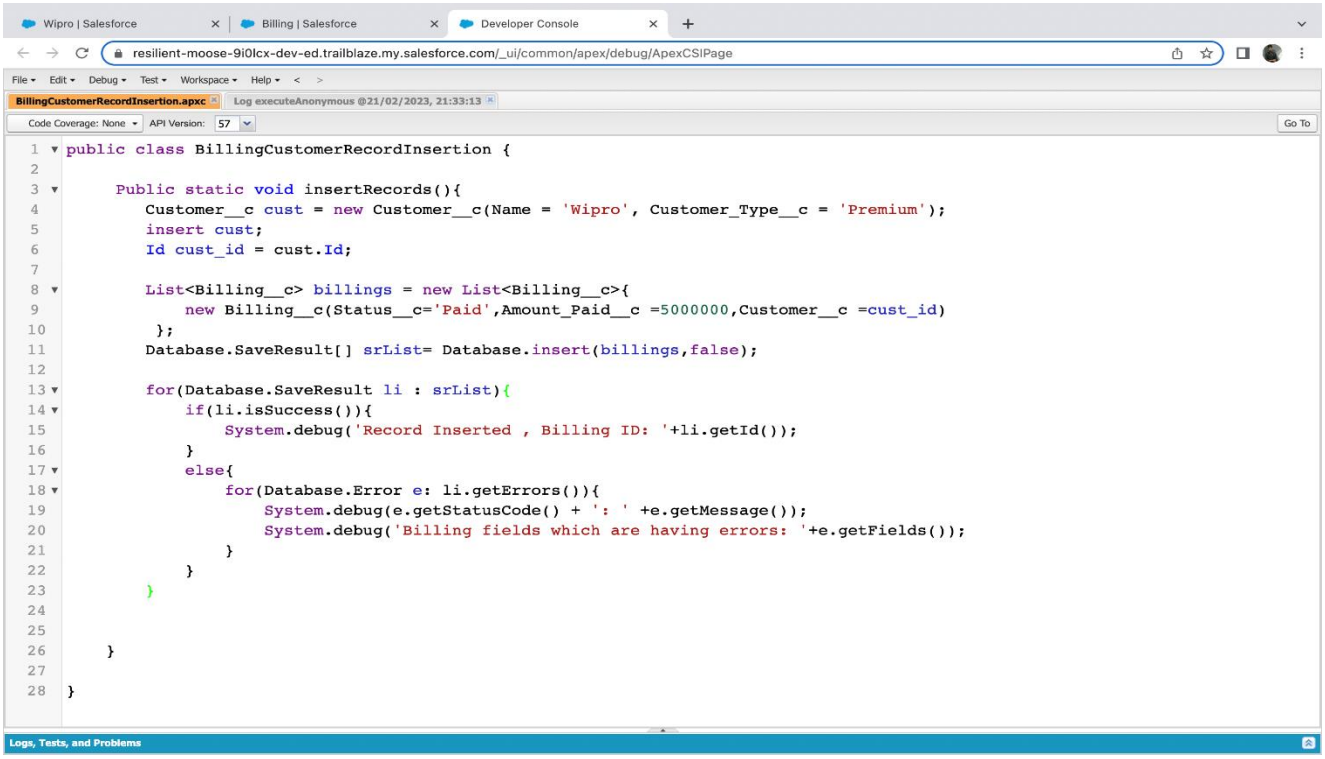

Recently Viewed | Billings | Sal
Billing | Salesforce
Developer Console
resilient-moose-9i0lcx-dev-ed.trailblaze.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
InterfaceExample.apxc
PremiumCustomer.apxc
normalCustomer.apxc
Log executeAnonymous @21/02/2023, 19:39:58
Execution Log
Timestamp
Event
Details
19:39:58:017
USER_DEBUG
[3]|DEBUG|Percentage Discount is: 0.3
This Frame
Executable
Debug Only
Filter
Click here to filter the log
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time
Status
Read
Size
Venkata Swamy Kadiyam
Unknown
/services/data/v57.0/tooling/execut...
21/02/2023, 19:39:58
Success
4.1 KB
21/02/2023, 19:26:38
6.47 KB
21/02/2023, 19:21:51
4.68 KB
21/02/2023, 19:10:49
6.48 KB
Filter
Click here to filter the log list

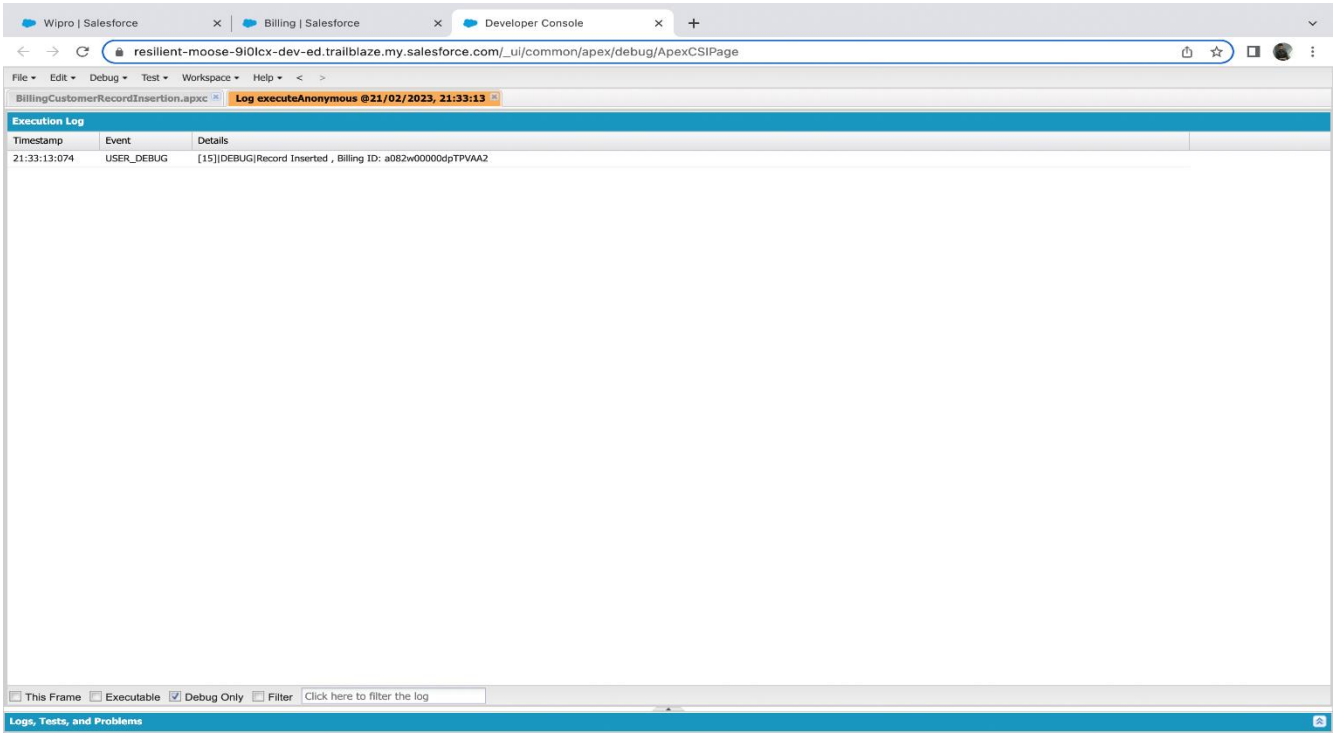

Recently Viewed | Billings | Sal
Billing | Salesforce
Developer Console
resilient-moose-9i0lcx-dev-ed.trailblaze.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
InterfaceExample.apxc
PremiumCustomer.apxc
normalCustomer.apxc
Code Coverage: None
API Version: 57
Go To
1 public class normalCustomer implements InterfaceExample{
2
3 public Double percentageDiscountTobeApplied(){
4 return 0.10;
5 }
6 }
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time
Status
Read
Size
Venkata Swamy Kadiyam
Unknown
/services/data/v57.0/tooling/execut...
21/02/2023, 19:39:58
Success
4.1 KB
21/02/2023, 19:26:38
6.47 KB
21/02/2023, 19:21:51
4.68 KB
21/02/2023, 19:10:49
6.48 KB
Filter
Click here to filter the log list


Recently Viewed | Billings | Sal
Billing | Salesforce
Developer Console
resilient-moose-9i0lcx-dev-ed.trailblaze.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
InterfaceExample.apxc
PremiumCustomer.apxc
normalCustomer.apxc
Log executeAnonymous @21/02/2023, 19:43:45
Execution Log
Timestamp
Event
Details
19:43:45:016
USER_DEBUG
[3]|DEBUG|Percentage Discount is: 0.1
This Frame
Executable
Debug Only
Filter
Click here to filter the log
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
User
Application
Operation
Time
Status
Read
Size
Venkata Swamy Kadiyam
Unknown
/services/data/v57.0/tooling/execut...
21/02/2023, 19:43:45
Success
4.08 KB
21/02/2023, 19:39:58
4.1 KB
21/02/2023, 19:26:38
6.47 KB
21/02/2023, 19:21:51
4.68 KB
21/02/2023, 19:10:49
6.48 KB
Filter
Click here to filter the log list

Exercise – 10

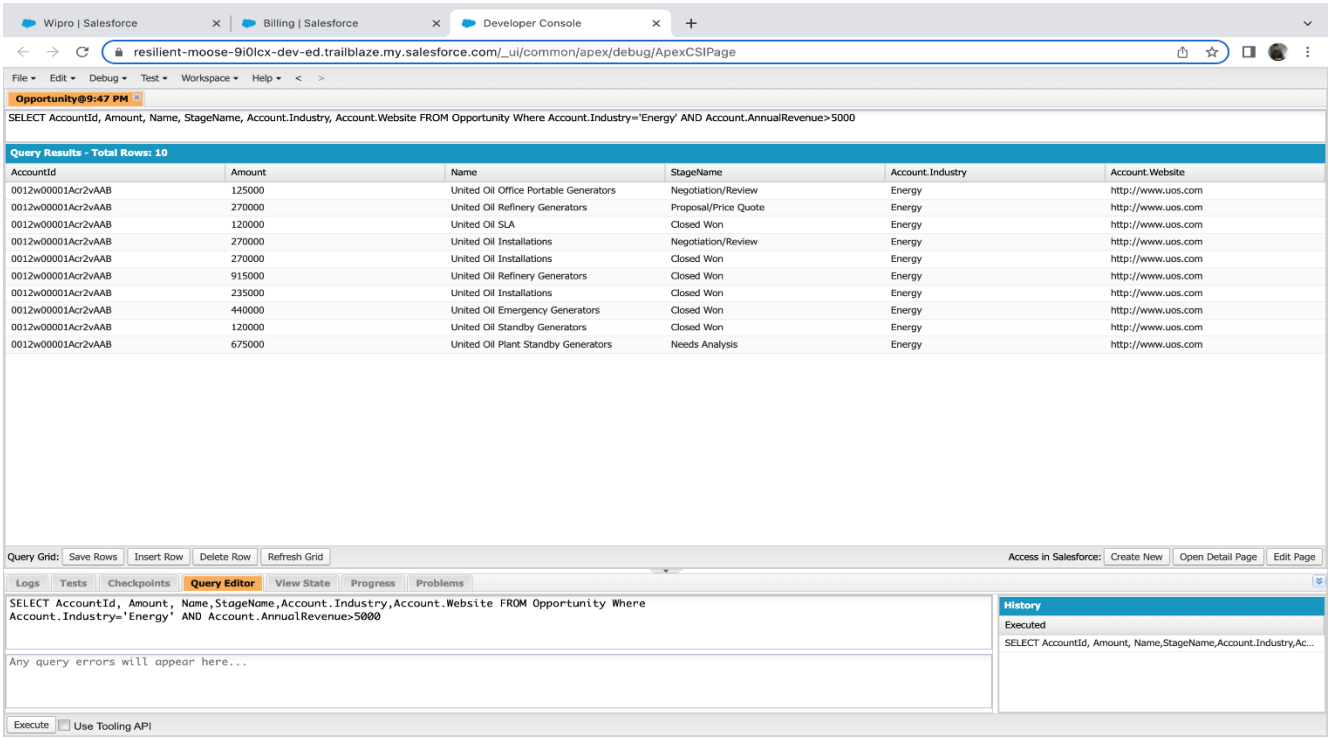
Demo on DML Insert Operation Using Database Methods





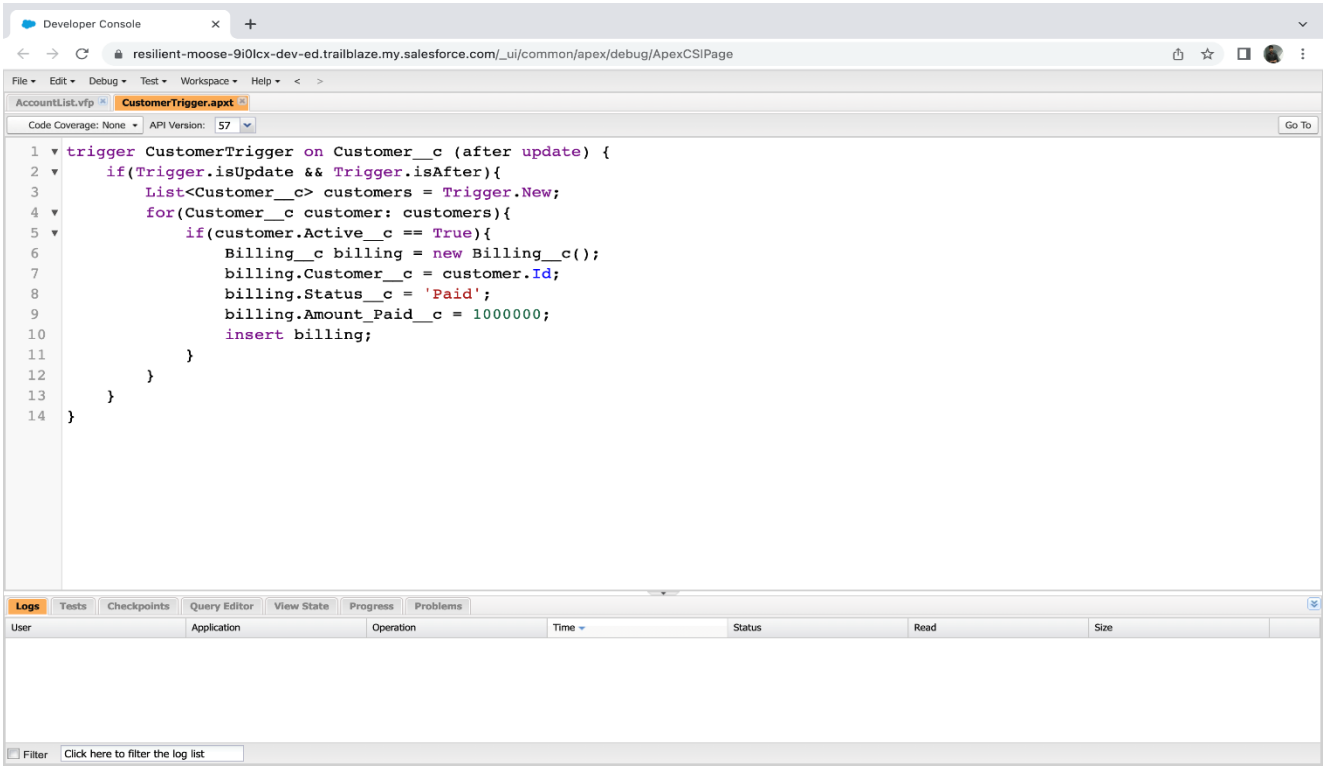
Exercise – 11

Displaying Records according to required conditions

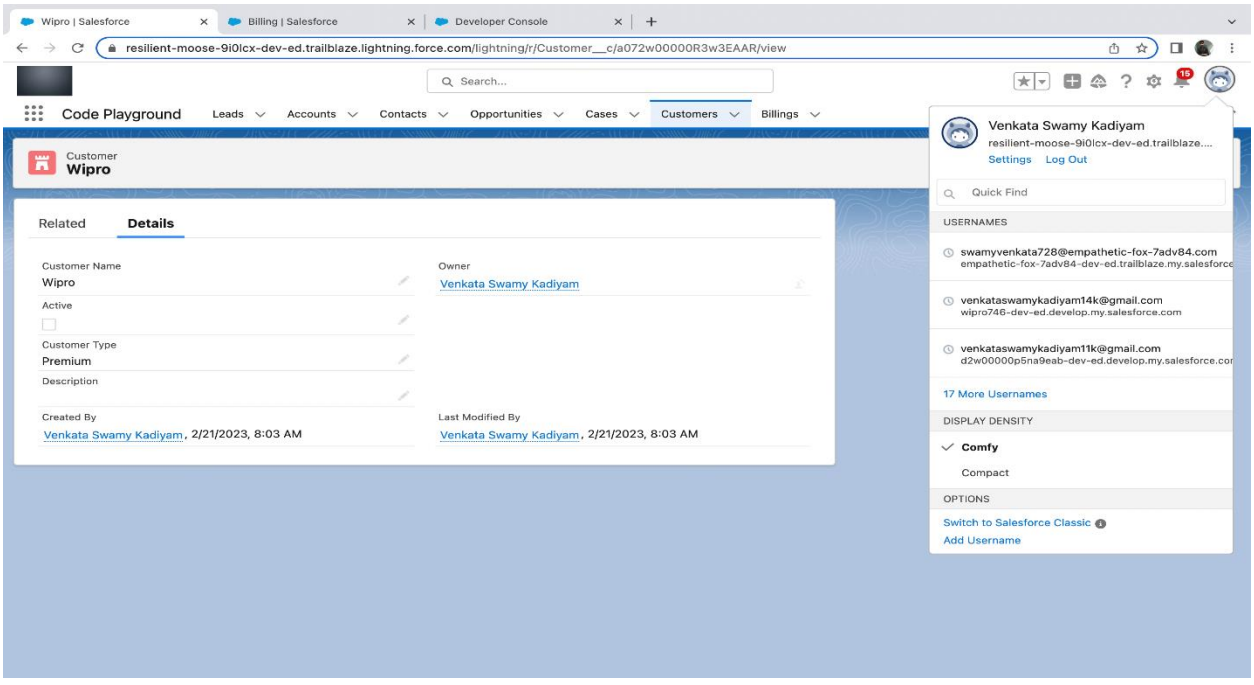


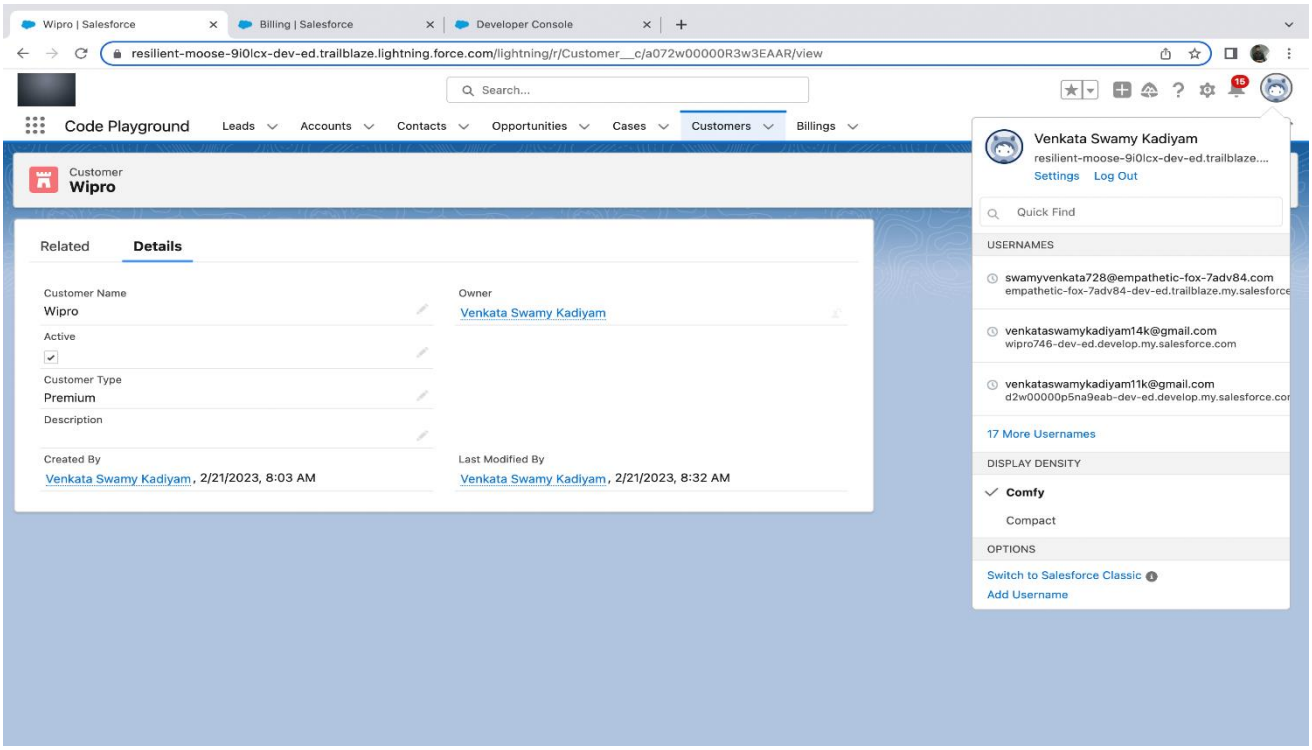
Exercise – 12

Created a Trigger for Billing Named Customer Trigger

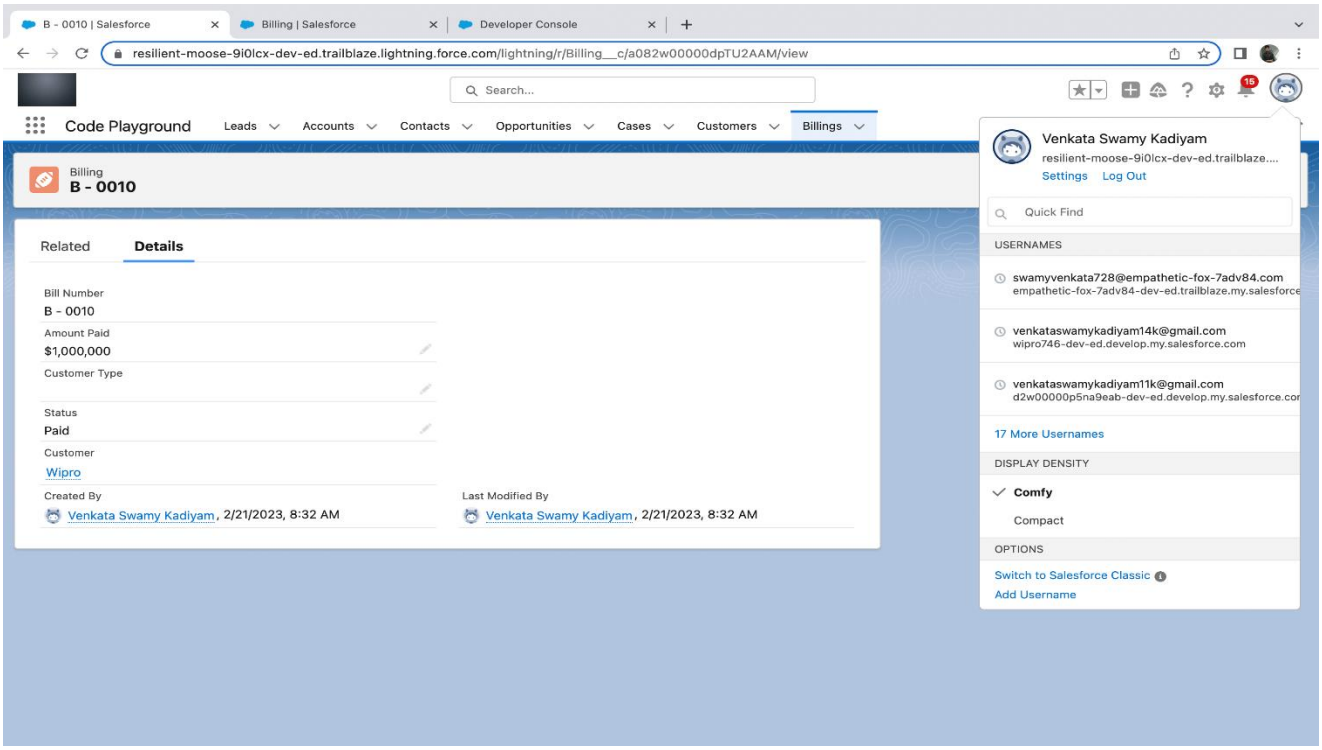


Updated Salesforce Customer from inactive to active



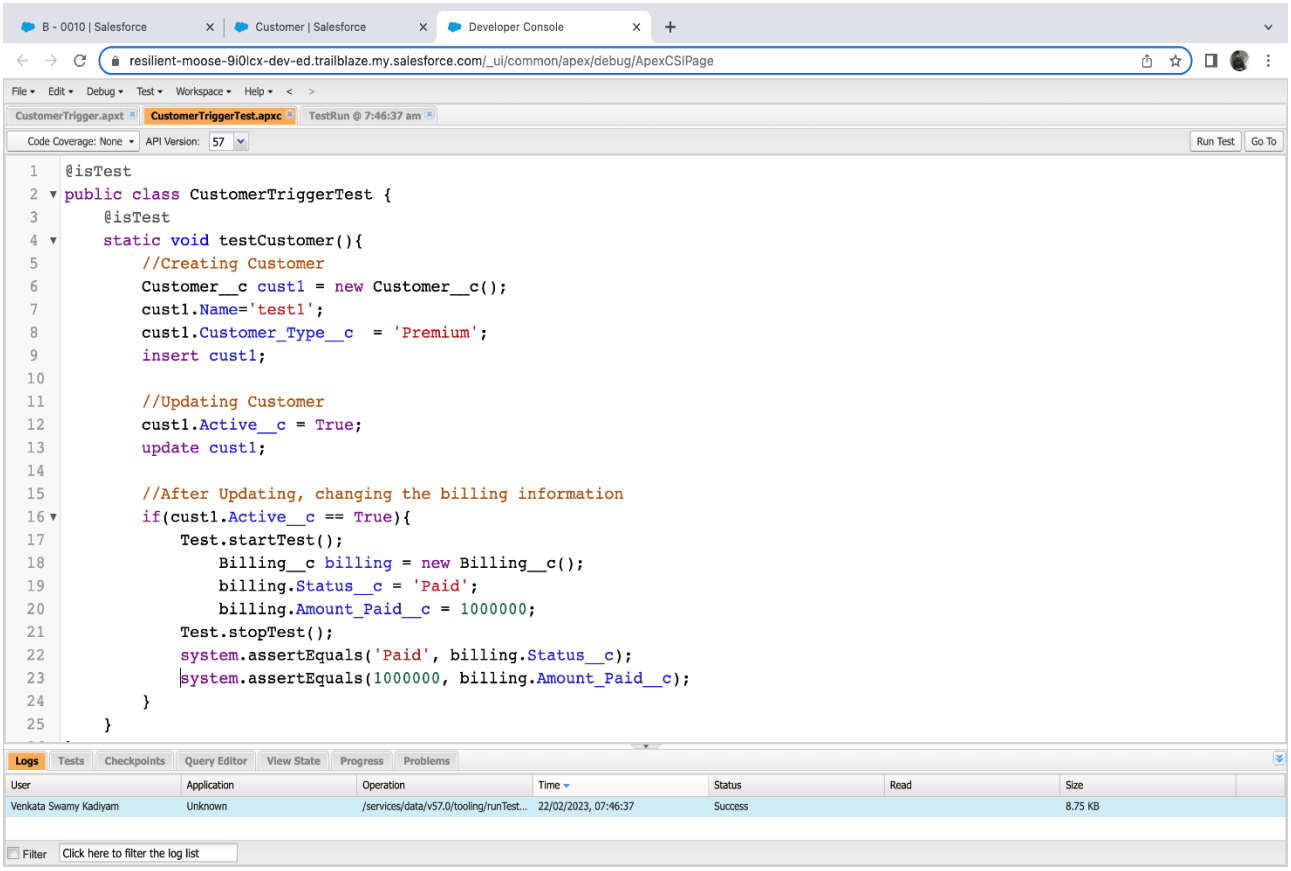


New Record Created in Billing Object with Salesforce as Customer



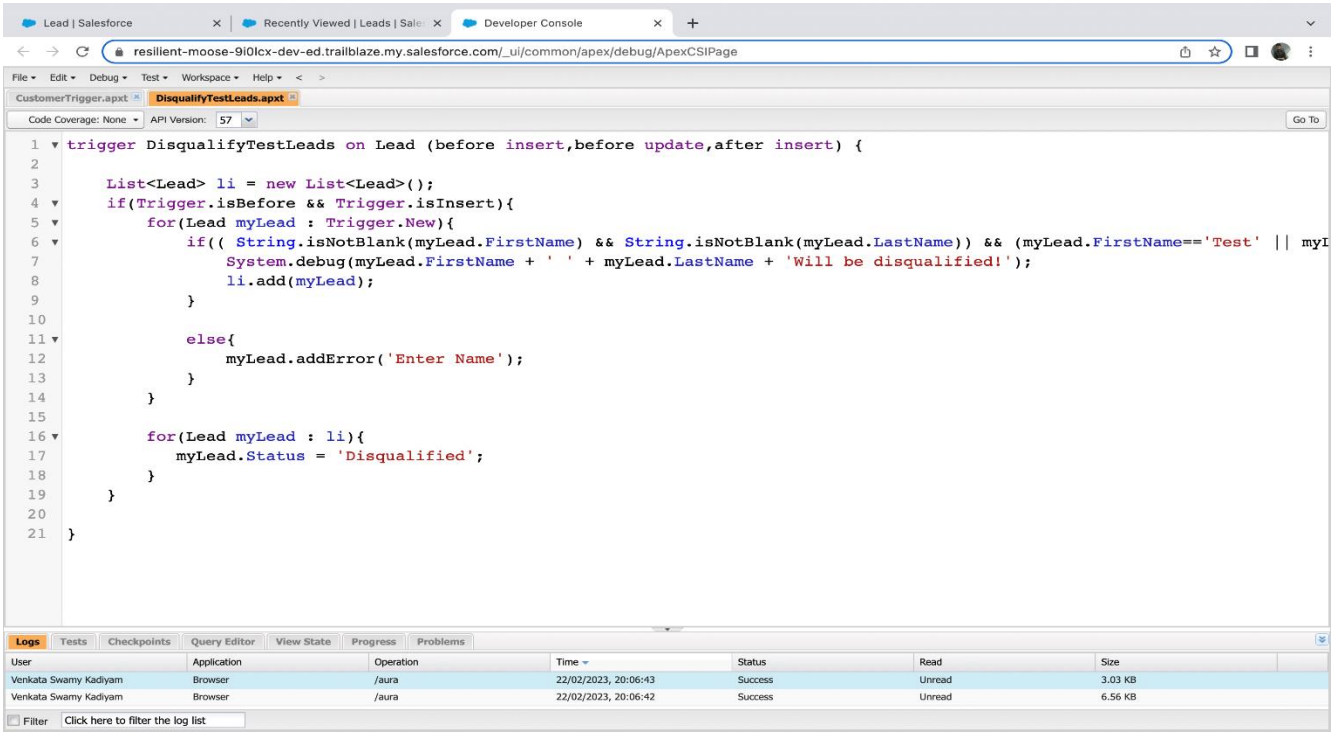
Exercise – 13

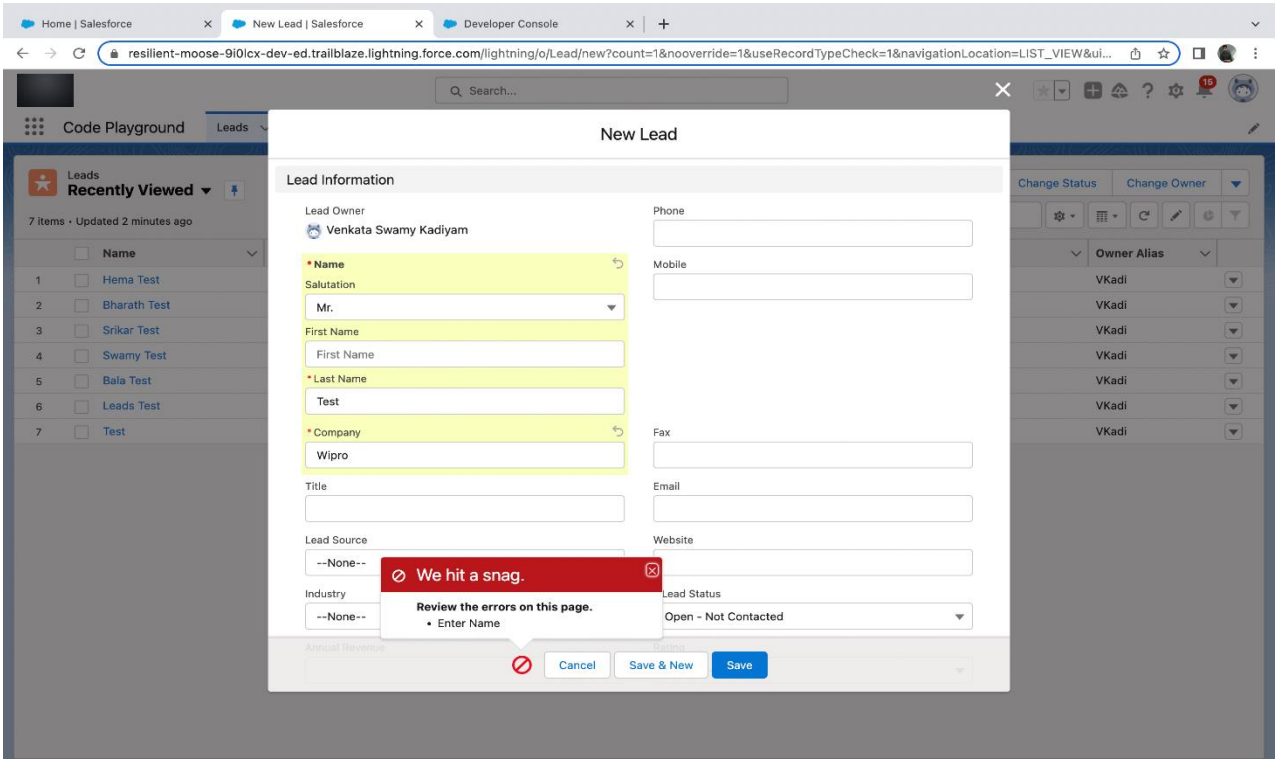
Created a Test Class for Customer Trigger

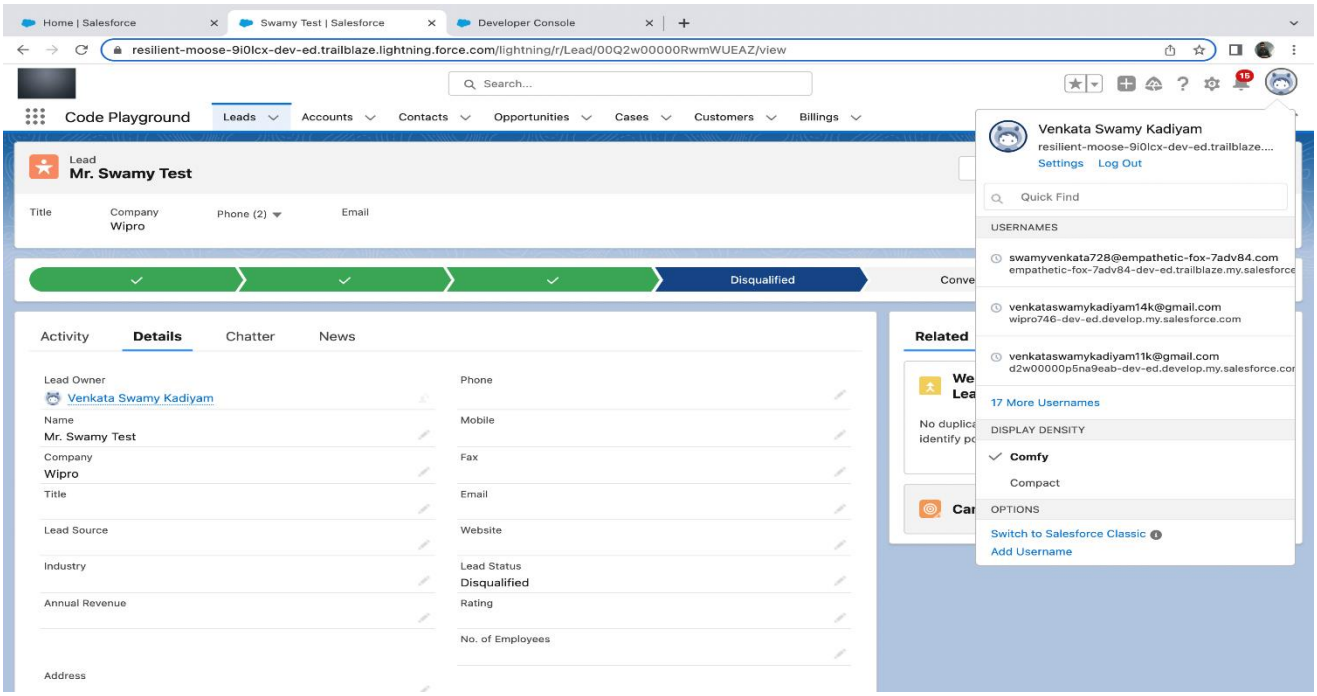


Exercise – 14

Created a Trigger for Leads Named DisqualifiedTestLeads

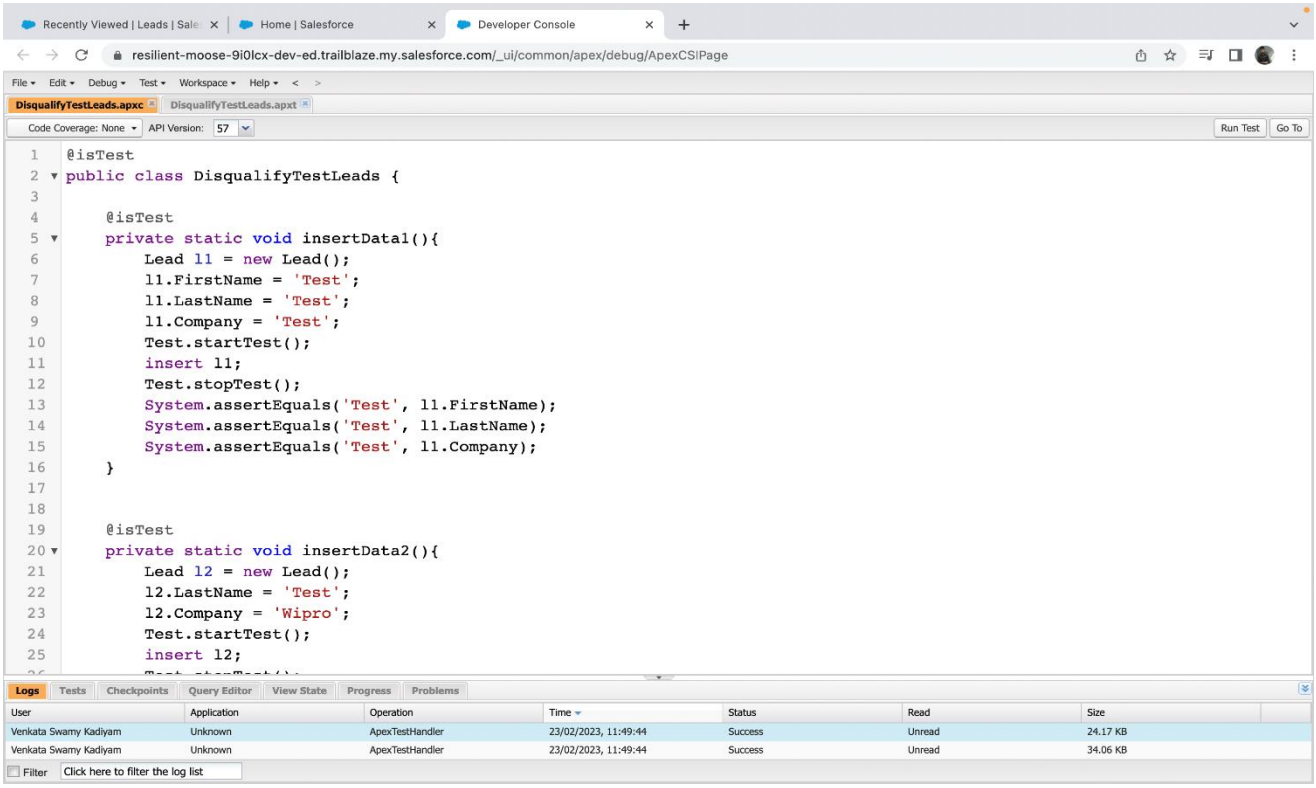


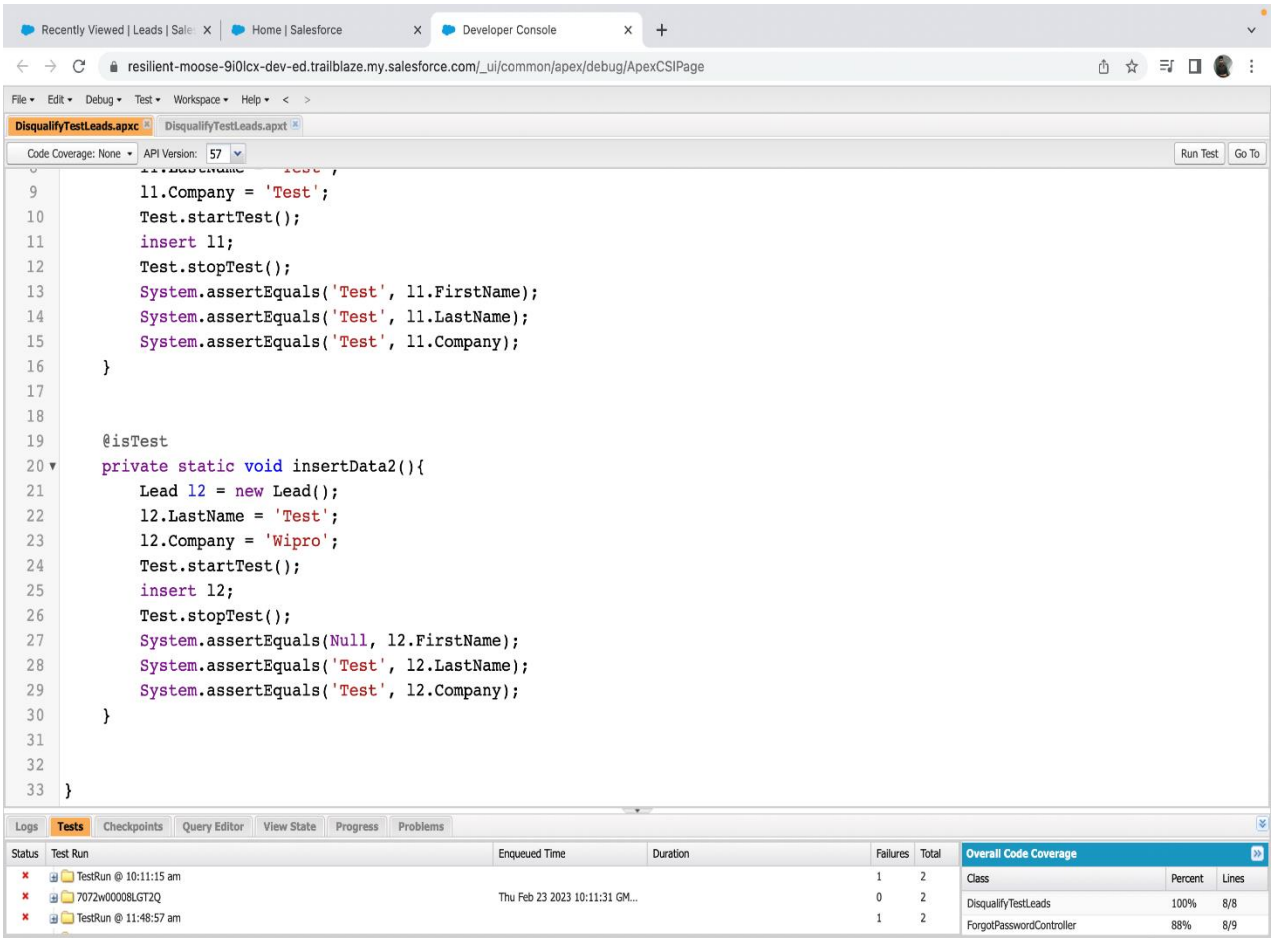




Exercise – 15

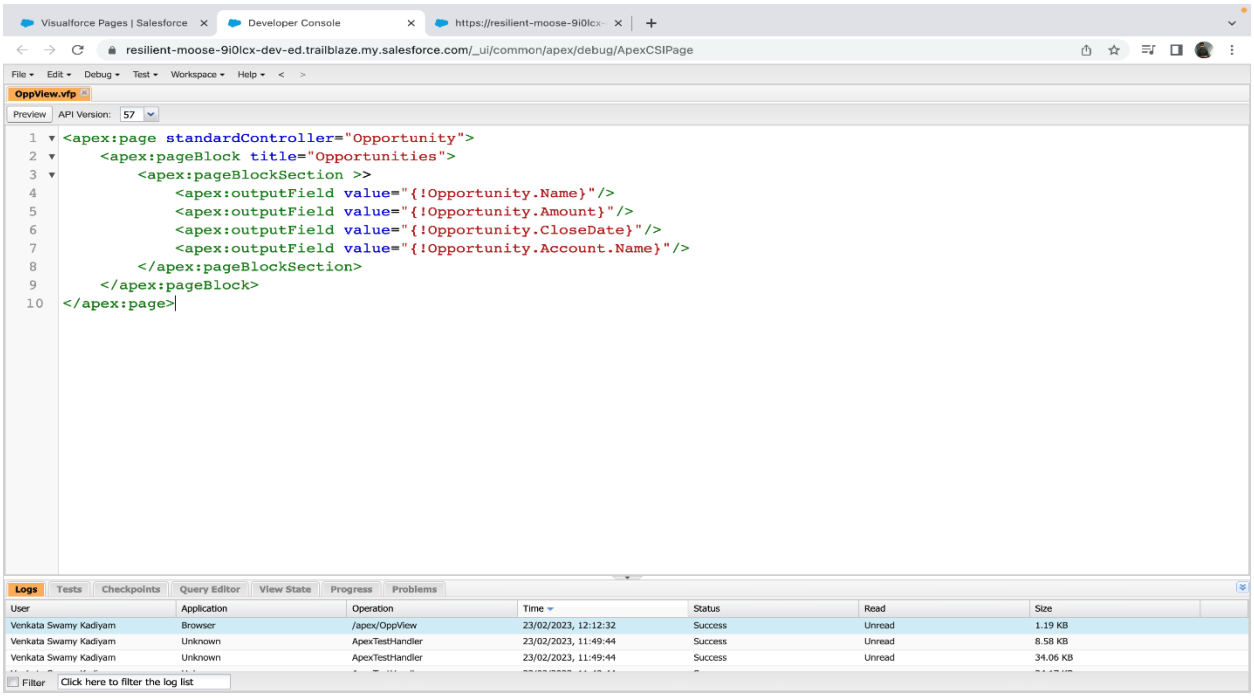
Create a test class for DisqualifyTestLeads trigger

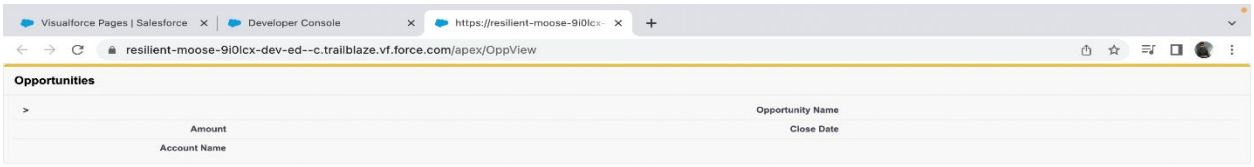



Recently Viewed | Leads | Sale
Home | Salesforce
Developer Console
resilient-moose-9i0lcx-dev-ed.trailblaze.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
DisqualifyTestLeads.apxc
DisqualifyTestLeads.apxt
Code Coverage: None
API Version: 57
Run Test
Go To
l1.Company = 'Test';
Test.startTest();
insert l1;
Test.stopTest();
System.assertEquals('Test', l1.FirstName);
System.assertEquals('Test', l1.LastName);
System.assertEquals('Test', l1.Company);
}
@isTest
private static void insertData2(){
Lead l2 = new Lead();
l2.LastName = 'Test';
l2.Company = 'Wipro';
Test.startTest();
insert l2;
Test.stopTest();
System.assertEquals(Null, l2.FirstName);
System.assertEquals('Test', l2.LastName);
System.assertEquals('Test', l2.Company);
}
}
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
Status
Test Run
Enqueued Time
Duration
Failures
Total
TestRun @ 10:11:15 am
1
2
7072w00008LGT2Q
Thu Feb 23 2023 10:11:31 GM...
0
2
TestRun @ 11:48:57 am
1
2
Overall Code Coverage
Class
Percent
Lines
DisqualifyTestLeads
100%
8/8
ForgotPasswordController
88%
8/9

Exercise – 16

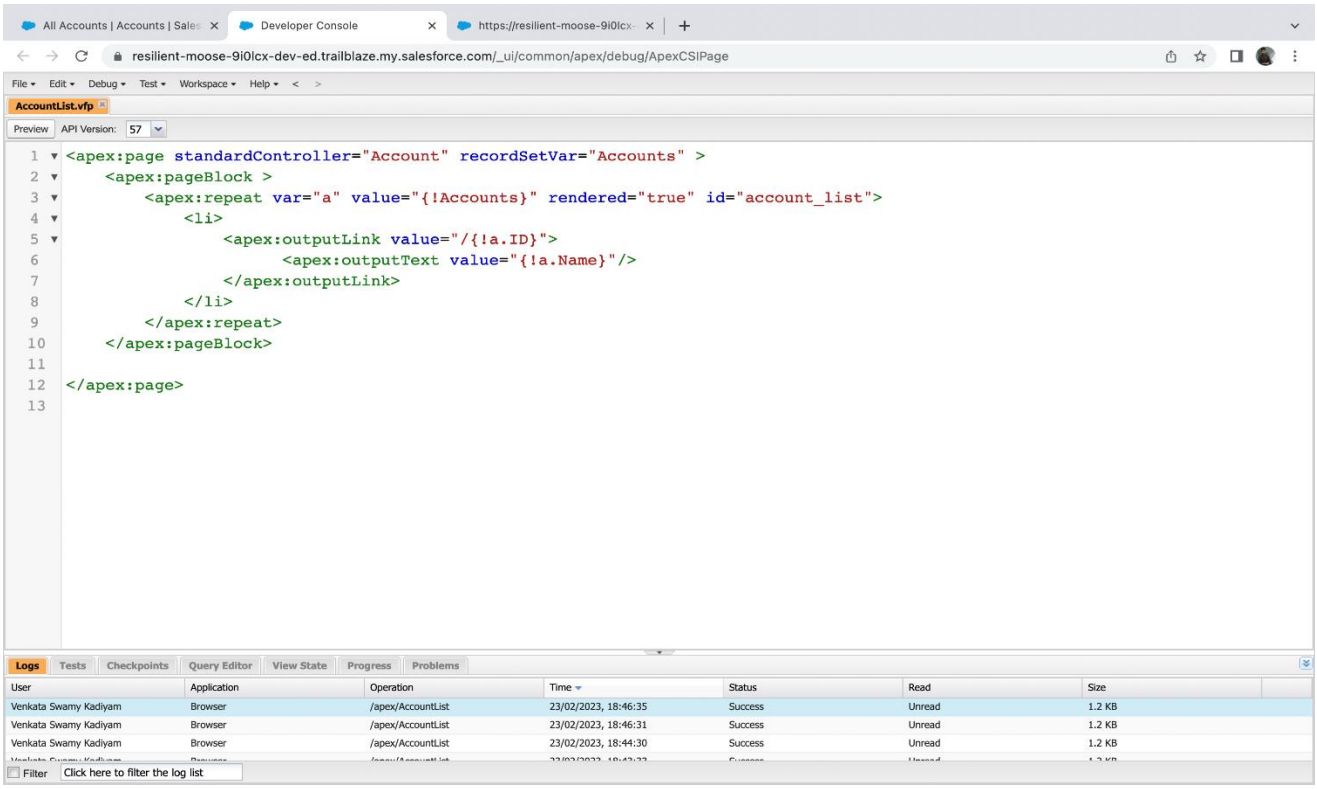
Created a Visualforce Page OppView and displayed four apex : outputfields

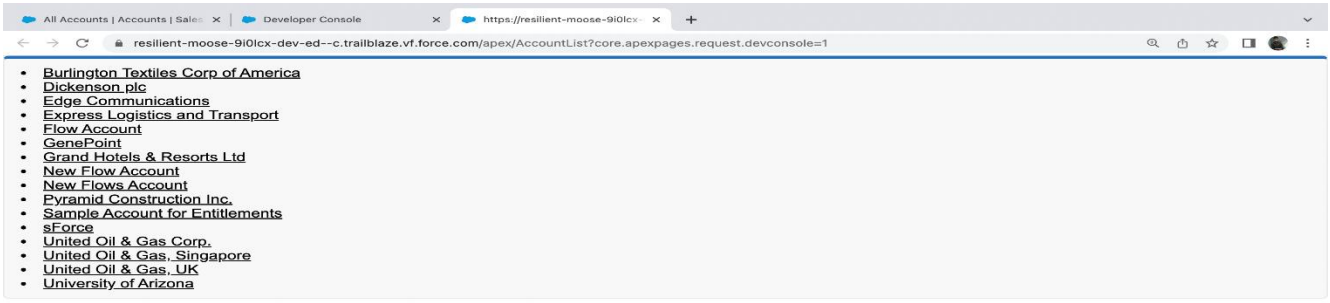




Exercise – 17

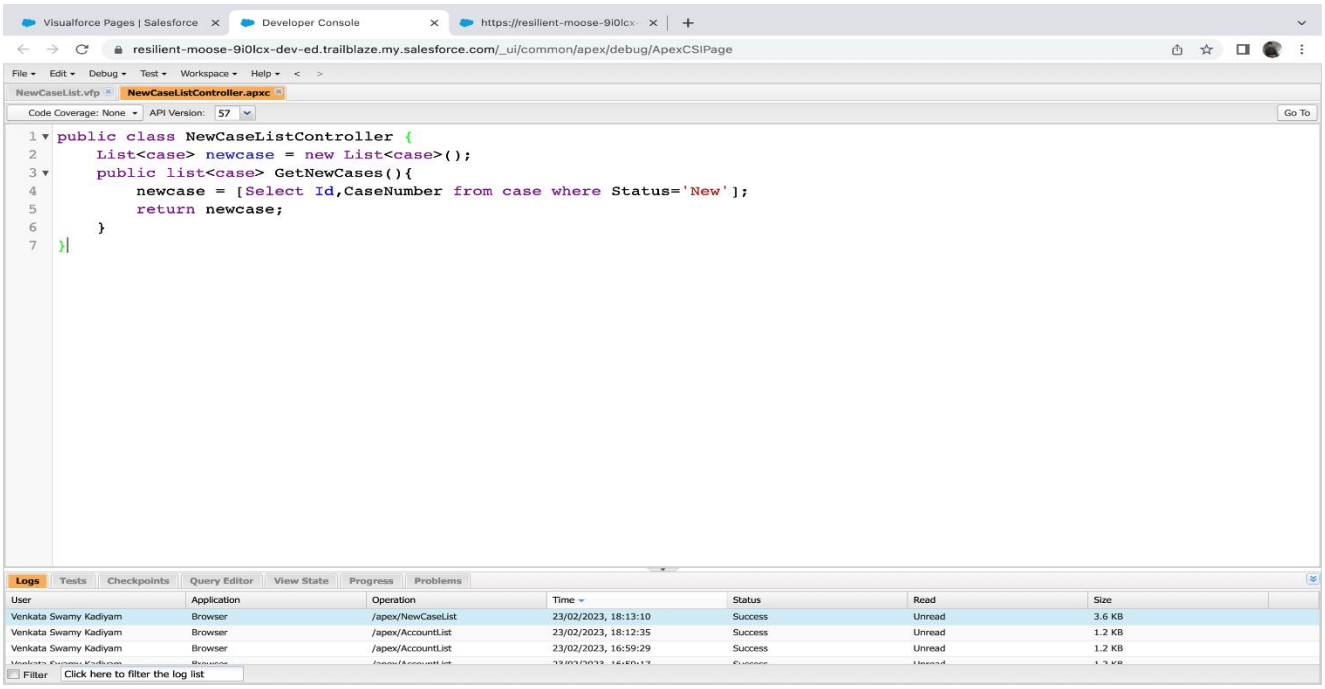
Created a Visualforce Page that shows a list of Accounts linked to their record Pages

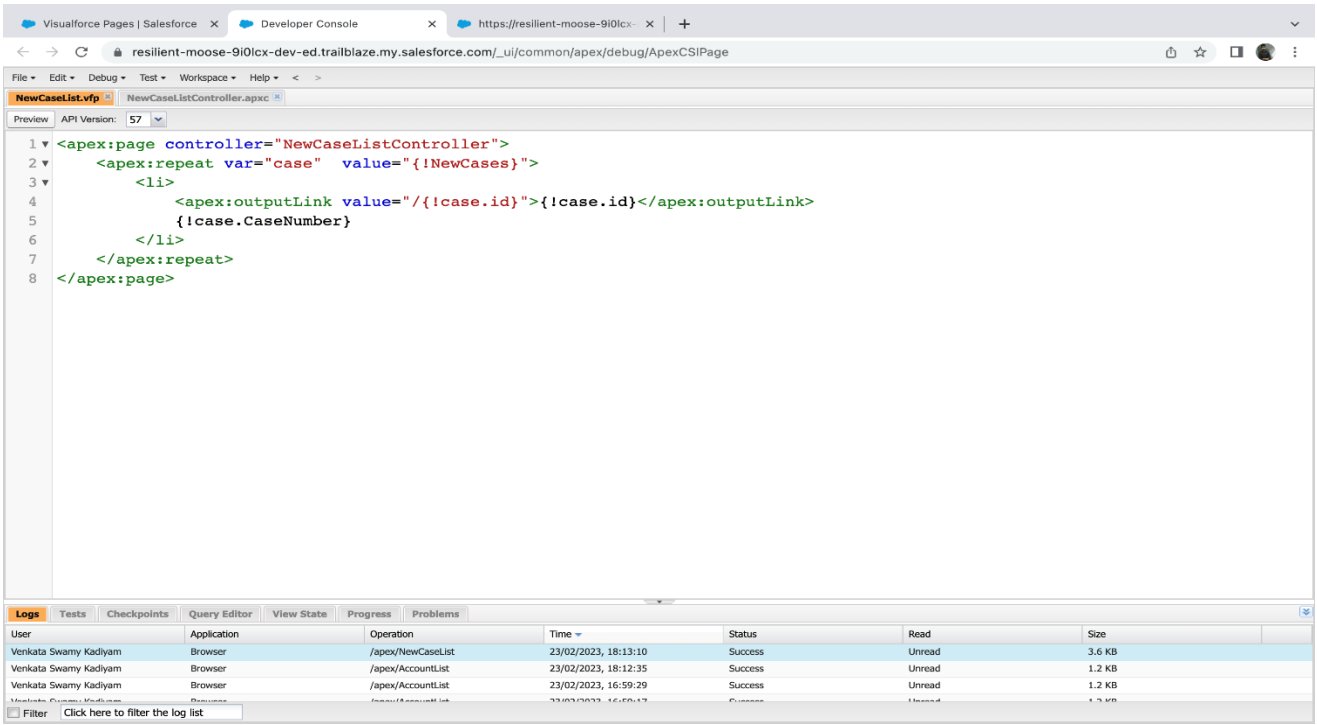


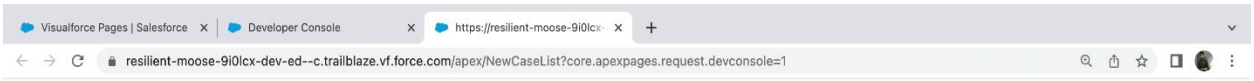


Exercise – 18

Created a VF page that uses a Apex class to display a list of cases with the status of ‘New’.







- 5002w00000afpzWAAQ 00001027
- 5002w00000ausD3AAI 00001002
- 5002w00000ausDHAAY 00001016
- 5002w00000ausDPAAY 00001024
- 5002w00000afdzFAAQ 00001026

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