

Salesforce Project

Ervin Musincki

21JanSoftware1



ForceTraining

My approach

- Experimented a lot
- Made many mistakes
- Learned from my mistakes
- Experienced limitations
- Never considered the project to be live or for production

Yet to hit a governor limit, must remedy that soon

Many flow error emails received

All Mailboxes (Found 10 matches for search)

Mailboxes

Search: All

Inbox - iCloud

Inbox

VIPs

Sent

Drafts

Flagged (2)

Save

Sort by Unread

FlowApplication

12/03/2021

Error Occurred During Flow "Expense Line Item Add New" (FlowRecordCreate). This error occurred when the flow tried to create records: REQUIRED_FIELD_MISSING: Required fields are missing: [Instructor_Invoice__c]. You can look up ExceptionCode values in the [SOAP API Developer Guide](#).

FlowApplication

11/03/2021

Error Occurred During Flow "Expense Line Item Add New" (FlowRecordCreate). This error occurred when the flow tried to create records: REQUIRED_FIELD_MISSING: Required fields are missing: [Instructor_Invoice__c]. You can look up ExceptionCode values in the [SOAP API Developer Guide](#).

FlowApplication

26/02/2021

Error Occurred During Flow "Expense Line Item Add New" (FlowRecordCreate). This error occurred when the flow tried to create records: REQUIRED_FIELD_MISSING: Required fields are missing: [Instructor_Invoice__c]. You can look up ExceptionCode values in the [SOAP API Developer Guide](#).

FlowApplication

24/02/2021

Error Occurred During Flow "Expense Line Item Add New" (FlowRecordCreate). This error occurred when the flow tried to create records: REQUIRED_FIELD_MISSING: Required fields are missing: [Instructor_Invoice__c]. You can look up ExceptionCode values in the [SOAP API Developer Guide](#).

FlowApplication

24/02/2021

Error Occurred During Flow "Expense Line Item Add New" (FlowRecordCreate). This error occurred when the flow tried to create records: REQUIRED_FIELD_MISSING: Required fields are missing: [Instructor_Invoice__c]. You can look up ExceptionCode values in the [SOAP API Developer Guide](#).

FlowApplication

23/02/2021

Error Occurred During Flow "Expense Line Item Add New" (FlowRecordCreate). This error occurred when the flow tried to create records: REQUIRED_FIELD_MISSING: Required fields are missing: [Instructor_Invoice__c]. You can look up ExceptionCode values in the [SOAP API Developer Guide](#).

FlowApplication

23/02/2021

Error Occurred During Flow "Expense Line Item Add New" (FlowRecordCreate). This error occurred when the flow tried to create records: REQUIRED_FIELD_MISSING: Required fields are missing: [Instructor_Invoice__c]. You can look up ExceptionCode values in the [SOAP API Developer Guide](#).

FlowApplication

23/02/2021

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FlowApplication

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FlowApplication

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☆ FlowApplication

12/03/2021

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Error Occurred During Flow "Expense Line Item Add New" (FlowRecordCreate). This error occurred when the flow tried to create records: REQUIRED_FIELD_MISSING: Required fields are missing: [Instructor_Invoice__c]. You can look up ExceptionCode values in the [SOAP API Developer Guide](#).

Flow Details

Flow API Name: Expense_LineItem_Add_New

Type: Screen Flow

Version: 2

Status: Active

Org: QA (00D4L000000DuOu)

Flow Interview Details

Interview Label: Expense_LineItem Add New

12/03/2021, 09:40

Current User: Ervin Musincki (0054L000000Zyam)

Start time: 12/03/2021, 09:39

Duration: 12 seconds

How the Interview Started

Ervin Musincki (0054L000000Zyam) started the flow interview.

API Version for Running the Flow: 51

Some of this flow's variables were set when the interview started.

recordId = 0064L00000071eRKQAY

SCREEN: Add_Expense

Textbox: Expense_Title

Label: Expense Title

Value at run time: Hotel

Dropdown List: Expense_Type_Pick

Label: Expense Type

Data Type: Text

Choices selected at runtime:

Choice selected at runtime: Accommodation (Expense_Type)

Choice value: Accommodation

Certification

Certification Date	Date
Course	Lookup(Course)
Created By	Lookup(User)
Daily Rate	Currency(10, 2)
Instructor	Text(80)
Instructor	Lookup(User)
Last Modified By	Lookup(User)
Owner	Lookup(User+1)

Opportunity

Account Name	Lookup(Account)
Amount	Currency(10, 2)
Contract	Lookup(Contract)
Course	Lookup(Course)
Course Code	Formula (Text)
Course Title	Formula (Text)
Created By	Lookup(User)
Description	Long Text Area(200)
End Date	Formula (Date)
Expected Revenue	Currency(10)
Expense Invoice Amount	Currency(10, 2)
Expense Invoice Created Check	
Forecast Category	Picklist
Instructor	Lookup(Certification)
InstructorId	Formula (Text)
Invoice Auto Number Auto Number	
Last Modified By	Lookup(User)
Lead Source	Picklist
Location	Text Area(255)
Main Competitor(s)	Text(100)
Next Step	Text(255)
Opportunity Score	Number(0, 0)
Owner	Lookup(User+1)

Instructor Invoice

Billed To	Formula (Text)
Billed To Account	Formula (Text)
Billed To City	Formula (Text)
Billed To Country	Formula (Text)
Billed To Postal Code	Formula (Text)
Billed To State	Formula (Text)
Billed To Street	Formula (Text)
Course	Lookup(Opportunity)
Created By	Lookup(User)
Due Date	Formula (Date)
Friendly List Name	Formula (Text)
Invoice Date	Formula (Date)
Invoice Number	Text(80)
Invoice Total	Formula (Currency)
Last Modified By	Lookup(User)
Owner	Lookup(User+1)
Paid Date	Date
Safe to withdraw	Formula (Currency)
Scheduled Course Start Date	Formula (Date)
Status	Picklist
Submitted Date	Date
Subtotal	
Roll-Up Summary (SLM) Instruct	

Instructor Invoice Line

Amount	Formula (Currency)
Created By	Lookup(User)
Expense Date	Date
Expense Title	Text(80)
Expense Type	Picklist
Instructor Invoice	Master-Detail(Instructor Invoice)
Last Modified By	Lookup(User)
Quantity	Number(10, 0)
Unit Cost	Currency(10, 2)

Course

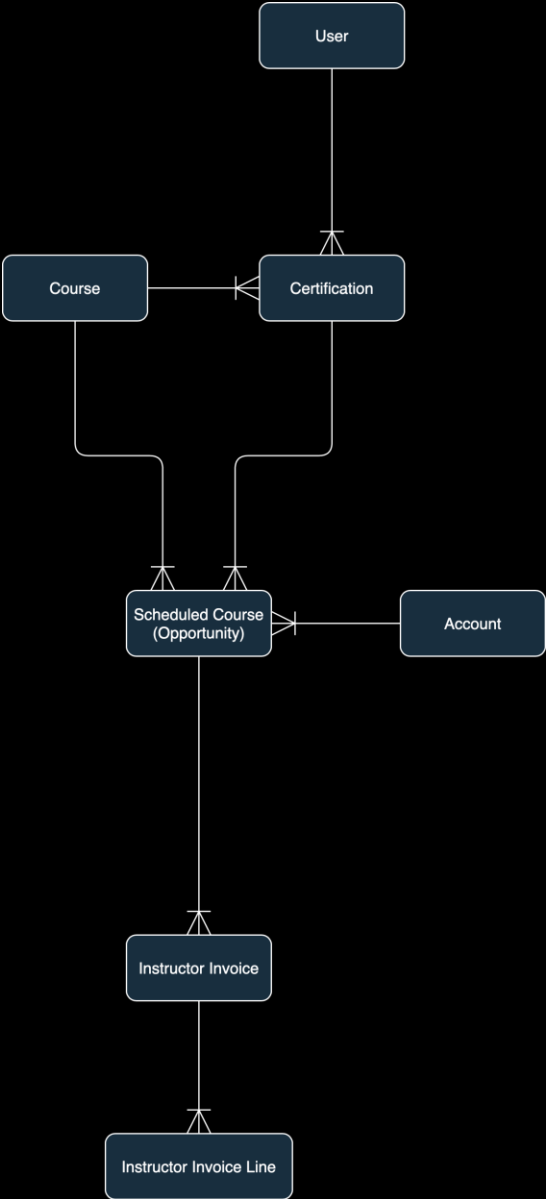
Course Code	Text(80)
Course Title	Text(255)
Created By	Lookup(User)
Days	Number(14, 0)
Hours	Number(14, 0)
Last Modified By	Lookup(User)
Owner	Lookup(User+1)

Account

Account Name	Name
Account Number	Text(40)
Account Owner	Lookup(User)
Account Site	Text(90)
Account Source	Picklist
Active	Picklist
Annual Revenue	Currency(10, 0)
Billing Address	Address
Clean Status	Picklist
Created By	Lookup(User)
Customer Priority	Picklist
D&B Company	Lookup(D&B Company)
Data.com Key	Text(20)
Description	Long Text Area(32000)
D-U-I-A-S Number	Text(9)
Employees	Number(0, 0)
Fax	Fax
Industry	Picklist
Last Modified By	Lookup(User)
NAICS Code	Text(8)
NAICS Description	Text(120)
Number of Locations	Number(3, 0)
Operating Hours	

User

About Me	Text Area(1000)
Active	Checkbox
Address	Address
Admin Info Emails	Checkbox
Alias	Text(8)
Allow Forecasting	Checkbox
Bank Address	Text Area(255)
Bank Name	Text(80)
Call Center	Lookup(Call Center)
Chatter Email Highlights Frequency	Picklist
Company Name	Text(80)
Contact	Lookup(Contact)
Data.com Monthly Addition Limit	Number(0, 0)
Default Notification Frequency when	Picklist
Delegated Approver	Lookup(User+1)
Department	Text(80)
Division	Text(80)
Email	Email
Email Encoding	Picklist
Email Sender Address	Email
Email Sender Name	Text(80)

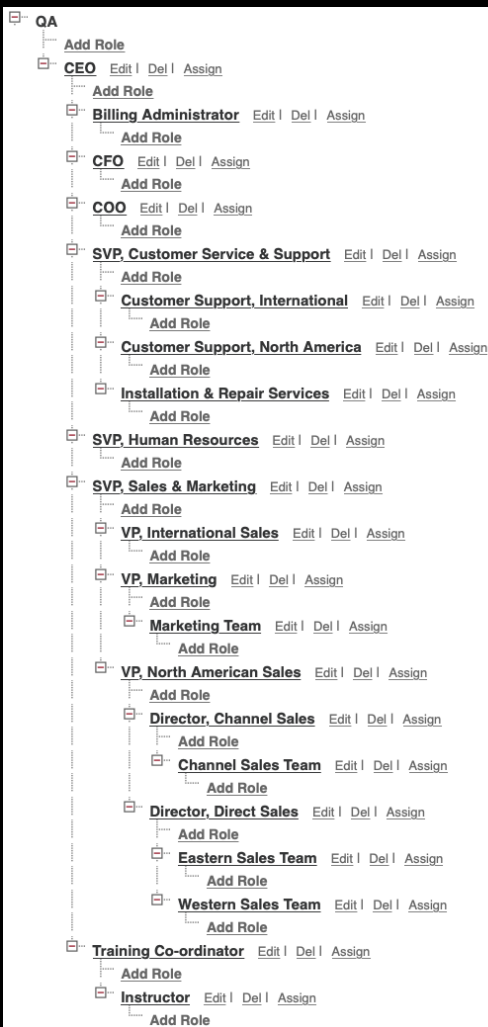


Rename opportunities or create new custom object

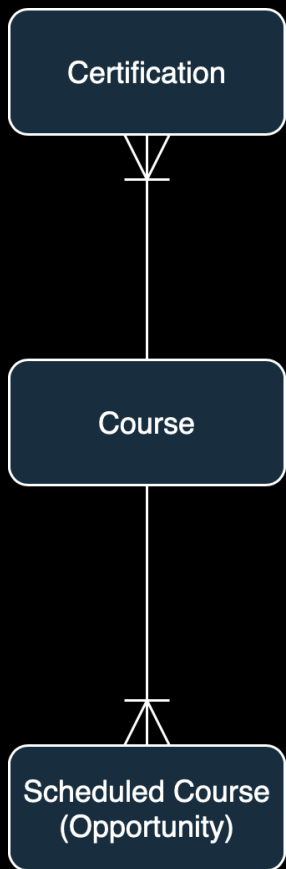
User Licenses						User Licenses Help ?
Name	Status	Total Licenses	Used Licenses	Remaining Licenses	Expiration	
Salesforce	Active	2	2	0		
Chatter Free	Active	5,000	1	4,999		
Salesforce Platform	Active	3	2	1		
Customer Community Login	Active	5	0	5		
XOrg Proxy User	Active	2	0	2		
Work.com Only	Active	3	0	3		
Customer Portal Manager Custom	Active	5	0	5		
Identity	Active	110	0	110		
Customer Community Plus	Active	5	0	5		
Silver Partner	Active	2	0	2		
Show 10 more » Go to list (22) »						

Demo limitations with only
a single spare Salesforce
License available

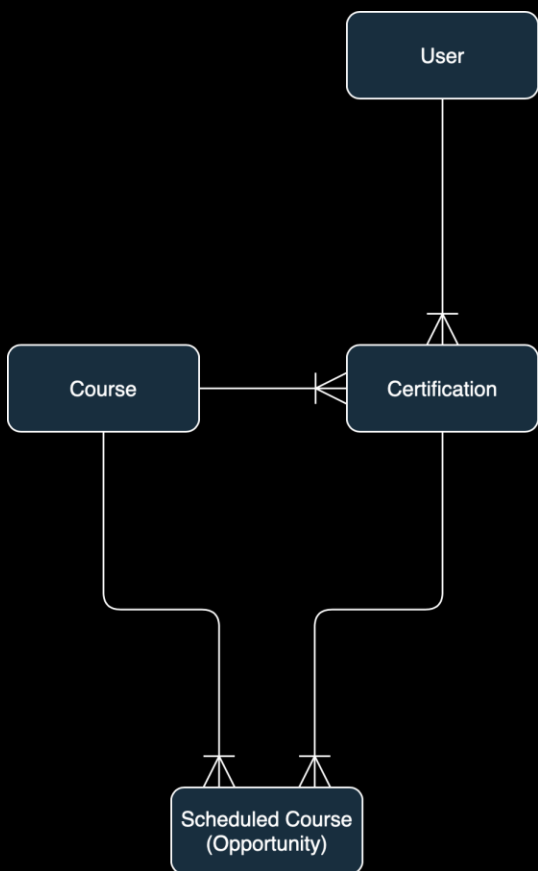
Security



Courses



Creating a certification



Certification access

```

CertificationTriggerHandler.cls — QA Project
CertificationTriggerHandler.cls ×

force-app > main > default > classes > CertificationTriggerHandler.cls > ...

1 public with sharing class CertificationTriggerHandler {
2
3     public static void grantInstructorAccess(List<Certification__c
4         Map<Id, Certification__c> oldMap, Boolean isInsert, Bo
5
6
7     /**
8      * When a new Certification object is assigned an
9      * instructor, or if an instructor changes on an existin
10     * object, give the new instructor access to the record
11     * creating a share object, and remove access for the
12     * previous instructor (if it is an update of that field
13     */
14
15     System.debug('Starting the Grant Instructor Access logic')
16
17     // List of share records to insert in bulk
18     List<Certification__Share> sharesToCreate = new List<Certi
19
20     // List of share records to delete in bulk
21     List<Certification__Share> sharesToDelete = new List<Certi
22
23     // Map of the Certification ID to the Instructor User ID
24     Map<Id, Id> certificationToInstructorMap = new Map<Id, Id>
25
26     // Loop through all the records in the trigger
27     for ( Certification__c certification : triggerNew ) {
28
29         // Check to see if this is an insert or the Instructor
30         if (isInsert || certification.Instructor__c != oldMap.
31             // Create new Share record for the Instructor and
32             if (certification.Instructor__c != null) {
33                 Certification__Share certificationShare = new
34                     ParentId = certification.Id,
35                     userOrGroupId = certification.Instructor_
36                     rowCause = 'Manual',
37                     AccessLevel = 'Read'
38             );
39             sharesToCreate.add(certificationShare);
40         }
41     }
42
43     if (isUpdate) {
44         // See the Instructor has changed
45         if (certification.Instructor__c != oldMap.get(cert
46             // Add to map of Instructor changes
47             System.debug('certification.Instructor__c is:
48             certificationToInstructorMap.put(certification
49         )
50     }
51
52     if ( certificationToInstructorMap.size() > 0 ) {
53
54         System.debug('certificationToInstructorMap is: ' + cer
55
56         for (List<Certification__Share> certificationShares :
57

```

Scheduling a course

▼ Days

×

New Scheduled Course

Course

ADX201

• Instructor

Search Certifications...

🔍

Account Name

Search Accounts...

🔍

• Start Date

📅

• Location

📝

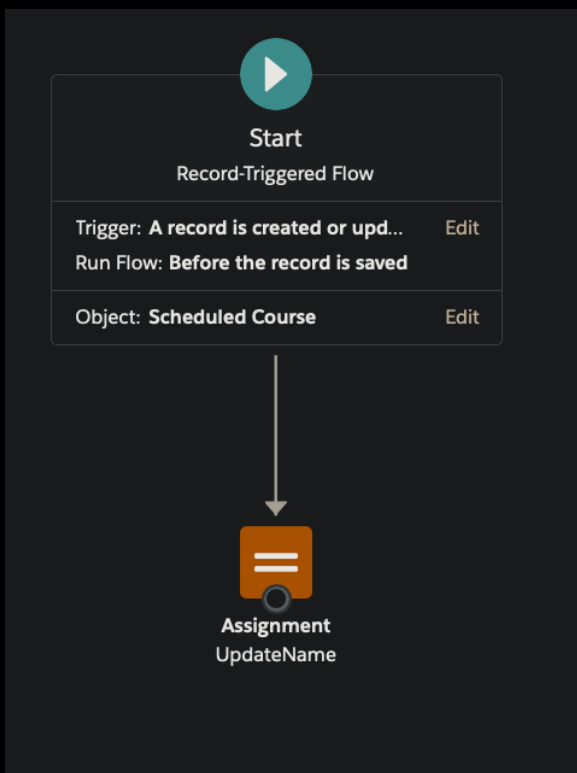
Description

📝

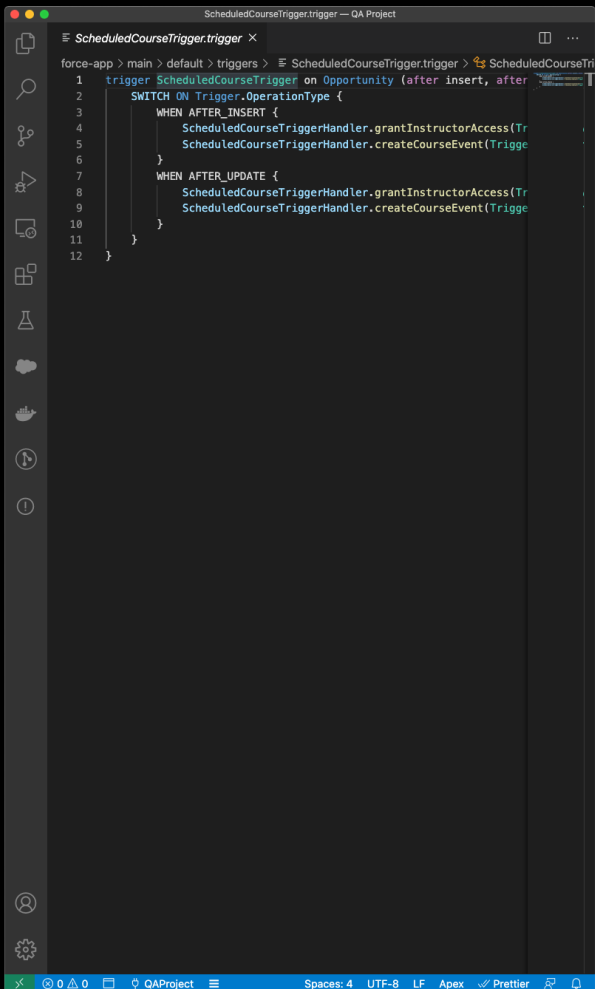
Cancel

Save

A few things happen automatically after scheduling



Apex triggers



```
1 trigger ScheduledCourseTrigger on Opportunity (after insert, after
2     SWITCH ON Trigger.OperationType {
3         WHEN AFTER_INSERT {
4             ScheduledCourseTriggerHandler.grantInstructorAccess(Tr
5             ScheduledCourseTriggerHandler.createCourseEvent(Trigge
6         }
7         WHEN AFTER_UPDATE {
8             ScheduledCourseTriggerHandler.grantInstructorAccess(Tr
9             ScheduledCourseTriggerHandler.createCourseEvent(Trigge
10        }
11    }
12 }
```

Scheduled Course access

```
ScheduledCourseTriggerHandler.cls — QA Project

force-app > main > default > classes > ScheduledCourseTriggerHandler.cls > ...

1 public class ScheduledCourseTriggerHandler {
2
3     public static void grantInstructorAccess(List<Opportunity> triggerNew,
4       Map<Id, Opportunity> oldMap, Boolean isInsert, Boolean isUpdate) {
5
6         /**
7          * When a new Scheduled Course object is assigned an
8          * instructor, or if an instructor changes on an existing
9          * object, give the new instructor access to the record
10          * creating a share object, and remove access for the
11          * previous instructor (if it is an update of that field)
12          */
13
14         System.debug('Starting the Grant Instructor Access logic')
15
16         // List of share records to insert in bulk
17         List<OpportunityShare> sharesToCreate = new List<OpportunityShare>()
18
19         // List of share records to delete in bulk
20         List<OpportunityShare> sharesToDelete = new List<OpportunityShare>()
21
22         // Map of the Opportunity ID to the Instructor User ID
23         Map<Id, Id> courseToInstructorMap = new Map<Id, Id>();
24
25         // Loop through all the records in the trigger
26         for (Opportunity scheduledCourse : triggerNew) {
27
28             // Check to see if this is an insert or the Instructor
29             if (isInsert || scheduledCourse.Instructor__c != oldMap.get(scheduledCourse.Id)) {
30                 // Create new Share record for the Instructor and
31                 if (scheduledCourse.InstructorId__c != null) {
32                     OpportunityShare scheduledCourseShare = new OpportunityShare() {
33                         opportunityId = scheduledCourse.Id,
34                         userOrGroupId = scheduledCourse.InstructorId__c,
35                         rowCause = 'Manual',
36                         opportunityAccessLevel = 'Edit'
37                     };
38                     sharesToCreate.add(scheduledCourseShare);
39                 }
40             }
41
42             if (isUpdate) {
43                 // See the Instructor has changed
44                 if (scheduledCourse.Instructor__c != oldMap.get(scheduledCourse.Id)) {
45                     // Add to map of Instructor changes
46                     System.debug('scheduledCourse.Instructor__c is ' + scheduledCourse.Instructor__c);
47                     courseToInstructorMap.put(scheduledCourse.Id, scheduledCourse.InstructorId__c);
48                 }
49             }
50         }
51
52         if (courseToInstructorMap.size() > 0) {
53
54             System.debug('courseToInstructorMap is: ' + courseToInstructorMap);
55
56             for (List<OpportunityShare> scheduledCourseShares : sharesToCreate) {
57                 insert scheduledCourseShares;
58             }
59
60             for (List<OpportunityShare> scheduledCourseShares : sharesToDelete) {
61                 delete scheduledCourseShares;
62             }
63         }
64     }
65 }
```

Calendar event

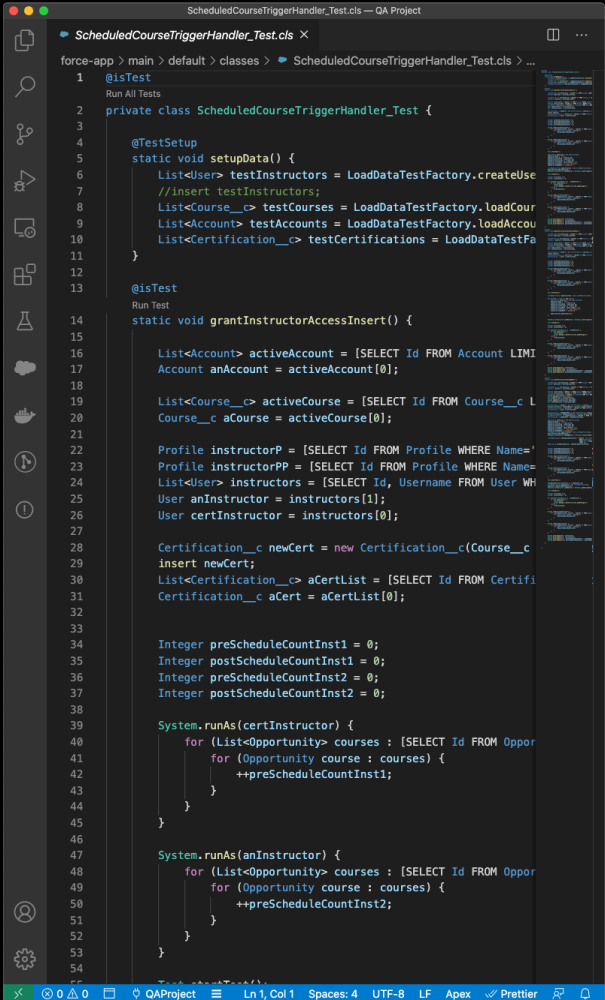
```
ScheduledCourseTriggerHandler.cls — QA Project

ScheduledCourseTriggerHandler.cls X

force-app > main > default > classes > ScheduledCourseTriggerHandler.cls > ...

1 public class ScheduledCourseTriggerHandler {
2
3   public static void grantInstructorAccess(List<Opportunity> tri
81 }
82
83   public static void createCourseEvent(List<Opp Boolean isInsert
84     Map<Id, Opportunity> oldMap, Boolean isInsert, Boolean
85
86   /**
87    * When a new Scheduled Course object is created or if t
88    * or end date or location fields are changed on an exis
89    * a new event record is created and assigned to the Ins
90    * object is deleted or relevant fields are updated the
91    */
92
93   System.debug('Starting the Create Course Event logic');
94
95   // List of event records to insert in bulk
96   List<Event> eventsToCreate = new List<Event>();
97
98   // Map of relevant updated courses and operation type
99   Map<Id> coursesUpdated = new Map<Id>();
100
101   // List of event records to delete in bulk
102   List<Event> eventsToDelete = new List<Event>();
103
104   // Loop through all the records in the trigger
105   for ( Opportunity scheduledCourse : triggerNew ) {
106
107     Boolean isRelevantUpdate = isUpdate && ( scheduledCourse
108     scheduledCourse
109     scheduledCourse
110     scheduledCourse
111
112     Boolean isCancelled = isUpdate && scheduledCourse.Stage
113     scheduledCourse.StageName == 'Cancelled';
114
115     // Check to see if this is an insert or a relevant upd
116     if (isInsert || isRelevantUpdate) {
117       // Create new event and add to list
118       if (scheduledCourse.Instructor__c != null && sched
119       scheduledCourse.End_Date__c != null && sch
120       Event scheduledCourseEvent = new Event(
121         OwnerId = scheduledCourse.InstructorId__c,
122         WhatId = scheduledCourse.Id,
123         Subject = scheduledCourse.Course_Code__c +
124         StartDateTime = scheduledCourse.CloseDate,
125         EndDateTime = scheduledCourse.End_Date__c,
126         Location = scheduledCourse.Location__c
127       );
128       eventsToCreate.add(scheduledCourseEvent);
129     }
130   }
131
132   if (isRelevantUpdate || isCancelled) {
133     coursesUpdated.add(scheduledCourse.Id);
134   }
135 }
```

Apex testing



```
ScheduledCourseTriggerHandler_Test.cls — QA Project

ScheduledCourseTriggerHandler_Test.cls X

force-app > main > default > classes > ScheduledCourseTriggerHandler_Test.cls > ...

1  @isTest
   Run All Tests
2  private class ScheduledCourseTriggerHandler_Test {
3
4      @TestSetup
5      static void setupData() {
6          List<User> testInstructors = LoadDataTestFactory.createUser();
7          //insert testInstructors;
8          List<Course__c> testCourses = LoadDataTestFactory.loadCourse();
9          List<Account> testAccounts = LoadDataTestFactory.loadAccount();
10         List<Certification__c> testCertifications = LoadDataTestFactory.loadCertification();
11     }
12
13     @isTest
14     Run Test
15     static void grantInstructorAccessInsert() {
16
17         List<Account> activeAccount = [SELECT Id FROM Account LIMIT 1];
18         Account anAccount = activeAccount[0];
19
20         List<Course__c> activeCourse = [SELECT Id FROM Course__c LIMIT 1];
21         Course__c aCourse = activeCourse[0];
22
23         Profile instructorP = [SELECT Id FROM Profile WHERE Name = 'Instructor'];
24         Profile instructorPP = [SELECT Id FROM Profile WHERE Name = 'Instructor'];
25         List<User> instructors = [SELECT Id, Username FROM User WHERE Username LIKE '%instructor%'];
26         User anInstructor = instructors[1];
27         User certInstructor = instructors[0];
28
29         Certification__c newCert = new Certification__c(Course__c aCourse, User anInstructor);
30         insert newCert;
31         List<Certification__c> aCertList = [SELECT Id FROM Certification__c WHERE Course__c = :aCourse];
32         Certification__c aCert = aCertList[0];
33
34         Integer preScheduleCountInst1 = 0;
35         Integer postScheduleCountInst1 = 0;
36         Integer preScheduleCountInst2 = 0;
37         Integer postScheduleCountInst2 = 0;
38
39         System.runAs(certInstructor) {
40             for (List<Opportunity> courses : [SELECT Id FROM Opportunity WHERE Course__c = :aCourse]) {
41                 for (Opportunity course : courses) {
42                     ++preScheduleCountInst1;
43                 }
44             }
45         }
46
47         System.runAs(anInstructor) {
48             for (List<Opportunity> courses : [SELECT Id FROM Opportunity WHERE Course__c = :aCourse]) {
49                 for (Opportunity course : courses) {
50                     ++preScheduleCountInst2;
51                 }
52             }
53         }
54     }
55 }
```


Still needs work

=== Test Summary

NAME	VALUE
Outcome	Passed
Tests Ran	6
Pass Rate	100%
Fail Rate	0%
Skip Rate	0%
Test Run Id	7074L000000Q7B5
Test Execution Time	11923 ms
Org Id	00D4L000000Du0uUAK
Username	ergo96@icloud.com.project
Org Wide Coverage	86%

=== Apex Code Coverage for Test Run 7074L000000Q7B5

TEST NAME	CLASS BEI
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsert	Scheduled
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsert	LoadDataT
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsert	Certifica
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsert	Scheduled
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsert	Certifica
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsertBulk	Certifica
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsertBulk	Scheduled
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsertBulk	Scheduled
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsertBulk	Certifica
ScheduledCourseTriggerHandler_Test.grantInstructorAccessInsertBulk	LoadDataT
ScheduledCourseTriggerHandler_Test.grantInstructorAccessUpdate	Scheduled
ScheduledCourseTriggerHandler_Test.grantInstructorAccessUpdate	LoadDataT
ScheduledCourseTriggerHandler_Test.grantInstructorAccessUpdate	Certifica
ScheduledCourseTriggerHandler_Test.grantInstructorAccessUpdate	Certifica
ScheduledCourseTriggerHandler_Test.grantInstructorAccessUpdate	Scheduled
CertificationTriggerHnadler_Test.insertCertification	Certifica
CertificationTriggerHnadler_Test.insertCertification	LoadDataT
CertificationTriggerHnadler_Test.insertCertification	Certifica
CertificationTriggerHnadler_Test.insertCertificationBulk	Certifica
CertificationTriggerHnadler_Test.insertCertificationBulk	LoadDataT
CertificationTriggerHnadler_Test.insertCertificationBulk	Certifica
CertificationTriggerHnadler_Test.updateCertification	Certifica
CertificationTriggerHnadler_Test.updateCertification	LoadDataT
CertificationTriggerHnadler_Test.updateCertification	Certifica

=== Apex Code Coverage by Class

CLASSES	PERCENT	UNCOVERED LINES
ScheduledCourseTrigger	100%	
ScheduledCourseTriggerHandler	86%	77,78,79,108,109...
LoadDataTestFactory	100%	
CertificationTrigger	100%	
CertificationTriggerHandler	91%	77,78,79

08:03:38.453 ended SFDX: Run Apex Tests

More than 5% of lines are catch blocks

```
        rowCause = 'Manual',
        AccessLevel = 'Read'
    );
    sharesToCreate.add(certificationShare);
}
}

if (isUpdate) {
    // See the Instructor has changed
    if ( certification.Instructor__c != oldMap.get(certification.Id).Instructor__c ) {
        // Add to map of Instructor changes
        System.debug('certification.Instructor__c is: ' + certification.Instructor__c);
        certificationToInstructorMap.put(certification.Id, certification.Instructor__c);
    }
}

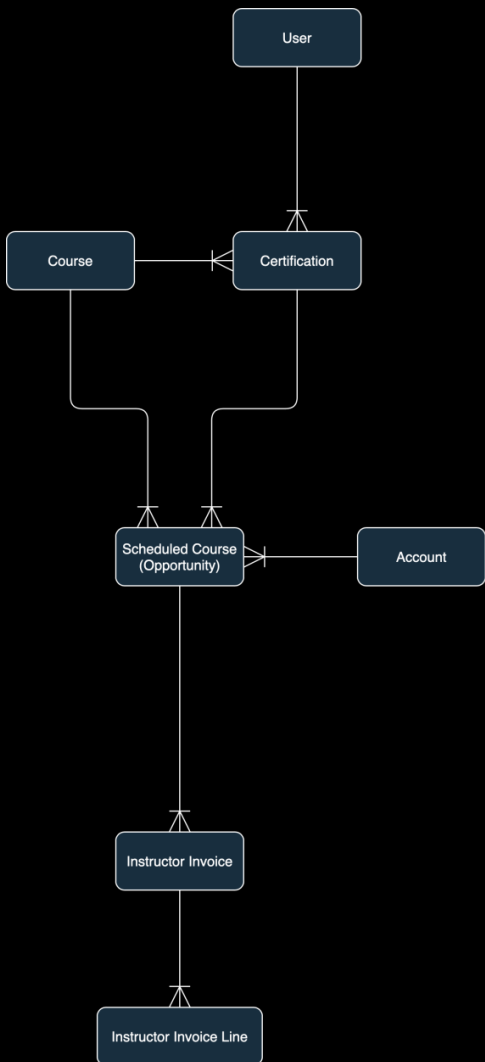
if ( certificationToInstructorMap.size() > 0 ) {
    System.debug('certificationToInstructorMap is: ' + certificationToInstructorMap);

    for (List<Certification__Share> certificationShares :
        [SELECT UserOrGroupId, RowCause, ParentId, Id, AccessLevel
        FROM Certification__Share
        WHERE ParentId IN :certificationToInstructorMap.keySet()
        AND RowCause = 'Manual']) {
        for (Certification__Share certificationShare : certificationShares) {
            if (certificationToInstructorMap.get(certificationShare.ParentId) != certificationShare.Instructor__c) {
                sharesToDelete.add(certificationShare);
            }
        }
    }
}

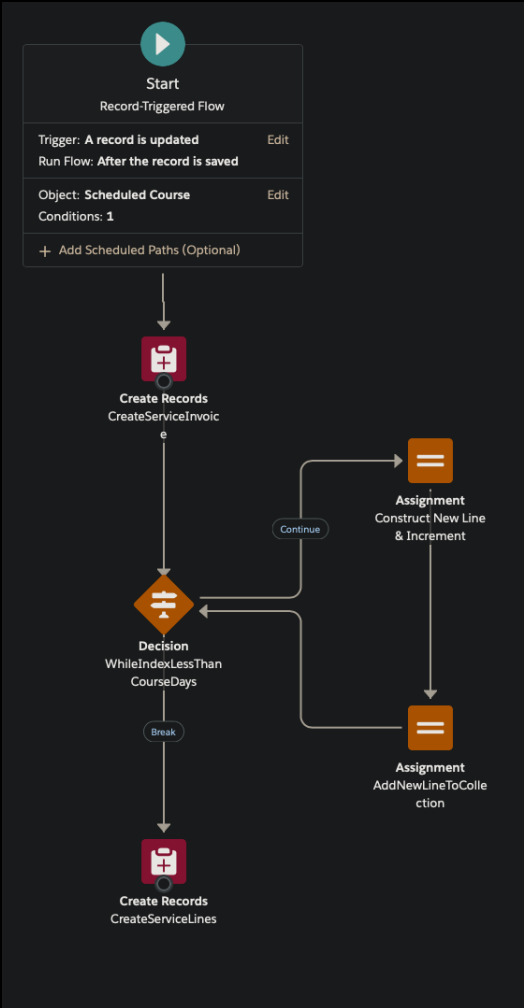
}

try {
    if ( sharesToCreate.size() > 0 ) {
        insert sharesToCreate;
    }
    if ( sharesToDelete.size() > 0 ) {
        delete sharesToDelete;
    }
} catch (System.DmlException ex) {
    Error_Log__c err = new Error_Log__c(Source__c = 'grantInstructorAccess', Message__c = ex.getMessage());
    insert err;
}
}
```

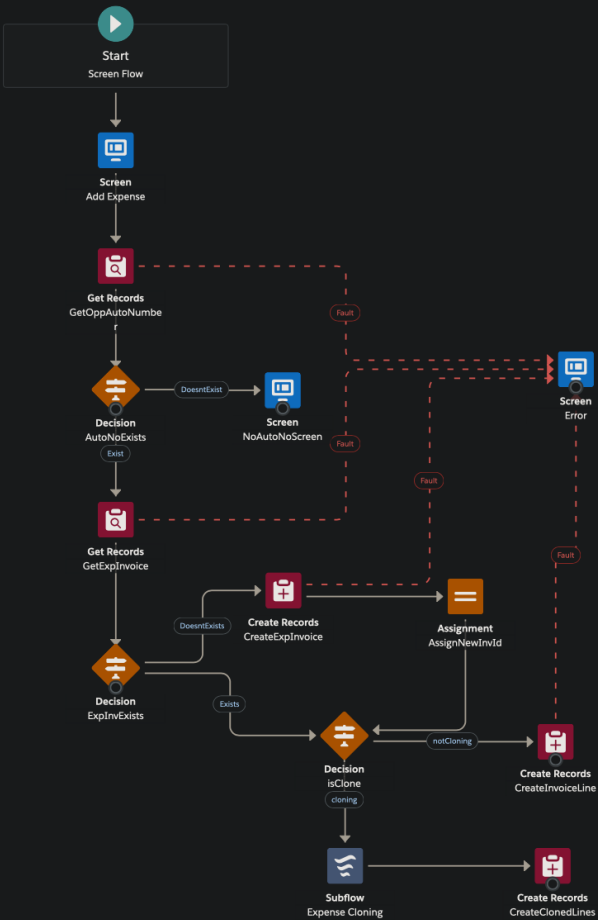
Invoices



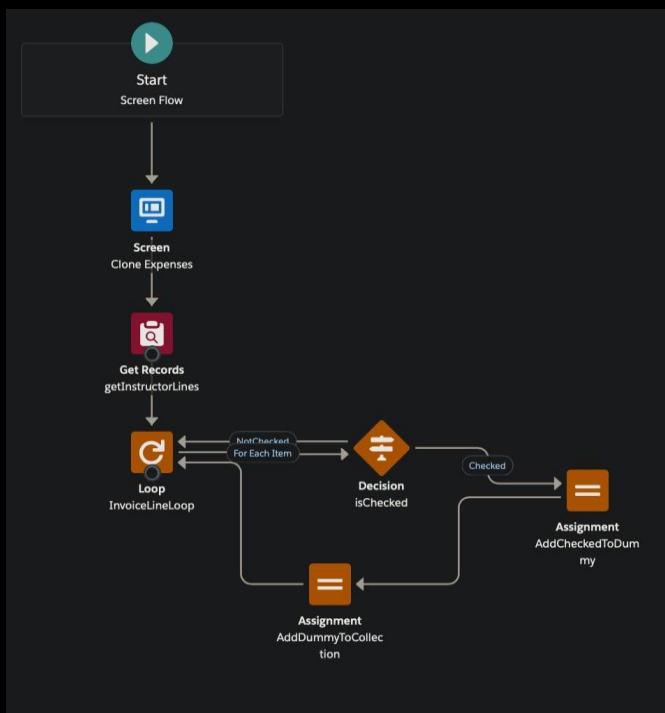
Automatically creating Service Invoices



Expense Invoice Screen Flow



Cloning Subflow



Generate PDF

Instructor Invoice Custom Button or Link

[Help for this Page](#) ?

Generate PDF

[« Back to Custom Object: Instructor Invoice](#)

Custom Button or Link Detail

[Edit](#) [Window Open Properties](#) [Delete](#) [Where is this used?](#)

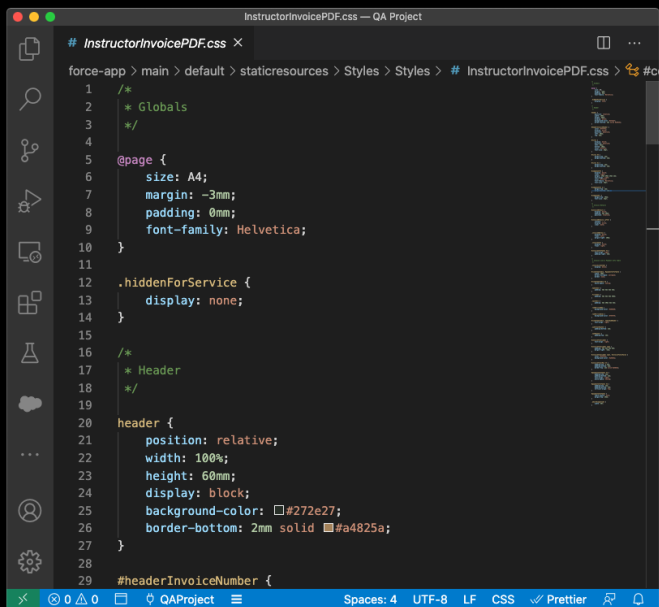
Label	Generate PDF	Object Name	Instructor Invoice
Name	Generate_PDF		
Behavior	Display in new window	Display Type	Detail Page Button
Content Source	Visualforce Page		
Height (in pixels)	600	Visualforce Page	InstructorInvoiceToPDF
Width (in pixels)		Show Address Bar	<input type="checkbox"/>
Window Position	No Preference	Show Scrollbars	<input checked="" type="checkbox"/>
Resizable	<input checked="" type="checkbox"/>	Show Toolbars	<input type="checkbox"/>
		Show Menu Bar	<input type="checkbox"/>
Description			
		Show Status Bar	<input type="checkbox"/>
Created By	Ervin Musincki , 24/03/2021, 14:41	Modified By	Ervin Musincki , 24/03/2021, 14:41

[Edit](#) [Window Open Properties](#) [Delete](#) [Where is this used?](#)

Dynamically adjusts to Invoice Type

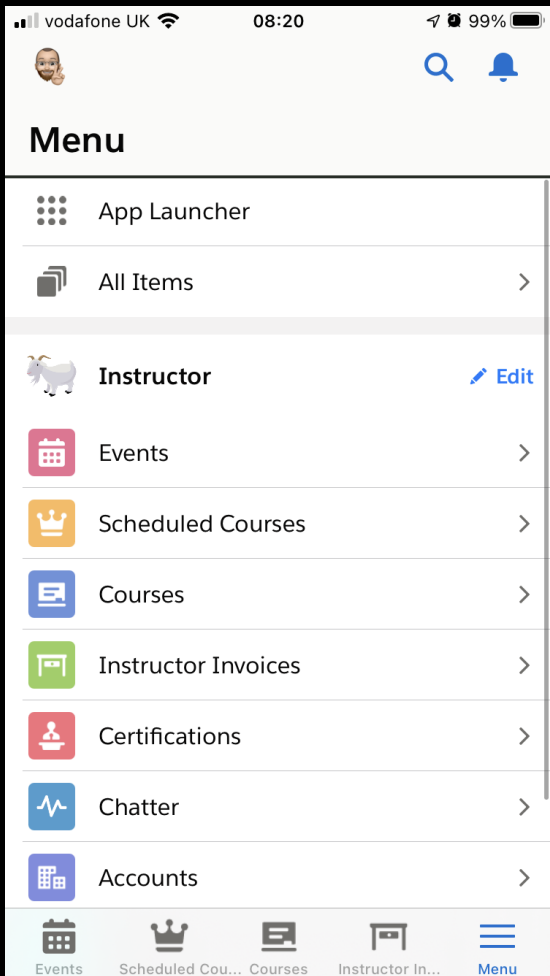
```
InstructorInvoiceToPDF.page — QA Project
InstructorInvoiceToPDF.page X
- app > main > default > pages > InstructorInvoiceToPDF.page > apex:page > div#invoiceDetails > div.invoiceInfo > table#invoiceTable
1 <apex:page standardController="Instructor_Invoice_c" renderAs="pdf">
2
3 <!--
4 The same visualforce page is used to generate both the service and expense invoices.
5 The dynamic behavior is achieved by conditionally applying a "hiding" class to elements
6 according to invoice type.
7 -->
8
9 <apex:stylesheet value="{!URLFOR($Resource.Styles,'Styles/InstructorInvoicePDF.css')}" />
10 <apex:variable value="{!IF(BEGINS(Instructor_Invoice_c.Name, 'EXPINV'), '', 'hiddenForService')}" />
11
12 <header>
13 <div id="headerInvoiceNumber">
14 <h5>
15 <apex:outputText value="{!Instructor_Invoice_c.Name}" />
16 </h5>
17 </div>
18 <div id="title">
19 <h4>{!IF(BEGINS(Instructor_Invoice_c.Name, 'EXPINV'), 'EXPENSE', 'SERVICE')}</h4>
20 <h1>INVOICE</h1>
21 </div>
22 <div id="companyInfo">
23 <apex:image value="https://icloudcomproject-dev-ed.my.salesforce.com/sfc/dist/version
24 width="75mm" height="15mm" alt="Force Training Logo" />
25 <p>32 Guild Street, &nbsp; London, &nbsp; EC2N 3RN</p>
26 <p>United Kingdom</p>
27 <p id="companyUrl">forcetraining.com</p>
28 </div>
29 </header>
30
31 <div id="invoiceDetails">
32
33 <div class="invoiceAddress">
34 <table id="invoiceToTable">
35 <tr>
36 <th>Bill To</th>
37 </tr>
38 <tr>
39 <td>
40 <apex:outputText value="{!Instructor_Invoice_c.Billed_To_Account_c}" />
41 </td>
42 </tr>
43 <tr>
44 <td>
45 <apex:outputText value="{!Instructor_Invoice_c.Billed_To_Street_c}" />
46 </td>
47 </tr>
48 <tr>
49 <td>
50 <apex:outputText value="{!Instructor_Invoice_c.Billed_To_City_c}" />
51 </td>
52 </tr>
53 <tr>
54 <td>
55 <apex:outputText value="{!Instructor_Invoice_c.Billed_To_State_c}" />
56 </td>
57 </tr>
58 </table>
59 </div>
60
61 <div class="invoiceDetails">
62 <table id="invoiceToTable">
63 <tr>
64 <th>Bill To</th>
65 </tr>
66 <tr>
67 <td>
68 <apex:outputText value="{!Instructor_Invoice_c.Billed_To_Account_c}" />
69 </td>
70 </tr>
71 <tr>
72 <td>
73 <apex:outputText value="{!Instructor_Invoice_c.Billed_To_Street_c}" />
74 </td>
75 </tr>
76 <tr>
77 <td>
78 <apex:outputText value="{!Instructor_Invoice_c.Billed_To_City_c}" />
79 </td>
80 </tr>
81 <tr>
82 <td>
83 <apex:outputText value="{!Instructor_Invoice_c.Billed_To_State_c}" />
84 </td>
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86 </table>
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370 </div&gt
```


Styles can be made more dynamic with more input



```
# InstructorInvoicePDF.css ×
force-app > main > default > staticresources > Styles > Styles > # InstructorInvoicePDF.css > #c
1  /*
2   * Globals
3   */
4
5  @page {
6      size: A4;
7      margin: -3mm;
8      padding: 0mm;
9      font-family: Helvetica;
10 }
11
12 .hiddenForService {
13     display: none;
14 }
15
16 /*
17 * Header
18 */
19
20 header {
21     position: relative;
22     width: 100%;
23     height: 60mm;
24     display: block;
25     background-color: #272e27;
26     border-bottom: 2mm solid #a4825a;
27 }
28
29 #headerInvoiceNumber {
```

Also works on mobile



Many ways to improve and extend functionality

End date selected (Different week) <#>

Start and End Date

Start Date

End Date

06/24/2020

06/30/2020

June

2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

Today

Show Code

```
<div style="height:25rem">  
  <div class="slds-form slds-form_compound">  
    <fieldset class="slds-form-element">
```

Today - In selected range <#>

Start and End Date

Start Date

End Date

06/24/2020

06/30/2020

June

2020

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	1	2	3	4

Today

Any Questions?

Thank you for listening



ForceTraining