<u>Project 1: Credit Card Billing Application</u>

For this application, following are the activities that I will focus on to achieve the goal:

- Project Roadmap Planning
- Data Model Designing
- Formula Fields
- Relationships
- Apex Trigger Implementation
- Visualforce Page Creation

Project Roadmap Planning:

The IT Head of EDU Bank wants to build an application to capture all the information about the customers, credit card types and calculate the credit card bill of their customer.

I as '**System Administrator'** will help them by providing solution quickly to boost the service.

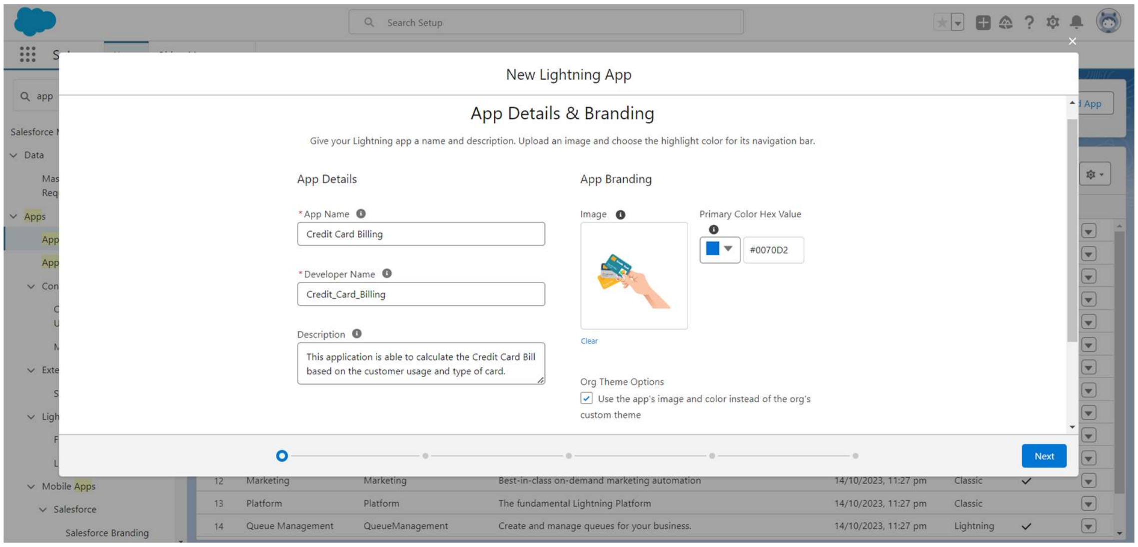
To provide quick solution. For Admin part, I will create a **Custom Application** and the **Objects** and **Fields** according to the requirements, will create **Relationship** between objects and some **Formula Fields** to calculate the value of a field based on the data present in other fields. I can make the set ups accordingly in the org. I will add more **Users** who will work on the application.

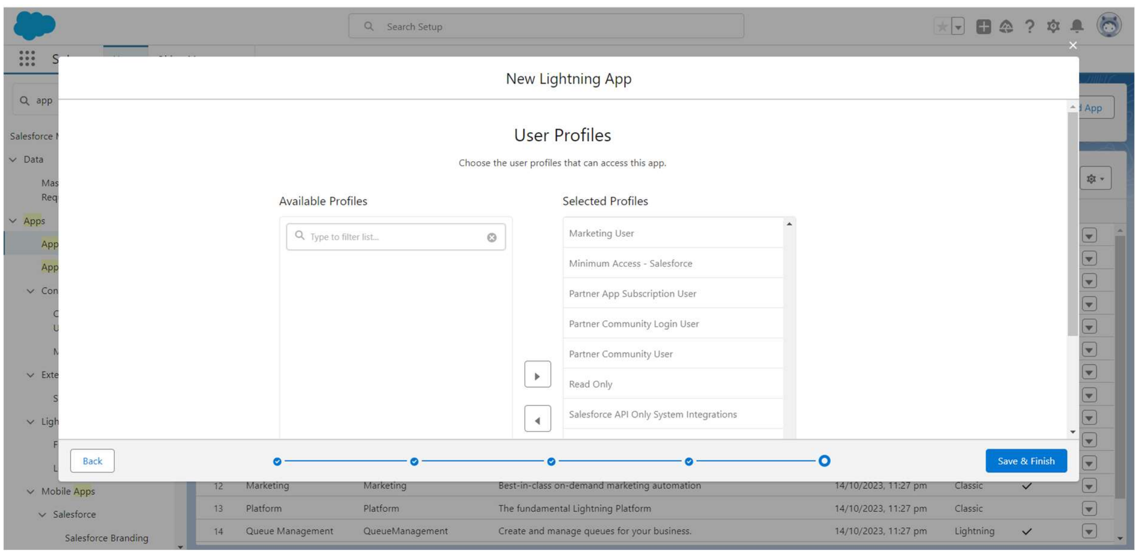
For Developer part, I will

Data Model Designing:

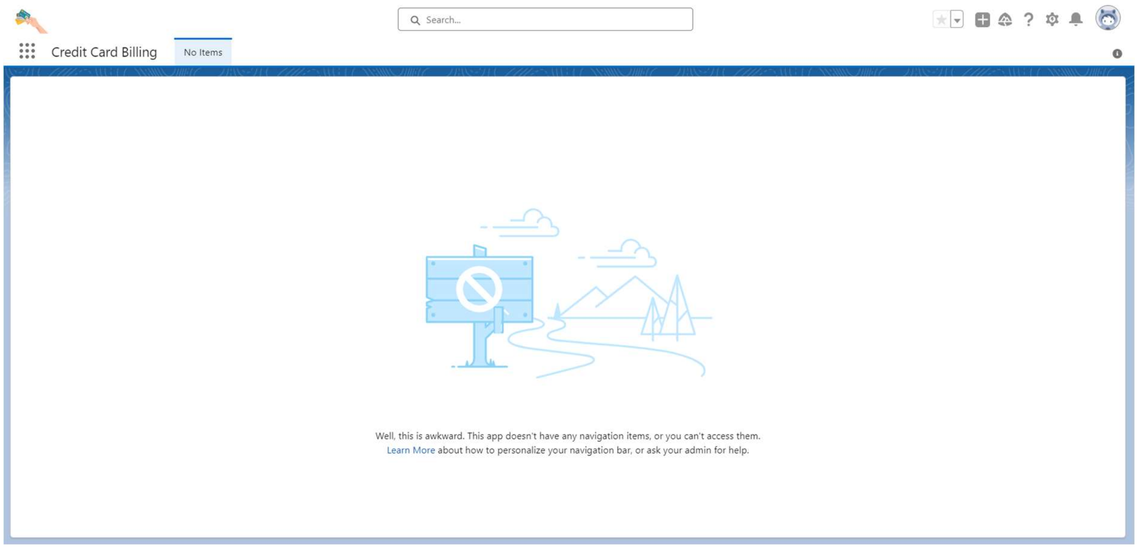
Firstly, I created a **new lightning application** named **'Credit Card Billing'**. While creating, entered the app name, description. Added necessary user profiles 'System administrator' to be able to work on this application.

Created new lightning app by going on Setup:





‘Credit Card Billing’ Application added in the org:



Every application needs to store its data and that will be in the form of objects and fields.

Creating Object:

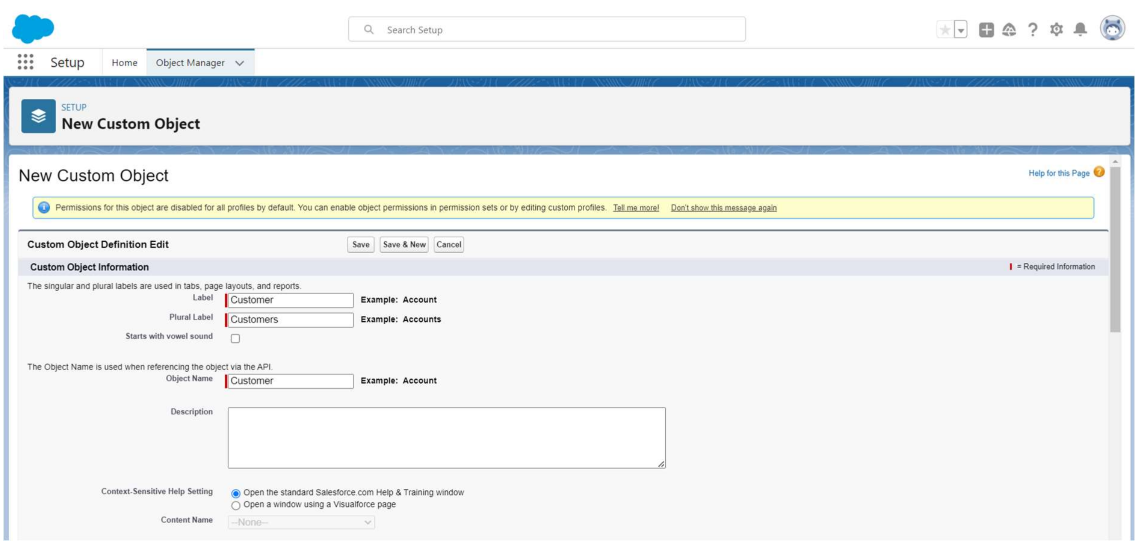
The requirement of EDU Bank application i.e. Credit Card Billing is that it needs to capture information about the Customers, Credit Card Master and wants to calculate the bill.

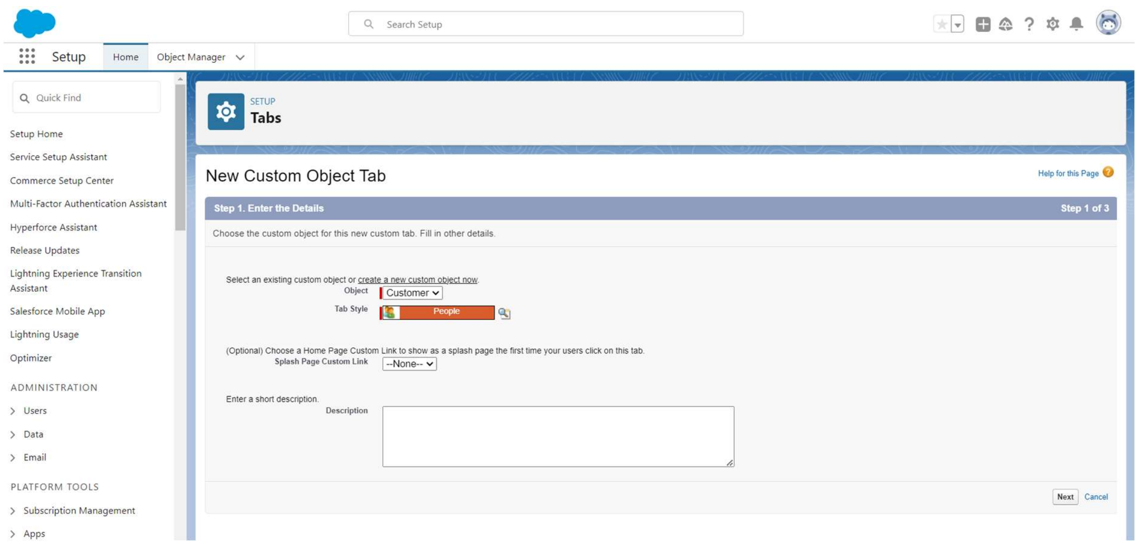
So, the objects involved in this application: -

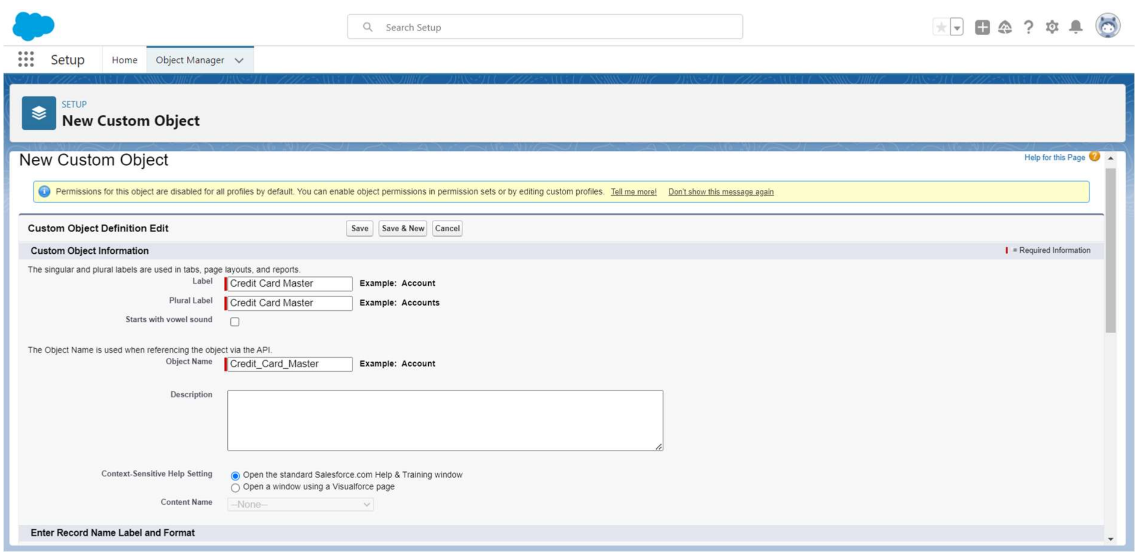
Customers, **Credit Card Master**, and **Billing Information**.

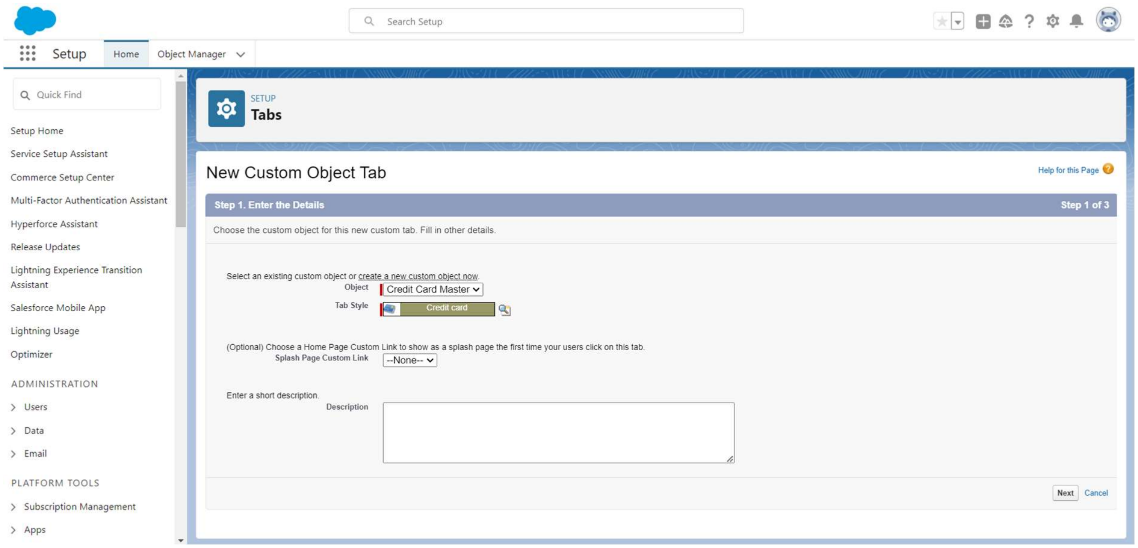
All these objects are custom objects.

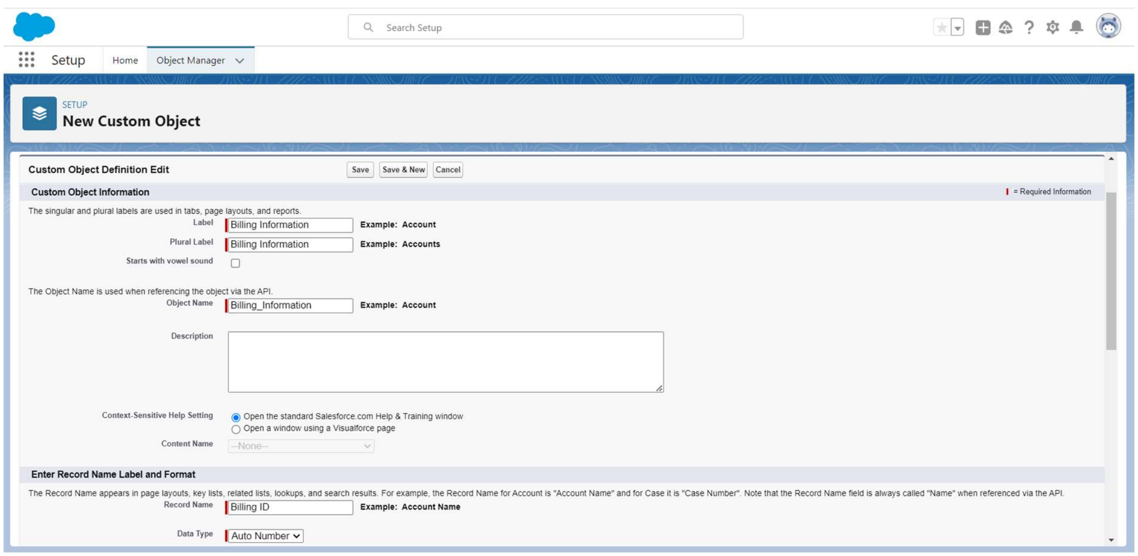
Object – customer

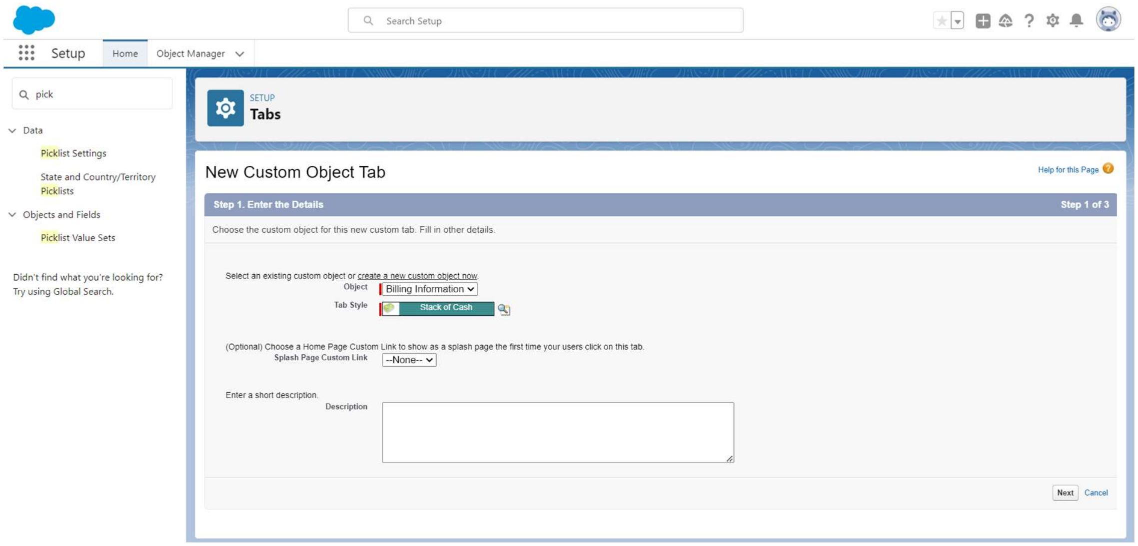


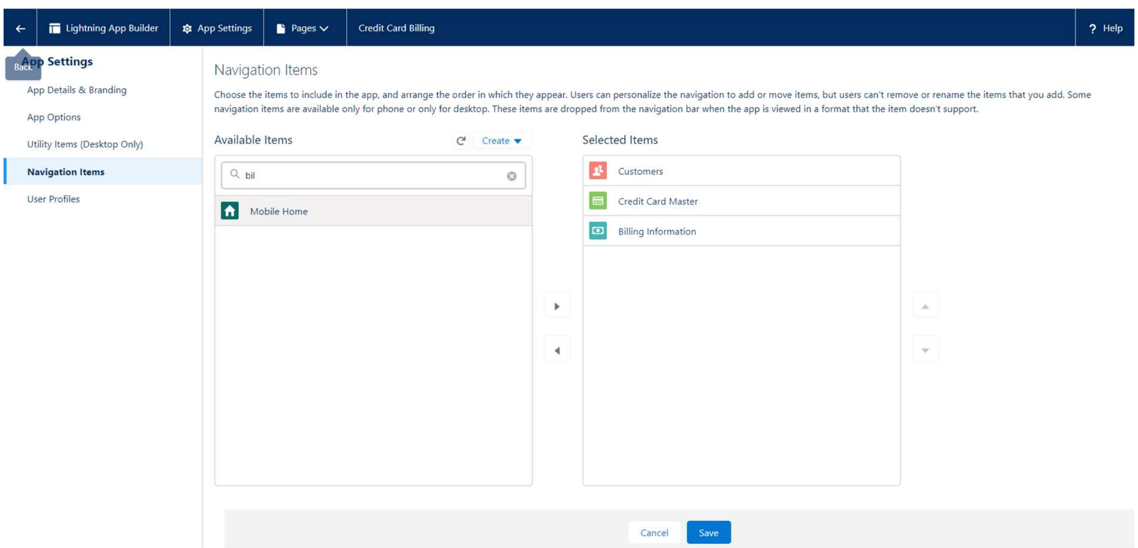

Search Setup
Setup
Home
Object Manager
Quick Find
Setup Home
Service Setup Assistant
Commerce Setup Center
Multi-Factor Authentication Assistant
Hyperforce Assistant
Release Updates
Lightning Experience Transition Assistant
Salesforce Mobile App
Lightning Usage
Optimizer
ADMINISTRATION
Users
Data
Email
PLATFORM TOOLS
Subscription Management
Apps
SETUP
Tabs
New Custom Object Tab
Help for this Page
Step 1. Enter the Details
Step 1 of 3
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
Customer
Tab Style
People
(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--
Enter a short description.
Description
Next
Cancel

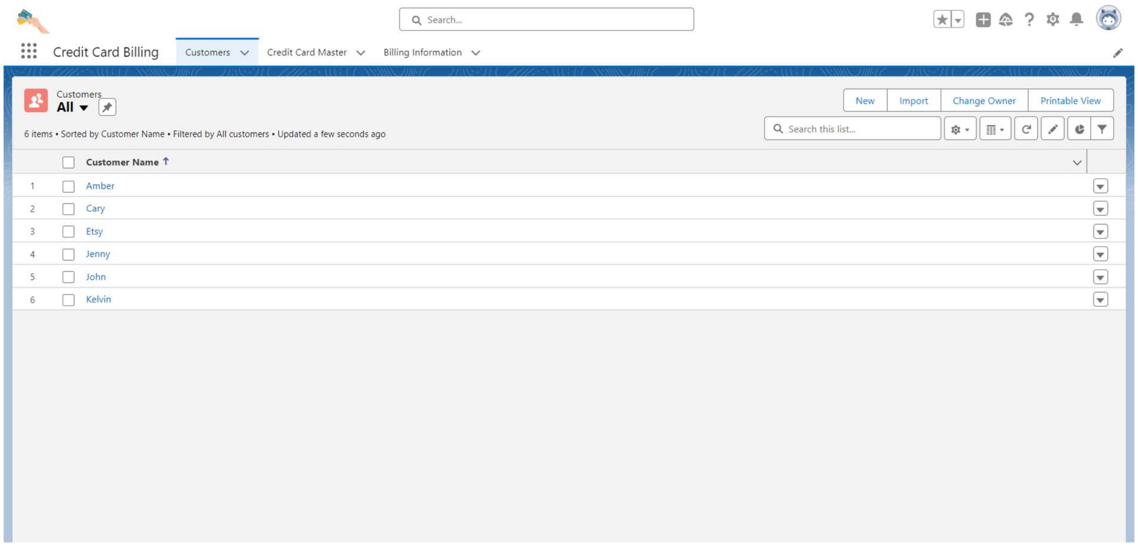

Search Setup
Setup
Home
Object Manager
SETUP
New Custom Object
New Custom Object
Help for this Page
Permissions for this object are disabled for all profiles by default. You can enable object permissions in permission sets or by editing custom profiles. Tell me more! Don't show this message again
Custom Object Definition Edit
Save
Save & New
Cancel
Custom Object Information
= Required Information
The singular and plural labels are used in tabs, page layouts, and reports.
Label
Credit Card Master
Example: Account
Plural Label
Credit Card Master
Example: Accounts
Starts with vowel sound
The Object Name is used when referencing the object via the API.
Object Name
Credit_Card_Master
Example: Account
Description
Context-Sensitive Help Setting
Open the standard Salesforce.com Help & Training window
Open a window using a Visualforce page
Content Name
--None--
Enter Record Name Label and Format


Search Setup
Setup
Home
Object Manager
Quick Find
Setup Home
Service Setup Assistant
Commerce Setup Center
Multi-Factor Authentication Assistant
Hyperforce Assistant
Release Updates
Lightning Experience Transition Assistant
Salesforce Mobile App
Lightning Usage
Optimizer
ADMINISTRATION
Users
Data
Email
PLATFORM TOOLS
Subscription Management
Apps
SETUP
Tabs
New Custom Object Tab
Help for this Page
Step 1. Enter the Details
Step 1 of 3
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
Credit Card Master
Tab Style
Credit card
(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--
Enter a short description.
Description
Next
Cancel


Search Setup
Setup
Home
Object Manager
SETUP
New Custom Object
Custom Object Definition Edit
Save
Save & New
Cancel
Custom Object Information
= Required Information
The singular and plural labels are used in tabs, page layouts, and reports.
Label
Billing Information
Example: Account
Plural Label
Billing Information
Example: Accounts
Starts with vowel sound
The Object Name is used when referencing the object via the API.
Object Name
Billing_Information
Example: Account
Description
Context-Sensitive Help Setting
Open the standard Salesforce.com Help & Training window
Open a window using a Visualforce page
Content Name
--None--
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 for Case it is "Case Number". Note that the Record Name field is always called "Name" when referenced via the API.
Record Name
Billing ID
Example: Account Name
Data Type
Auto Number


Search Setup
Setup
Home
Object Manager
pick
Data
Picklist Settings
State and Country/Territory Picklists
Objects and Fields
Picklist Value Sets
Didn't find what you're looking for? Try using Global Search.
SETUP
Tabs
New Custom Object Tab
Help for this Page
Step 1. Enter the Details
Step 1 of 3
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
Billing Information
Tab Style
Stack of Cash
(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--
Enter a short description.
Description
Next
Cancel


Lightning App Builder
App Settings
Pages
Credit Card Billing
Help
Back
App Settings
App Details & Branding
App Options
Utility Items (Desktop Only)
Navigation Items
User Profiles
Navigation Items
Choose the items to include in the app, and arrange the order in which they appear. Users can personalize the navigation to add or move items, but users can't remove or rename the items that you add. Some navigation items are available only for phone or only for desktop. These items are dropped from the navigation bar when the app is viewed in a format that the item doesn't support.
Available Items
Create
bil
Mobile Home
Selected Items
Customers
Credit Card Master
Billing Information
Cancel
Save



Creating Fields:

In all custom objects, some custom fields are created according to the requirement.

Customer Object –

- Customer Name : Text
- Phone : Phone
- Email : Email
- SSN : Number (9,0)

Credit Card Master Object –

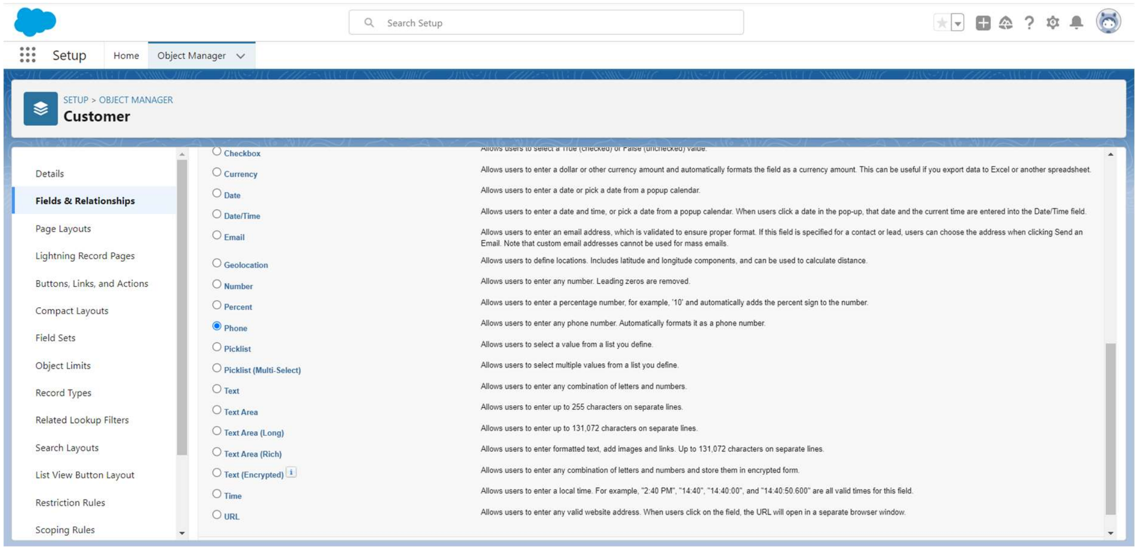
- Credit Card Master Name: Name
- Card Limit : Currency
- Charges Per Transaction: Currency
- Comments : Text Area
- Monthly Crad Fees : Currency

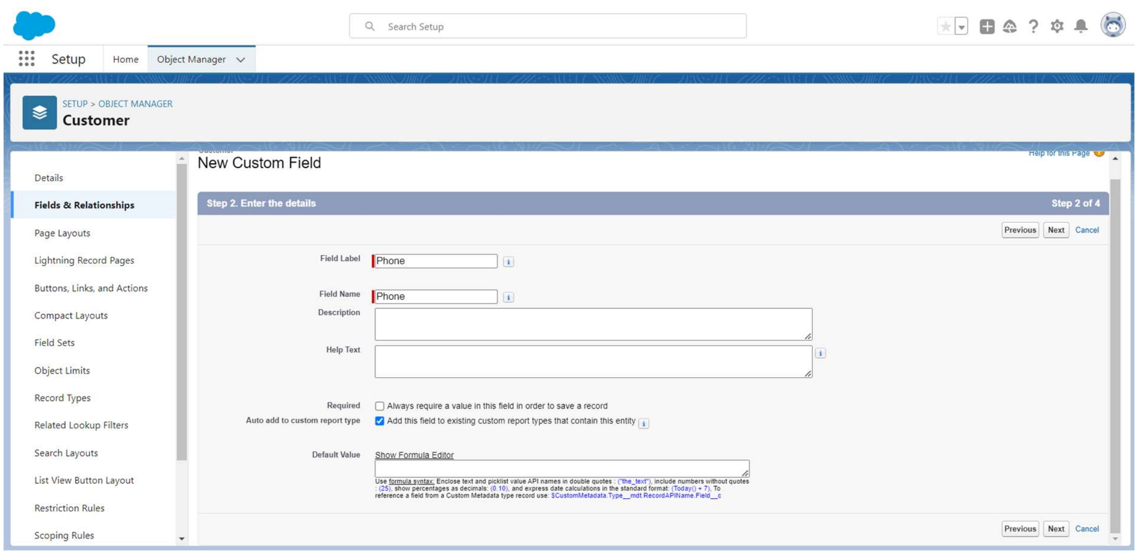
Billing Information Object –

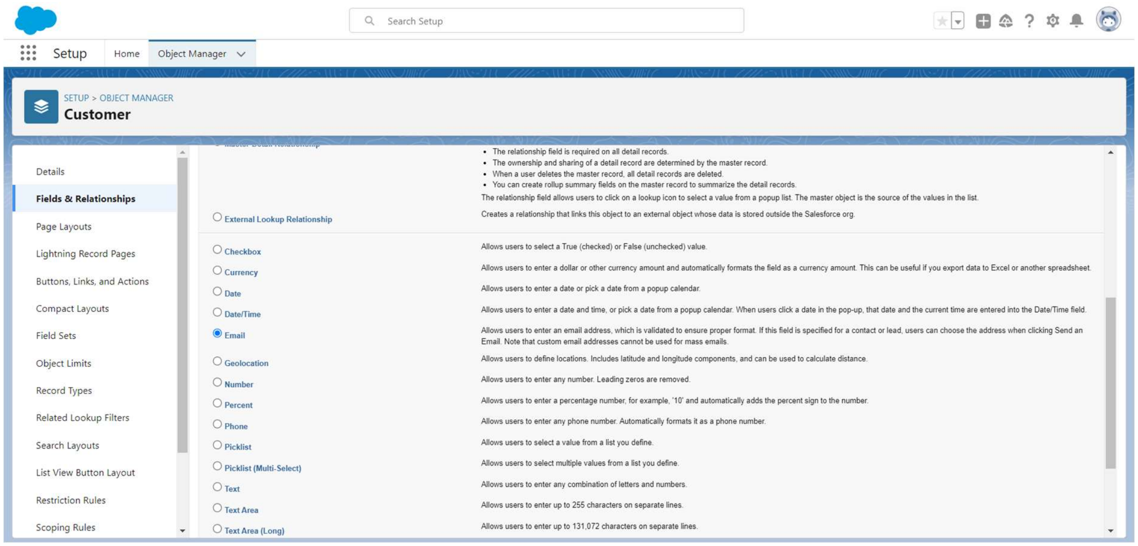
- Billing Id : Auto Number
- Credit Card Number : Number (10, 0)
- Amount Swiped : Currency
- Cash Withdrawal : Currency
- Total Transactions : Number (18, 0)
- Months : Picklist
- Start Date : Formula (Date)
- End Date : Formula (Date)
- Due Date : Formula (Date)
- Total Outstanding Amount: Formula (Currency)
- Customer : Master-Detail (Customer)
- Credit Card Master : Master-Detail (Credit Card Master)

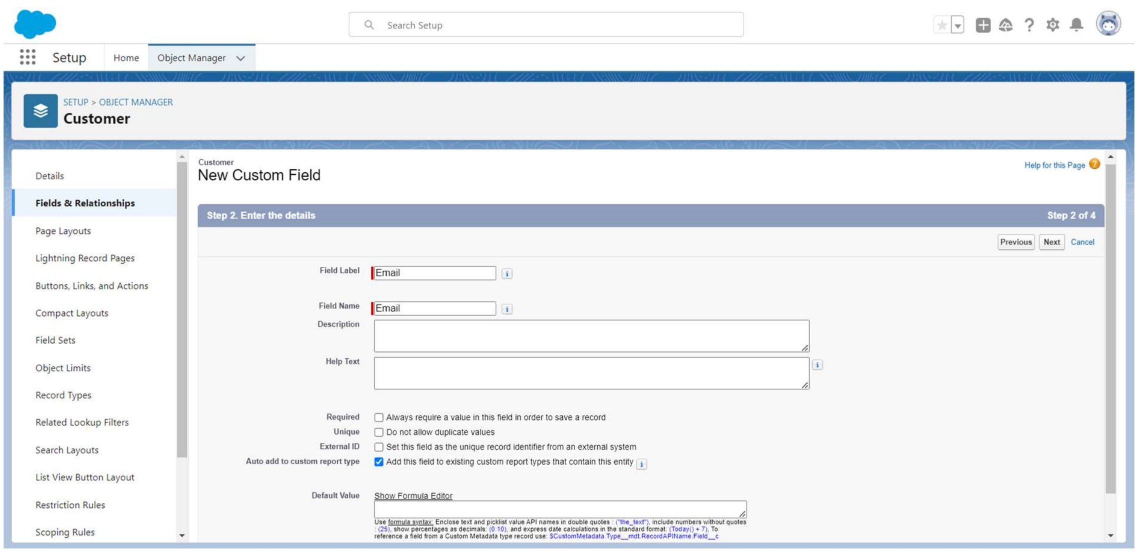
Object: Customer

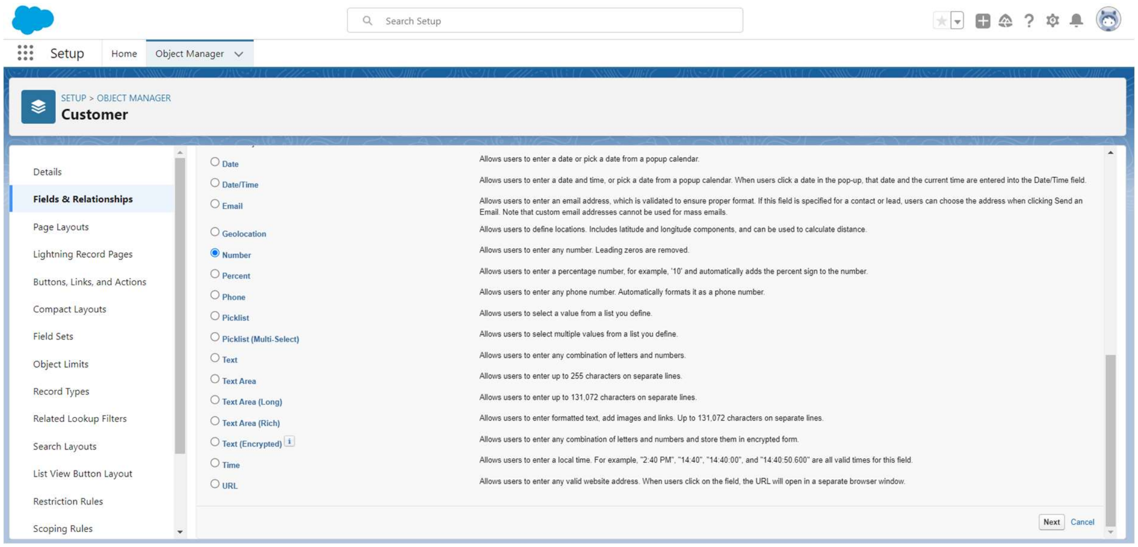
Fields:






Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Customer
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
The relationship field is required on all detail records.
The ownership and sharing of a detail record are determined by the master record.
When a user deletes the master record, all detail records are deleted.
You can create rollup summary fields on the master record to summarize the detail records.
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.
External Lookup Relationship
Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.
Checkbox
Allows users to select a True (checked) or False (unchecked) value.
Currency
Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.
Date
Allows users to enter a date or pick a date from a popup calendar.
Date/Time
Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
Email
Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
Geolocation
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Number
Allows users to enter any number. Leading zeros are removed.
Percent
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone
Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist
Allows users to select a value from a list you define.
Picklist (Multi-Select)
Allows users to select multiple values from a list you define.
Text
Allows users to enter any combination of letters and numbers.
Text Area
Allows users to enter up to 255 characters on separate lines.
Text Area (Long)
Allows users to enter up to 131,072 characters on separate lines.


Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Customer
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Customer
New Custom Field
Help for this Page
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Email
Field Name
Email
Description
Help Text
Required
Always require a value in this field in order to save a record
Unique
Do not allow duplicate values
External ID
Set this field as the unique record identifier from an external system
Auto add to custom report type
Add this field to existing custom report types that contain this entity
Default Value
Show Formula Editor


Search Setup
Setup
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Object Manager
SETUP > OBJECT MANAGER
Customer
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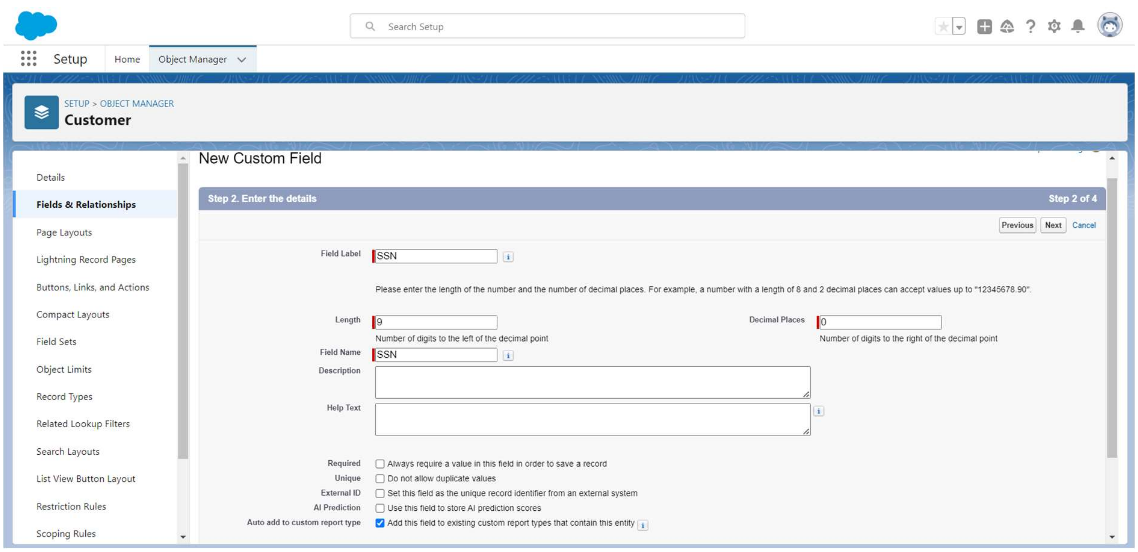
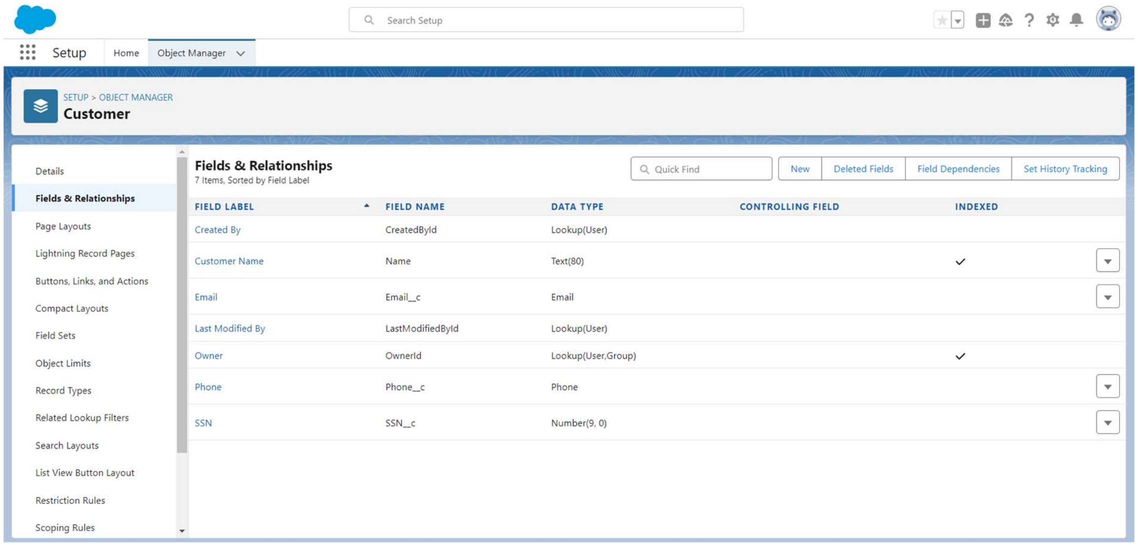
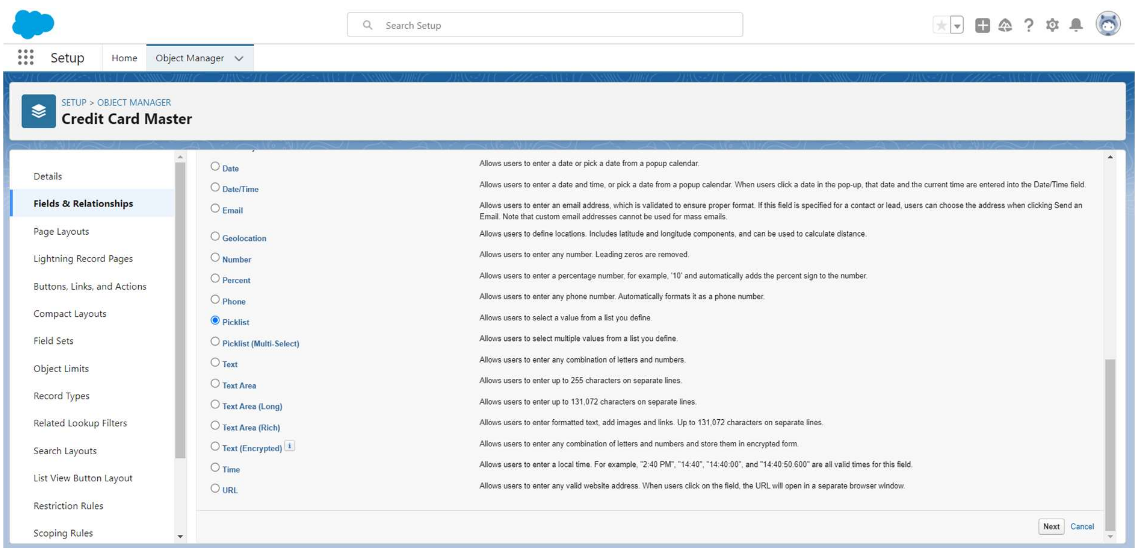
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Date
Allows users to enter a date or pick a date from a popup calendar.
Date/Time
Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
Email
Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
Geolocation
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Number
Allows users to enter any number. Leading zeros are removed.
Percent
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone
Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist
Allows users to select a value from a list you define.
Picklist (Multi-Select)
Allows users to select multiple values from a list you define.
Text
Allows users to enter any combination of letters and numbers.
Text Area
Allows users to enter up to 255 characters on separate lines.
Text Area (Long)
Allows users to enter up to 131,072 characters on separate lines.
Text Area (Rich)
Allows users to enter formatted text, add images and links. Up to 131,072 characters on separate lines.
Text (Encrypted)
Allows users to enter any combination of letters and numbers and store them in encrypted form.
Time
Allows users to enter a local time. For example, "2:40 PM", "14:40", "14:40:00", and "14:40:50.600" are all valid times for this field.
URL
Allows users to enter any valid website address. When users click on the field, the URL will open in a separate browser window.
Next
Cancel

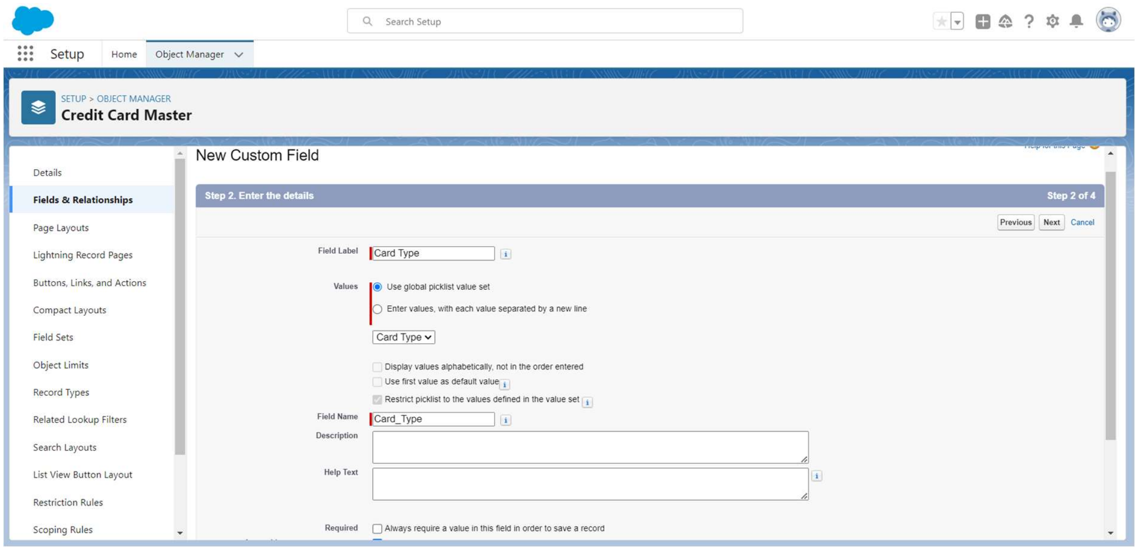

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Customer
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
New Custom Field
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
SSN
Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".
Length
9
Number of digits to the left of the decimal point
Decimal Places
0
Number of digits to the right of the decimal point
Field Name
SSN
Description
Help Text
Required
Always require a value in this field in order to save a record
Unique
Do not allow duplicate values
External ID
Set this field as the unique record identifier from an external system
AI Prediction
Use this field to store AI prediction scores
Auto add to custom report type
Add this field to existing custom report types that contain this entity

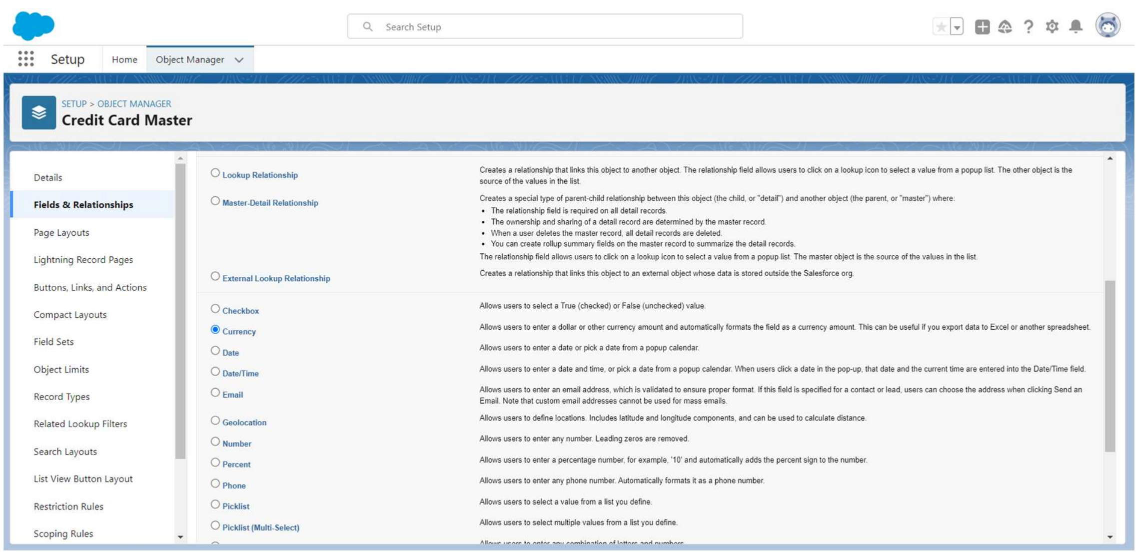


Object – Credit card master

Fields:




Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Credit Card Master
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
New Custom Field
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Card Type
Values
Use global picklist value set
Enter values, with each value separated by a new line
Card Type
Display values alphabetically, not in the order entered
Use first value as default value
Restrict picklist to the values defined in the value set
Field Name
Card_Type
Description
Help Text
Required
Always require a value in this field in order to save a record


Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Credit Card Master
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
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.
The ownership and sharing of a detail record are determined by the master record.
When a user deletes the master record, all detail records are deleted.
You can create rollup summary fields on the master record to summarize the detail records.
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.
External Lookup Relationship
Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.
Checkbox
Allows users to select a True (checked) or False (unchecked) value.
Currency
Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.
Date
Allows users to enter a date or pick a date from a popup calendar.
Date/Time
Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
Email
Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
Geolocation
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Number
Allows users to enter any number. Leading zeros are removed.
Percent
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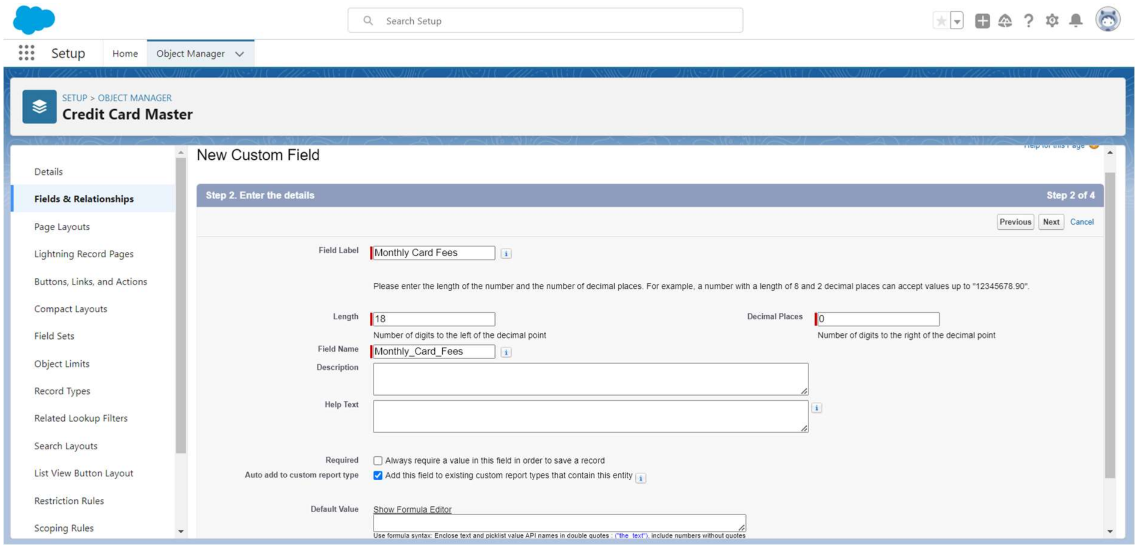
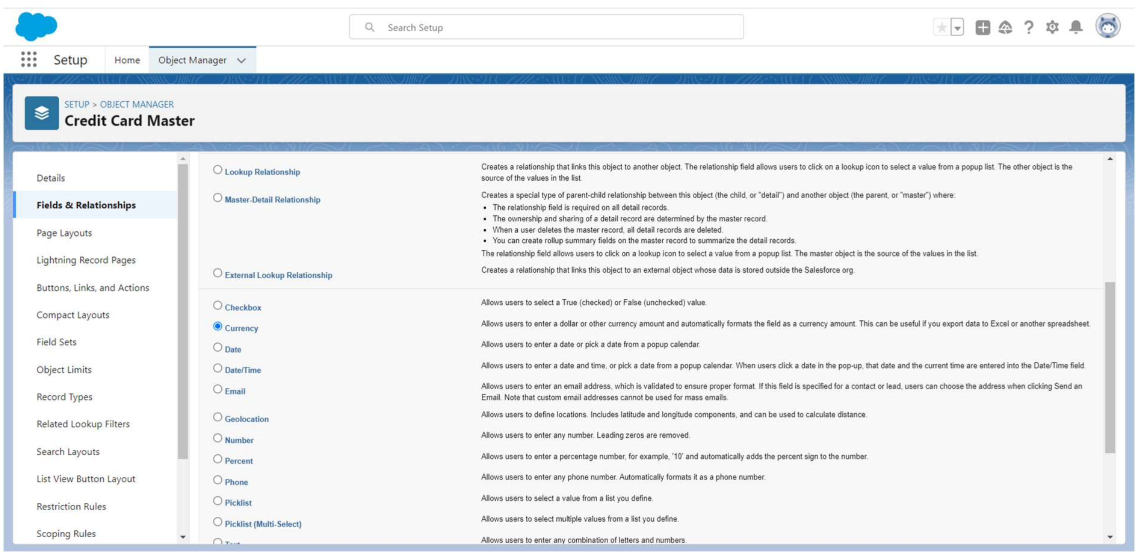

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Credit Card Master
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
New Custom Field
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Monthly Card Fees
Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".
Length
18
Number of digits to the left of the decimal point
Decimal Places
0
Number of digits to the right of the decimal point
Field Name
Monthly_Card_Fees
Description
Help Text
Required
Always require a value in this field in order to save a record
Auto add to custom report type
Add this field to existing custom report types that contain this entity
Default Value
Show Formula Editor


Search Setup
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Home
Object Manager
SETUP > OBJECT MANAGER
Credit Card Master
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
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Date/Time
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Email
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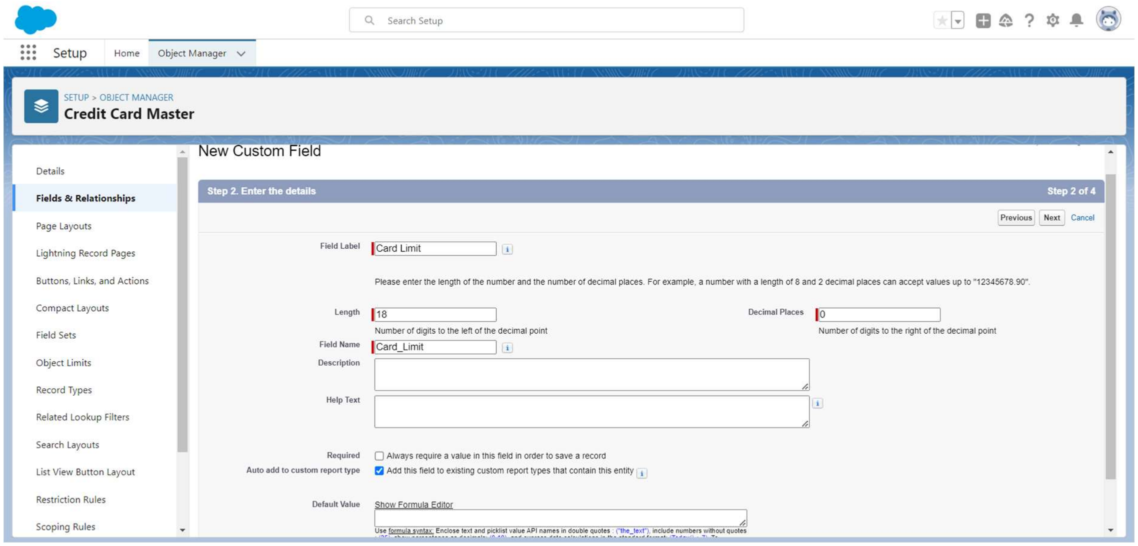
Geolocation
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Number
Allows users to enter any number. Leading zeros are removed.
Percent
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone
Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist
Allows users to select a value from a list you define.
Picklist (Multi-Select)
Allows users to select multiple values from a list you define.
Allows users to enter any combination of letters and numbers.


Search Setup
Setup
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Object Manager
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Credit Card Master
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Lightning Record Pages
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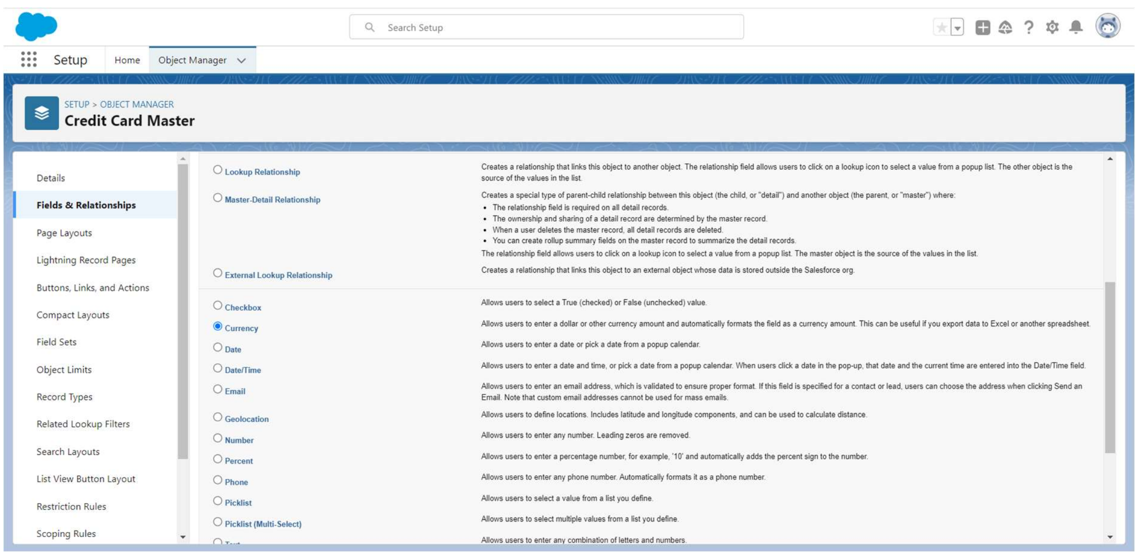
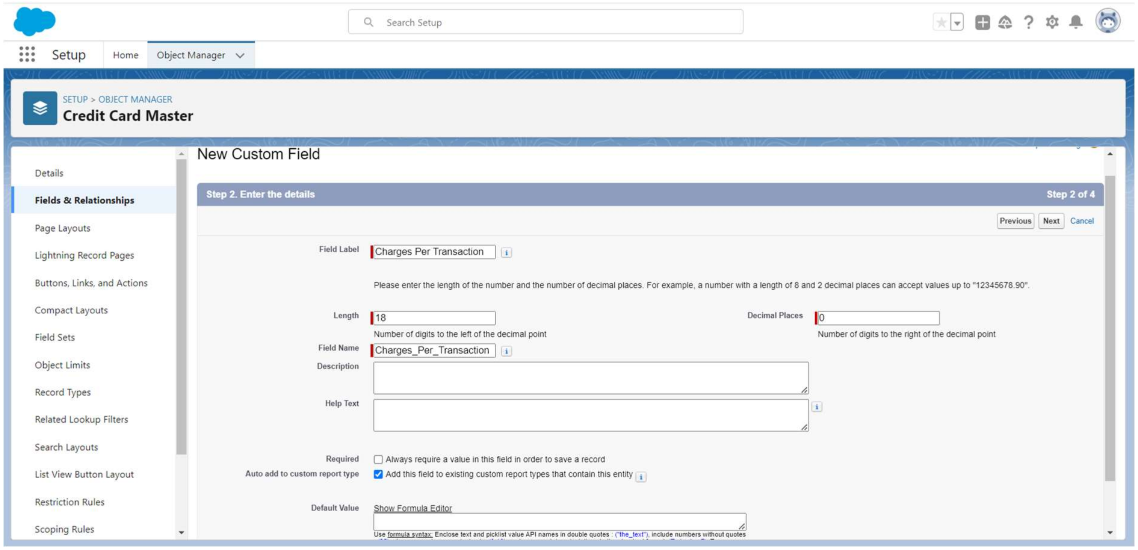
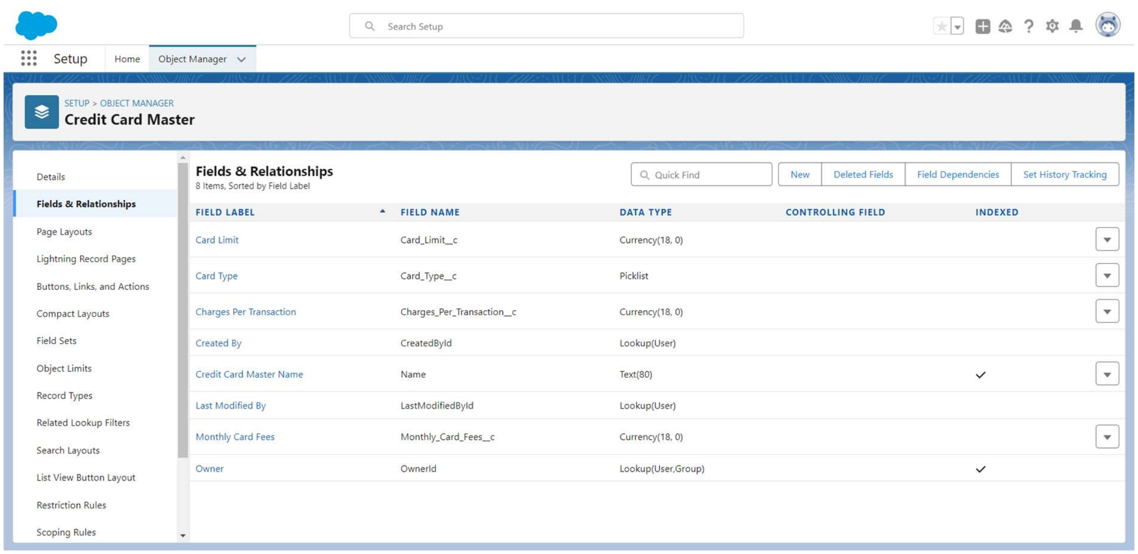
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
New Custom Field
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Card Limit
Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".
Length
18
Number of digits to the left of the decimal point
Decimal Places
0
Number of digits to the right of the decimal point
Field Name
Card_Limit
Description
Help Text
Required
Always require a value in this field in order to save a record
Auto add to custom report type
Add this field to existing custom report types that contain this entity
Default Value
Show Formula Editor

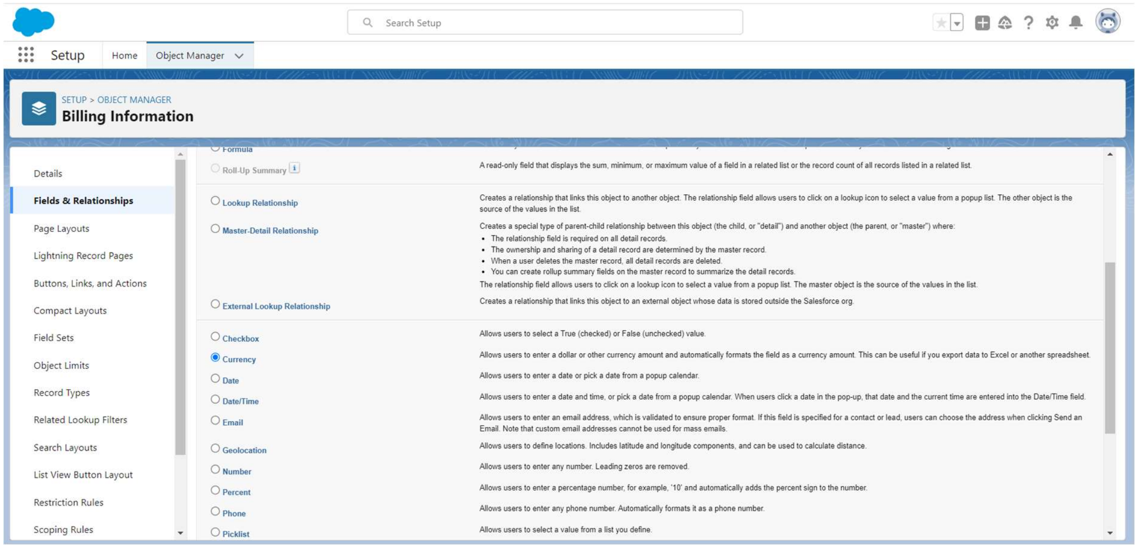

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Credit Card Master
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
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.
The ownership and sharing of a detail record are determined by the master record.
When a user deletes the master record, all detail records are deleted.
You can create rollup summary fields on the master record to summarize the detail records.
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.
External Lookup Relationship
Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.
Checkbox
Allows users to select a True (checked) or False (unchecked) value.
Currency
Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.
Date
Allows users to enter a date or pick a date from a popup calendar.
Date/Time
Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
Email
Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
Geolocation
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Number
Allows users to enter any number. Leading zeros are removed.
Percent
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone
Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist
Allows users to select a value from a list you define.
Picklist (Multi-Select)
Allows users to select multiple values from a list you define.
Allows users to enter any combination of letters and numbers.





Object – Billing Information

Fields:


Search Setup
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Buttons, Links, and Actions
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Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
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:
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When a user deletes the master record, all detail records are deleted.
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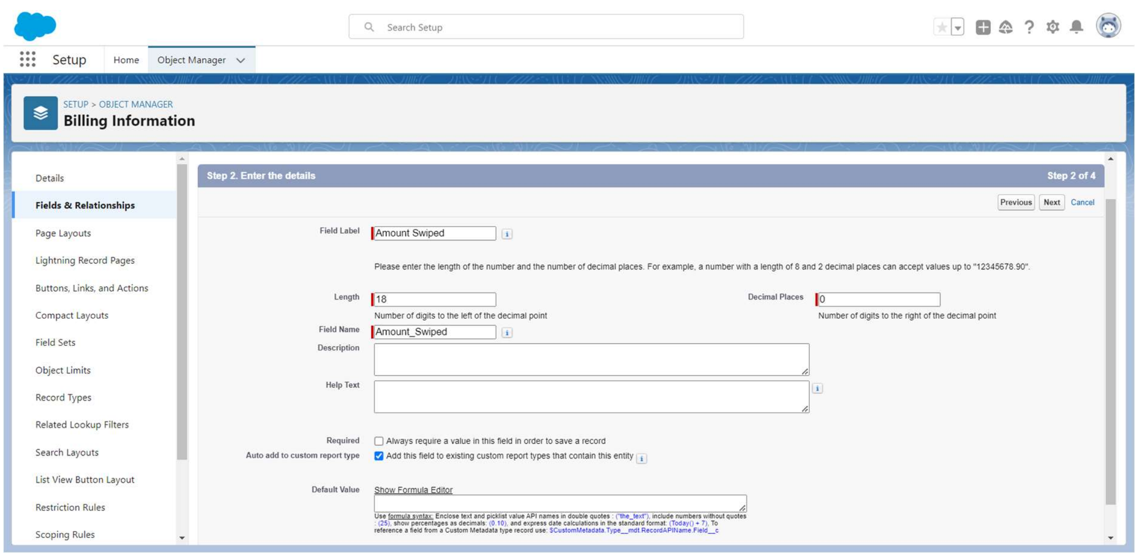
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.
External Lookup Relationship
Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.
Checkbox
Allows users to select a True (checked) or False (unchecked) value.
Currency
Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.
Date
Allows users to enter a date or pick a date from a popup calendar.
Date/Time
Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
Email
Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
Geolocation
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Number
Allows users to enter any number. Leading zeros are removed.
Percent
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone
Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist
Allows users to select a value from a list you define.


Search Setup
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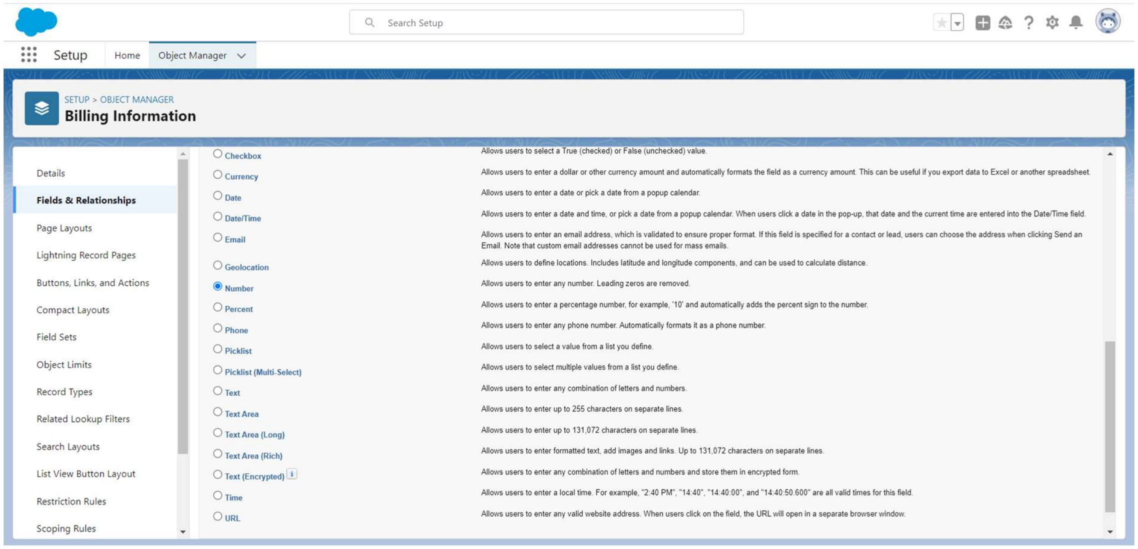
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Amount Swiped
Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".
Length
18
Number of digits to the left of the decimal point
Decimal Places
0
Number of digits to the right of the decimal point
Field Name
Amount_Swiped
Description
Help Text
Required
Always require a value in this field in order to save a record
Auto add to custom report type
Add this field to existing custom report types that contain this entity
Default Value
Show Formula Editor


Search Setup
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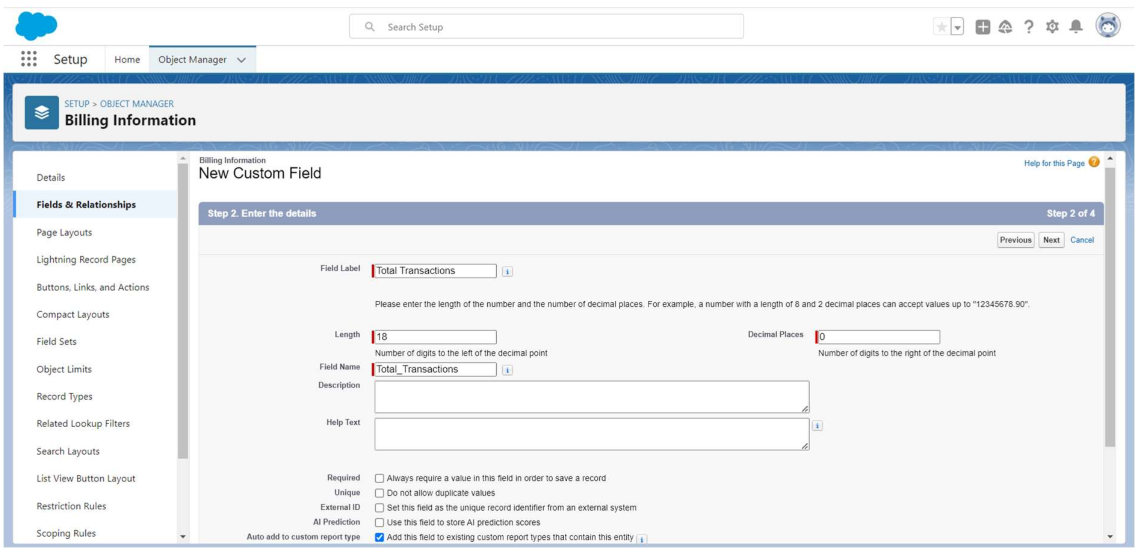
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Checkbox
Allows users to select a True (checked) or False (unchecked) value.
Currency
Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.
Date
Allows users to enter a date or pick a date from a popup calendar.
Date/Time
Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
Email
Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
Geolocation
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Number
Allows users to enter any number. Leading zeros are removed.
Percent
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone
Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist
Allows users to select a value from a list you define.
Picklist (Multi-Select)
Allows users to select multiple values from a list you define.
Text
Allows users to enter any combination of letters and numbers.
Text Area
Allows users to enter up to 255 characters on separate lines.
Text Area (Long)
Allows users to enter up to 131,072 characters on separate lines.
Text Area (Rich)
Allows users to enter formatted text, add images and links. Up to 131,072 characters on separate lines.
Text (Encrypted)
Allows users to enter any combination of letters and numbers and store them in encrypted form.
Time
Allows users to enter a local time. For example, "2:40 PM", "14:40", "14:40:00", and "14:40:50.600" are all valid times for this field.
URL
Allows users to enter any valid website address. When users click on the field, the URL will open in a separate browser window.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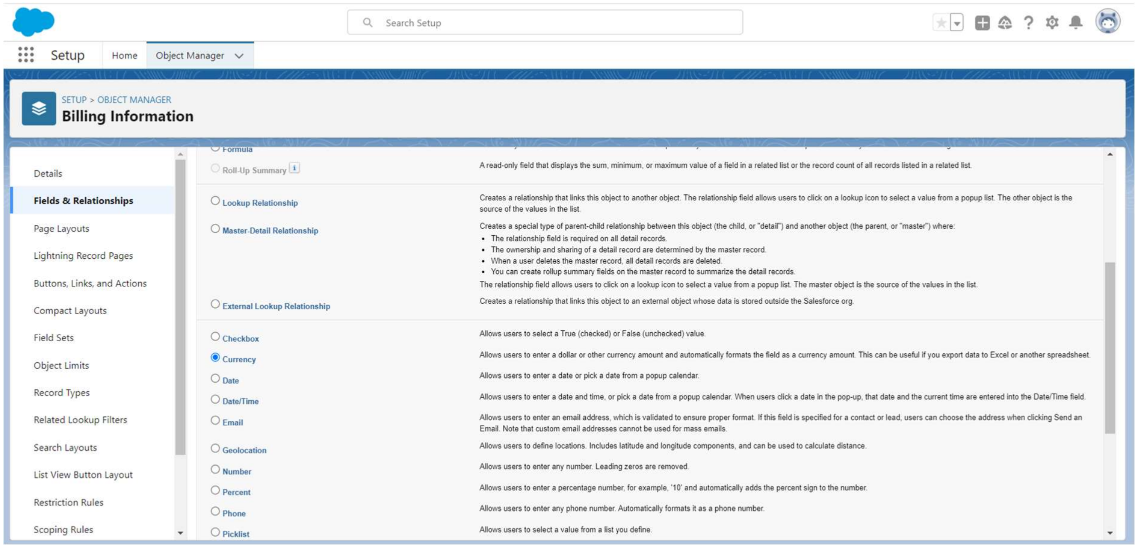
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Custom Field
Help for this Page
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Total Transactions
Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".
Length
18
Number of digits to the left of the decimal point
Decimal Places
0
Number of digits to the right of the decimal point
Field Name
Total_Transactions
Description
Help Text
Required
Always require a value in this field in order to save a record
Unique
Do not allow duplicate values
External ID
Set this field as the unique record identifier from an external system
AI Prediction
Use this field to store AI prediction scores
Auto add to custom report type
Add this field to existing custom report types that contain this entity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Restriction Rules
Scoping Rules
Formula
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.
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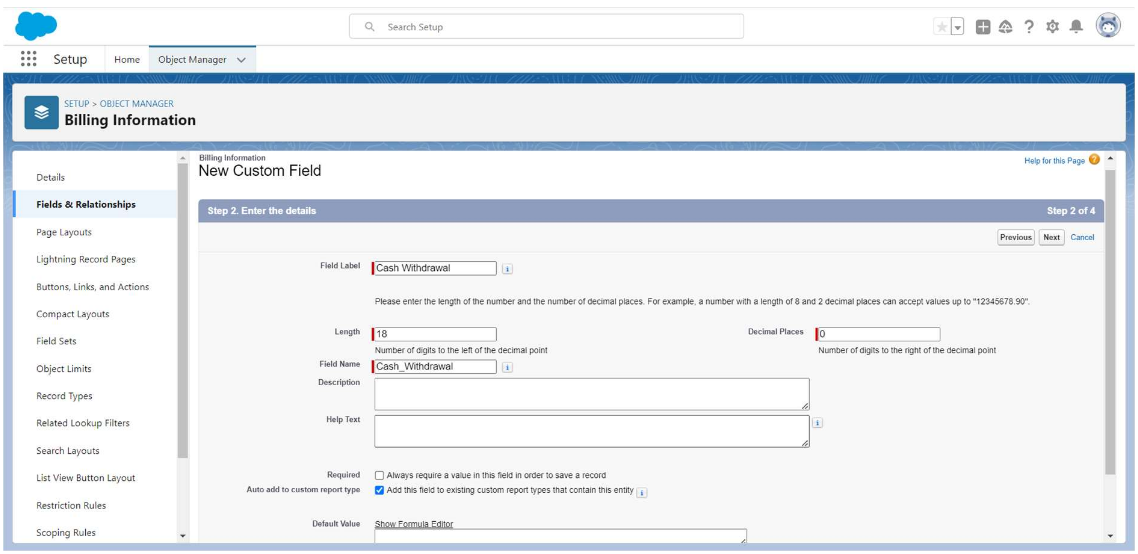
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.
External Lookup Relationship
Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.
Checkbox
Allows users to select a True (checked) or False (unchecked) value.
Currency
Allows users to enter a dollar or other currency amount and automatically formats the field as a currency amount. This can be useful if you export data to Excel or another spreadsheet.
Date
Allows users to enter a date or pick a date from a popup calendar.
Date/Time
Allows users to enter a date and time, or pick a date from a popup calendar. When users click a date in the pop-up, that date and the current time are entered into the Date/Time field.
Email
Allows users to enter an email address, which is validated to ensure proper format. If this field is specified for a contact or lead, users can choose the address when clicking Send an Email. Note that custom email addresses cannot be used for mass emails.
Geolocation
Allows users to define locations. Includes latitude and longitude components, and can be used to calculate distance.
Number
Allows users to enter any number. Leading zeros are removed.
Percent
Allows users to enter a percentage number, for example, '10' and automatically adds the percent sign to the number.
Phone
Allows users to enter any phone number. Automatically formats it as a phone number.
Picklist
Allows users to select a value from a list you define.


Search Setup
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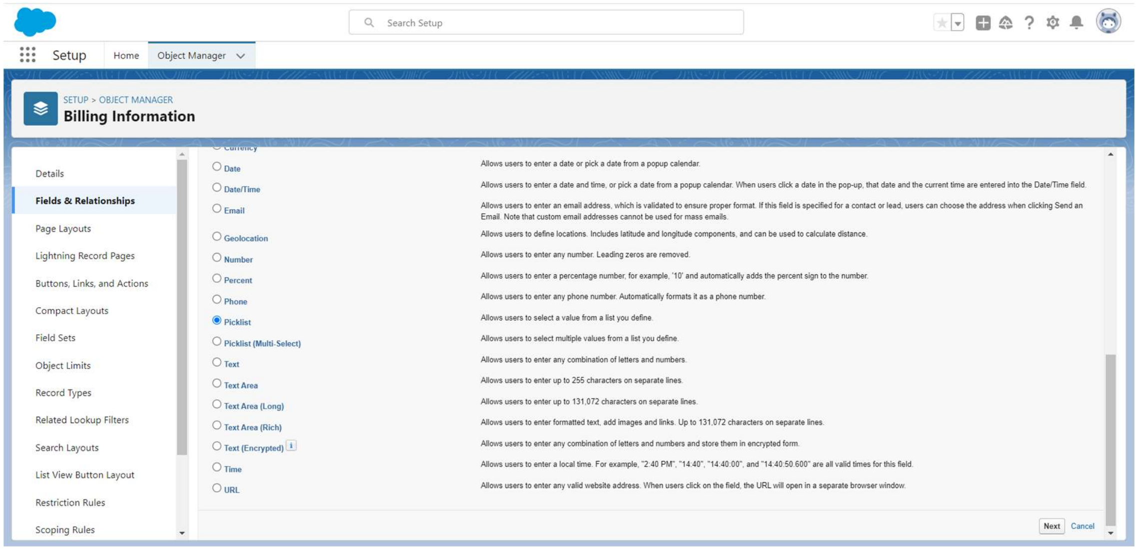
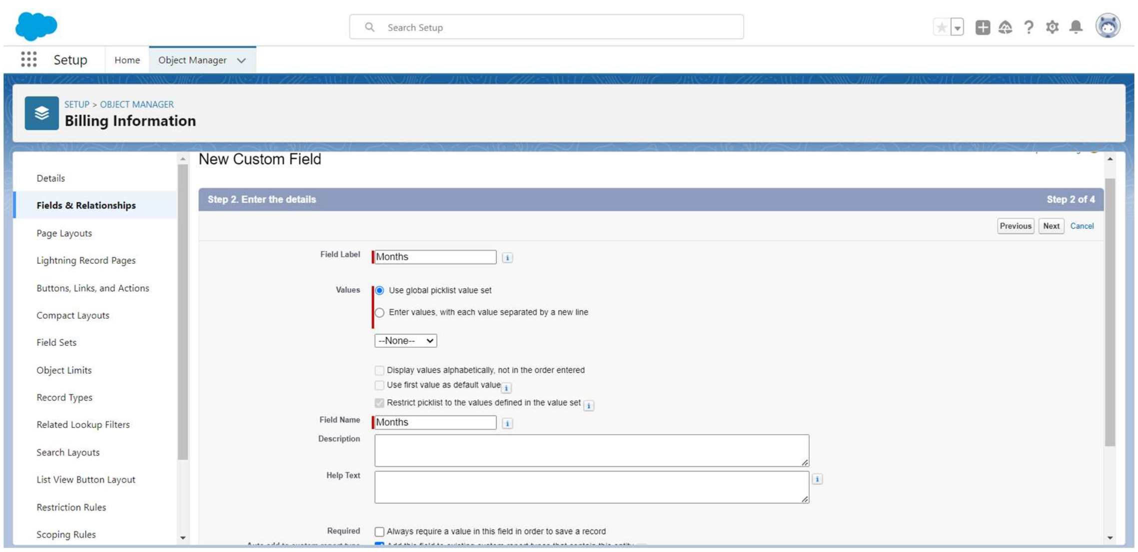
Scoping Rules
Billing Information
New Custom Field
Help for this Page
Step 2. Enter the details
Step 2 of 4
Previous
Next
Cancel
Field Label
Cash Withdrawal
Please enter the length of the number and the number of decimal places. For example, a number with a length of 8 and 2 decimal places can accept values up to "12345678.90".
Length
18
Number of digits to the left of the decimal point
Decimal Places
0
Number of digits to the right of the decimal point
Field Name
Cash_Withdrawal
Description
Help Text
Required
Always require a value in this field in order to save a record
Auto add to custom report type
Add this field to existing custom report types that contain this entity
Default Value
Show Formula Editor



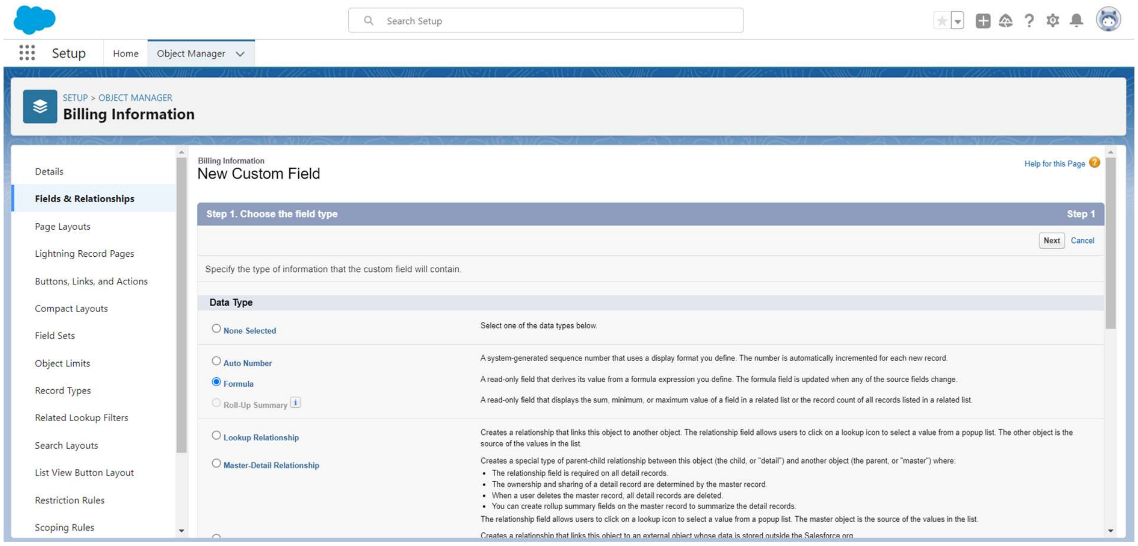


Formula Fields:

Formula Fields are read only fields. Formula Fields are created to calculate the value of a field based on the data present in other fields.

In this application, In Billing Information object, For the following scenarios, formula field needs to be created:

- Start Date and End Date of the bill should be the start and end date of the month selected from Months picklist.
- Due Date should be bill End Date + 10 days.
- Total Outstanding Amount should be summation of Monthly Card Fees, Charges per transaction*Total Transaction per month, Amount Swiped and Cash Withdrawal.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Scoping Rules
Billing Information
New Custom Field
Help for this Page
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:
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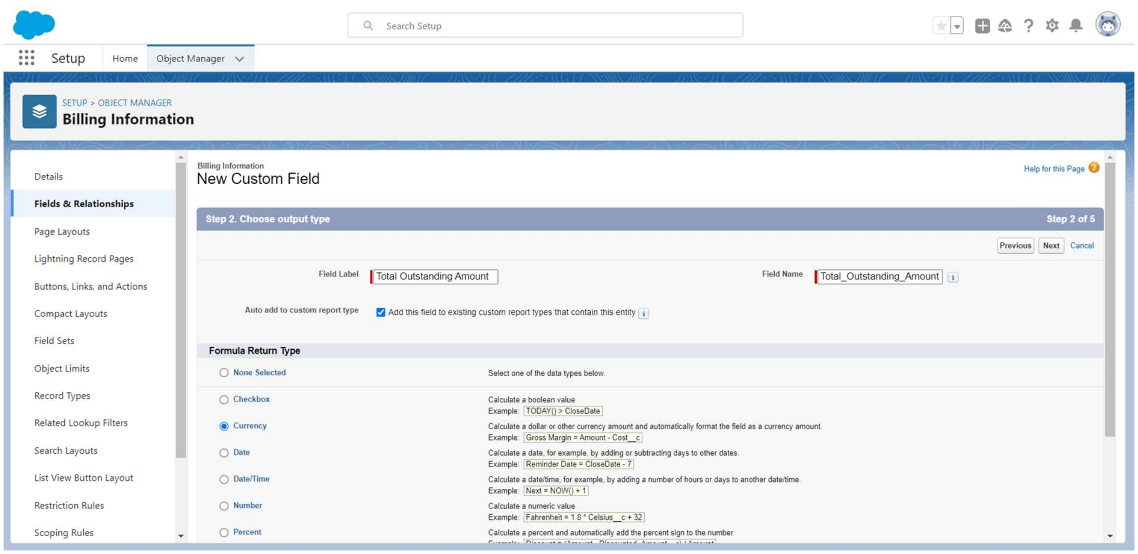
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.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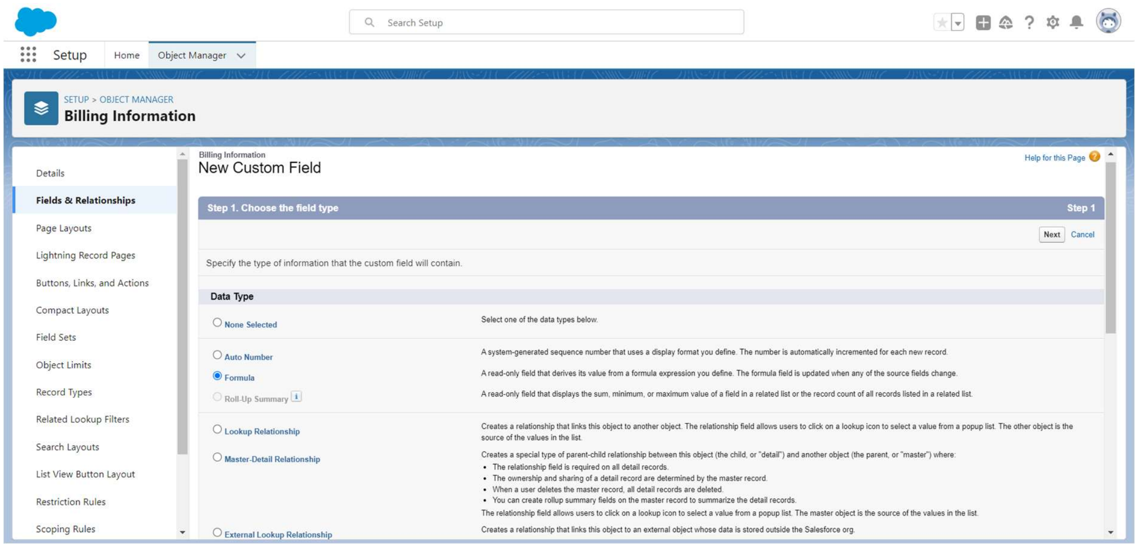
Scoping Rules
Billing Information
New Custom Field
Help for this Page
Step 2. Choose output type
Step 2 of 5
Previous
Next
Cancel
Field Label
Total Outstanding Amount
Field Name
Total_Outstanding_Amount
Auto add to custom report type
Add this field to existing custom report types that contain this entity
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.



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Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Custom Field
Help for this Page
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.
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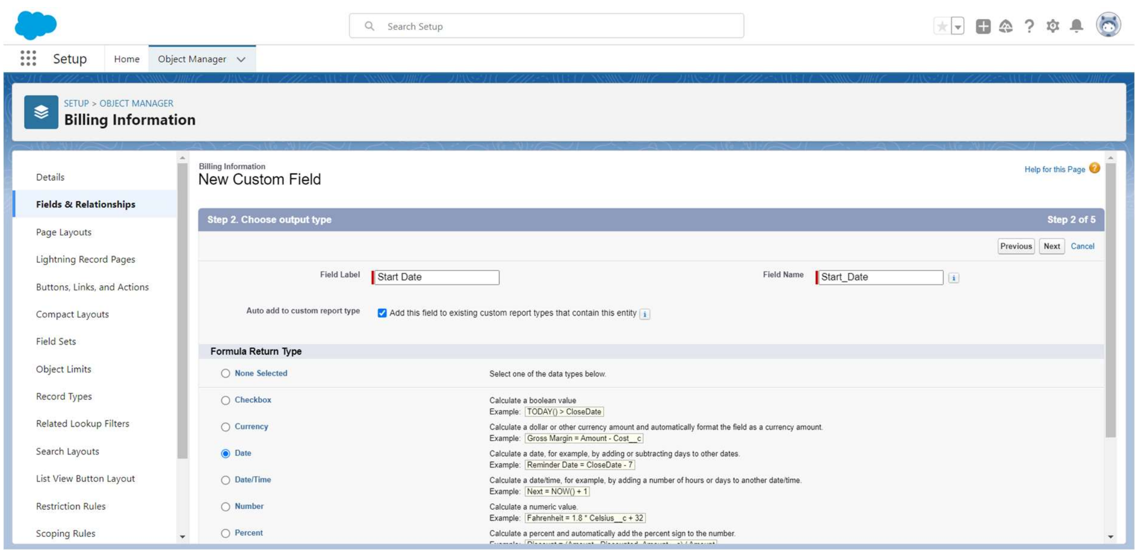
External Lookup Relationship
Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.



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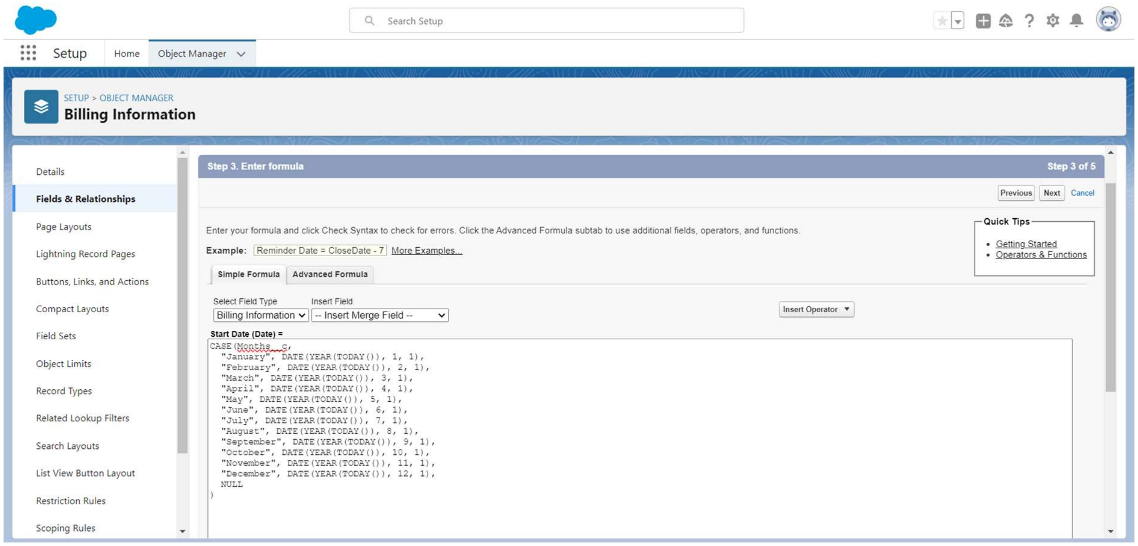
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Custom Field
Help for this Page
Step 2. Choose output type
Step 2 of 5
Previous
Next
Cancel
Field Label
Start Date
Field Name
Start_Date
Auto add to custom report type
Add this field to existing custom report types that contain this entity
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.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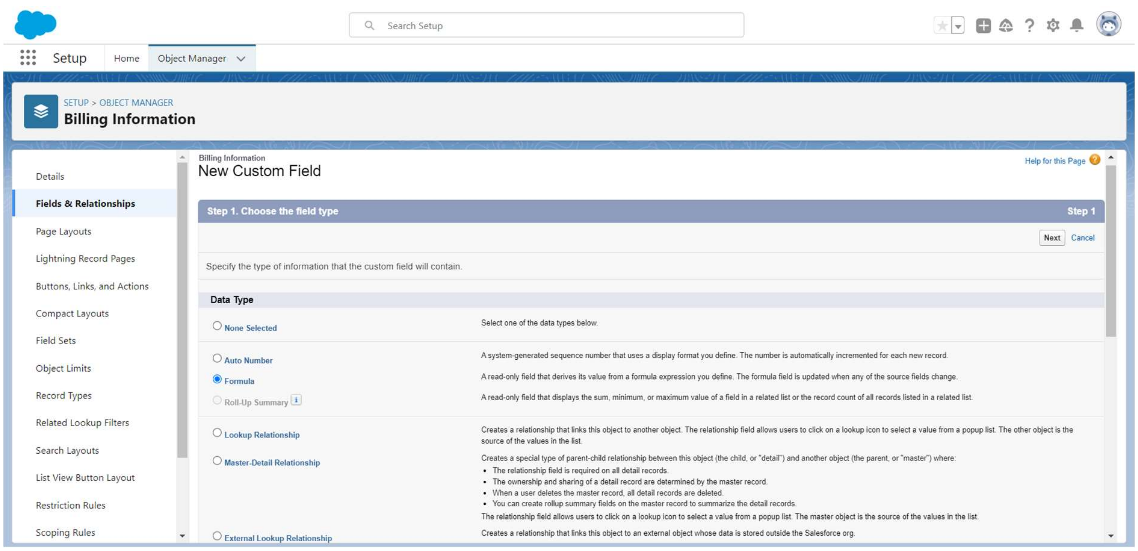
Step 3. Enter formula
Step 3 of 5
Previous
Next
Cancel
Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.
Quick Tips
Getting Started
Operators & Functions
Example: Reminder Date = CloseDate - 7 More Examples...
Simple Formula
Advanced Formula
Select Field Type
Insert Field
Billing Information
-- Insert Merge Field --
Insert Operator
Start Date (Date) =
CASE(Months__c,
"January", DATE(YEAR(TODAY()), 1, 1),
"February", DATE(YEAR(TODAY()), 2, 1),
"March", DATE(YEAR(TODAY()), 3, 1),
"April", DATE(YEAR(TODAY()), 4, 1),
"May", DATE(YEAR(TODAY()), 5, 1),
"June", DATE(YEAR(TODAY()), 6, 1),
"July", DATE(YEAR(TODAY()), 7, 1),
"August", DATE(YEAR(TODAY()), 8, 1),
"September", DATE(YEAR(TODAY()), 9, 1),
"October", DATE(YEAR(TODAY()), 10, 1),
"November", DATE(YEAR(TODAY()), 11, 1),
"December", DATE(YEAR(TODAY()), 12, 1),
NULL
)


Search Setup
Setup
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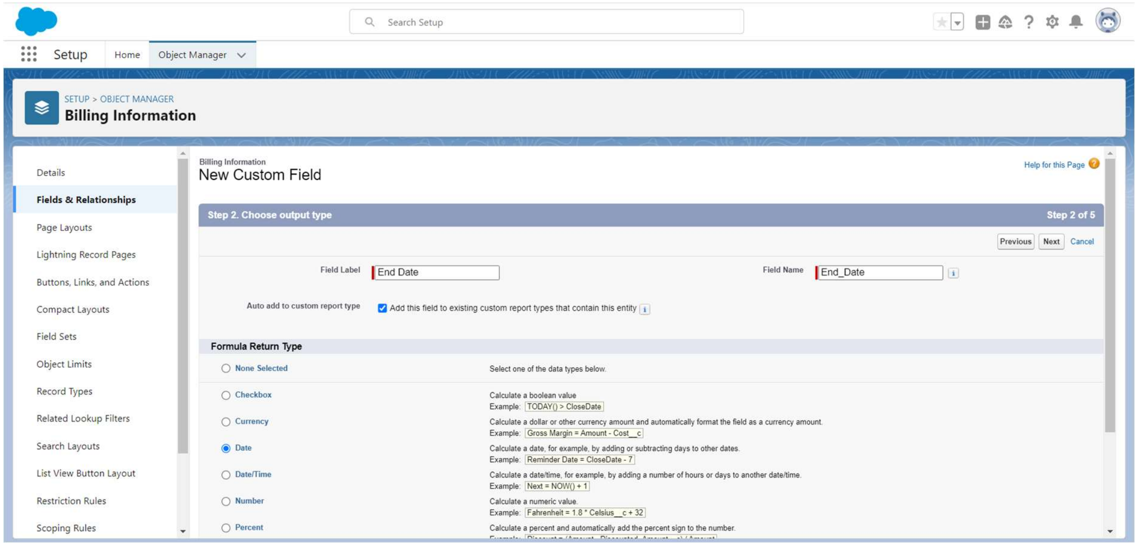
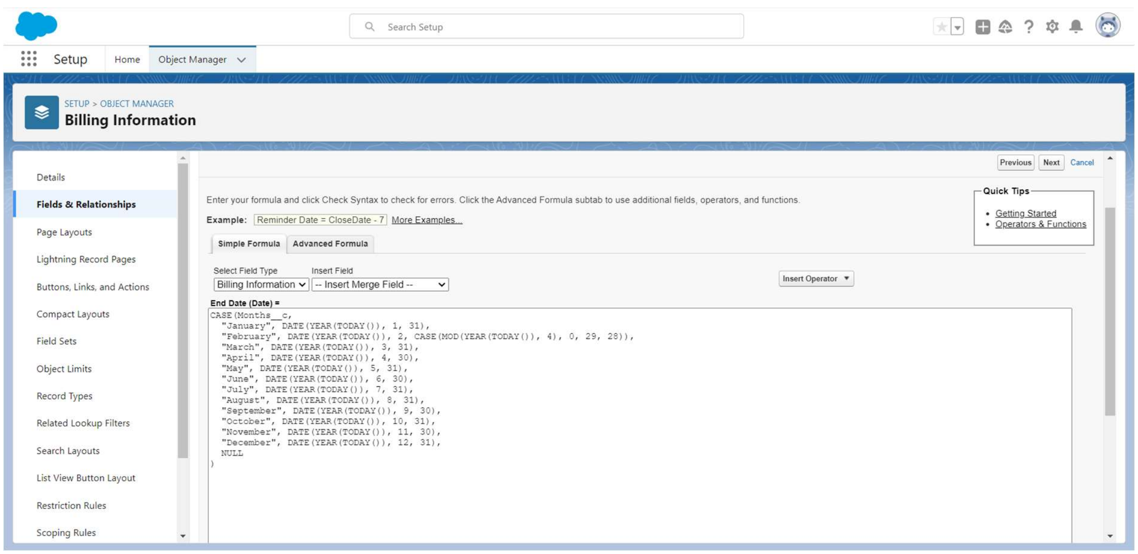
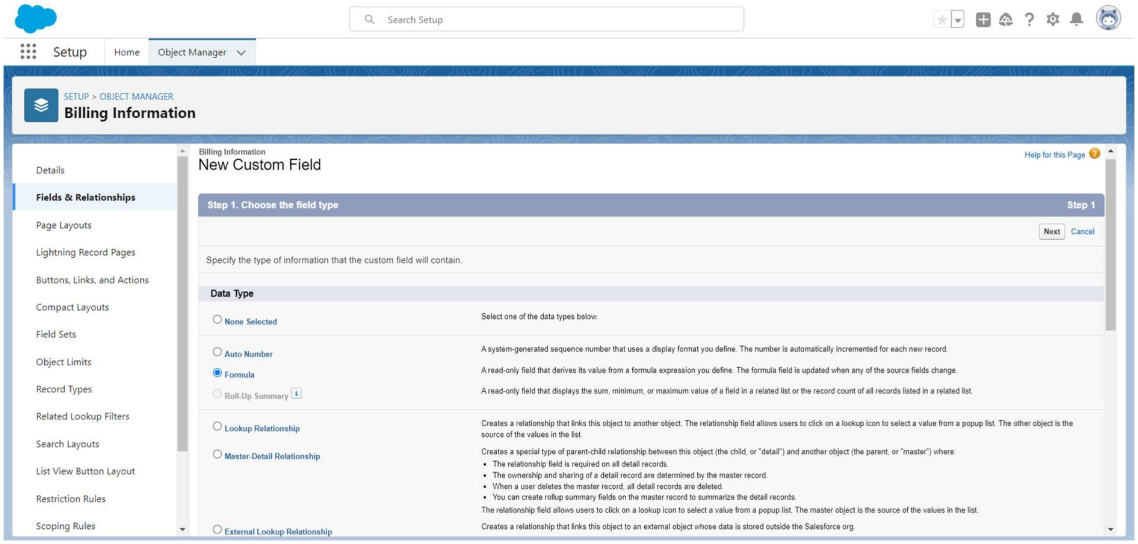
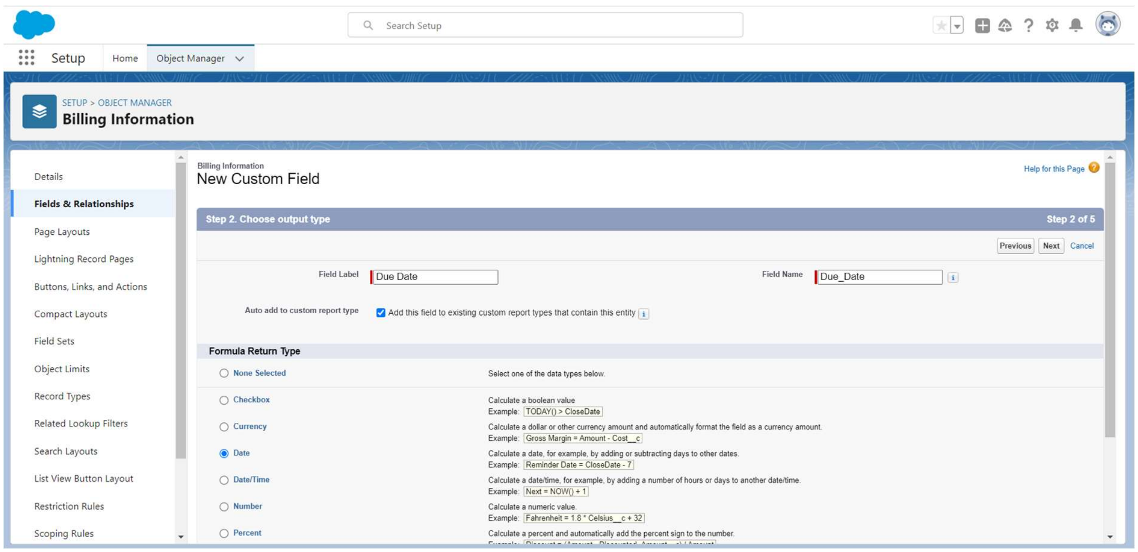
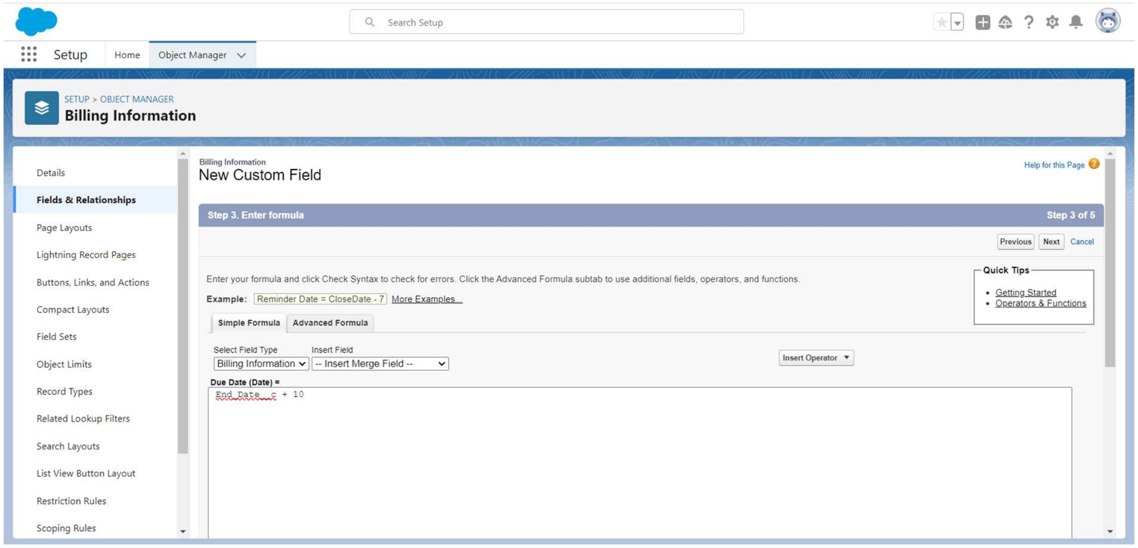
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Custom Field
Help for this Page
Step 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.
The ownership and sharing of a detail record are determined by the master record.
When a user deletes the master record, all detail records are deleted.
You can create rollup summary fields on the master record to summarize the detail records.
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.
External Lookup Relationship
Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.


Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Billing Information
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Custom Field
Help for this Page
Step 2. Choose output type
Step 2 of 5
Previous
Next
Cancel
Field Label
End Date
Field Name
End_Date
Auto add to custom report type
Add this field to existing custom report types that contain this entity
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.


Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Billing Information
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Previous
Next
Cancel
Enter your formula and click Check Syntax to check for errors. Click the Advanced Formula subtab to use additional fields, operators, and functions.
Example: Reminder Date = CloseDate - 7 More Examples...
Quick Tips
Getting Started
Operators & Functions
Simple Formula
Advanced Formula
Select Field Type
Insert Field
Billing Information
-- Insert Merge Field --
Insert Operator
End Date (Date) =
CASE(Months__c,
"January", DATE(YEAR(TODAY()), 1, 31),
"February", DATE(YEAR(TODAY()), 2, CASE(MOD(YEAR(TODAY()), 4), 0, 29, 28)),
"March", DATE(YEAR(TODAY()), 3, 31),
"April", DATE(YEAR(TODAY()), 4, 30),
"May", DATE(YEAR(TODAY()), 5, 31),
"June", DATE(YEAR(TODAY()), 6, 30),
"July", DATE(YEAR(TODAY()), 7, 31),
"August", DATE(YEAR(TODAY()), 8, 31),
"September", DATE(YEAR(TODAY()), 9, 30),
"October", DATE(YEAR(TODAY()), 10, 31),
"November", DATE(YEAR(TODAY()), 11, 30),
"December", DATE(YEAR(TODAY()), 12, 31),
NULL
)


Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Billing Information
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Custom Field
Help for this Page
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.
The ownership and sharing of a detail record are determined by the master record.
When a user deletes the master record, all detail records are deleted.
You can create rollup summary fields on the master record to summarize the detail records.
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.
External Lookup Relationship
Creates a relationship that links this object to an external object whose data is stored outside the Salesforce org.


Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Billing Information
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Custom Field
Help for this Page
Step 2. Choose output type
Step 2 of 5
Previous
Next
Cancel
Field Label
Due Date
Field Name
Due_Date
Auto add to custom report type
Add this field to existing custom report types that contain this entity
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.



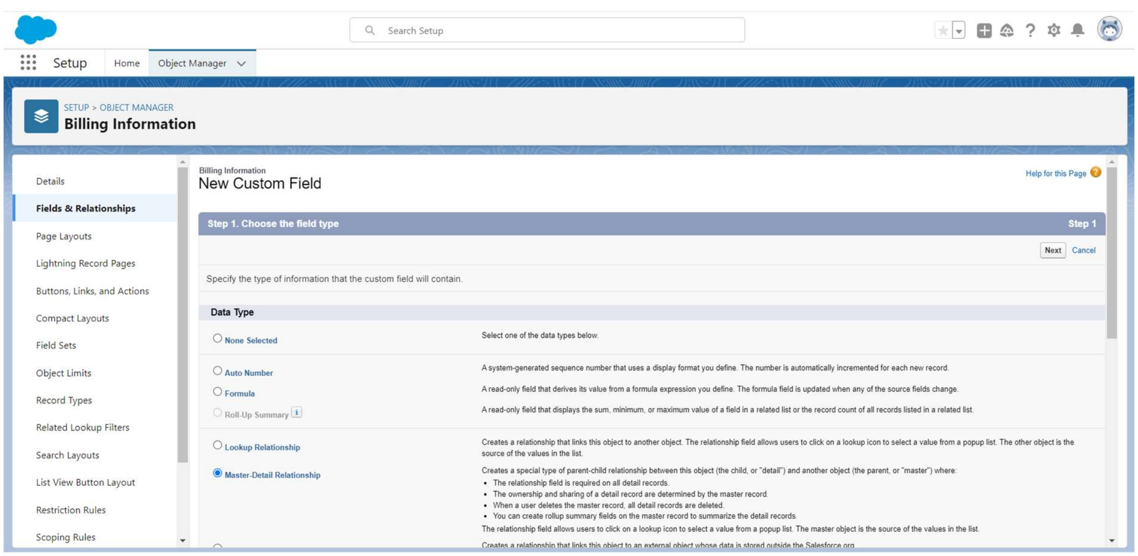
Relationships:

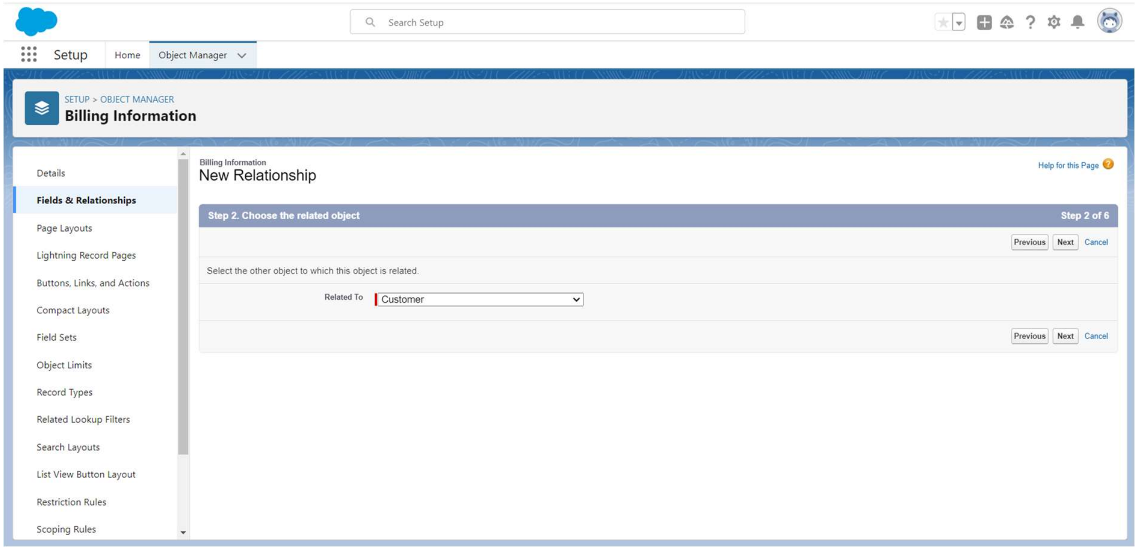
In Credit Card Billing Application, One Customer can have multiple cards and one Card Type (gold, diamond, platinum) can have multiple customers. For this type of scenario, I need to create many to many relationships. In Salesforce, many to many relationships can be achieved by creating a **Junction Object**. In this application, Billing Information is the junction object.

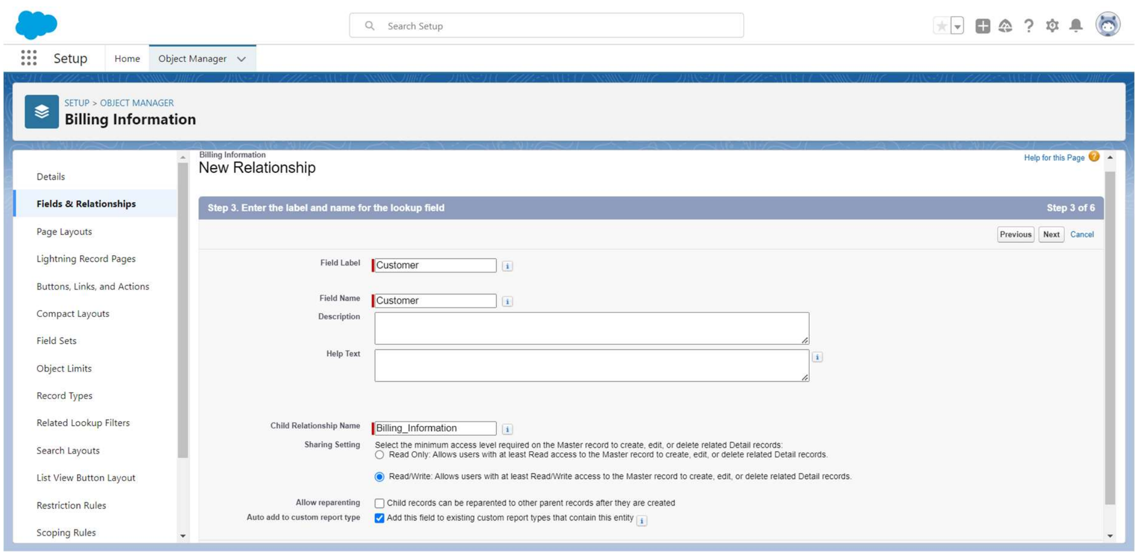
Customer and **Credit Card Master** are **One** sided objects.

Billing Information is the **Many** side object (Junction Object).

Customer and Credit Card **Master Detail Relationship** field will be created Billing Information object.




Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Billing Information
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Relationship
Help for this Page
Step 2. Choose the related object
Step 2 of 6
Previous
Next
Cancel
Select the other object to which this object is related.
Related To
Customer
Previous
Next
Cancel


Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Billing Information
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
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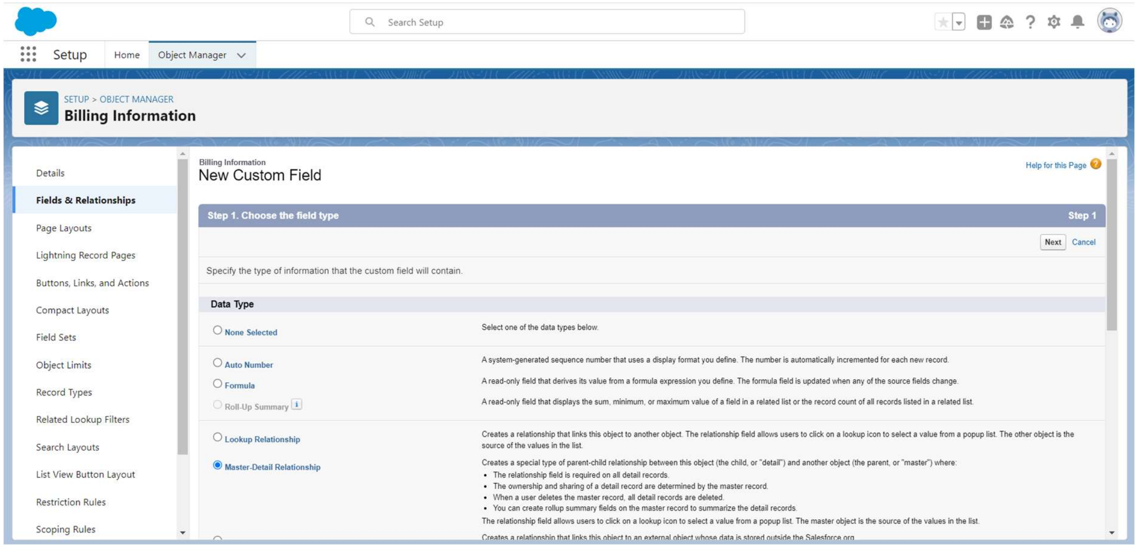
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Relationship
Help for this Page
Step 3. Enter the label and name for the lookup field
Step 3 of 6
Previous
Next
Cancel
Field Label
Customer
Field Name
Customer
Description
Help Text
Child Relationship Name
Billing_Information
Sharing Setting
Select the minimum access level required on the Master record to create, edit, or delete related Detail records:
Read Only: Allows users with at least Read access to the Master record to create, edit, or delete related Detail records.
Read/Write: Allows users with at least Read/Write access to the Master record to create, edit, or delete related Detail records.
Allow reparenting
Child records can be reparented to other parent records after they are created
Auto add to custom report type
Add this field to existing custom report types that contain this entity


Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Billing Information
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Custom Field
Help for this Page
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
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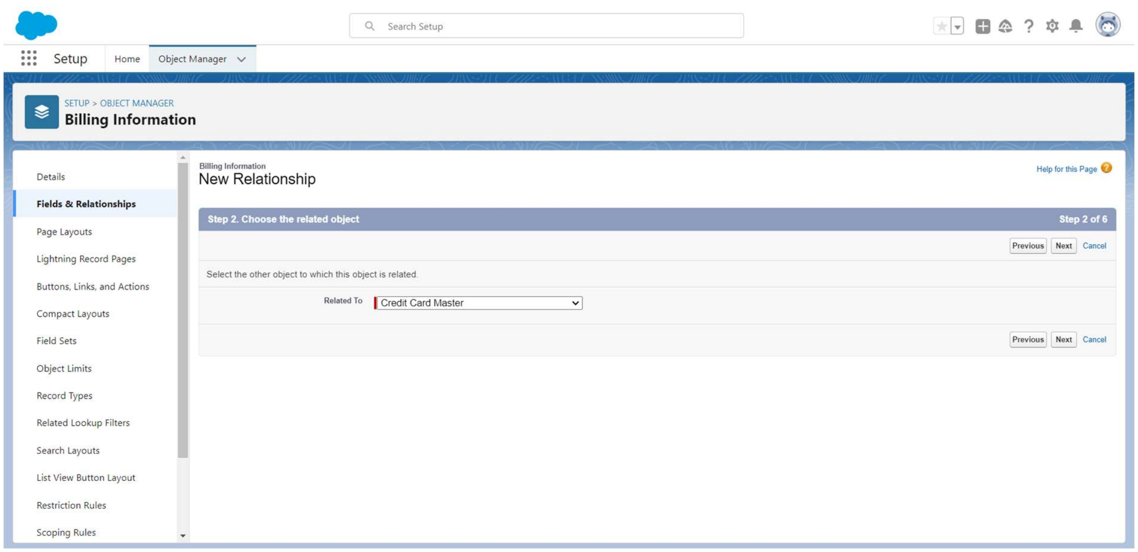
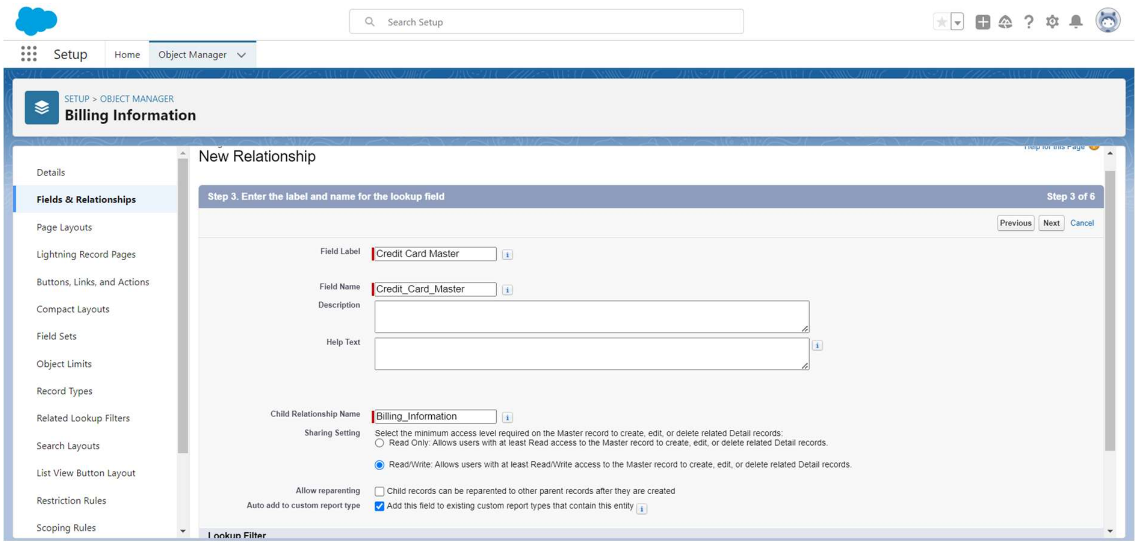
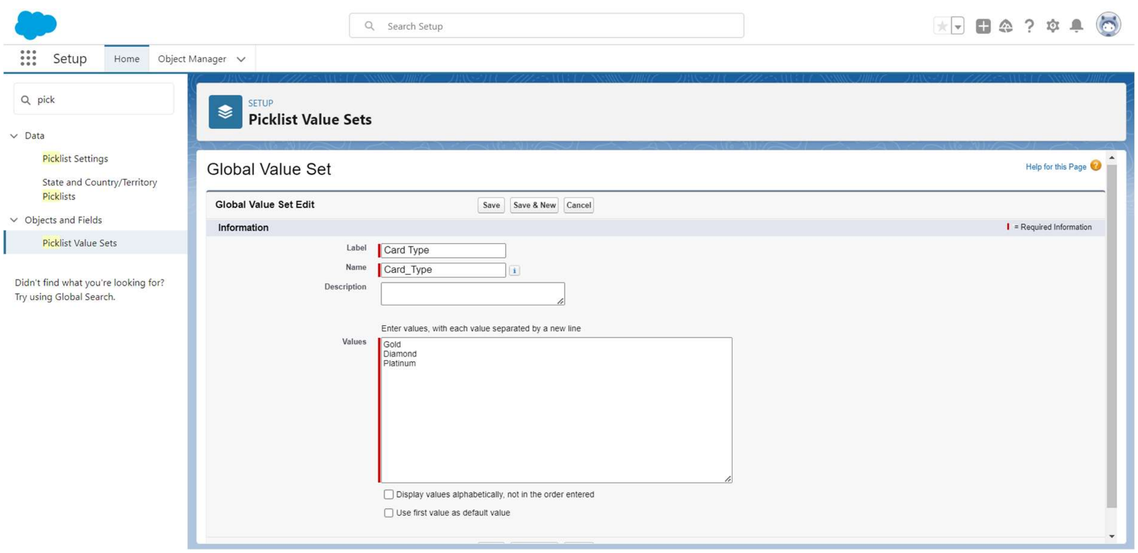
The relationship field allows users to click on a lookup icon to select a value from a popup list. The master object is the source of the values in the list.

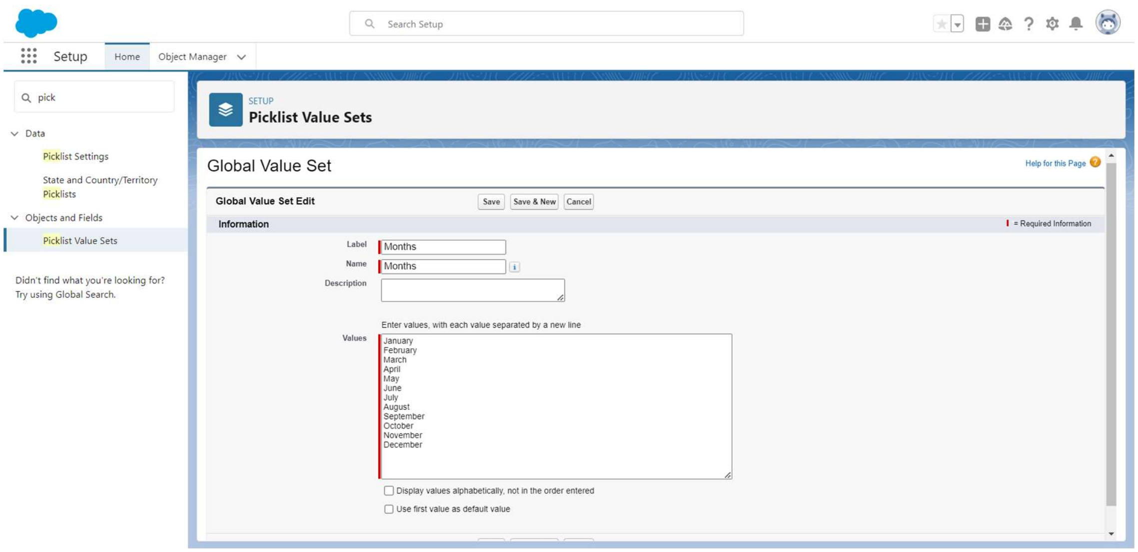

Search Setup
Setup
Home
Object Manager
SETUP > OBJECT MANAGER
Billing Information
Details
Fields & Relationships
Page Layouts
Lightning Record Pages
Buttons, Links, and Actions
Compact Layouts
Field Sets
Object Limits
Record Types
Related Lookup Filters
Search Layouts
List View Button Layout
Restriction Rules
Scoping Rules
Billing Information
New Relationship
Help for this Page
Step 2. Choose the related object
Step 2 of 6
Previous
Next
Cancel
Select the other object to which this object is related.
Related To
Credit Card Master
Previous
Next
Cancel



Global Picklist:

Picklist value sets:

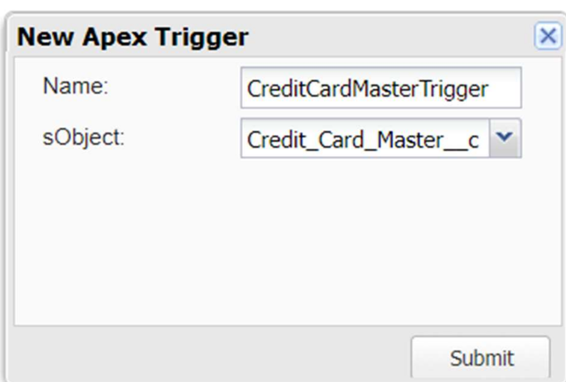


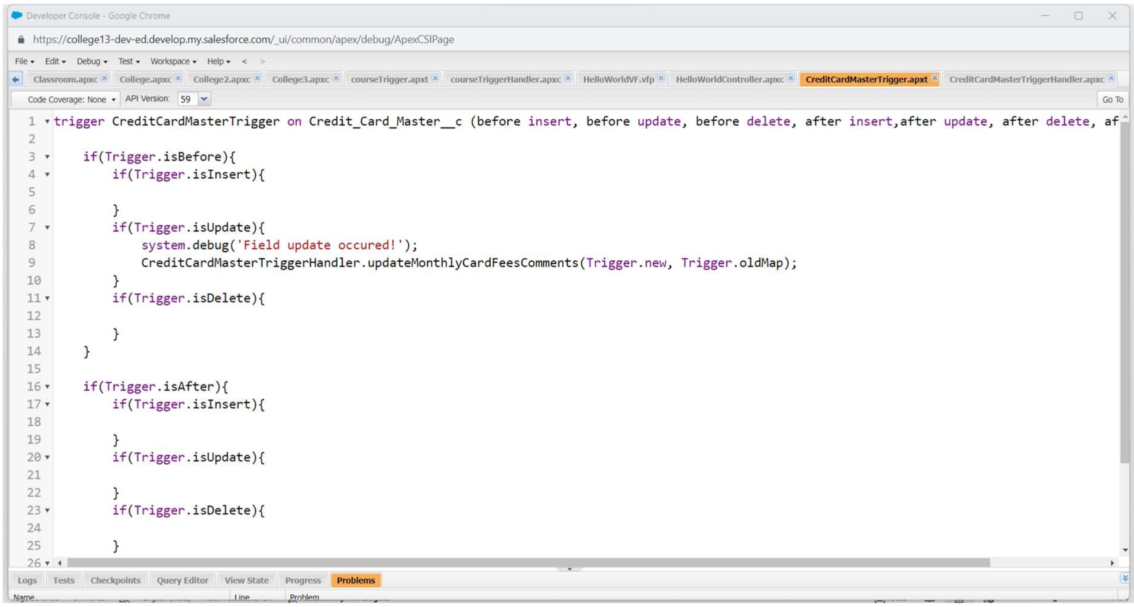


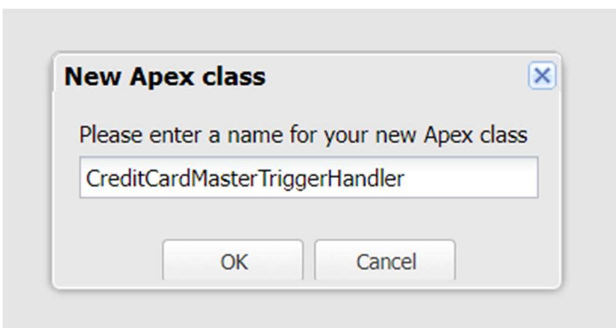
Apex Trigger Implementation:

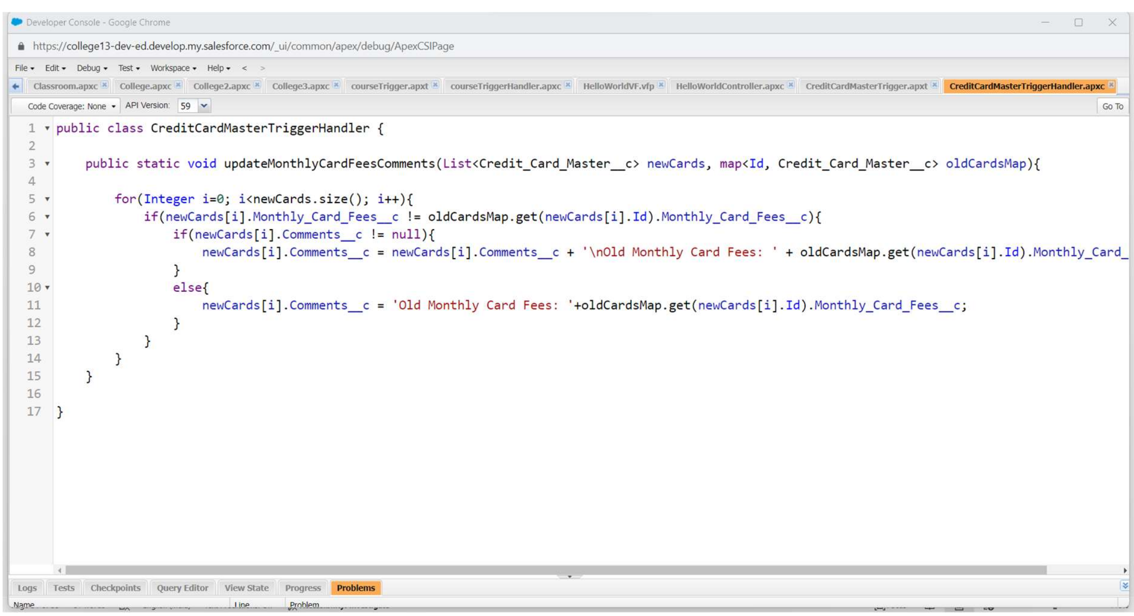
Apex trigger is a set of Apex code that runs before or after data manipulation language (DML) events.

CreditCardMasterTrigger and **CreditCardMasterTriggerHandler** is created for the **scenario:** 'If the Credit Card Master - Monthly Card Fees field data is changed by the administrator, comments field on the Credit Card Master object should capture the old monthly fees, before the new value is updated on the record'.

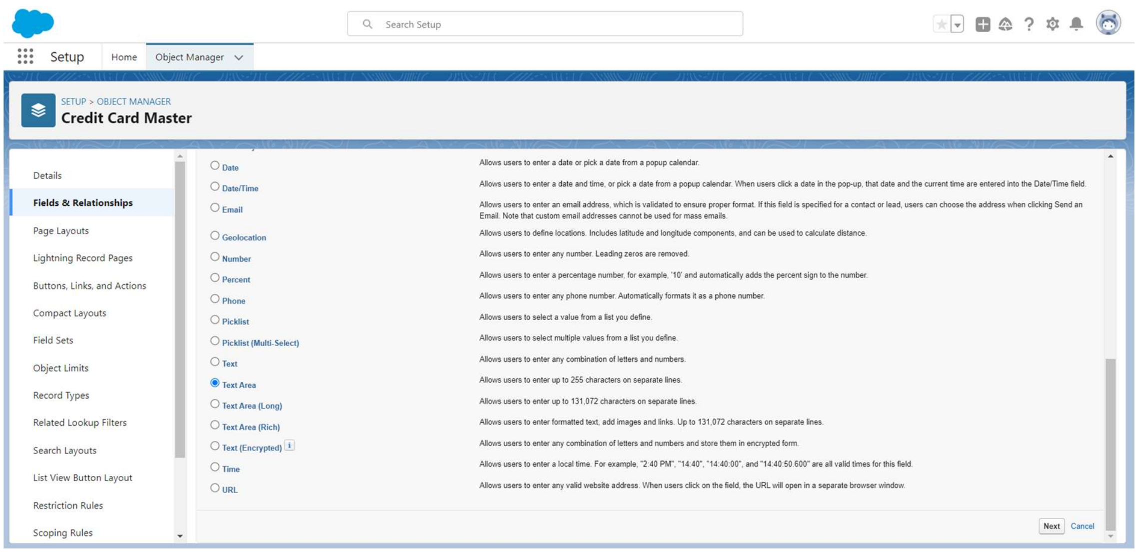


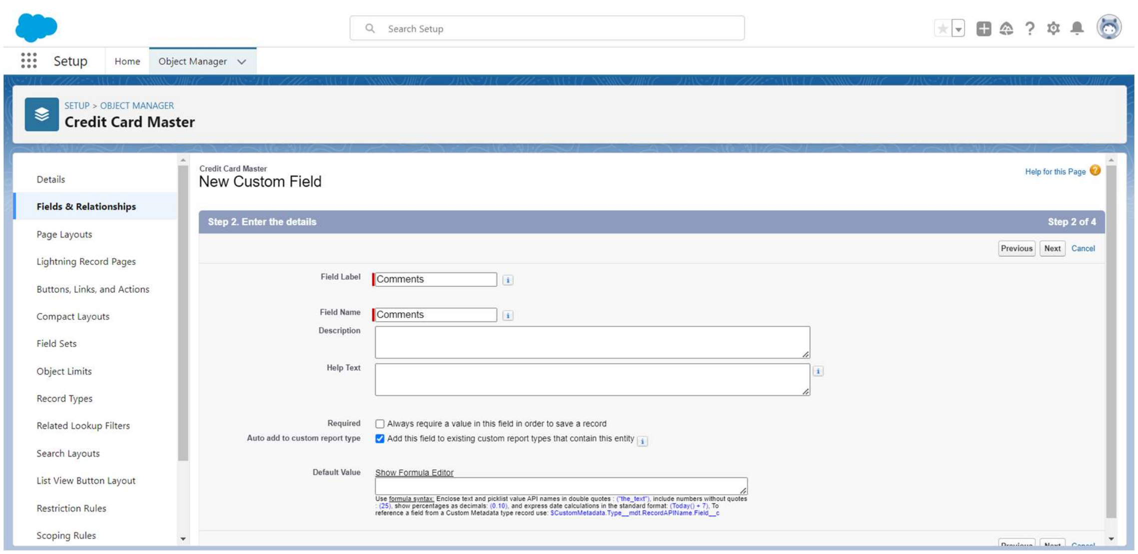

Developer Console - Google Chrome
https://college13-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
trigger CreditCardMasterTrigger on Credit_Card_Master__c (before insert, before update, before delete, after insert,after update, after delete, af
    if(Trigger.isBefore){
        if(Trigger.isInsert){
        }
        if(Trigger.isUpdate){
            system.debug('Field update occured!');
            CreditCardMasterTriggerHandler.updateMonthlyCardFeesComments(Trigger.new, Trigger.oldMap);
        }
        if(Trigger.isDelete){
        }
    }
    if(Trigger.isAfter){
        if(Trigger.isInsert){
        }
        if(Trigger.isUpdate){
        }
        if(Trigger.isDelete){
        }
Logs Tests Checkpoints Query Editor View State Progress Problems

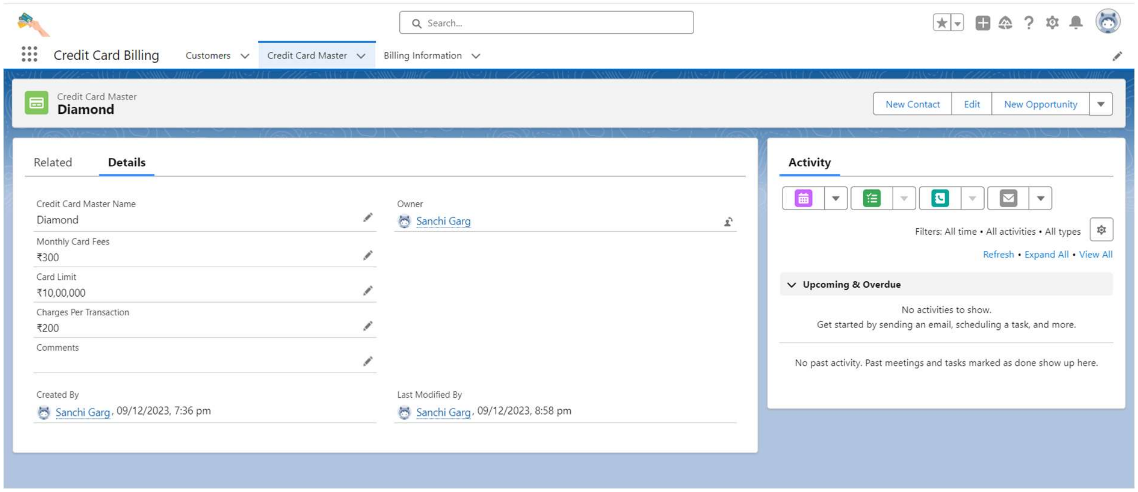

New Apex class
Please enter a name for your new Apex class
CreditCardMasterTriggerHandler
OK
Cancel

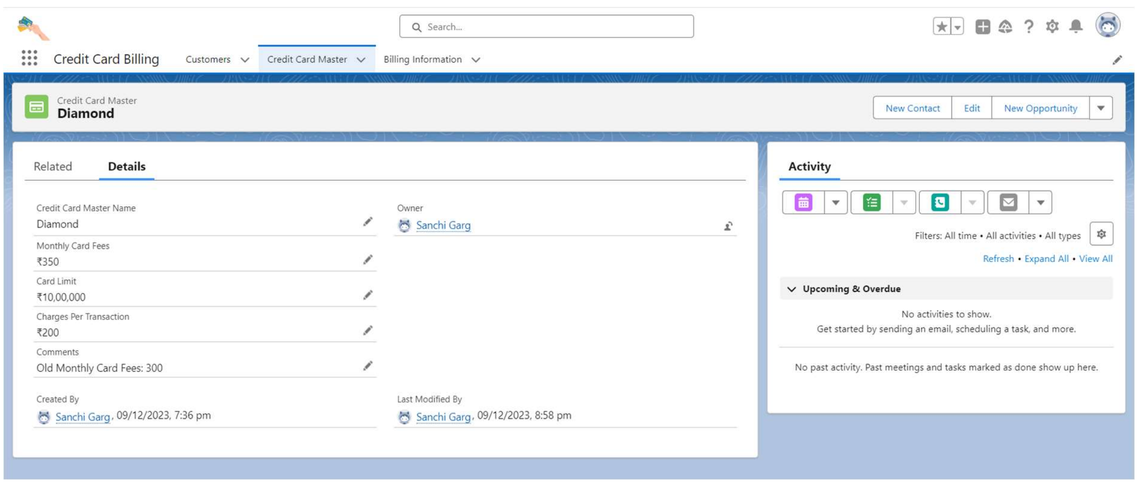

Developer Console - Google Chrome
https://college13-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
public class CreditCardMasterTriggerHandler {
    public static void updateMonthlyCardFeesComments(List<Credit_Card_Master__c> newCards, map<Id, Credit_Card_Master__c> oldCardsMap){
        for(Integer i=0; i<newCards.size(); i++){
            if(newCards[i].Monthly_Card_Fees__c != oldCardsMap.get(newCards[i].Id).Monthly_Card_Fees__c){
                if(newCards[i].Comments__c != null){
                    newCards[i].Comments__c = newCards[i].Comments__c + '\nOld Monthly Card Fees: ' + oldCardsMap.get(newCards[i].Id).Monthly_Card_
                }
                else{
                    newCards[i].Comments__c = 'Old Monthly Card Fees: '+oldCardsMap.get(newCards[i].Id).Monthly_Card_Fees__c;
                }
            }
        }
    }
}
Logs Tests Checkpoints Query Editor View State Progress Problems

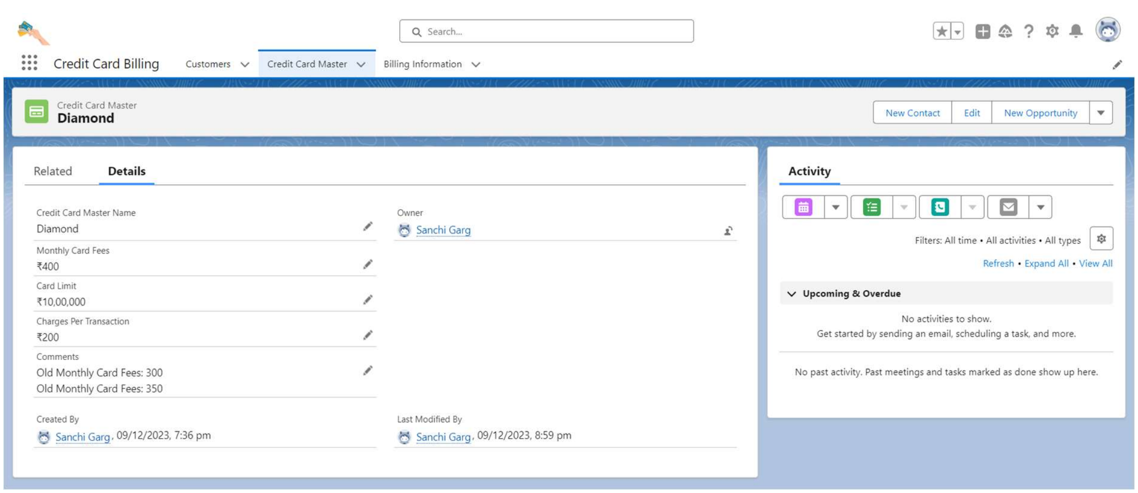
Added comments field in Credit Card Master object:






Search...
Credit Card Billing
Customers
Credit Card Master
Billing Information
Credit Card Master
Diamond
New Contact
Edit
New Opportunity
Related
Details
Credit Card Master Name
Diamond
Monthly Card Fees
₹300
Card Limit
₹10,00,000
Charges Per Transaction
₹200
Comments
Owner
Sanchi Garg
Created By
Sanchi Garg, 09/12/2023, 7:36 pm
Last Modified By
Sanchi Garg, 09/12/2023, 8:58 pm
Activity
Filters: All time • All activities • All types
Refresh • Expand All • View All
Upcoming & Overdue
No activities to show.
Get started by sending an email, scheduling a task, and more.
No past activity. Past meetings and tasks marked as done show up here.

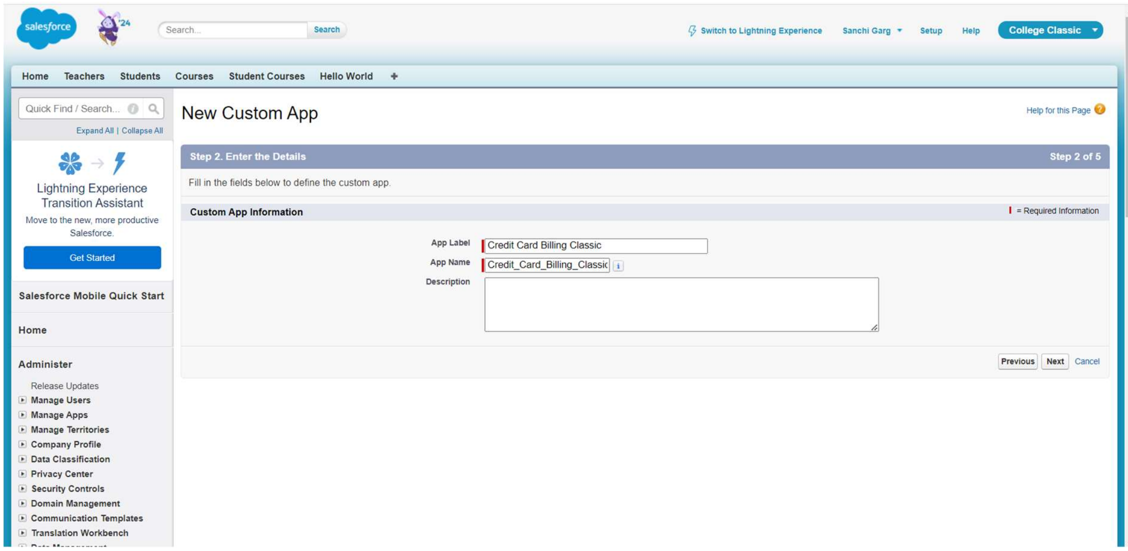

Search...
Credit Card Billing
Customers
Credit Card Master
Billing Information
Credit Card Master
Diamond
New Contact
Edit
New Opportunity
Related
Details
Credit Card Master Name
Diamond
Monthly Card Fees
₹350
Card Limit
₹10,00,000
Charges Per Transaction
₹200
Comments
Old Monthly Card Fees: 300
Owner
Sanchi Garg
Created By
Sanchi Garg, 09/12/2023, 7:36 pm
Last Modified By
Sanchi Garg, 09/12/2023, 8:58 pm
Activity
Filters: All time • All activities • All types
Refresh • Expand All • View All
Upcoming & Overdue
No activities to show.
Get started by sending an email, scheduling a task, and more.
No past activity. Past meetings and tasks marked as done show up here.

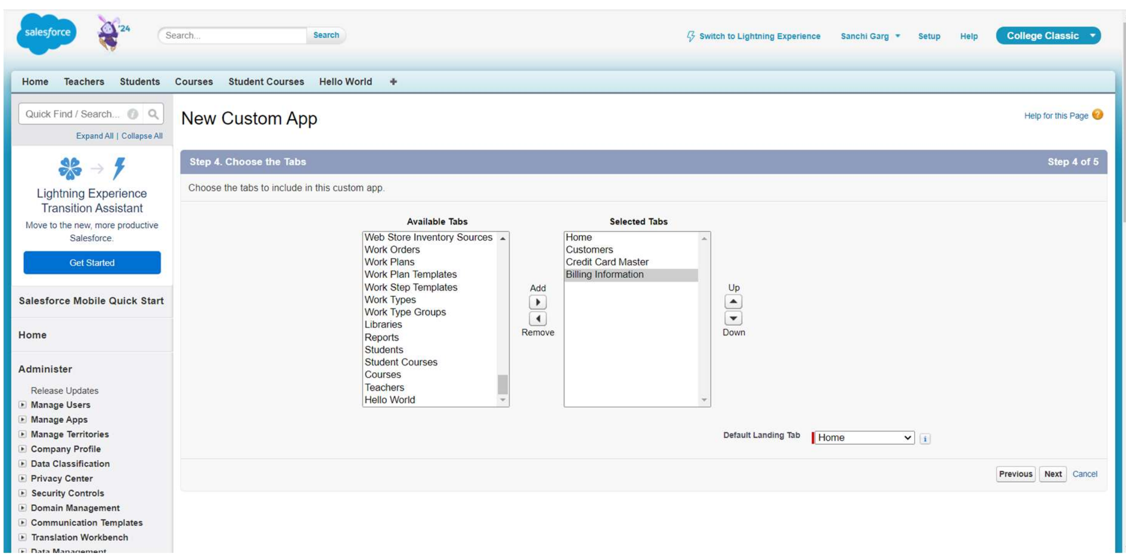

Search...
Credit Card Billing
Customers
Credit Card Master
Billing Information
Credit Card Master
Diamond
New Contact
Edit
New Opportunity
Related
Details
Credit Card Master Name
Diamond
Monthly Card Fees
₹400
Card Limit
₹10,00,000
Charges Per Transaction
₹200
Comments
Old Monthly Card Fees: 300
Old Monthly Card Fees: 350
Owner
Sanchi Garg
Created By
Sanchi Garg, 09/12/2023, 7:36 pm
Last Modified By
Sanchi Garg, 09/12/2023, 8:59 pm
Activity
Filters: All time • All activities • All types
Refresh • Expand All • View All
Upcoming & Overdue
No activities to show.
Get started by sending an email, scheduling a task, and more.
No past activity. Past meetings and tasks marked as done show up here.

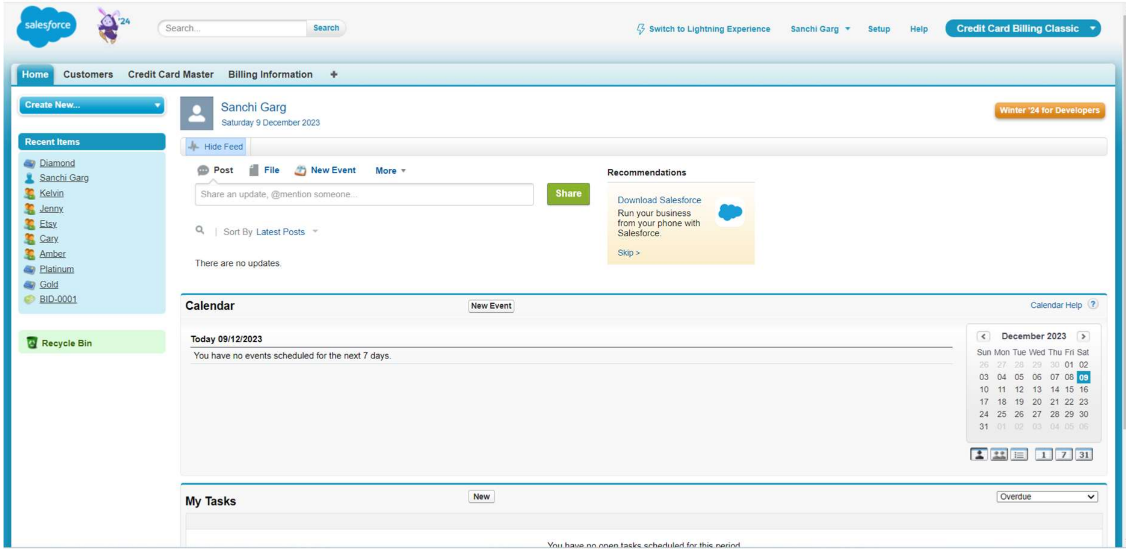
Visualforce Page Creation:

Visualforce is Markup language that allows you to describe the User Interface which can live on your Salesforce Platform. Visualforce pages consist of two elements: Visualforce markup, and a controller. It is also used to create VF Tabs.

To create the Visualforce tab, firstly, I need to create a classic custom application **Credit Card Billing Classic** by switching to Salesforce Classic platform.



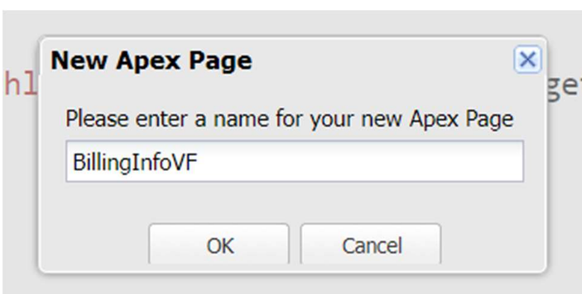


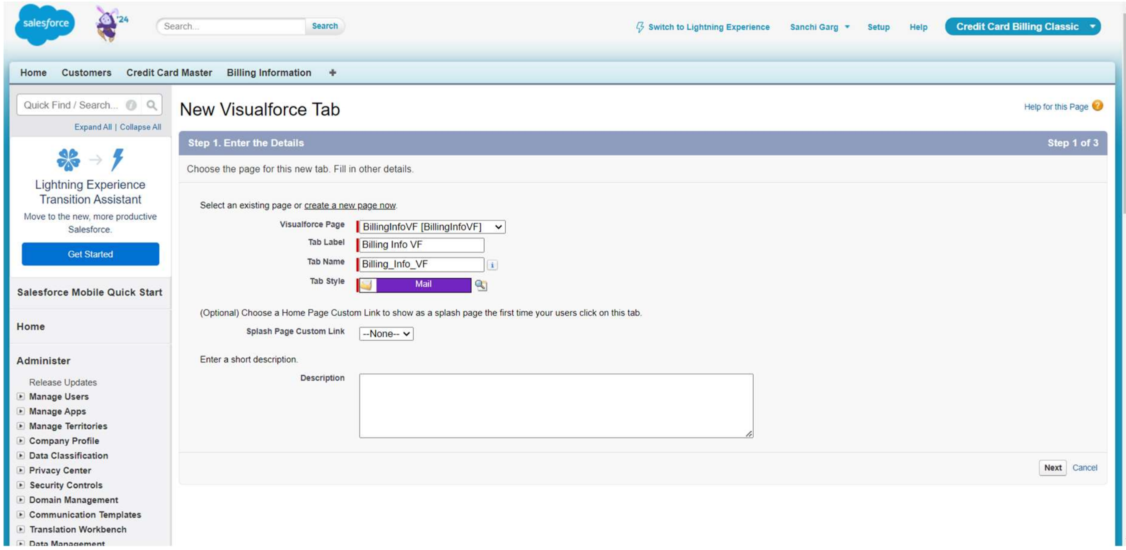


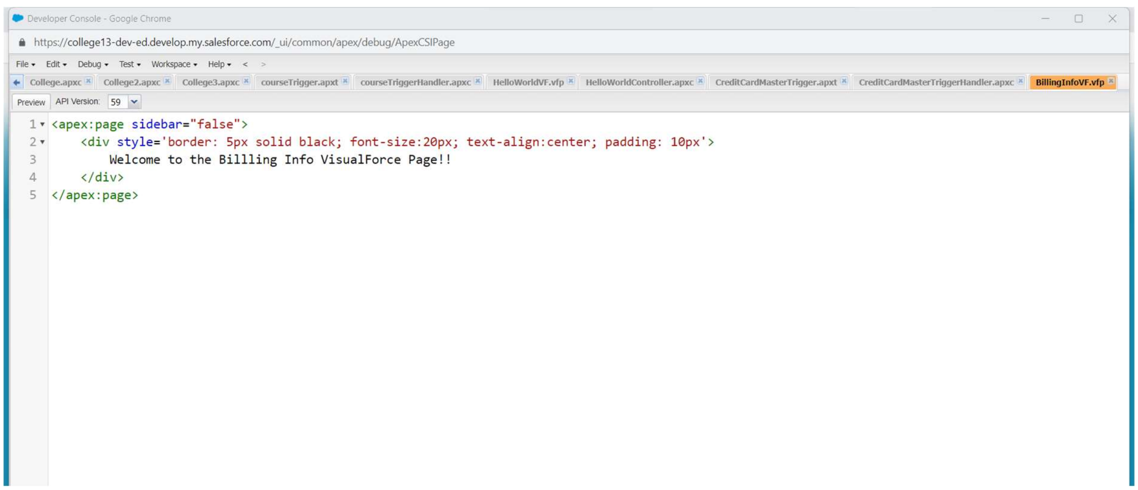
Created Visualforce page and the Controller apex class for the following scenarios:

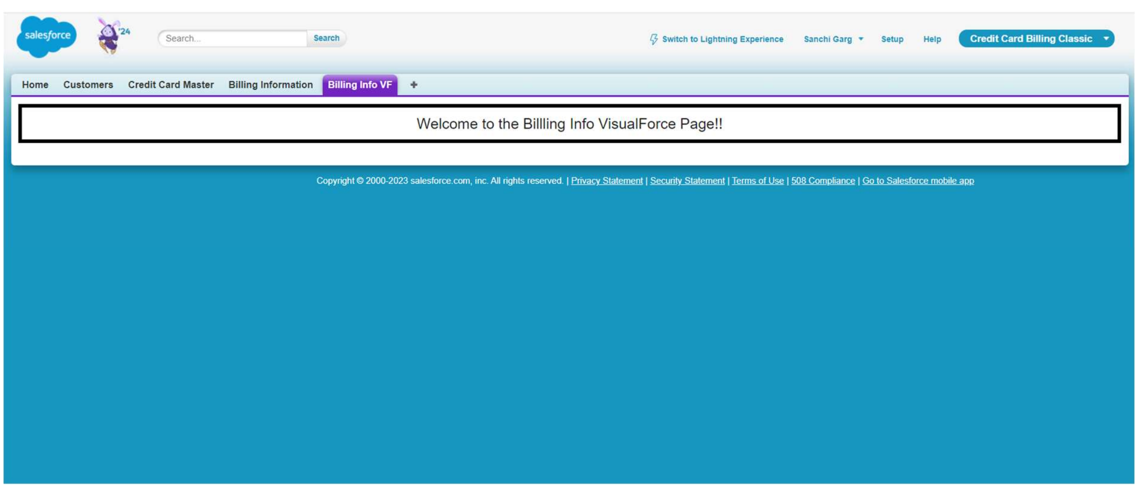
Scenario 1:

Create a Visualforce page AND Apex Class with input of credit card number and output of the corresponding bills for various months.




Search
Switch to Lightning Experience
Sanchi Garg
Setup
Help
Credit Card Billing Classic
Home
Customers
Credit Card Master
Billing Information
Quick Find / Search...
Expand All | Collapse All
Lightning Experience Transition Assistant
Move to the new, more productive Salesforce.
Get Started
Salesforce Mobile Quick Start
Home
Administer
Release Updates
Manage Users
Manage Apps
Manage Territories
Company Profile
Data Classification
Privacy Center
Security Controls
Domain Management
Communication Templates
Translation Workbench
Data Management
New Visualforce Tab
Help for this Page
Step 1. Enter the Details
Step 1 of 3
Choose the page for this new tab. Fill in other details.
Select an existing page or create a new page now.
Visualforce Page
BillingInfoVF [BillingInfoVF]
Tab Label
Billing Info VF
Tab Name
Billing_Info_VF
Tab Style
Mail
(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--
Enter a short description.
Description
Next
Cancel


Developer Console - Google Chrome
https://college13-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
College.apxc
College2.apxc
College3.apxc
courseTrigger.apxt
courseTriggerHandler.apxc
HelloWorldVF.vfp
HelloWorldController.apxc
CreditCardMasterTrigger.apxt
CreditCardMasterTriggerHandler.apxc
BillingInfoVF.vfp
Preview
API Version: 59
<apex:page sidebar="false">
<div style='border: 5px solid black; font-size:20px; text-align:center; padding: 10px'>
Welcome to the Billling Info VisualForce Page!!
</div>
</apex:page>


Search
Switch to Lightning Experience
Sanchi Garg
Setup
Help
Credit Card Billing Classic
Home
Customers
Credit Card Master
Billing Information
Billing Info VF
Welcome to the Billling Info VisualForce Page!!
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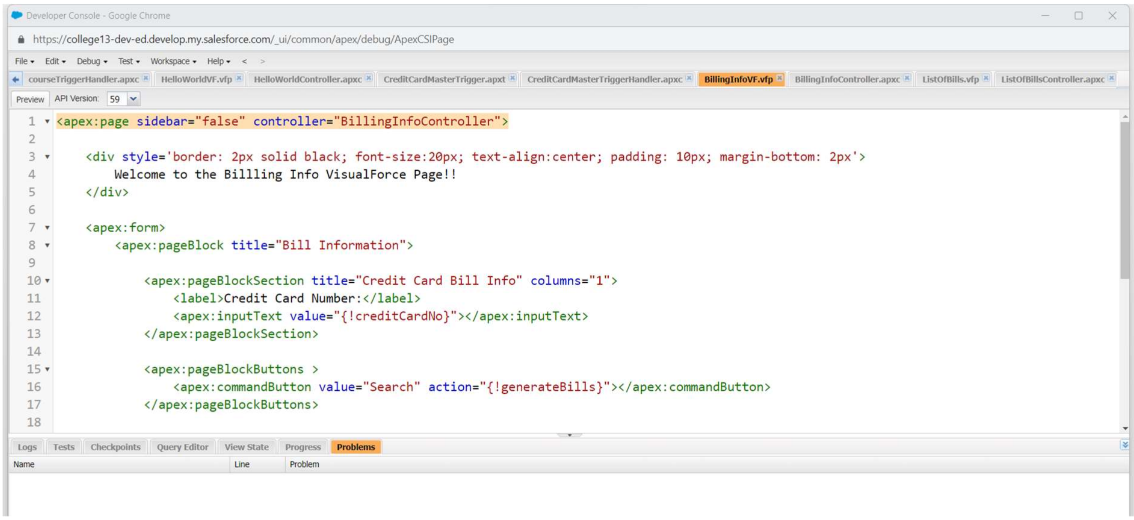
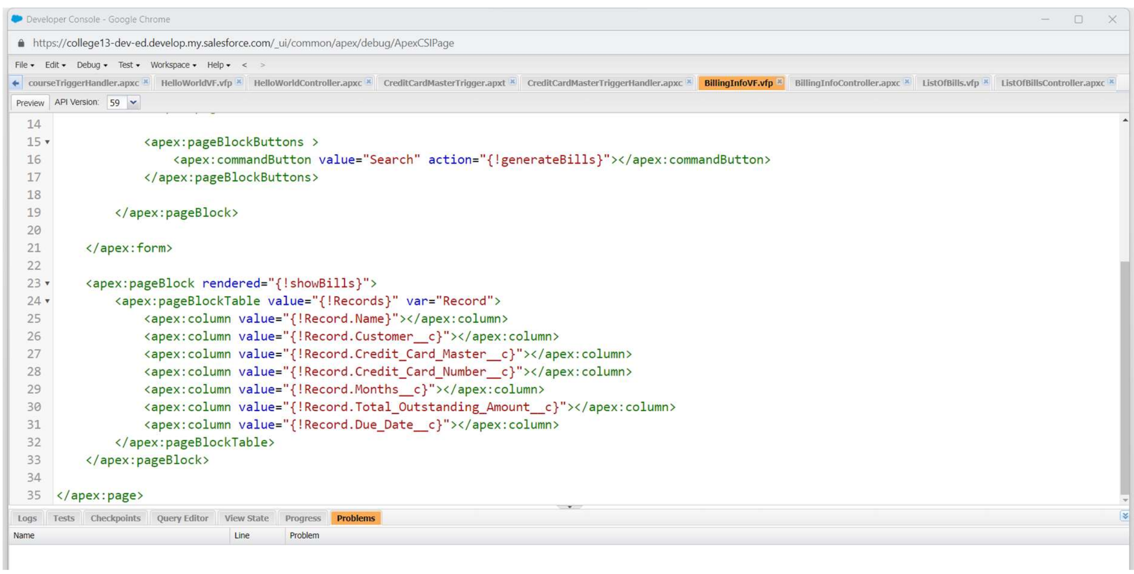
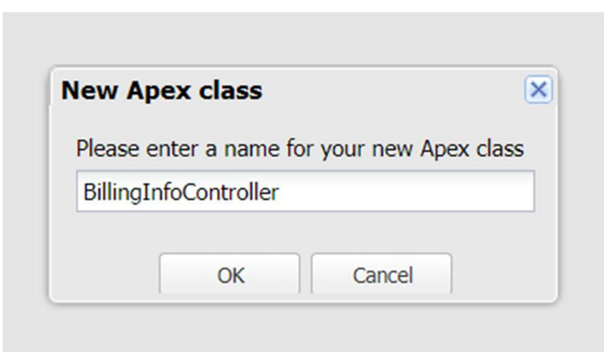
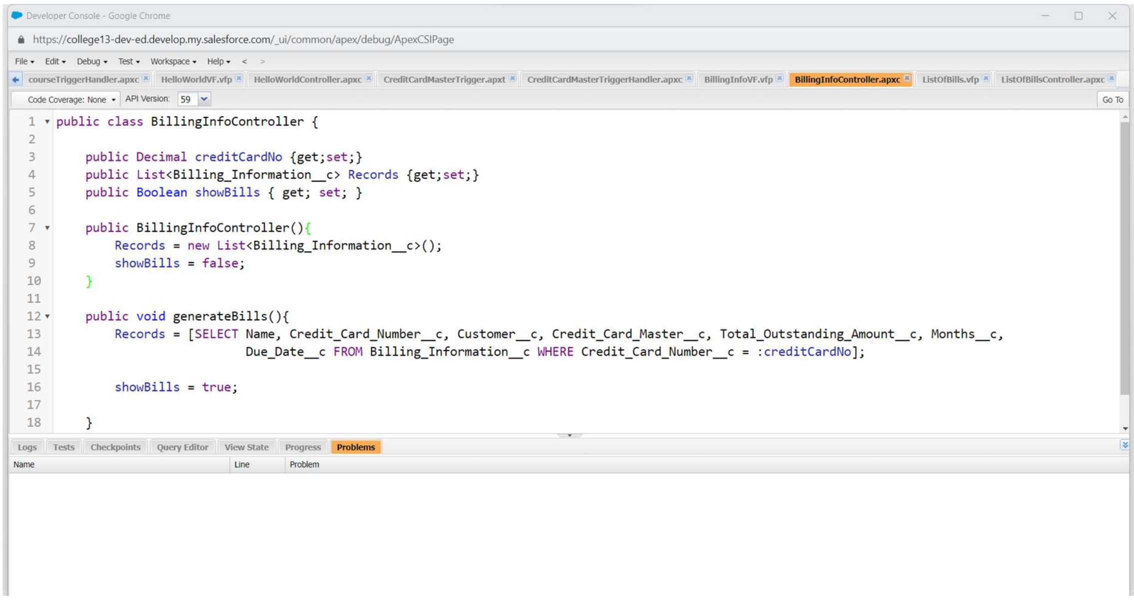
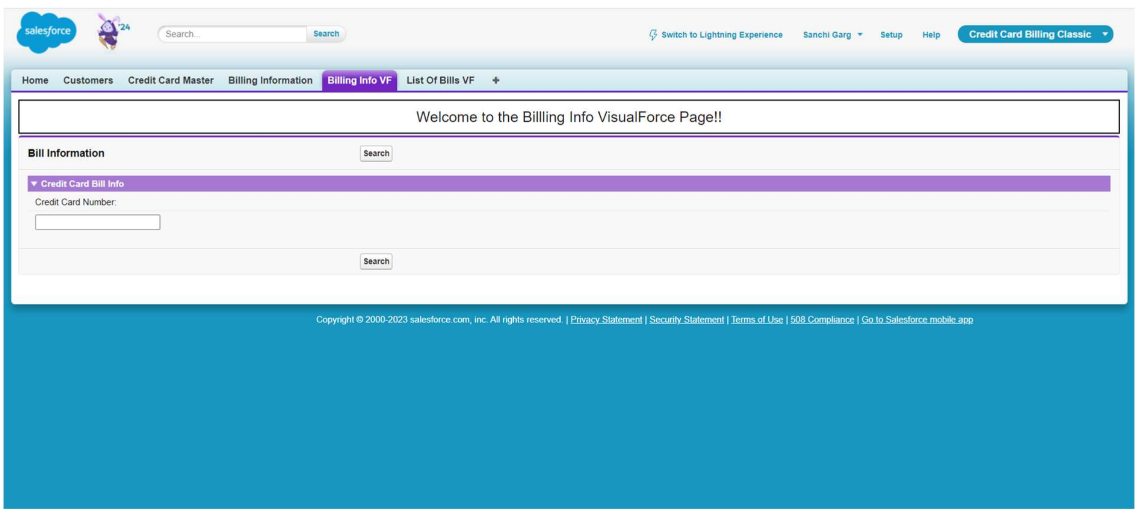

Developer Console - Google Chrome
https://college13-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
courseTriggerHandler.apxc HelloWorldVF.vfp HelloWorldController.apxc CreditCardMasterTrigger.apxt CreditCardMasterTriggerHandler.apxc BillingInfoVF.vfp BillingInfoController.apxc ListOfBills.vfp ListOfBillsController.apxc
Preview API Version: 59
<apex:page sidebar="false" controller="BillingInfoController">
<div style='border: 2px solid black; font-size:20px; text-align:center; padding: 10px; margin-bottom: 2px'>
Welcome to the Billling Info VisualForce Page!!
</div>
<apex:form>
<apex:pageBlock title="Bill Information">
<apex:pageBlockSection title="Credit Card Bill Info" columns="1">
<label>Credit Card Number:</label>
<apex:inputText value="{!creditCardNo}"></apex:inputText>
</apex:pageBlockSection>
<apex:pageBlockButtons >
<apex:commandButton value="Search" action="{!generateBills}"></apex:commandButton>
</apex:pageBlockButtons>
Logs Tests Checkpoints Query Editor View State Progress Problems
Name Line Problem


Developer Console - Google Chrome
https://college13-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
courseTriggerHandler.apxc HelloWorldVF.vfp HelloWorldController.apxc CreditCardMasterTrigger.apxt CreditCardMasterTriggerHandler.apxc BillingInfoVF.vfp BillingInfoController.apxc ListOfBills.vfp ListOfBillsController.apxc
Preview API Version: 59
<apex:pageBlockButtons >
<apex:commandButton value="Search" action="{!generateBills}"></apex:commandButton>
</apex:pageBlockButtons>
</apex:pageBlock>
</apex:form>
<apex:pageBlock rendered="{!showBills}">
<apex:pageBlockTable value="{!Records}" var="Record">
<apex:column value="{!Record.Name}"></apex:column>
<apex:column value="{!Record.Customer__c}"></apex:column>
<apex:column value="{!Record.Credit_Card_Master__c}"></apex:column>
<apex:column value="{!Record.Credit_Card_Number__c}"></apex:column>
<apex:column value="{!Record.Months__c}"></apex:column>
<apex:column value="{!Record.Total_Outstanding_Amount__c}"></apex:column>
<apex:column value="{!Record.Due_Date__c}"></apex:column>
</apex:pageBlockTable>
</apex:pageBlock>
</apex:page>
Logs Tests Checkpoints Query Editor View State Progress Problems
Name Line Problem


New Apex class
Please enter a name for your new Apex class
BillingInfoController
OK
Cancel


Developer Console - Google Chrome
https://college13-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage
File Edit Debug Test Workspace Help
courseTriggerHandler.apxc
HelloWorldVF.vfp
HelloWorldController.apxc
CreditCardMasterTrigger.apxt
CreditCardMasterTriggerHandler.apxc
BillingInfoVF.vfp
BillingInfoController.apxc
ListOfBills.vfp
ListOfBillsController.apxc
Code Coverage: None
API Version: 59
Go To
public class BillingInfoController {
public Decimal creditCardNo {get;set;}
public List<Billing_Information__c> Records {get;set;}
public Boolean showBills { get; set; }
public BillingInfoController(){
Records = new List<Billing_Information__c>();
showBills = false;
}
public void generateBills(){
Records = [SELECT Name, Credit_Card_Number__c, Customer__c, Credit_Card_Master__c, Total_Outstanding_Amount__c, Months__c,
Due_Date__c FROM Billing_Information__c WHERE Credit_Card_Number__c = :creditCardNo];
showBills = true;
}
Logs
Tests
Checkpoints
Query Editor
View State
Progress
Problems
Name
Line
Problem


salesforce
Search...
Search
Switch to Lightning Experience
Sanchi Garg
Setup
Help
Credit Card Billing Classic
Home
Customers
Credit Card Master
Billing Information
Billing Info VF
List Of Bills VF
Welcome to the Billling Info VisualForce Page!!
Bill Information
Search
Credit Card Bill Info
Credit Card Number:
Search
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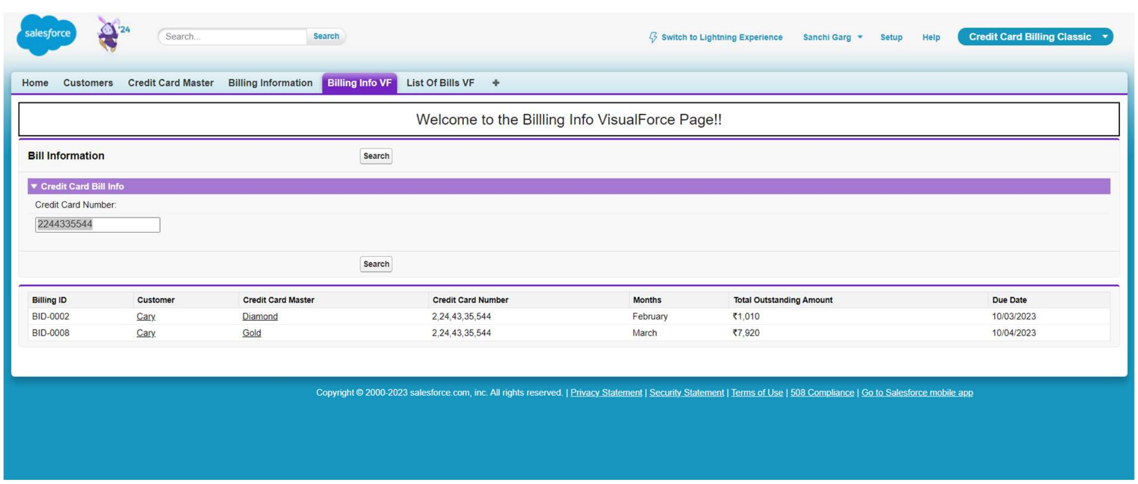
salesforce
Search...
Search
Switch to Lightning Experience
Sanchi Garg
Setup
Help
Credit Card Billing Classic
Home
Customers
Credit Card Master
Billing Information
Billing Info VF
List Of Bills VF
Welcome to the Billling Info VisualForce Page!!
Bill Information
Search
Credit Card Bill Info
Credit Card Number:
2244335544
Search
Billing ID | Customer | Credit Card Master | Credit Card Number | Months | Total Outstanding Amount | Due Date
BID-0002 | Cary | Diamond | 2,24,43,35,544 | February | ₹1,010 | 10/03/2023
BID-0008 | Cary | Gold | 2,24,43,35,544 | March | ₹7,920 | 10/04/2023
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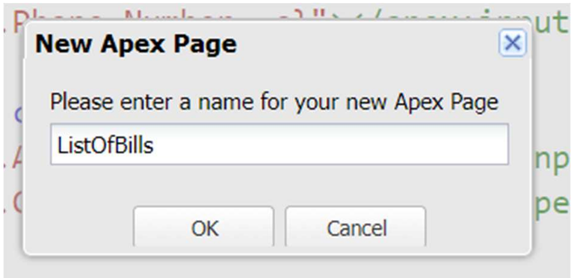
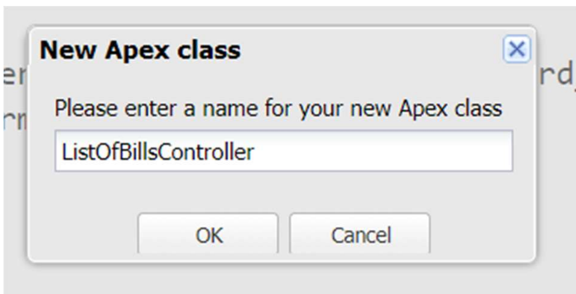
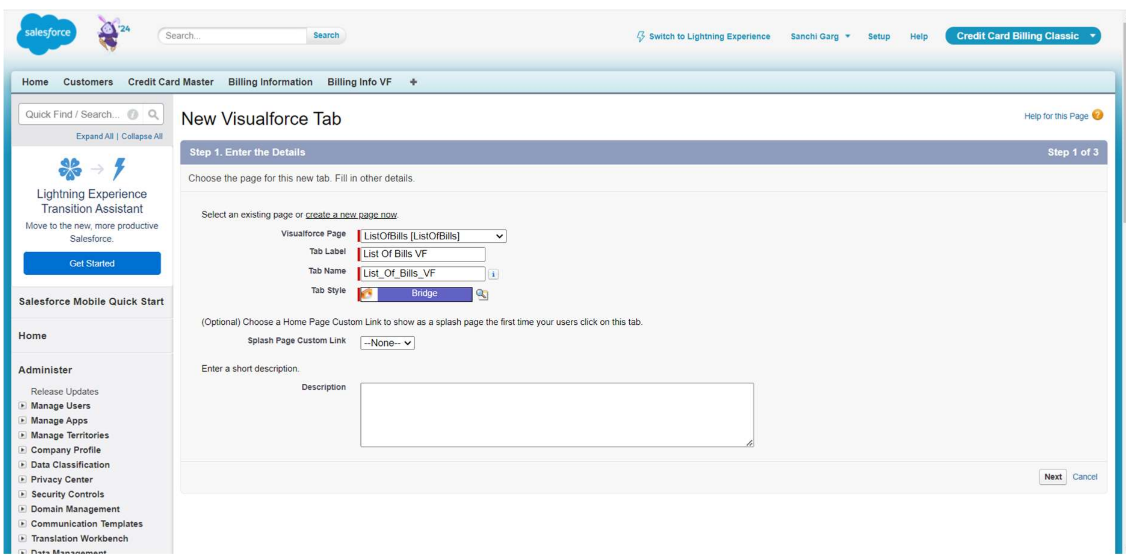
Scenario 2:

Display all the Billing information (List of Bills) in a tabular format via a VF Page a. Create a custom visualforce tab to view the VF page.







Developer Console - Google Chrome

https://college13-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

ListOfBills.vfp

```
<apex:page sidebar="false" controller="ListOfBillsController">
    <div style='border: 2px solid black; font-size:20px; text-align:center; padding: 10px; margin-bottom: 2px'>
        Welcome to the Billling Info VisualForce Page!!
    </div>
    <apex:pageBlock title="List of Bills">
        <apex:pageBlockTable value="{!billingRecords}" var="Record">
            <apex:column value="{!Record.Name}"></apex:column>
            <apex:column value="{!Record.Customer__c}"></apex:column>
            <apex:column value="{!Record.Credit_Card_Master__c}"></apex:column>
            <apex:column value="{!Record.Credit_Card_Number__c}"></apex:column>
            <apex:column value="{!Record.Months__c}"></apex:column>
            <apex:column value="{!Record.Total_Outstanding_Amount__c}"></apex:column>
            <apex:column value="{!Record.Due_Date__c}"></apex:column>
        </apex:pageBlockTable>
    </apex:pageBlock>

</apex:page>
```

Developer Console - Google Chrome

https://college13-dev-ed.develop.my.salesforce.com/_ui/common/apex/debug/ApexCSIPage

ListOfBillsController.apxc

```
public class ListOfBillsController {

    public List<Billing_Information__c> billingRecords {get;set;}

    public ListOfBillsController(){
        billingRecords = new List<Billing_Information__c>();
        getRecords();
    }

    public void getRecords(){
        billingRecords = [SELECT Name, Credit_Card_Number__c, Customer__c, Credit_Card_Master__c, Total_Outstanding_Amount__c, Months__c,
                          Due_Date__c FROM Billing_Information__c];

    }

}
```

Home | Customers | Credit Card Master | Billing Information | Billing Info VF | List Of Bills VF

Welcome to the VisualForce Page!!

List of Bills

Billing ID	Customer	Credit Card Master	Credit Card Number	Months	Total Outstanding Amount	Due Date
BID-0002	Cary	Diamond	2,24,43,35,544	February	₹1,010	10/03/2023
BID-0003	Etsy	Platinum	1,12,23,34,455	April	₹1,708	10/05/2023
BID-0001	John	Gold		January	₹702	10/02/2023
BID-0006	Cary	Platinum	2,23,34,45,566	December	₹6,760	10/01/2024
BID-0009	Kelvin	Gold	2,24,43,35,544	March	₹1,408	10/04/2023
BID-0004	Amber	Diamond	2,23,34,45,566	October	₹8,010	10/11/2023
BID-0005	Kelvin	Gold	1,12,23,34,455	June	₹6,910	10/07/2023
BID-0007	Jenny	Diamond	2,24,43,35,544	August	₹5,510	10/09/2023
BID-0008	Cary	Gold	2,24,43,35,544	March	₹7,920	10/04/2023