

salesforce

Salesforce Developer Workshop



Table of Contents

Table of Contents

Introduction

Lab 0 – Developer Workshop Prework

Lab 1 – Manage the data model for your app

 Create the Last Prize Win Field for the Participant Object

 Create the Loot Winner Object

Lab 2 - UI - Create the Application and Tabs

 Salesforce Terminology & Navigation: Orientation to the User Interface

 Create a Tab for the Selected Loot Items Object

 Create a Tab for the Loot Winner Object

 Create an App Page for the Loot App

 Create the Loot Administration App

 Create the Loot App

Lab 3 - UI - Manage Page Layouts and List Views

 Modify the Page Layout of the Loot Campaign Object

 Modify the Page Layout of the Participant Object

 Add the Region field to the User Page Layout

 Add Fields to the Recently View list view

 Create a Custom List View

 Theming and Branding Your Salesforce Org

Lab 4 – Import and Create Data

 Import Data for the Prize Object

 Create Campaign Prize Items

 Create Records from a Related List

 Create Records from a Tab's List View

Lab 5 – Data Validation and Process Automation

 Create a Validation Rule for the Loot Campaign Object

 Create a Process Builder Process to send Campaign Activation Emails

 Email Alerts and Email Templates

 Create a Process to send Loot Activation Email

 Update the Get Campaign Winner Flow

 Invoking the Flow via a Button

Lab 6 – Try out the Loot App

Lab 7 – Optional - Collaboration and Mobility

 Enable Record Collaboration

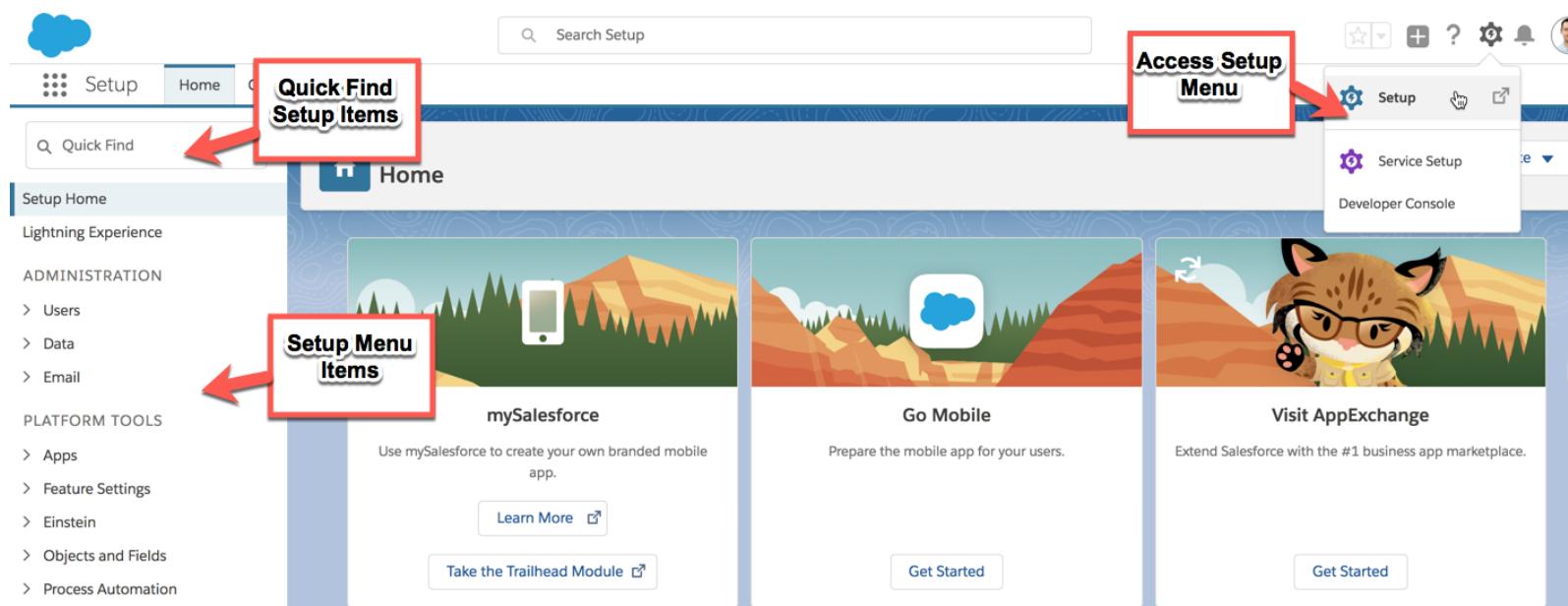
 Mobile Access for the Loot Administration App

Introduction

This document contains the hands-on exercises corresponding to the topics being covered in the Developer Workshop presentation. As you go through the labs in this workbook, you will go through the typical process of building a Salesforce application with clicks, not code.

The primary activities in this workshop is configuring Salesforce to create the **Loot App**. This will include creating an app for administering the **Loot Campaign** as well as an app for employees to select Loot.

Configuring Salesforce for creating new applications, objects, fields, business rules, approval processes, etc... are all done through the Setup configuration menu. You access the Setup menu using the gear icon in top-right of the screen and then selecting Setup Home. Below is sample screen of the Setup options with a brief description.



Lab 0 – Developer Workshop Prework

We know you are excited to start the hands-on exercises. Just to make sure you are all set to get started, we had shared a list of prework with you.

If you were able to complete the prework, thank you! You might be slightly oriented to Salesforce and have a slight head start.

First off, please download the **Developer Workshop Labs -Blizzard.pdf** file and **Salesforce Workshop Resources** folder from the following GitHub page -
https://github.com/abychat/blizzard_dev_workshop

In case you weren't able to complete the prework, please complete the following items. The first two items are mandatory for completing the workshop today.

- [Sign up for a free Salesforce Developer Edition Org](#) – **MANDATORY**
- [Setup My Domain for your Salesforce Org](#) - **MANDATORY**
- Sign up for a free Trailhead account by following the instructions at [Trailhead Basics](#). As you follow the instructions, please use your recently created Salesforce Developer Edition org credentials to sign up. – **OPTIONAL**
- Complete the [Data Modeling Trail](#) on Trailhead. - **OPTIONAL**

Lab 1 – Manage the data model for your app

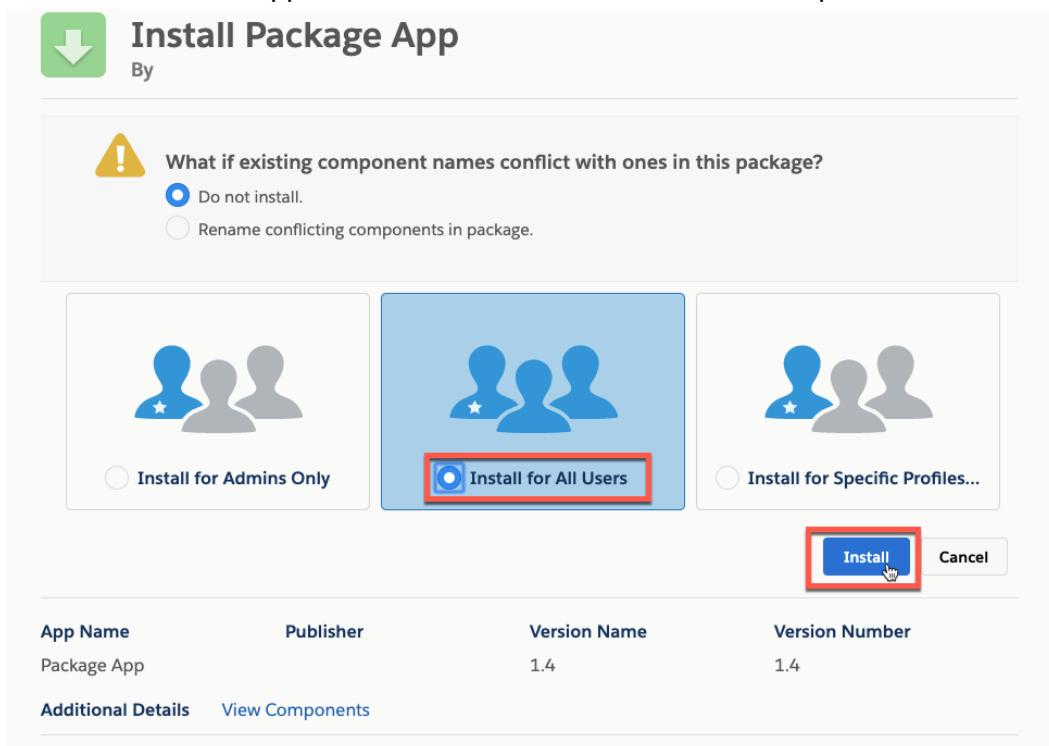
In this lab, we will look at how we can create and extend the data model of your app. If you completed the pre-work for the workshop, this will be an extension of the pre-work. In case you haven't done the pre-work, don't worry, we got your back. This exercise will walk you through building a new custom object from scratch, add different field types to it and create relationships with other objects supplied by Salesforce.

The **Loot Administration** and the **Loot** app are composed of multiple Salesforce objects. In the interest of time we have created some of those objects already. Before we get started with creating new objects and extend existing objects, let's install a package containing the objects we created into your Developer Edition environment.

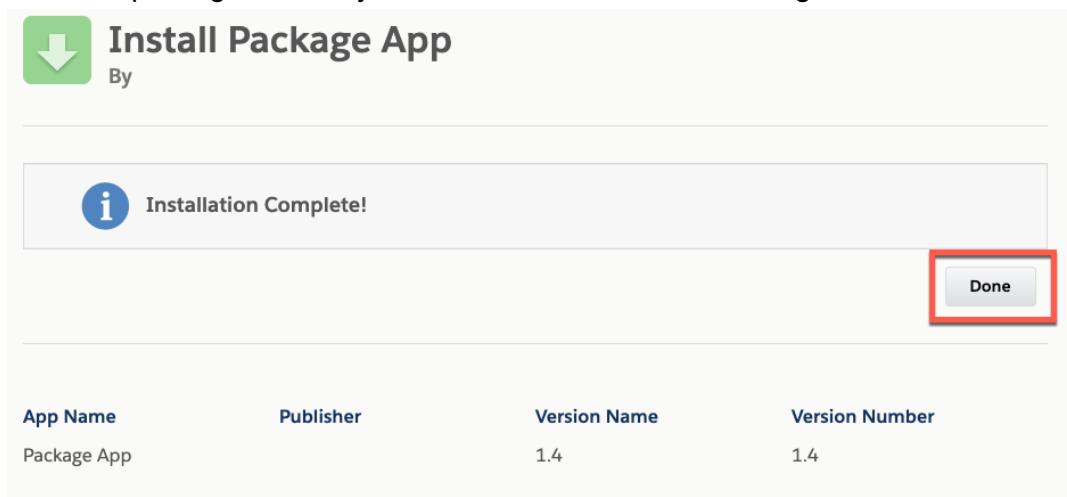
If you are not logged in to your Salesforce Developer Edition environment:

- a. Launch your browser and go to <https://login.salesforce.com>
- b. Enter your user name and password and click Log In
- c. Once logged in access, https://sfdc.co/blizzard_package in the same window. Login again if the browser prompts you to.

- d. On the screen that appears, select the ‘Install for All Users’ dropdown and click Install



- e. Once the package installs, you will see a confirmation message. Click ‘Done’.



- f. You are now in the ‘Setup’ area of your Salesforce org tab.

The package has installed a few Objects and related configuration in your org. Let’s take a look at the visual representation of these objects.

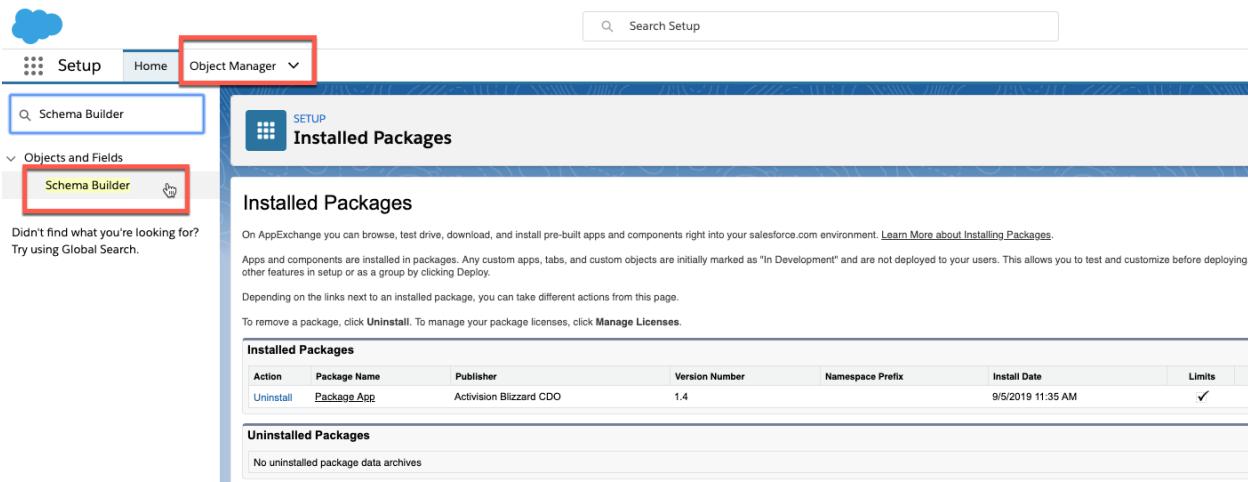
As you might have seen while completing the pre-work, Salesforce includes a rich data modeling tool that allows you to define custom objects, custom fields, and relationships between objects. For example, you can relate objects in parent-child relationships such as Requests and Tasks.

Schema Builder is great for visualization, but you can also use it to customize your data model. For example, you can manage the permissions for your custom fields directly in Schema Builder. Just right-click the field name and click Manage Field Permissions.

You can also create objects using **Schema Builder**. If you prefer, you can create objects in this visual interface if you're designing your system and want to be able to revise all your customizations on the spot. Let's see how it's done.

1. The Schema Builder can be accessed in a couple of ways.

- **Option 1 - Type 'Schema Builder' in the 'Quick Find' search box in Setup.**

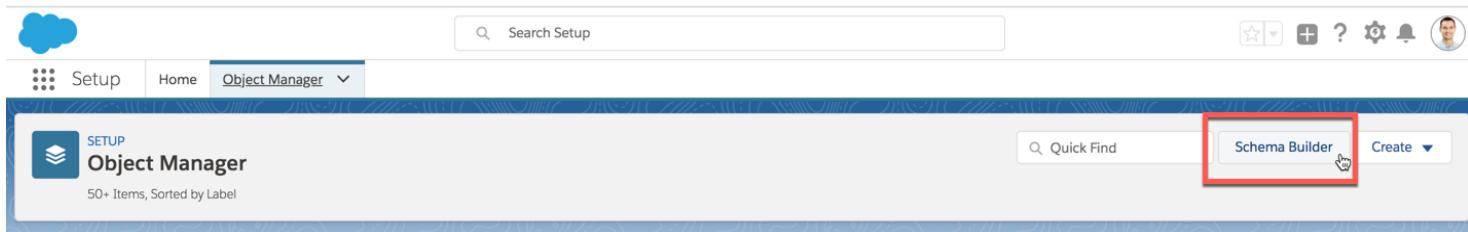


The screenshot shows the Salesforce Setup interface. At the top, there is a navigation bar with tabs: 'Setup' (highlighted with a blue box), 'Home', and 'Object Manager' (with a red box around its dropdown arrow). Below the navigation bar, there is a search bar labeled 'Search Setup'. A sidebar on the left has a 'Schema Builder' button highlighted with a red box. The main content area is titled 'Installed Packages' under the 'SETUP' tab. It contains sections for 'Installed Packages' and 'Uninstalled Packages'. The 'Installed Packages' section shows a table with one row:

| Action | Package Name | Publisher | Version Number | Namespace Prefix | Install Date | Limits |
|-----------|--------------|-------------------------|----------------|------------------|-------------------|--------|
| Uninstall | Package App | Activision Blizzard CDO | 1.4 | | 9/5/2019 11:35 AM | ✓ |

The 'Uninstalled Packages' section below it says 'No uninstalled package data archives'.

- **Option 2 - Click the Object Manager tab in the Setup screen and click on the Schema Builder button.**



2. You should see something like the screen below once you access **Schema Builder**

Automatically rearrange objects on the grid

Elements Tab - Tools for creating and extending objects

Object List Views - All Objects, Selected Objects, Standard Objects, Custom Objects, System Objects

Quick Find...

List of Objects Select Checkbox to display object on grid/canvas.

Account

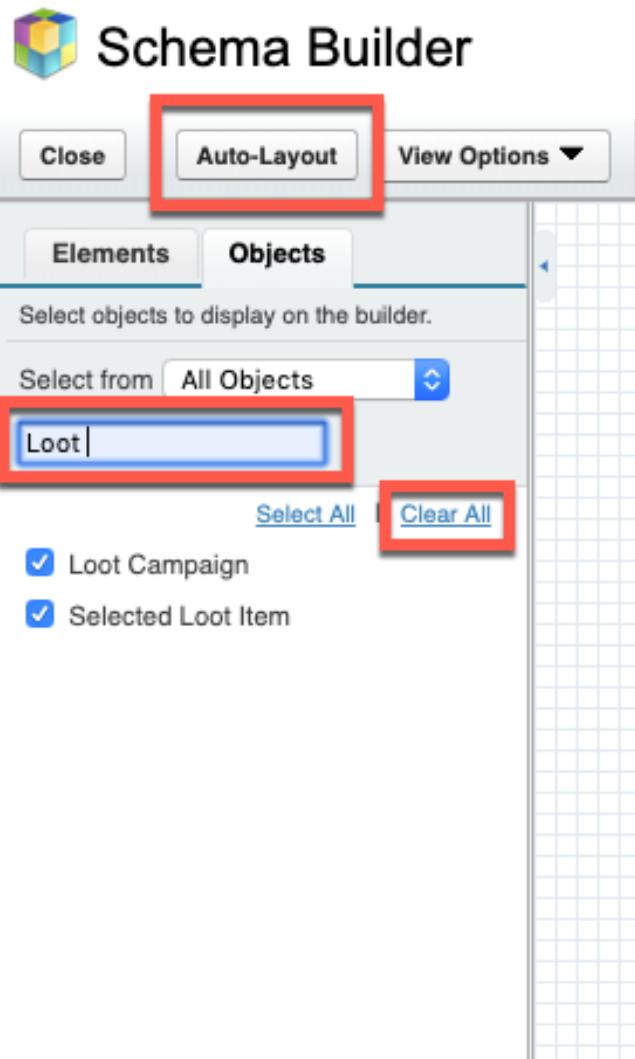
| | |
|----------------------------|-------------------------|
| % Goal Attainment | Formula (Percent) |
| % of Reps Trained | Percent(3, 0) |
| Account Location | Formula (Text) |
| Account Name | Name |
| Account Number | Text(40) |
| Account Owner | Lookup(User) |
| Account Priority | Formula (Text) |
| Account Record Type | Record Type |
| Account Site | Text(80) |
| Account Source | Picklist |
| Account Status | Formula (Text) |
| Active | Picklist |
| Active Leads | Number(18, 0) |
| analyticsdemo_batch_id_c | Text(50) |
| Annual Income | Currency(7, 0) |
| Annual Revenue | Currency(18, 0) |
| Application Date | Date |
| Assistant | Text(40) |
| Ast. Phone | Phone |
| Billing Address | Address |
| Birthdate | Date |
| Buying Relationship | Picklist (Multi-Select) |
| Channel Program Level Name | Text(255) |

Contact

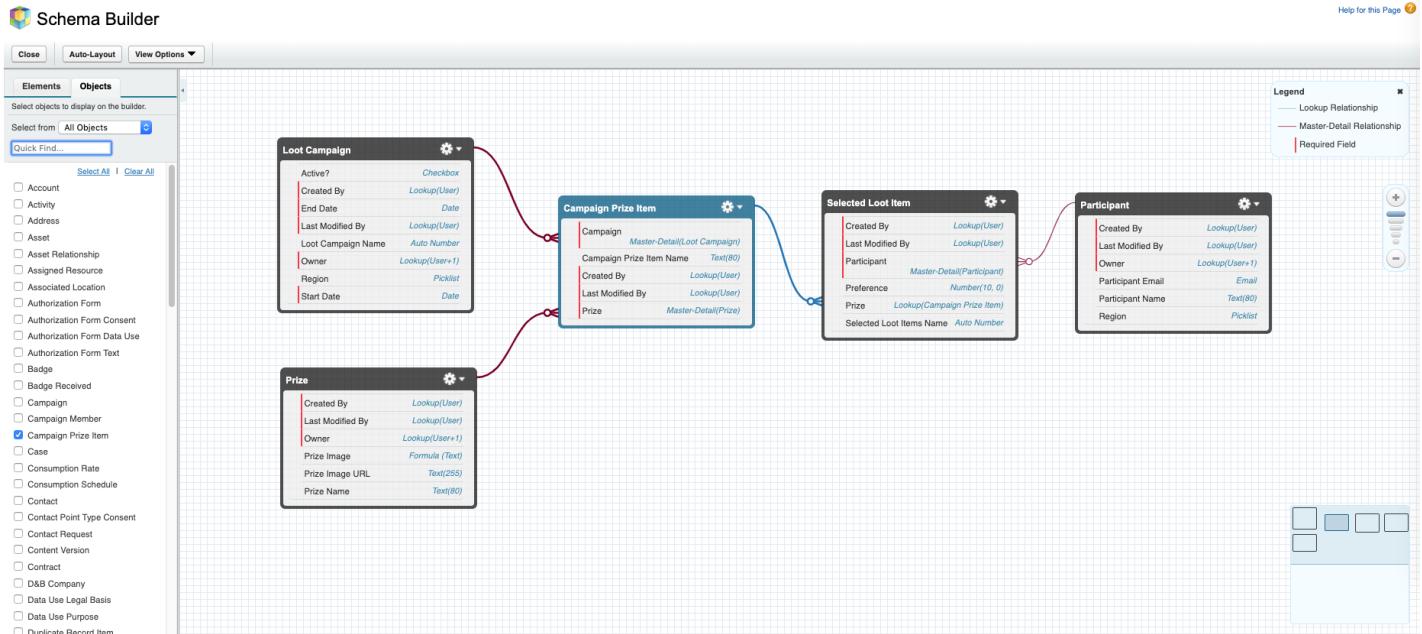
| | |
|---|-----------------------|
| Account Address | Formula (Text) |
| Account Name | Lookup(Account) |
| ActiveLiveAgentUser | Checkbox |
| Activity Indicator | Formula (Text) |
| Allow Customer Portal Self-Registration | Checkbox |
| analyticsdemo_batch_id_c | Text(50) |
| Assistant | Text(40) |
| Ast. Phone | Phone |
| Birthdate | Date |
| Certification Level | Picklist |
| Clean Status | Picklist |
| Contact Location | Formula (Text) |
| Contact Owner | Lookup(User) |
| Contact Record Type | Record Type |
| Created By | Lookup(User) |
| Data.com Key | Text(20) |
| Days Since Last Activity | Formula (Number) |
| DB | Checkbox |
| Department | Text(80) |
| Description | Long Text Area(32000) |
| Do Not Call | Checkbox |
| Email | Email |

3. Click **Clear All** and type **Request** in the **Quick Find** box to clear the Canvas. Find the following objects by typing their names one by one in the **Quick Find** box and selecting the check box next to the name.

- Loot Campaign
- Selected Loot Item
- Prize
- Campaign Prize Item
- Participant



4. If you don't see the items on the Canvas, click the **Auto-Layout** button to get the elements into view. Arrange the elements per your preference. You should see a screen similar to the following image.

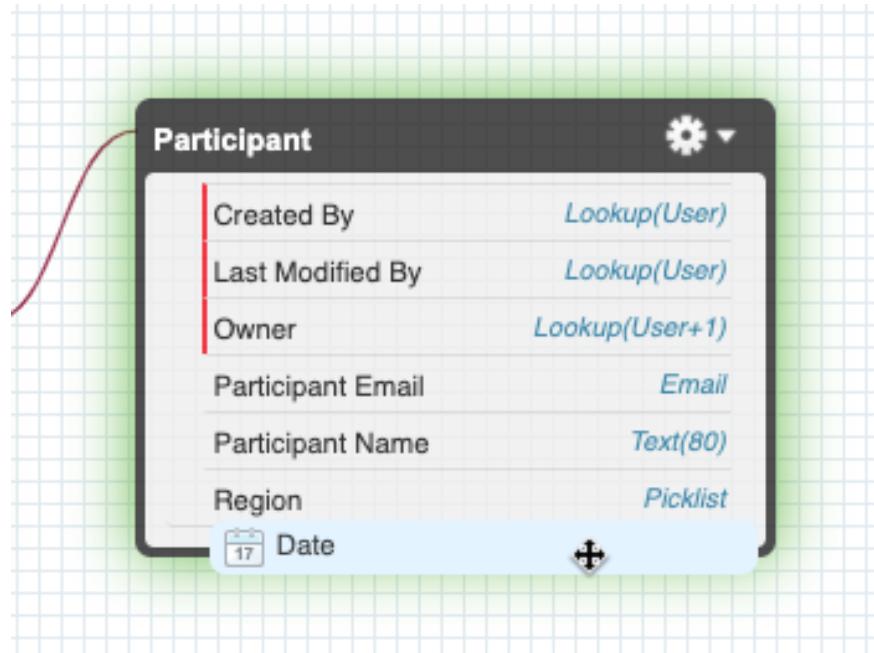


5. Click the Elements tab of the Schema Builder to see the drag and drop elements that can be used to manage and extend your data model.

Create the Last Prize Win Field for the Participant Object

Let's create a new field on the Participant Object using the Schema Builder.

1. Drag a **Date** Element on to the Participant object.



2. A field creation form will appear when you drag the Date field element onto the object

Create Date Field (Object: Participant)

| | |
|---|---|
| Field Label | Last Prize Win |
| Field Name | Last_Prize_Win |
| Description | Latest Date when the participant won a loot item |
| Help Text | Latest Date when the participant won a loot item |
| This text displays on detail and edit pages when users hover over the Info icon next to this field. | |
| Default Value | |
| Required | <input type="checkbox"/> Always require a value in this field in order to save a record |
| Save Cancel | |

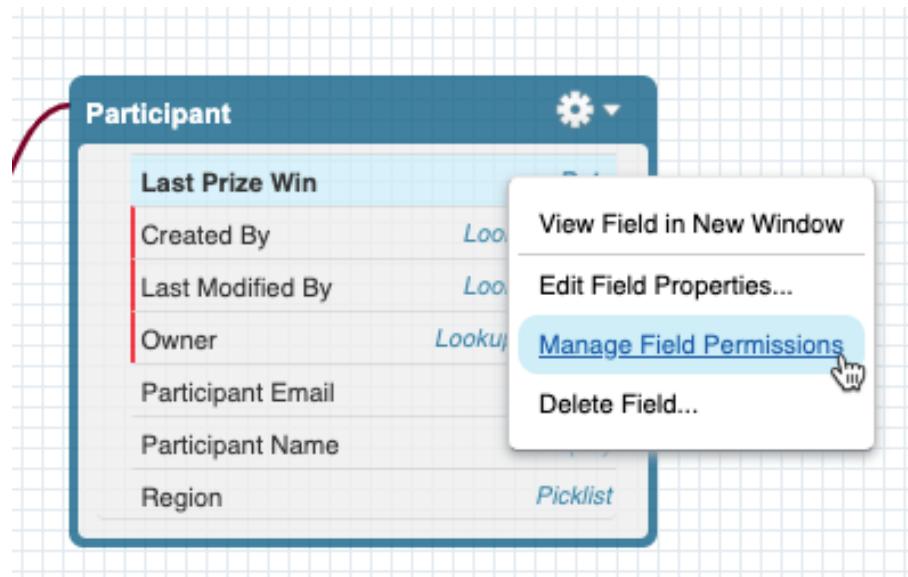
3. Enter the following details for the field

| Parameter | Value |
|---------------|---|
| Field Label | Last Prize Win |
| Field Name | Last_Prize_Win (Will auto populate when you tab out of the Field label) |
| Description | Latest Date when the participant won a loot item |
| Help Text | Latest Date when the participant won a loot item |
| Default Value | <i>Leave Blank</i> |
| Required | <i>Leave this unselected/unchecked</i> |

4. Click **Save**.

5. Set the permissions for the Last Prize Win Field

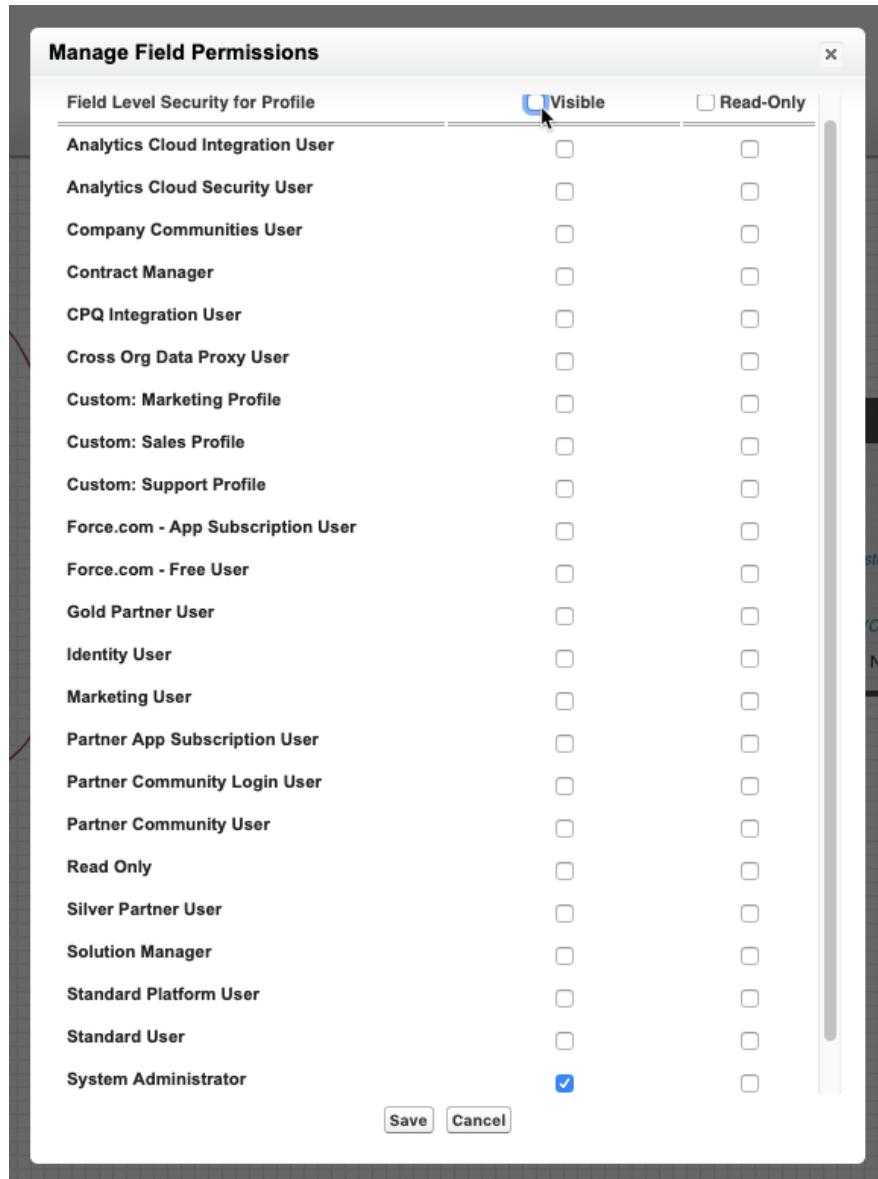
- a. To edit properties of a custom field, right-click the element name or label and select **Edit Field Properties**.



- b. To manage permissions of a custom field, click the element name or label and select **Manage Field Permissions**. Use the dialog box that appears to manage the field's visibility and writability for all standard and custom profiles. By default, the field-level

security for custom fields is set to visible and editable for internal profiles—those not cloned from Partner User or Customer Portal Manager. Fields that are not normally editable, such as formulas and roll-up summary fields, are visible and read only.

- c. Check and Uncheck the **Visible** button to clear the selection. Select the **System Administrator** profile and click **Save**.



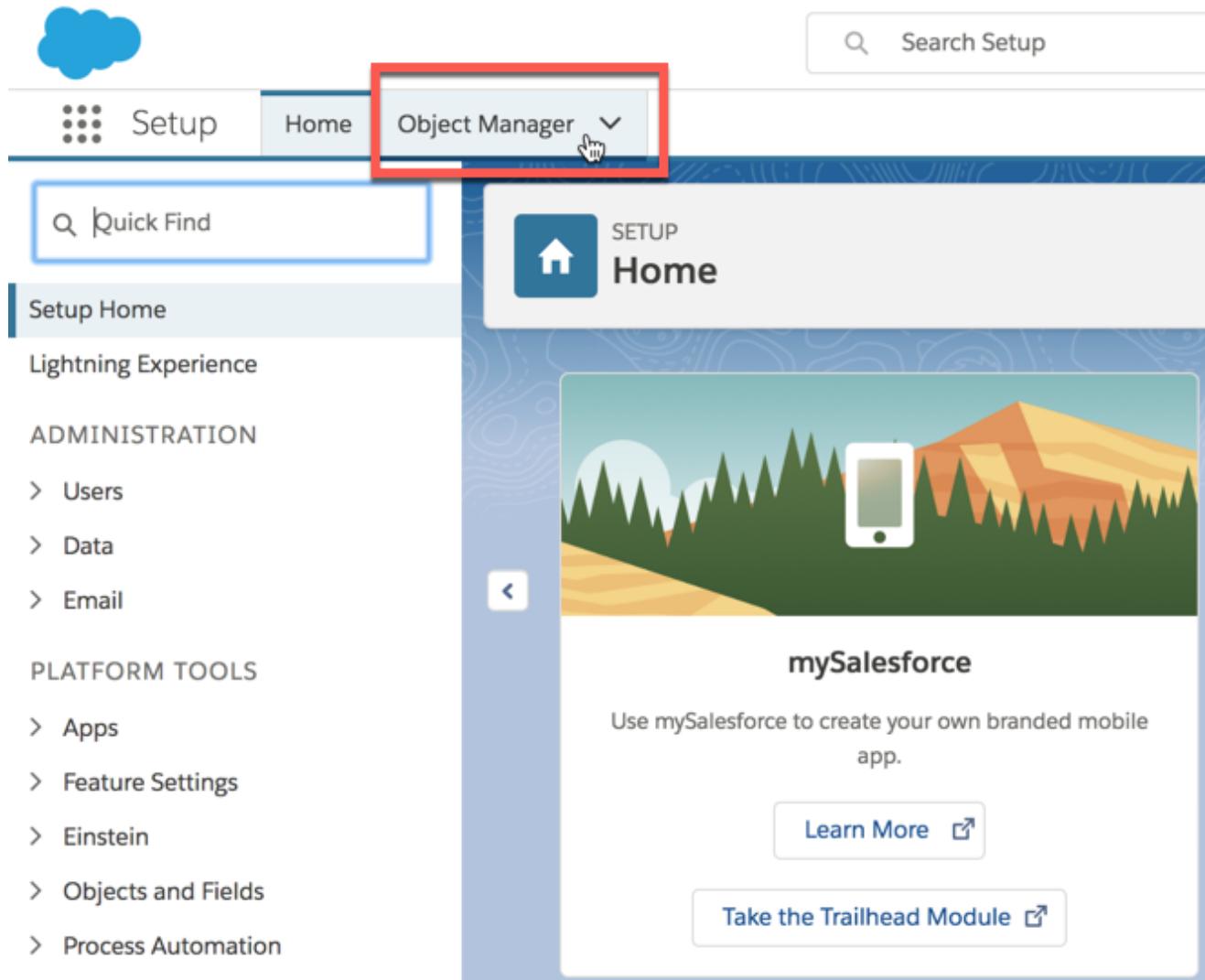
Awesome! You just took a tour of the Schema Builder, visualized the data model for your app, extended it and even managed security permissions for individual elements of the data model.

Create the Loot Winner Object

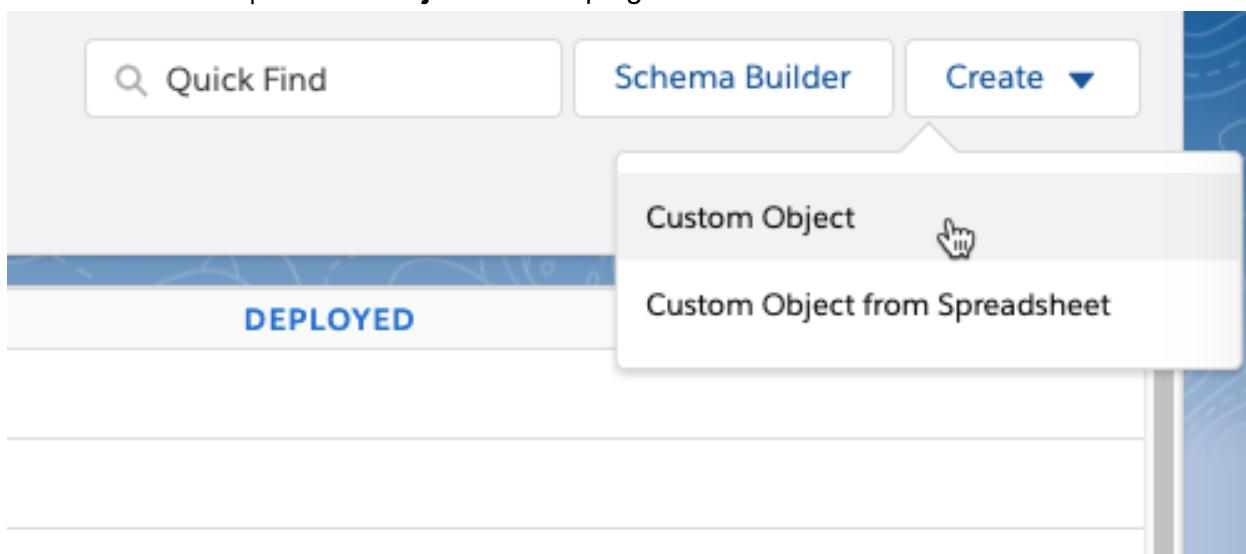
Schema Builder is a great way to quickly create and manage your data model. However, you need to make sure you manage the security settings and explicitly add data elements to the UI after you have created them.

All of these steps are taken care of if you use the Create Object wizard. Let's see what that looks like by creating the 'Loot Winner' object. This object will keep a track of winners of past, present and future Loot winners.

1. If you are not already in **Setup**, Click the gear icon at the top of the page and click on **Setup**.
2. Click the **Object Manager**



3. Click **Create | Custom Object** in the top right corner



4. Enter the following values on the screen that appears. If an option is not mentioned here, please leave it unchanged.

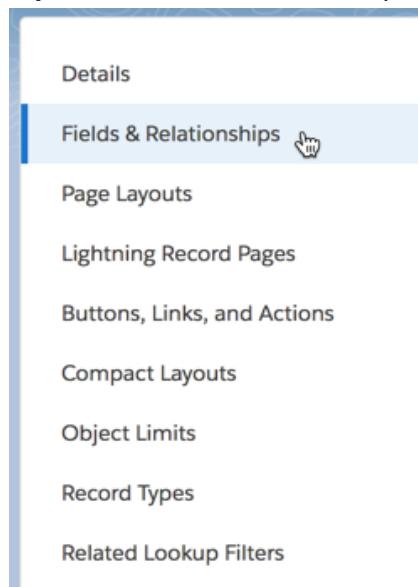
| Parameter | Value |
|-------------------------|---|
| Label | Loot Winner |
| Plural Label | Loot Winners |
| Object name | Loot_Winner (Will auto populate when you tab out of the label name) |
| Description | Record of Loot Winners for Loot Campaigns |
| Data Type | Auto Number |
| Display Format | LW-{000000} |
| Allow Reports | Check |
| Allow Activities | Check |
| Track Field History | Check |
| Allow in Chatter Groups | Check |
| Allow Search | Check |

5. Your screen should look like the following screenshot. Click Save.

You are now directed to the object configuration page for the Loot Winner object. We will now create additional fields for the Loot Winner. First, we need to make sure we are in the Fields & Relationships section of the object editor.

Create the Participant Field for the Loot Winner Object

1. Click on the **Fields & Relationships** tab on left-hand side of page.



- Let's create the **Participant** field. This field will be related to the Participant Object that was installed as part of the package we installed earlier.
- Click the **New** button towards the right of the screen to start the wizard to create a new field.



- On step 1 of the **New Custom Field** screen, you need to select the field data type. Select the **Lookup** option and click the **Next** button.

Loot Winner
New Custom Field Help for this Page ?

Step 1. Choose the field type Step 1

Specify the type of information that the custom field will contain. **Next** **Cancel**

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.

- On the next screen, select **Participant** for the **Related To** dropdown. Click Next.

Loot Winner
New Relationship Help for this Page ?

Step 2. Choose the related object Step 2

Select the other object to which this object is related. **Previous** **Next** **Cancel**

Related To (C)

Previous **Next** **Cancel**

- Enter the following values for the field details. Notice some options for a Lookup field. The **What to do if the lookup record is deleted?** option controls what happens if the related Participant record is deleted. You also have the option of setting up a **Lookup Filter** for this field limit the Participant records that can be related to a Loot Winner to only those that meet certain criterion.

| Parameter | Value |
|-------------|--|
| Field Label | Participant |
| Field Name | Participant (populates automatically based on the Field Label and can be different from the label if required) |

Click Next.

Loot Winner
New Relationship

Step 3 of 6

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

Field Label: Participant

Field Name: Participant

Description:

Help Text:

Child Relationship Name: Loot_Winners

Required: Always require a value in this field in order to save a record
 Clear the value of this field. You can't choose this option if you make this field required.
 Don't allow deletion of the lookup record that's part of a lookup relationship.

Lookup Filter

Optional, create a filter to limit the records available to users in the lookup field. [Tell me more!](#)

Show Filter Settings

Previous Next Cancel

7. The next screen sets field level security for this new field you are creating. In Salesforce, you have ability to indicate which user profiles have view, edit or no access rights for the custom field. Click **Next** button to accept the default values.

Select the profiles to which you want to grant edit access to this field via field-level security. The field will be hidden from all profiles if you do not add it to field-level security.

| Field-Level Security for Profile | Visible | Read-Only |
|-----------------------------------|-------------------------------------|--------------------------|
| Analytics Cloud Integration User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Analytics Cloud Security User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Company Communities User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Contract Manager | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| CPQ Integration User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Cross Org Data Proxy User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Custom: Marketing Profile | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Custom: Sales Profile | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Custom: Support Profile | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Force.com - App Subscription User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Force.com - Free User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Gold Partner User | <input type="checkbox"/> | <input type="checkbox"/> |
| Identity User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Marketing User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Partner App Subscription User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Partner Community Login User | <input type="checkbox"/> | <input type="checkbox"/> |
| Partner Community User | <input type="checkbox"/> | <input type="checkbox"/> |
| Read Only | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Silver Partner User | <input type="checkbox"/> | <input type="checkbox"/> |
| Solution Manager | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Standard Platform User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Standard User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| System Administrator | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| Work.com Only User | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Previous Next Cancel

8. The next screen adds the field to a page layout. Accept the default and click the **Next** button.

Loot Winner
New Relationship

Help for this Page ⓘ

Step 5. Add reference field to Page Layouts Step 5 of 6

| | | | | |
|-------------|-------------|---|-------------------------------------|---------------------------------------|
| Field Label | Participant | <input type="button" value="Previous"/> | <input type="button" value="Next"/> | <input type="button" value="Cancel"/> |
| Data Type | Lookup | | | |
| Field Name | Participant | | | |
| Description | | | | |

Select the page layouts that should include this field. The field will be added as the last field in the first 2-column section of these page layouts. The field will not appear on any pages if you do not select a layout.

To change the location of this field on the page, you will need to customize the page layout.

Add Field

Loot Winner Layout

9. The following screen provides the option to add the 'Loot Winners' Related List to the UI for the Participant object. Leave the Default options as they are and click **Save**.

Loot Winner
New Relationship

Help for this Page ⓘ

Step 6. Add custom related lists Step 6 of 6

| | | | | | |
|-------------|-------------|---|---|-------------------------------------|---------------------------------------|
| Field Label | Participant | <input type="button" value="Previous"/> | <input type="button" value="Save & New"/> | <input type="button" value="Save"/> | <input type="button" value="Cancel"/> |
| Data Type | Lookup | | | | |
| Field Name | Participant | | | | |
| Description | | | | | |

Specify the title that the related list will have in all of the layouts associated with the parent.

Related List Label

Select the page layouts that should include this field. The field will be added as the last field in the first 2-column section of these page layouts. The field will not appear on any pages if you do not select a layout.

To change the location of this field on the page, you will need to customize the page layout.

Add Related List

Participant Layout

Append related list to users' existing personal customizations

10. You are redirected to the Fields and Relationships screen for the Loot Winner Object. Notice the new Participant field.

Fields & Relationships

5 Items, Sorted by Field Label

| FIELD LABEL | FIELD NAME | DATA TYPE | CONTROLLING FIELD | INDEXED |
|------------------|------------------|---------------------|-------------------|---------|
| Created By | CreatedById | Lookup(User) | | |
| Last Modified By | LastModifiedById | Lookup(User) | | |
| Loot Winner Name | Name | Text(80) | | ✓ |
| Owner | OwnerId | Lookup(User,Group) | | ✓ |
| Participant | Participant__c | Lookup(Participant) | | ✓ |

Create the Prize Field for the Loot Winner Object

The Loot Winner object will also be related to a Campaign Prize Item. Using your newly acquired knowledge about creating Lookup relationship, lets create another lookup field with the following details.

| Parameter | Value |
|--------------------------|---|
| Field Type | Look Up |
| Related To | Campaign Prize Item |
| Field Label | Prize |
| Field Name | Prize |
| Description | The Campaign Prize Item which the Participant has won |
| Help Text | The Campaign Prize Item which the Participant has won |
| Profile | <i>Default Selection</i> |
| Page Layout | <i>Default selection</i> |
| Add Custom Related Lists | <i>Default Selection</i> |

Create the Drawing Date Field for the Loot Winner Object

Formula fields in Salesforce are similar to Formula fields in Excel. Their values are calculated based on values of other fields, both of the object as well as fields of related objects.

In this case we want to see the date that the participant won a specific prize related to a loot campaign. We will calculate this date based on the ‘Last Prize Win’ field of the Participant object that we created earlier.

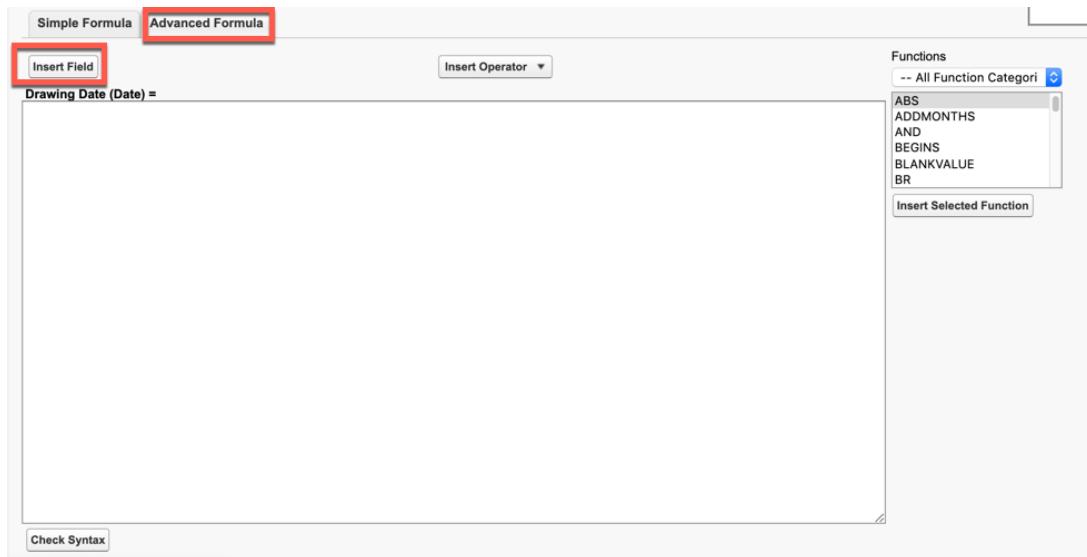
1. Start the **New** field wizard.
2. Select **Formula** data type.
3. On the **Step 2. Choose output type** screen choose enter the **Field Label** as **Drawing Date**. The **Field Name** will auto populate when you tab out of the Field Label input.
4. Select the **Date** return type and click **Next**.

The screenshot shows the 'Step 2. Choose output type' screen of the New field wizard in Salesforce. At the top, there are three buttons: 'Previous', 'Next', and 'Cancel'. Below these, two input fields are shown: 'Field Label' containing 'Drawing Date' and 'Field Name' containing 'Drawing_Date'. A tooltip icon is visible next to the Field Name field. The main area is titled 'Formula Return Type' and contains a list of options:

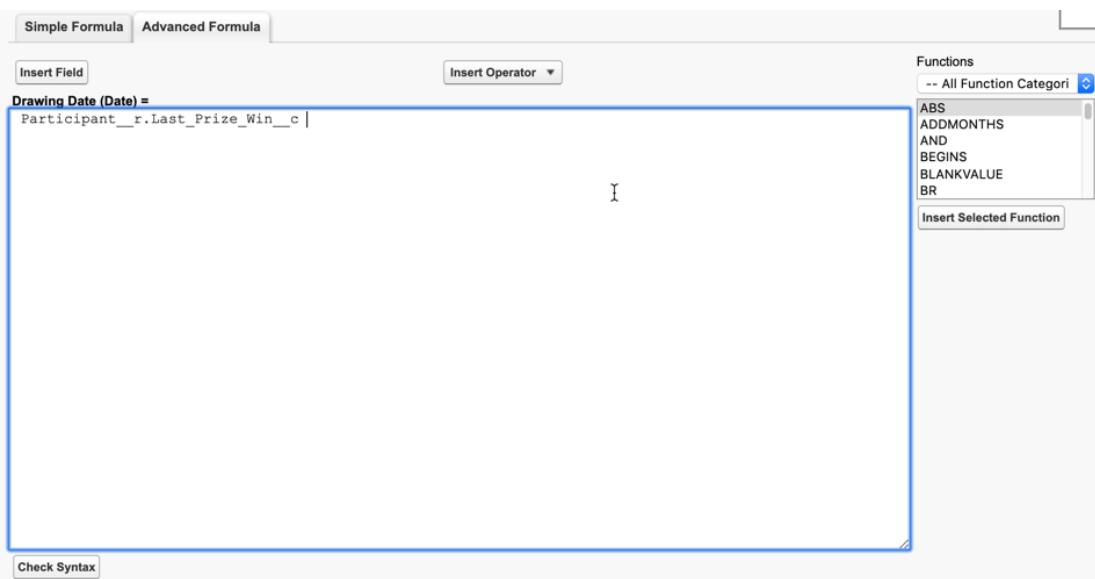
| Return Type | Description | Example |
|---------------------------------------|--|--|
| <input type="radio"/> None Selected | Select one of the data types below. | |
| <input type="radio"/> Checkbox | Calculate a boolean value | Example: <code>TODAY() > CloseDate</code> |
| <input type="radio"/> Currency | Calculate a dollar or other currency amount and automatically format the field as a currency amount. | Example: <code>Gross Margin = Amount - Cost_c</code> |
| <input checked="" type="radio"/> Date | Calculate a date, for example, by adding or subtracting days to other dates. | Example: <code>Reminder Date = CloseDate - 7</code> |
| <input type="radio"/> Date/Time | Calculate a date/time, for example, by adding a number of hours or days to another date/time. | Example: <code>Next = NOW() + 1</code> |
| <input type="radio"/> Number | Calculate a numeric value. | Example: <code>Fahrenheit = 1.8 * Celsius_c + 32</code> |
| <input type="radio"/> Percent | Calculate a percent and automatically add the percent sign to the number. | Example: <code>Discount = (Amount - Discounted_Amount_c) / Amount</code> |
| <input type="radio"/> Text | Create a text string, for example, by concatenating other text fields. | Example: <code>Full Name = LastName & ", " & FirstName</code> |
| <input type="radio"/> Time | Calculate a time, for example, by adding a number of hours to another time. | Example: <code>Next = TIMEVALUE(NOW()) + 1</code> |

At the bottom right of the form, there are three buttons: 'Previous', 'Next' (which has a hand cursor icon over it), and 'Cancel'.

5. On the following screen click the **Advanced Formula** tab. Click on the **Insert Field** button.



6. On modal window that opens up Select **Loot Winner> Participant > Last Prize Win** and click **Insert**. This is a very simple function. You can write a variety complex functions using multiple fields. Optionally, click the **Check Syntax** button to check the validity of the formula.



7. **Click Next** and accept the default options on the following screens before finally clicking **Save**.

You just created a new object and added a few fields to the object. Along the way you also set the security permissions for those fields and added them to the UI for the object. Next up, let's create the application and UI for the Loot Administration as well as the Loot app.

Lab 2 - Create the Application and Tabs

Salesforce Terminology & Navigation: Orientation to the User Interface

Duration: 15 minutes

When learning a new application, platform or development paradigm for the first time, two of the most important things to learn are (1) Terminology and (2) Navigation. This following section will give you the tools you need to understand Salesforce terminology so you will be able to navigate and complete the subsequent exercises.

Below is a screenshot of a Travel Approval application. Highlighted are the main functional areas you will use in this workshop and a description of each is provided below.

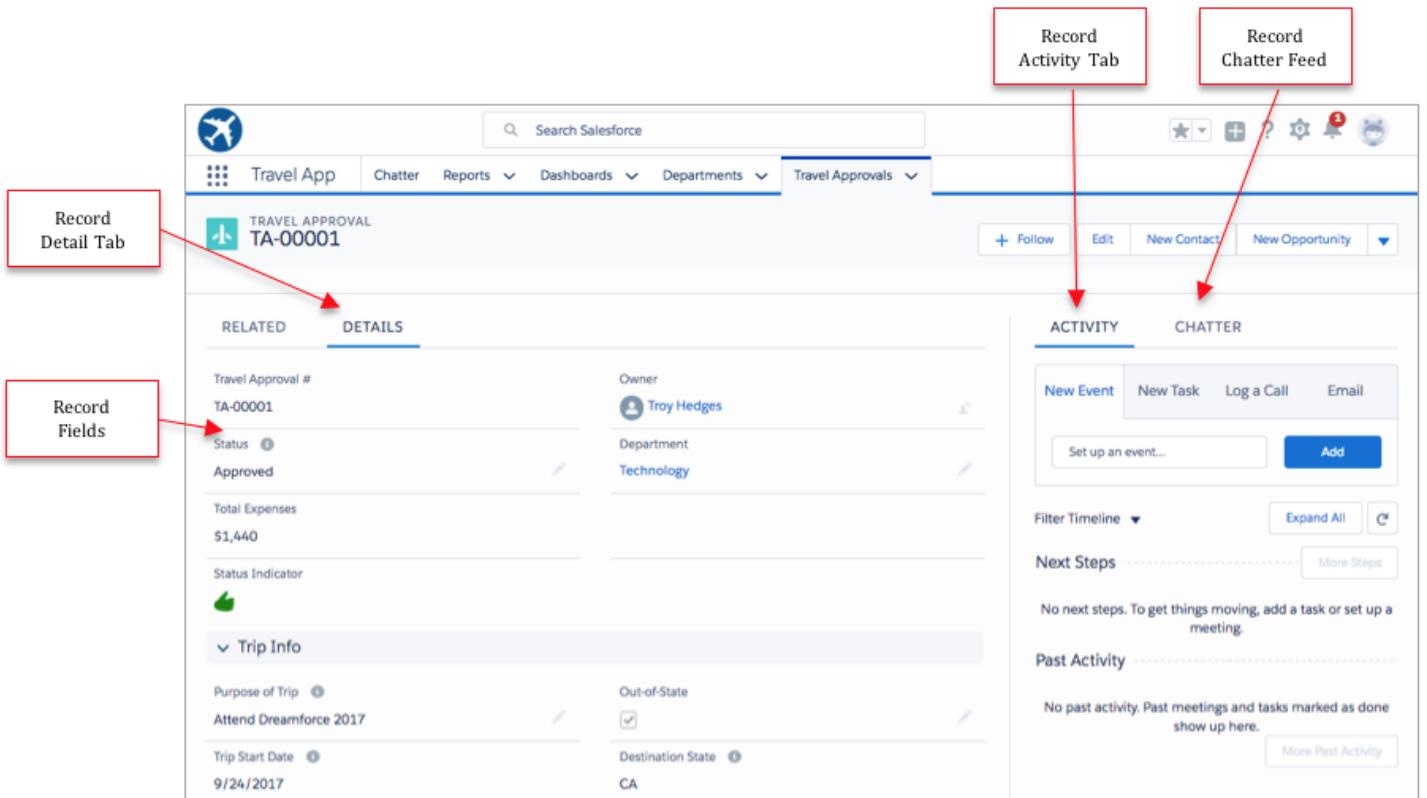
The screenshot shows a Salesforce application interface for a Travel Approval system. The top navigation bar includes the Application Selector (with a Travel App icon), Global Search, Tabs, and various navigation links like Chatter, Reports, Dashboards, and Departments. A specific tab labeled "Travel Approvals" is selected. The main content area displays a list view of travel approvals, with columns for TRAVEL APPROVAL#, DEPARTMENT, CREATED BY, STATUS, TRIP START DATE, TRIP END DATE, and STATUS INDICATOR (represented by green or red thumbs-up icons). The list view selector shows "All". Red boxes and arrows highlight several key components: "Application Selector" points to the app icon in the top left; "List View Selector" points to the "All" button in the list view header; "List View Data Area" points to the table body where row 3 (TA-00003) is selected; "Global Search" points to the search bar at the top; "Tabs" points to the tab bar; "List View Configuration" points to the gear icon in the top right; "Setup Configuration" points to the gear icon in the top right; and "User Options" points to the user profile icon in the top right.

| TRAVEL APPROVAL# | DEPARTMENT | CREATED BY | STATUS | TRIP START DATE | TRIP END DATE | STATUS INDICATOR |
|------------------|--------------------------|-------------|----------|-----------------|---------------|------------------|
| 1 TA-00001 | Technology | Troy Hedges | Approved | 9/24/2017 | 9/29/2017 | Green |
| 2 TA-00002 | | Troy Hedges | Rejected | 11/9/2017 | 11/10/2017 | Red |
| 3 TA-00003 | Office of Communi... | Troy Hedges | Approved | 6/14/2016 | 6/15/2016 | Green |
| 4 TA-00004 | Disability Determin... | Troy Hedges | Approved | 10/1/2016 | 10/1/2016 | Green |
| 5 TA-00005 | Division of Disabilit... | Troy Hedges | Rejected | 4/3/2016 | 4/6/2016 | Red |
| 6 TA-00006 | Technology | Troy Hedges | Approved | 3/13/2016 | 3/17/2016 | Green |
| 7 TA-00007 | Human Resources | Troy Hedges | Approved | 4/27/2016 | 5/5/2016 | Green |
| 8 TA-00008 | Division of Finance | Troy Hedges | Rejected | 3/9/2016 | 3/9/2016 | Red |
| 9 TA-00009 | Contract Managem... | Troy Hedges | Approved | 12/22/2016 | 1/1/2017 | Green |
| 10 TA-00010 | Division of Aging | Troy Hedges | Approved | 4/23/2016 | 4/28/2016 | Green |
| 11 TA-00011 | Audit Services | Troy Hedges | Rejected | 8/9/2016 | 8/15/2016 | Red |
| 12 TA-00012 | Division of Aging | Troy Hedges | Approved | 11/5/2016 | 11/11/2016 | Green |
| 13 TA-00013 | Disability Determin... | Troy Hedges | Approved | 3/22/2016 | 3/22/2016 | Green |
| 14 TA-00014 | Technology | Troy Hedges | Approved | 3/6/2016 | 3/9/2016 | Green |
| 15 TA-00015 | Office of General C... | Troy Hedges | Approved | 11/21/2016 | 11/26/2016 | Green |
| 16 TA-00016 | Office of Communi... | Troy Hedges | Approved | 3/7/2016 | 3/16/2016 | Green |

Salesforce user interface functional areas (starting in upper right):

- **User Options** – provides configuration options tied to your user account such as login session and user profile. You can logout of the system or edit your user profile for changing information like email address, password, contact information, time zone, etc...
- **Setup Configuration** – *Setup* is the place where Administrators will spend lots of their time when configuring Salesforce to meet their business needs. This is only provided to Administrators and provides access to all setup capabilities such as creating new applications, creating new custom objects and custom fields, creating users and user profiles, configuring page layouts, and many other options.
- **Global Search** – Salesforce has a rich Google-like search engine for easily finding information throughout the system. Salesforce will search across all data in the system and provide a response list that is grouped by object types for easily finding the information you need.
- **Application Selector** – Salesforce supports the ability to create many applications and provide access to users of the system via the built-in security model. A user can use the application selector to switch between applications that he/she has been given access to. In the workshop, we will be creating a new application that will be available in this menu.
- **Tabs** – a Salesforce application is made up of one or more tabs. When a user switches to a new application, the tabs will adjust based on which tabs have been configured for that application. Each Tab can be thought of as a logical business entity like an Account (Business), Contact (Person), Travel Request, Report and so on. The Tabs represent “data objects” or things you track in your business. Some data objects are delivered out-of-the-box in Salesforce and some will be “custom objects” that you create.
- **List View Selector** – A list view is a set of search conditions that display records that match the search conditions. For example, a view of contacts that have "Birthdays This Month" would filter your list of contacts based on a search for birthdays falling on a day in the current month. By default, Salesforce.com includes a number of views for each screen Tab/Object. The List View Selector allows you to switch between the list views that have been configured for that object.
- **List View Configuration** – this option provides capabilities to create new list views or modify existing list views. You can change such options as the title, the filter criteria, or the columns to show in the data table section. You will create a custom list view in this workshop to show open travel approvals.
- **List View Data Area** – this is the table area that shows all records that match the list view selected. As mentioned above, the list view will define the filter criteria and columns to show for the records that it finds.

The typical interactions a user has with the Salesforce interface is to use the tabs to focus on the type of object you are interested in. You use configured list views to filter the records associated with that object where a record can be thought of as a row in a database. Then in the list view table section, you click on a record to drill in to the details of that record. Below is a sample screen that shows the details of a record.



Salesforce record detail user interface functional areas:

- **Record Detail Tab** – this tab shows the actual field information for the chosen record. The fields and field sections shown on this page can be configured by administrator and different views (i.e. page layouts) can be configured for different users. Thus, one user could have a different view of the field level data than another user.
- **Record Fields** – this is area where all fields are shown for the current record. As mentioned above, the fields shown on this area are totally configurable and different page layouts can be created to show different views to different users.
- **Record Activity Tab** –this is tab for users to enter activities such as logging a call, creating new tasks, or logging a meeting. This section also includes a chronological timeline of the activities that have occurred and those that are scheduled in the future.
- **Record Chatter Tab** - Chatter is Salesforce's social collaboration tool that is native to the platform. With Chatter, you can collaborate with people both inside and outside your organization on individual records of data (e.g. Cases, Contacts, Referrals) and on common topics of interest using Chatter Groups. The Chatter “feed” allows a user to post comments, @Mention co-workers, add files, initiate polls, and perform “actions” such as creating a note, adding a task, updating a field, or sending an email. In addition, you can “follow” a record of data much the same way you can follow your favorite sports team on Facebook. When you follow a record in Chatter, anytime the record is updated, an entry is made on the Chatter “feed” so followers are instantly aware of the updates related to that particular record.

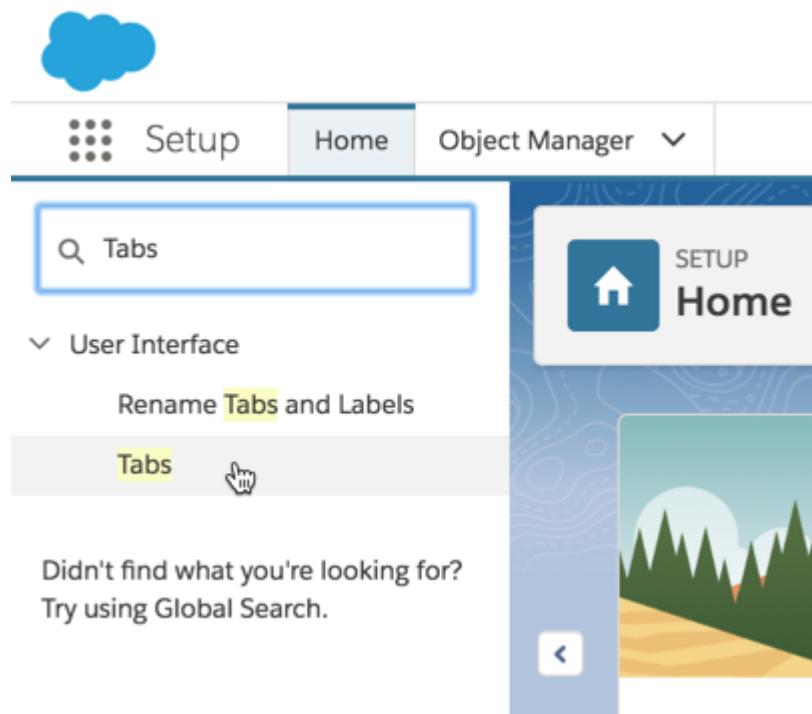
When viewing records in Salesforce, you have option to view the child objects related to your record. These related child objects are referred to “related lists” in the user interface. Below is screenshot of record where the related lists are being shown.

Salesforce user interface functional areas:

- **Related Tab** – click this tab to see the related lists (i.e. child objects) that are linked to this record
- **Related Lists** - related lists are a set of (child) related records associated, in this example, to the travel approval record you created. The Related List objects like (expense items, notes, approval history) have a relationship in the data model (schema) to the Travel Approval object. Related lists of records usually have either a 1:M, M:1 or M:M relationship with the parent object.

Create a Tab for the Selected Loot Items Object

1. From Setup, enter **Tabs** in the Quick Find box, then select **Tabs**



2. In the Custom Object Tabs section, click **New**

| Action | Label | Description |
|------------|----------------------|------------------------|
| Edit Del | Campaign Prize Items | |
| Edit Del | Loot Campaigns | |
| Edit Del | Participants | |
| Edit Del | Prizes | |
| New | | New Custom Object Tabs |
| | Treasure chest | |
| | Map | |
| | People | |
| | Sack | |

3. From the Object picklist, select **Selected Loot Items**.

4. For the Icon, Click  and select **Star**



5. Click **Next**.

6. Tabs can be left hidden or visible for all profiles or, be made visible to only certain profiles. Leave the profile selection as is and click **Next**.

7. In the Add to Custom Apps section:

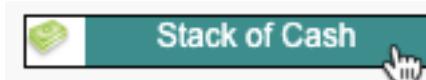
- Deselect **Include Tab**.
- Select **Append tab to users' existing personal customizations**.

| Custom App | <input type="checkbox"/> Include Tab |
|---|--------------------------------------|
| Customer Portal | <input type="checkbox"/> |
| Partner Portal | <input type="checkbox"/> |
| Bolt Solutions (standard__LightningBolt) | <input type="checkbox"/> |
| Sales (standard__LightningSales) | <input type="checkbox"/> |
| Sample Console (standard__ServiceConsole) | <input type="checkbox"/> |
| Service (standard__Service) | <input type="checkbox"/> |
| Sales (standard__Sales) | <input type="checkbox"/> |
| App Launcher (standard__AppLauncher) | <input type="checkbox"/> |
| Start Here (Start_Here) | <input type="checkbox"/> |
| High Volume Customer Portal User | <input type="checkbox"/> |
| Authenticated Website User | <input type="checkbox"/> |
| Site.com (standard__Sites) | <input type="checkbox"/> |
| Salesforce Chatter (standard__Chatter) | <input type="checkbox"/> |
| Community (standard__Community) | <input type="checkbox"/> |
| Marketing (standard__Marketing) | <input type="checkbox"/> |
| Platform (standard__Platform) | <input type="checkbox"/> |
| Lightning Usage App (standard__LightningInstrumentation) | <input type="checkbox"/> |
| Internal Portal User | <input type="checkbox"/> |
| Content (standard__Content) | <input checked="" type="checkbox"/> |
| <input checked="" type="checkbox"/> Append tab to users' existing personal customizations | |

8. Click **Save**.

Create a Tab for the Loot Winner Object

Just like you created a tab for the Loot Winner Object. Select the ‘Stacks of Cash’



icon for the tab. Choose the default options for profiles and remember to deselect the ‘Include Tab’ and ‘Append tab to users’ existing personal customizations’ checkboxes.

Create an App Page for the Loot App

Salesforce Tabs are the landing pages for Salesforce Objects but they can also be a collection of standard and custom components assemble for specific use cases and audiences.

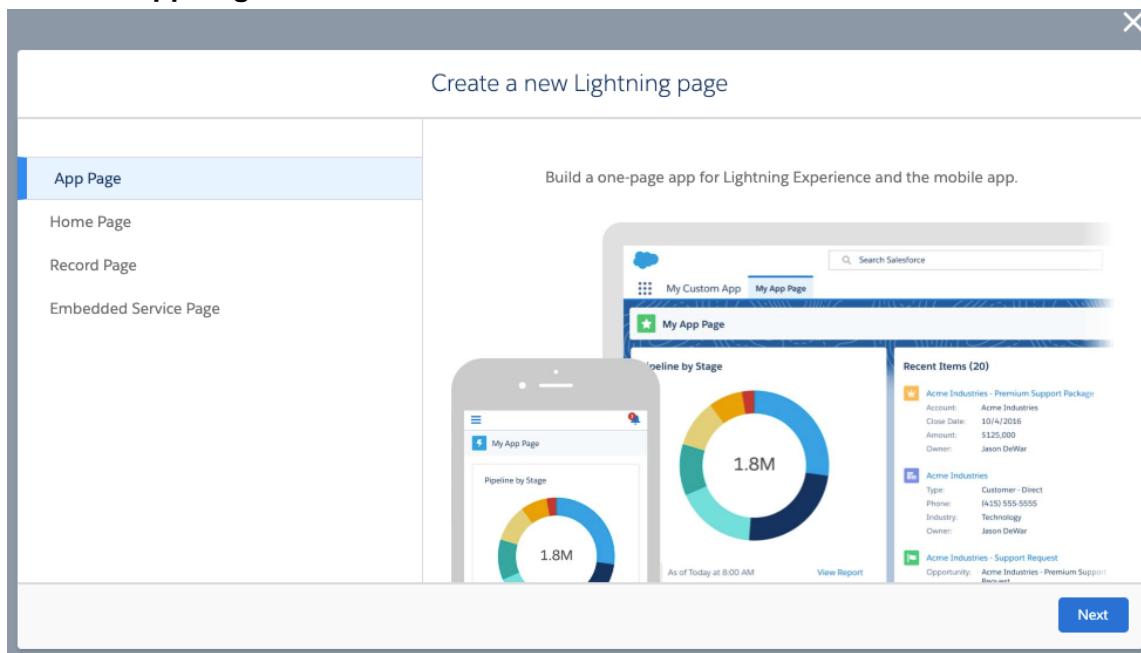
The Loot App will be the landing page for the end users of the Loot App who will be able to participate in a Loot Campaign and select Loot items in a specific preference, all based on how the Campaign is setup by the administrators. There are some custom Lighting Web Components that we have built for this purpose. The components use the same underlying data model that we have built so far. Let’s take a look at how you can build an App Page using the Lightning App Builder.

1. From **Setup**, enter **App Builder** in the Quick Find box, then select **Lightning App Builder**.
2. Click **New** on the Lightning App Builder page.

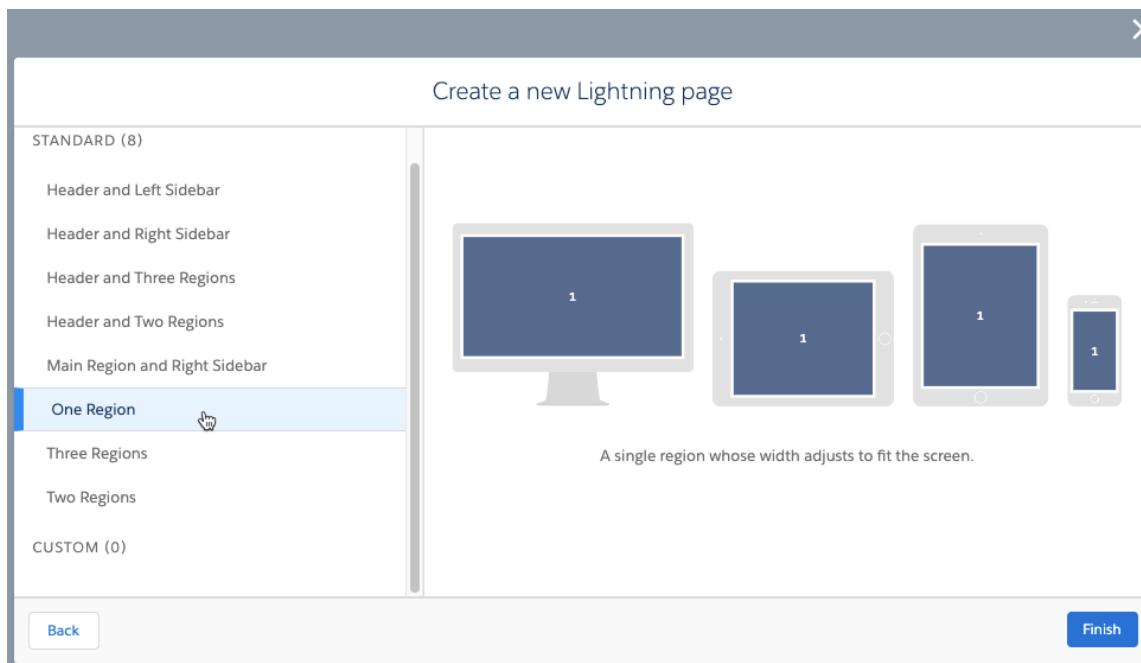
A screenshot of the Salesforce Lightning App Builder interface. The search bar at the top right contains "Search Setup". The left sidebar has a "Setup" icon, "Home" button, and "Object Manager" dropdown. A search bar in the sidebar contains "App Builder". Under "User Interface", there is a "Lightning App Builder" button which is highlighted with a yellow background. Below the sidebar, a message says "Didn't find what you're looking for? Try using Global Search." The main content area has a "SETUP" header and "Lightning App Builder" title. It includes a description: "The Lightning App Builder provides an easy to use graphical interface for creating custom Lightning pages for Salesforce Lightning Experience drop into regions of the page in the Lightning App Builder." Below this is a "View:" dropdown set to "All" and a "Create New View" button. At the bottom, there is a table titled "Lightning Pages" with columns: Action, Label (with a sort arrow), Name, and Namespace Prefix. A "New" button with a hand cursor is shown in the "Action" column of the first row, which has the label "Participant Record Page" and name "Participant_Record_Page".

| Action | Label ↑ | Name | Namespace Prefix |
|--------------------|---|-------------------------|------------------|
| Edit Clone Del | Participant Record Page | Participant_Record_Page | |

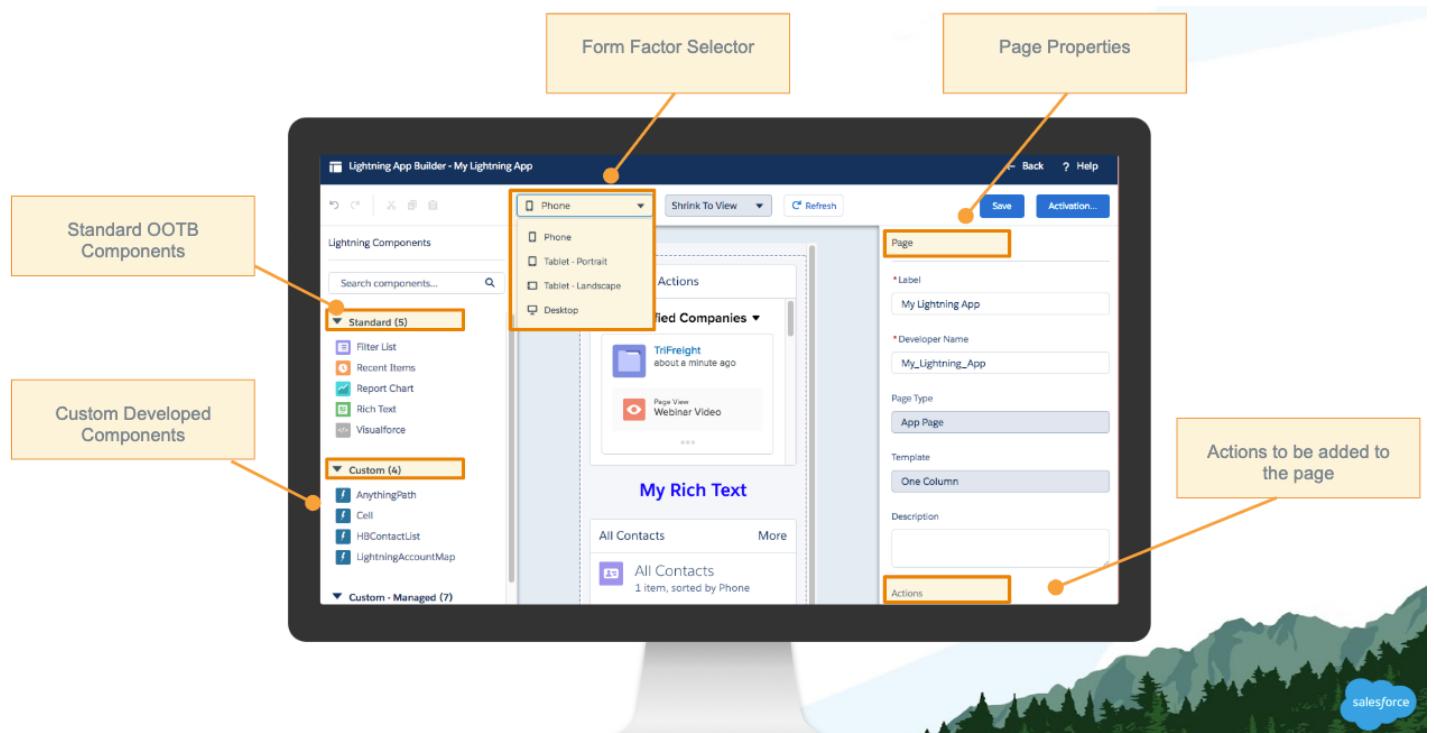
3. Select **App Page** and then click **Next**.



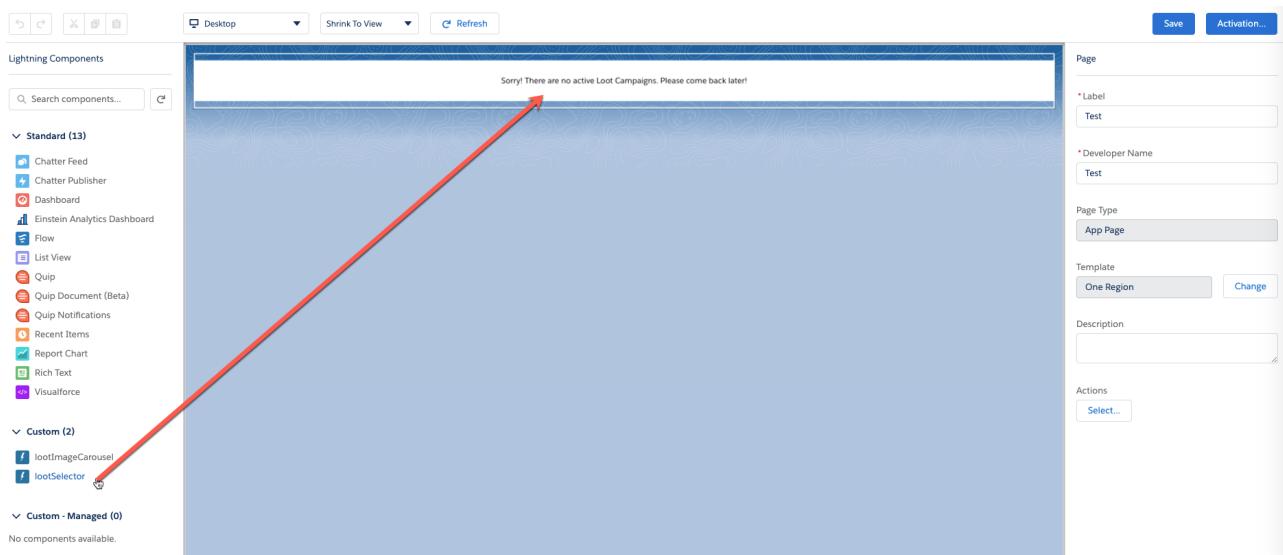
4. On the next screen, enter **Loot** as the page label and click **Next**.
5. The following screen gives you the option of selecting out of the box as well as custom page templates created by your developers. Select the **One Region** template and click **Finish**.



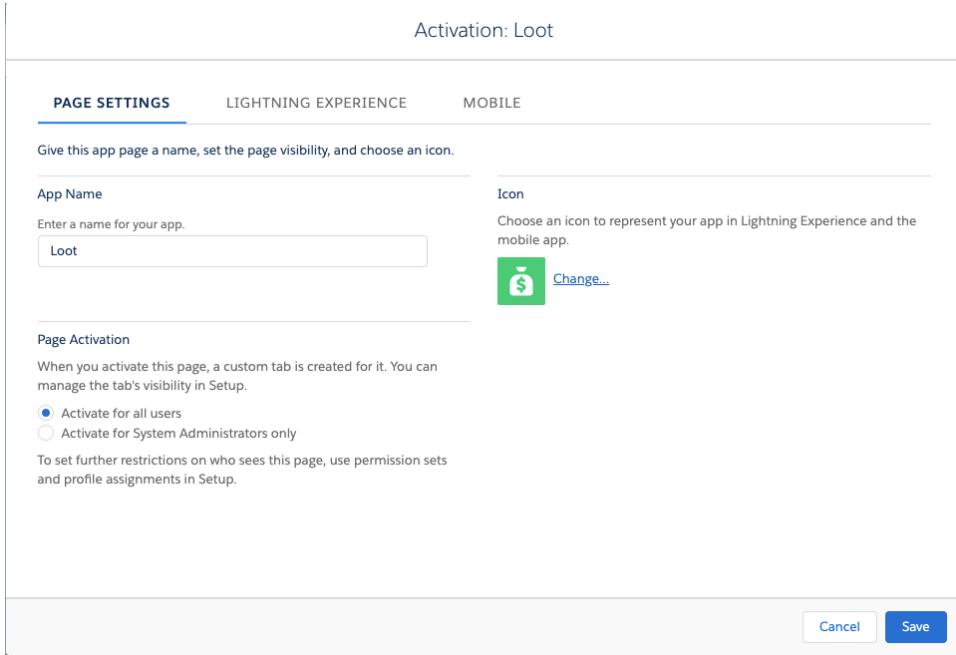
6. The next screen that loads is the Lightning App Builder that allows you to use drag and drop tools to assemble components that appear on the page. Developers can also dynamically make components visible based on either specific user attributes or if a specific record meets certain criterion. Once a page is built, it can be made visible to specific profiles.



7. Drag the **lootSelector** component on to the Canvas. We haven't created a campaign or associated prize items yet so you will see no data render in these components.



8. Click **Save**. On the confirmation message that appears, click **Activate**. Change the icon of the App Page to the sack of cash icon 



The screenshot shows the 'Activation: Loot' configuration page. At the top, there are three tabs: 'PAGE SETTINGS' (which is selected), 'LIGHTNING EXPERIENCE', and 'MOBILE'. Below the tabs, a section titled 'Give this app page a name, set the page visibility, and choose an icon.' contains fields for 'App Name' (set to 'Loot') and 'Icon' (set to a green sack of cash icon). A note says: 'Choose an icon to represent your app in Lightning Experience and the mobile app.' Under 'Page Activation', it says: 'When you activate this page, a custom tab is created for it. You can manage the tab's visibility in Setup.' There are two radio button options: 'Activate for all users' (selected) and 'Activate for System Administrators only'. A note below says: 'To set further restrictions on who sees this page, use permission sets and profile assignments in Setup.' At the bottom right are 'Cancel' and 'Save' buttons.

9. Click **Finish** on the confirmation message that pops up.
10. Click the **Back** button on the top right corner to go back to the **Setup** menu.

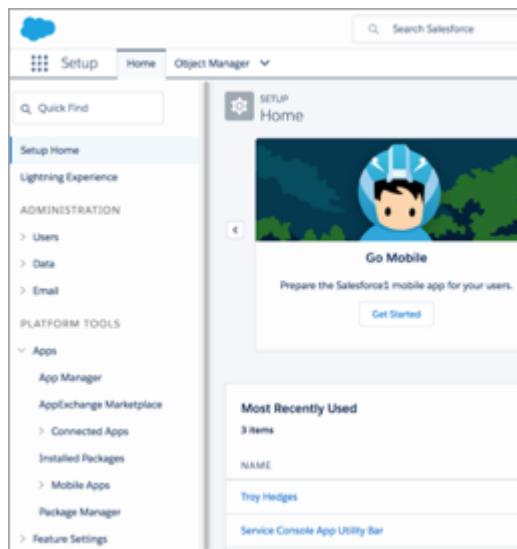


11. Navigate to the **Tabs** section using the **Quick Find** search. You will see the **Loot** tab listed under the **Lightning Pages** tab section. Now onto creating the apps!

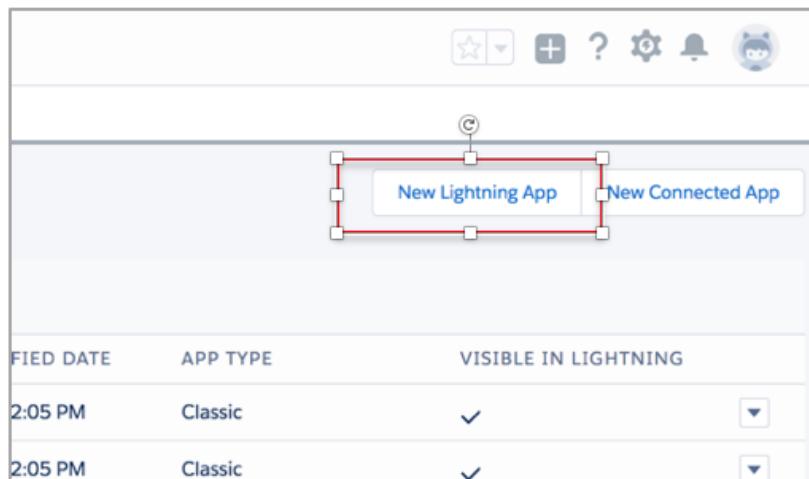
Create the Loot Administration App

The next thing we need to do is to create the **Loot Administration** app that allows Loot Campaign administrators to create and manage campaigns, related prizes, participants, their loot selections, track winners and report on all of this data as well . Remember that a Salesforce application is a grouping of tabs that give you access to corresponding object data.

1. Access the **Setup** menu
2. In left-hand side of main window, click on **Apps > App Manager**. Remember you could also search for App Manager in the Quick Find search box.



3. Click **New Lightning App** in the upper-right area.



4. On the “App Details & Branding” window, enter the following:

App Details & Branding

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

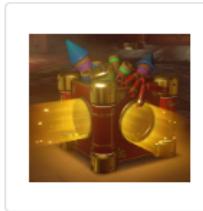
App Details

* App Name i

* Developer Name i

Description i
 G

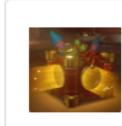
App Branding

Image i

i #0070D2

Primary Color Hex Value

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

App Launcher Preview


Loot Administration

| Parameter | Value |
|----------------|---|
| App Name | Loot Administration |
| Developer Name | Loot_Administration (Auto populates) |
| Image | Upload the ‘ Loot_Admin_Logo.jpg ’ image from the Salesforce Workshop folder you downloaded |

5. Click **Next** button in lower-right.

6. On **App Options** screen, select **Standard navigation** for Navigation Style, **Desktop and Phone** for Supported Form Factors, and click **Next** button.

New Lightning App

App Options

Navigation and Form Factor i

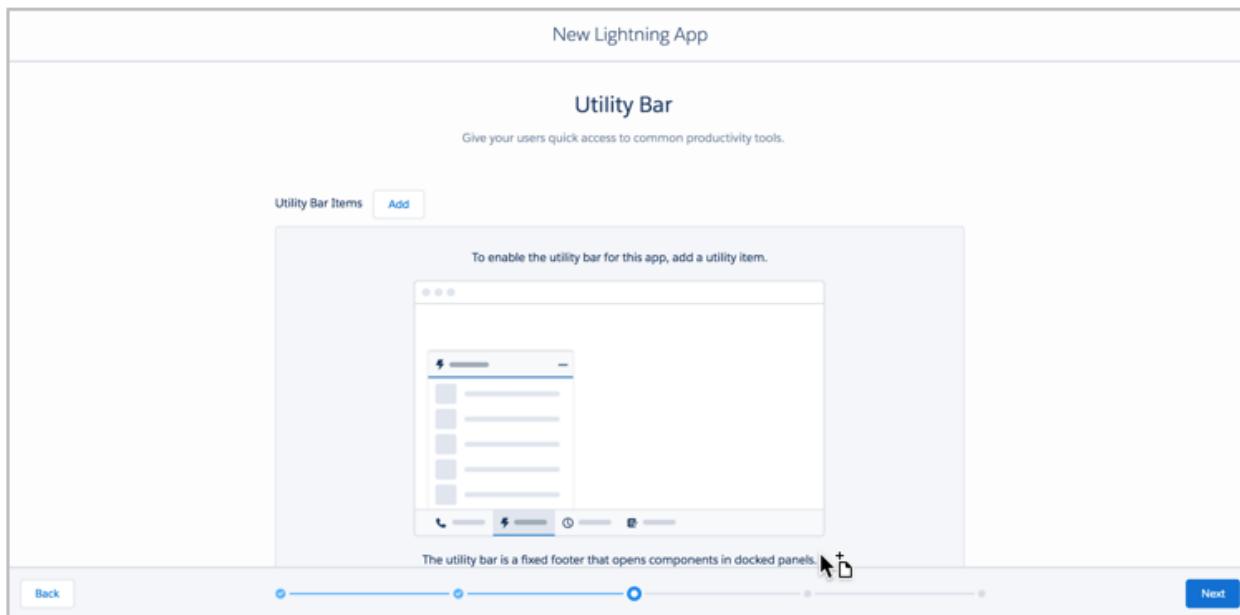
- * **Navigation Style**
 - Standard navigation
 - Console navigation

- * **Supported Form Factors**
 - Desktop
 - Phone
 - Desktop and phone

Setup and Personalization i

- #### App Personalization Settings
- Disable end user personalization of nav items in this app
 - Disable temporary tabs for items outside of this app

7. Utility items in a Lightning App are items that your user can access quickly. These can be out of the box features such as Notes, recently accessed items, report charts etc. as well as custom developed features. For now, we will not add any utility bar items. Just click the **Next** button.



8. On **Select Items** screen, select the following tabs from the Available Items side and move them over to the Selected Items side: **Loot Campaigns, Prizes, Participants, Campaign Prize Items, Selected Loot Items, Loot Winners, Chatter, Reports and Dashboards**. Your screen should look like the following.

Notice that you can create an object and a tab by using the **Custom Object from Spreadsheet** aka Lightning Object Creator. Click the **Next** button.

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.

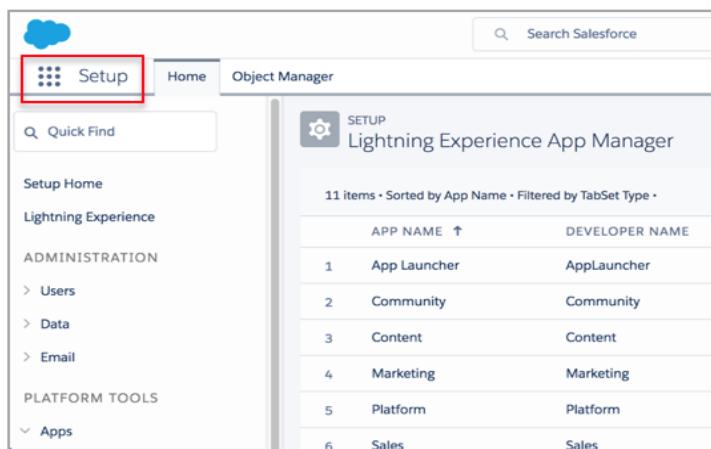
9. On the **Assign to User Profiles** screen, select **System Administrator** like the following screen. Click **Save & Finish** button in lower-right.

10. You should now see the new **Loot Administration** app on the **App Manager** screen like the following:

The screenshot shows the 'Lightning Experience App Manager' interface. At the top, there are buttons for 'New Lightning App' and 'New Connected App'. Below the header, a table lists 16 items, each representing an app with columns for APP NAME, DEVELOPER NAME, DESCRIPTION, LAST MODIFIED, APP TYPE, and VISIBILITY. The 'Loot Administration' app, which has a developer name of 'Loot_Administration', is highlighted with a red border. The table has a header row and 16 data rows.

| APP NAME ↑ | DEVELOPER NAME | DESCRIPTION | LAST MODIFIED | APP T... | VISIBILITY |
|--------------------------------------|-----------------------|---|-------------------|-----------|------------|
| 1 All Tabs | AllTabSet | | 8/29/2019 4:35 AM | Classic | ✓ |
| 2 Analytics Studio | Insights | Build Einstein Analytics dashboards and apps | 8/29/2019 4:35 AM | Classic | ✓ |
| 3 App Launcher | AppLauncher | App Launcher tabs | 8/29/2019 4:35 AM | Classic | ✓ |
| 4 Bolt Solutions | LightningBolt | Discover and manage business solutions designed for your industry. | 8/29/2019 4:35 AM | Lightning | ✓ |
| 5 Community | Community | Salesforce CRM Communities | 8/29/2019 4:35 AM | Classic | ✓ |
| 6 Content | Content | Salesforce CRM Content | 8/29/2019 4:35 AM | Classic | ✓ |
| 7 CPQ Integration User Connected App | CPQIntegrationUserApp | | 8/29/2019 4:35 AM | Connected | ✓ |
| 8 Loot Administration | Loot_Administration | | 9/8/2019 1:28 PM | Lightning | ✓ |
| 9 Marketing | Marketing | Best-in-class on-demand marketing automation | 8/29/2019 4:35 AM | Classic | ✓ |
| 10 Package App | Package_App | | 9/5/2019 11:35 AM | Lightning | ✓ |
| 11 Platform | Platform | The fundamental Lightning Platform | 8/29/2019 4:35 AM | Classic | ✓ |
| 12 Sales | Sales | The world's most popular sales force automation (SFA) solution | 8/29/2019 4:35 AM | Classic | ✓ |
| 13 Sales | LightningSales | Manage your sales process with accounts, leads, opportunities, and more | 8/29/2019 4:35 AM | Lightning | ✓ |
| 14 Salesforce Chatter | Chatter | The Salesforce Chatter social network, including profiles and feeds | 8/29/2019 4:35 AM | Classic | ✓ |
| 15 Service | Service | Manage customer service with accounts, contacts, cases, and more | 8/29/2019 4:35 AM | Classic | ✓ |
| 16 Site.com | Sites | Build pixel-perfect, data-rich websites using the drag-and-drop Site.com application, and manage content and published sites. | 8/29/2019 4:35 AM | Classic | ✓ |

11. Let's now navigate to the **Loot Administration** application to see what it looks like so far. We will use the application selector to accomplish this. Click the application selector, also known as the 'waffle icon' on the top left of the screen. Click that and select the **Loot Administration** application (see next page).



12. An application selector window will pop-up. Click on the **Loot Administration** app to select it. You can reorder the app tiles as per your preferences

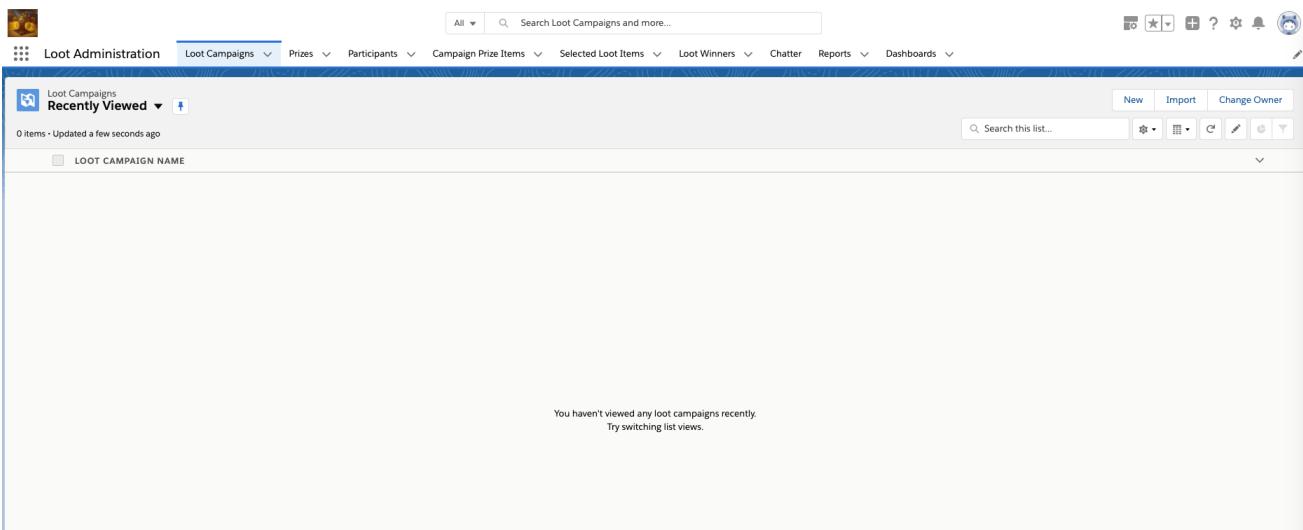
App Launcher

[Visit AppExchange](#)

All Apps

| | | | |
|--|--|---|---|
|  Service Manage customer service with accounts, contacts, cases, and more |  Marketing Best-in-class on-demand marketing automation |  Community Salesforce CRM Communities |  Site.com Build pixel-perfect, data-rich websites using the drag-and-dr... |
|  Salesforce Chatter The Salesforce Chatter social network, including profiles and feeds |  Content Salesforce CRM Content |  Sales Manage your sales process with accounts, leads, opportunities, and more |  Bolt Solutions Discover and manage business solutions designed for your industry. |
|  Package App |  Loot Administration | | |

Your window should now look like the following. Note it has all the tabs you selected while creating the app.

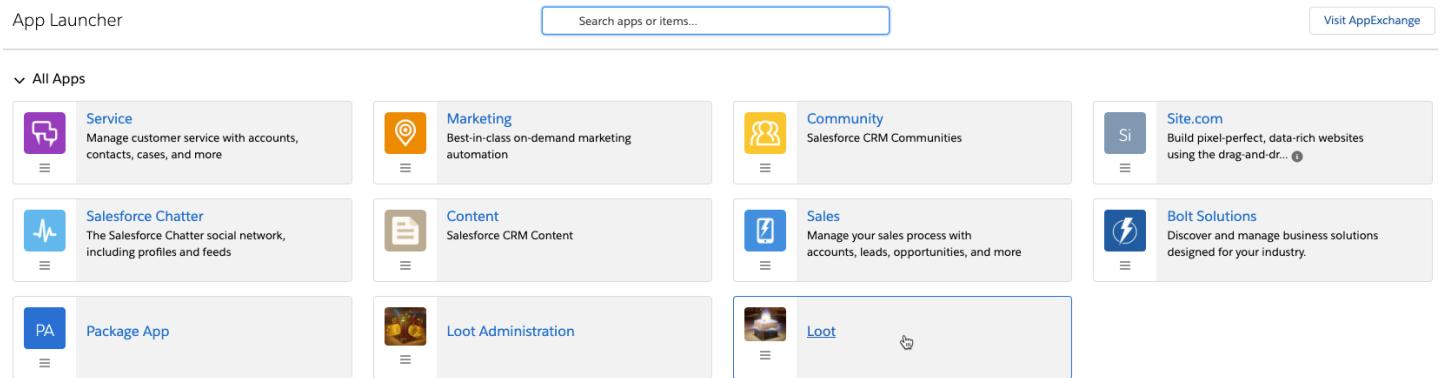


The screenshot shows the Salesforce App Launcher interface. A red box highlights the "Loot Administration" app card, which is the second item in the second row. The card features a blue icon with a yellow gear and the text "Loot Administration". Below the card, there is a brief description: "Manage your sales process with accounts, leads, opportunities, and more". The rest of the interface includes a search bar at the top, a navigation bar with various tabs like "Loot Campaigns", "Prizes", "Participants", etc., and a main content area that is currently empty, displaying a message: "You haven't viewed any loot campaigns recently. Try switching list views."

Create the Loot App

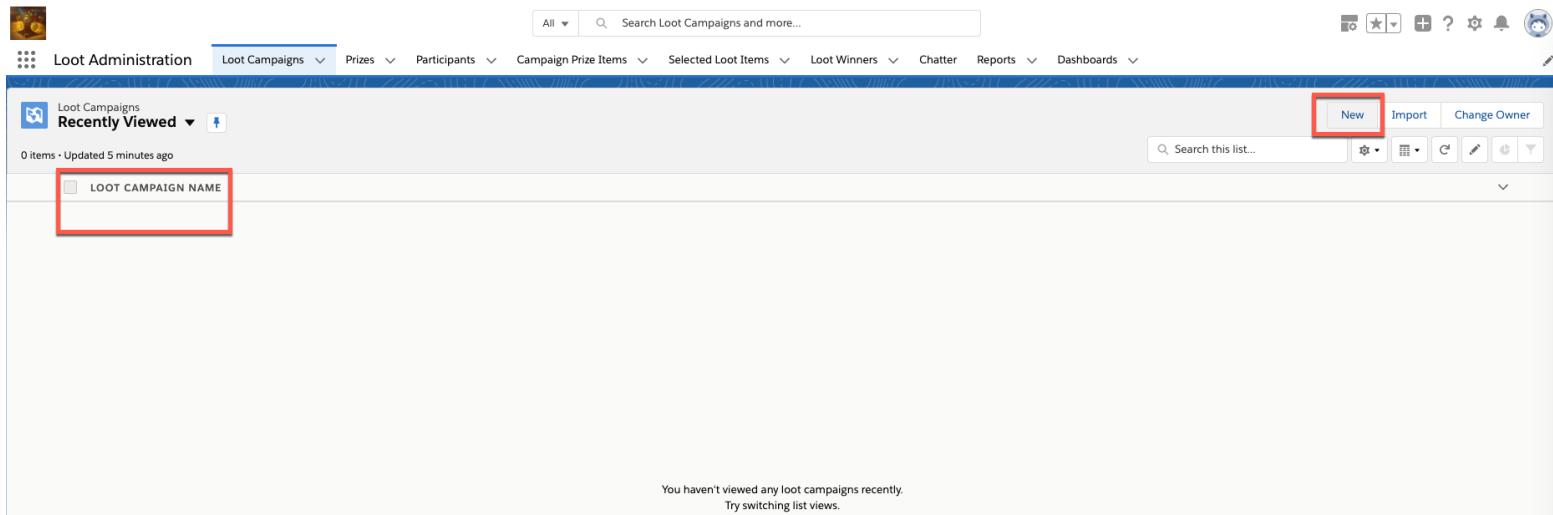
Just like the Loot Administration app, go to the **App Manager** in Setup and create the **Loot** app.

1. Name your App **Loot**.
2. Use the **Loot App.jpeg** image as the image logo.
3. Choose **Standard Navigation** for Navigation Style.
4. Choose **Desktop** for Supported Form Factors.
5. Skip adding **Utility Items**.
6. Add the **Loot** Lightning Page Tab from Available Items.
7. Choose the **System Administrator** and **Standard User** profiles.
8. Click the **App Launcher** and confirm that the **Loot** app is visible.
9. We will visit the app after we enter some data for Loot Campaigns and Prizes.

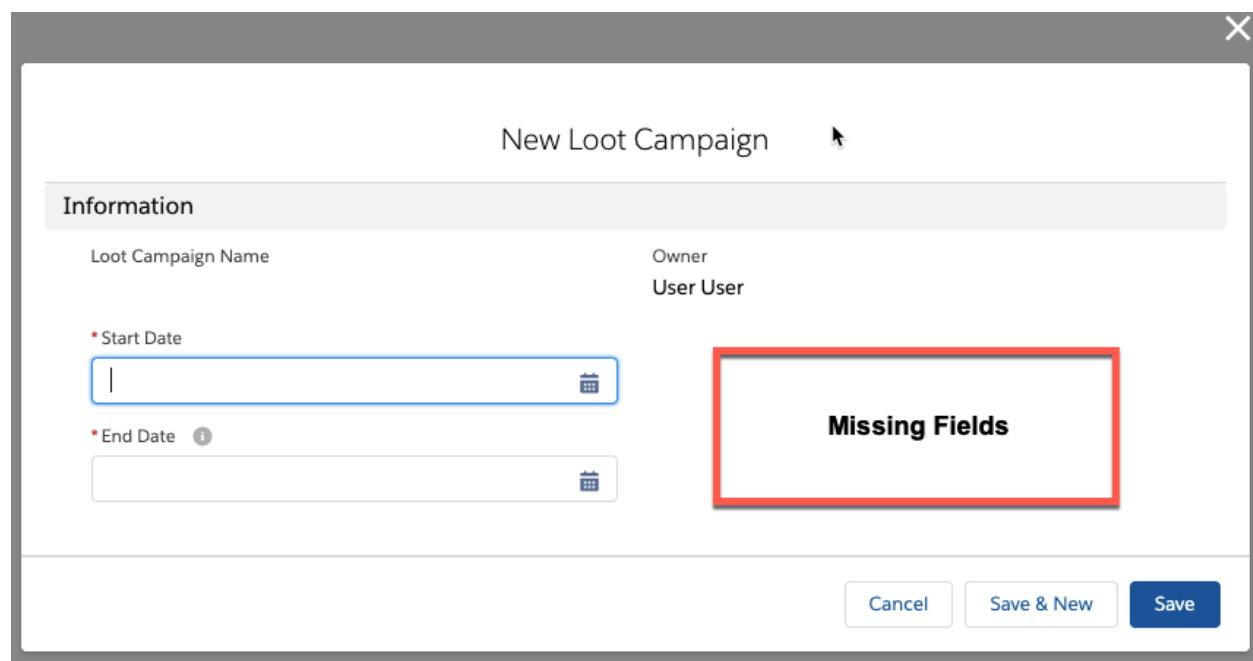


Lab 3 - Manage Page Layouts and List Views

Access the **Loot Administration** app via the App Launcher. While on the **Loot Campaigns** tab you will notice a few things. First, while on the **Recently Viewed** list view you only see the **Campaign Name** tab. Second, if you click the **New** button on the top right corner of the list view to create a new Loot Campaign, you will see that the '**Region**' and '**Active?**' fields are missing from the page.



The screenshot shows the Salesforce App Launcher with the 'Loot Administration' app selected. The 'Loot Campaigns' tab is active, showing the 'Recently Viewed' list view. A red box highlights the 'LOOT CAMPAIGN NAME' column header. Another red box highlights the 'New' button in the top right corner of the list view.



The screenshot shows the 'New Loot Campaign' modal dialog. The 'Information' tab is selected. A red box highlights the 'Start Date' field. A larger red box highlights the 'Missing Fields' section, which contains the 'Region' and 'Active?' fields. The 'Save' button is visible at the bottom right.

Let's see how we can modify the page to add fields to both the list view as well as the record forms.

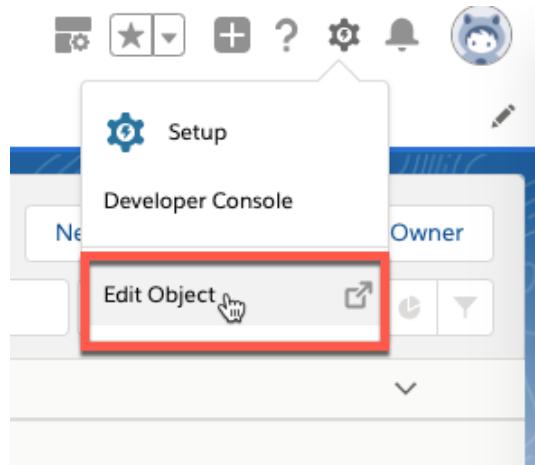
Modify the Page Layout of the Loot Campaign Object

A page layout determines the fields, sections, related lists, and buttons that appear when users view or edit a record. You can modify an object's default page layout or create a new one.

You can customize a page's contents, such as the fields and buttons that appear on the page, by using the page layout editor tool. The page layout editor helps you manage the content of pages in both our Classic UI and in Lightning Experience. The page layout editor is what we'll be working with in this section.

We will now adjust the user interface for the Loot Campaign object to better suit our requirements.

1. While on the Loot Campaign tab, click the setup gear icon on the top right corner of the screen and click **Edit Object**.



2. The **Loot Campaign** object details page opens in a new window. Click on the **Page Layouts** link on the left side of the page. Click on the **Loot Campaign Layout** page layout.

A screenshot of the Salesforce object details page for 'Loot Campaign'. On the left, there is a sidebar with links: 'Details', 'Fields & Relationships', 'Page Layouts' (which is highlighted with a red box), 'Lightning Record Pages', 'Buttons, Links, and Actions', and 'Compact Layouts'. On the right, under the heading 'Page Layouts', it says '1 Items, Sorted by Page Layout Name'. A table shows a single item: 'PAGE LAYOUT NAME' (Loot Campaign Layout). The entire screenshot is framed by a light blue border.

3. You are now taken to the page layout editor as shown below. The layout editor allows you to configure which fields, buttons, or related lists are shown on the page. The types of entities that can be added to the page are on the top left corner of the screen.

The Information and the System Information are default sections on the page layout. You can optionally add new sections on the page as well.

Loot Campaign Layout ▾

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Fields

- Buttons
- Quick Actions
- Mobile & Lightning Actions
- Expanded Lookups
- Related Lists

Quick Find Field Name

| Section | End Date | Region |
|-------------|--------------------|------------|
| Blank Space | Last Modified By | Start Date |
| Active? | Loot Campaign Name | |
| Created By | Owner | |

New Section

Loot Campaign Sample

Highlights Panel

Customize the highlights panel for this page layout...

Quick Actions in the Salesforce Classic Publisher

Actions in this section are currently inherited from the global publisher layout. You can [override the global publisher layout](#) to set a customized list of actions for the publisher on pages that use this layout.

Salesforce Mobile and Lightning Experience Actions

Actions in this section are predefined by Salesforce. You can [override the predefined actions](#) to set a customized list of actions on Lightning Experience and mobile app pages that use this layout. If you customize the actions in the Quick Actions in the Salesforce Classic Publisher section, and have saved the layout, then this section inherits that set of actions by default when you click to override.

Loot Campaign Detail

Standard Buttons: Edit, Delete, Clone, Change Owner, Change Record Type, Printable View, Sharing | Custom Buttons

Information (Header visible on edit only)

| | | | |
|--------------------|-----------------|-------|-------------|
| Loot Campaign Name | GEN-2004-001234 | Owner | Sample Text |
| Start Date | 9/8/2019 | | |
| End Date | 9/8/2019 | | |

Sections

System Information (Header visible on edit only)

| | | | |
|------------|-------------|------------------|-------------|
| Created By | Sample Text | Last Modified By | Sample Text |
|------------|-------------|------------------|-------------|

Custom Links (Header visible on edit only)

4. Let's add the 'Region' and 'Active?' fields to the **Loot Campaign Detail** section. Drag the fields to the Information section. Set them in the appropriate columns as shown in the image below. Your screen should look like following

Loot Campaign Layout ▾

Save Quick Save Preview As... Cancel Undo Redo Layout Properties

Fields

- Buttons
- Quick Actions
- Mobile & Lightning Actions
- Expanded Lookups
- Related Lists

Quick Find Field Name

| Section | End Date | Region |
|-------------|--------------------|------------|
| Blank Space | Last Modified By | Start Date |
| Active? | Loot Campaign Name | |
| Created By | Owner | |

Actions in this section are predefined by Salesforce. You can [override the predefined actions](#) to set a customized list of actions on Lightning Experience and mobile app pages that use this layout. If you customize the actions in the Quick Actions in the Salesforce Classic Publisher section, and have saved the layout, then this section inherits that set of actions by default when you click to override.

Loot Campaign Detail

Standard Buttons: Edit, Delete, Clone, Change Owner, Change Record Type, Printable View, Sharing | Custom Buttons

Information (Header visible on edit only)

| | | | |
|--------------------|-----------------|---------|-------------------------------------|
| Loot Campaign Name | GEN-2004-001234 | Owner | Sample Text |
| Start Date | 9/8/2019 | Active? | <input checked="" type="checkbox"/> |
| End Date | 9/8/2019 | Region | Sample Text |

System Information (Header visible on edit only)

| | | | |
|------------|-------------|------------------|-------------|
| Created By | Sample Text | Last Modified By | Sample Text |
|------------|-------------|------------------|-------------|

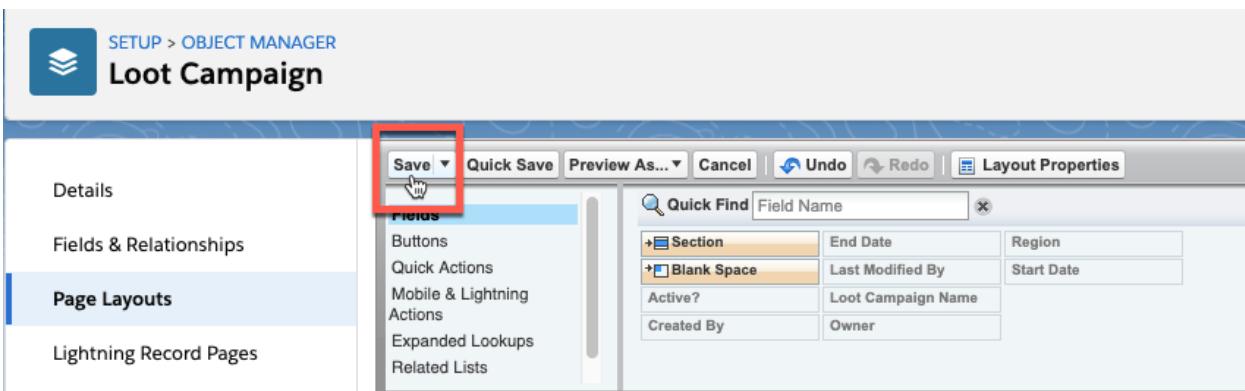
Custom Links (Header visible on edit only)

5. Let's also add the 'Campaign Prize Items' related list to the Loot Campaign page layout.
 Click on **Related Lists** on the left side of the page. Drag the **Campaign Prize Items** relates lists to the top of the **Related Lists** section and click **OK**.

The screenshot shows the Salesforce Layout Editor interface. At the top, there are standard toolbar options like Save, Quick Save, Preview As..., Cancel, Undo, Redo, and Layout Properties. Below the toolbar, the left sidebar has sections for Fields, Buttons, Quick Actions, Mobile & Lightning Actions, Expanded Lookups, and Related Lists. The 'Related Lists' section is highlighted with a red box. The main content area displays the 'Loot Campaign Detail' page layout. In the 'Related Lists' section of the layout, the 'Campaign Prize Items' list is also highlighted with a red box. The layout includes sections for Information, System Information, and Custom Links, each with their own edit-only headers. Standard buttons like Edit, Delete, Clone, Change Owner, Change Record Type, Printable View, and Sharing are at the top of the layout. The 'Campaign Prize Items' list entry has a green checkmark icon next to it.

6. Let's adds columns to the **Campaign Prize Items** related list. Click the wrench icon . Choose the **Prize Image** and the **Prize Name** fields to the **Selected Fields** section. Click **OK**.

The screenshot shows the 'Related List Properties - Campaign Prize Items' dialog box. The 'Columns' tab is active. On the left, the 'Available Fields' section lists fields like Prize: Created Date, Prize: Last Activity Date, etc. On the right, the 'Selected Fields' section lists 'Campaign Prize Item: Campaign Prize I', 'Prize: Prize Name', and 'Prize: Prize Image'. There are 'Add' and 'Remove' buttons between the two sections. Below the 'Selected Fields' section are 'Up' and 'Down' buttons for reordering. Underneath the 'Available Fields' section is a 'Sort By' dropdown set to 'Default' and a radio button for 'Ascending'. At the bottom of the dialog are 'OK', 'Cancel', and 'Revert to Defaults' buttons.



7. Click on **Save**.
8. Navigate back to Loot Campaign tab and click on the **New** button on the list view tab. You should see the Region and Active? Fields on the record creation form. Enter the following details for the new Loot Campaign record.

| Field | Value |
|------------|---|
| Start Date | 9/1/2019 (You can also use the date picker) |
| End Date | 9/30/2019 |
| Active? | Unchecked |
| Region | West |

New Loot Campaign

Information

| | |
|---|----------------------------------|
| Loot Campaign Name | Owner |
| User User | |
| * Start Date | Active? <input type="checkbox"/> |
| 9/1/2019 <input type="button" value="Calendar"/> | |
| * End Date <input type="checkbox"/> | Region |
| 9/30/2019 <input type="button" value="Calendar"/> | West |

9. After you click **Save**, you will be redirected to the newly created record.

This screenshot shows the Salesforce Details page for a Loot Campaign record named 'LC-000000'. The page has two main sections: 'Details' and 'Activity'. The 'Details' section contains fields for 'Loot Campaign Name' (LC-000000), 'Start Date' (9/1/2019), 'End Date' (9/30/2019), 'Created By' (User User), 'Owner' (User User), 'Active?' (checked), 'Region' (West), and 'Last Modified By' (User User). The 'Activity' section shows a Chatter feed with a new event post: 'Set up an event...' and an 'Add' button. It also includes a 'Filters' dropdown set to 'All time - All activities - All types' and a 'Refresh Expand All' link.

10. Click on the **Related** tab to see the related list for this record. Notice that you can create new records of the related objects from the related lists.

This screenshot shows the 'Related' tab for the same Loot Campaign record. The tab displays three related lists: 'Campaign Prize Items (0)', 'Files (0)', and 'Loot Campaign History (1)'. The 'Campaign Prize Items' list has a 'New' button highlighted with a red box. The 'Files' list has an 'Upload Files' button and a 'Drop files' placeholder. The 'Loot Campaign History' list shows one entry for 'Created' by 'User User' on '9/8/2019 5:55 PM'. The right side of the screen shows the standard Chatter feed, filters, and activity history.

Modify the Page Layout of the Participant Object

Remember the **Last Prize Win** field we created for the **Participant** object? When you create a field via the Schema Builder, it isn't automatically added to the object's page layout. Let's add the **Last Prize Win** field to the **Participant** object's page layout.

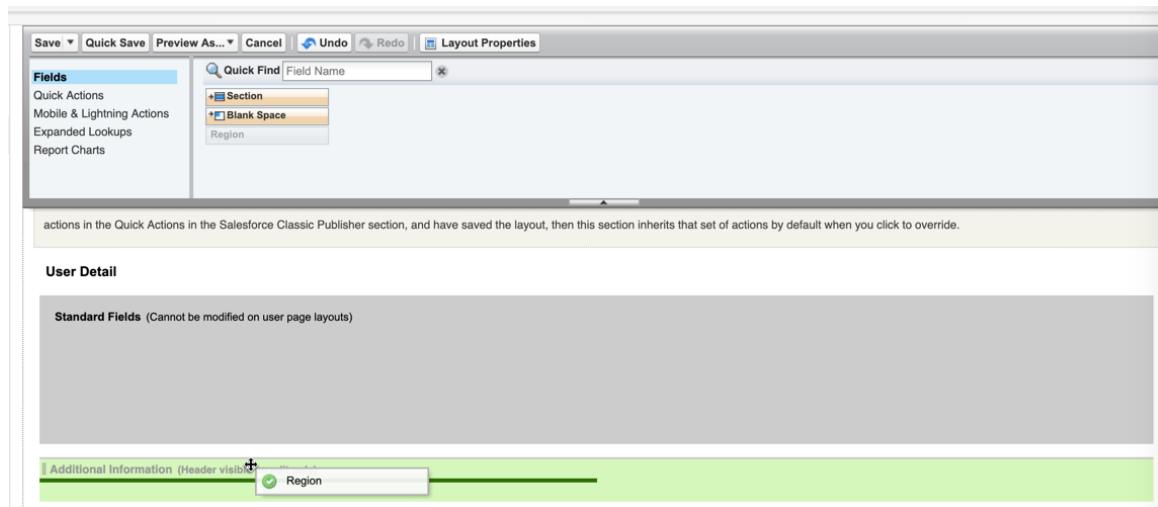
1. Access the **Object Manager** via **Setup** and search for the **Participant** object.
2. Once you click on the **Participant** object, access the **Page Layouts** section and click on **Participant Layouts**.
3. Drag the **Last Prize Win** field to any column of the Information section of the page layout.
4. Click **Save**.

Add the Region field to the User Page Layout

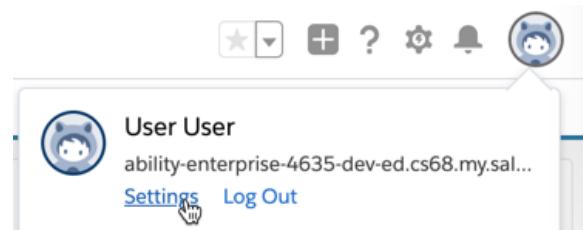
A User in Salesforce is managed as an Object, just like other Standard Objects like Account, Contacts, Opportunities etc and you can extend the user data model the same way you can extend other Standard Objects.

The package that was installed earlier had a 'Region' field for the User object. We are going to use this field to determine the region (West, Central or East) that the user belongs to. Let's add the user field to the User Page Layout.

1. Access the **Object Manager** and search for the **User** object.
2. Click on the **User Page Layouts** section on the left side of the page and click **User Layout**.
3. Add the **Region** field to the **Additional Information** section.



4. Click **Save**.
5. Now let's update this field for your user profile. Click on the profile picture placeholder on the top right corner of the screen and click on **Settings**. This will take you to your personal user settings for multiple features across your Salesforce org.



6. On the window that opens up, click on **Advanced User Details**.

The screenshot shows the 'Advanced User Details' page in the Salesforce setup. The left sidebar has a section titled 'My Personal Information' with a sub-section 'Advanced User Details'. This 'Advanced User Details' link is highlighted with a red box. Other options in the sidebar include 'Approver Settings', 'Authentication Settings for External Systems', 'Change My Password', 'Connections', and 'Grant Account Login Access'. The main content area is titled 'Person' and shows tabs for 'Details' and 'Advanced User Details'.

7. Click on **Edit** and look for the **Region** field.
8. Set the value of Region to **West** and click **Save**.

Add Fields to the Recently Viewed list view

1. Navigate to the **Loot Administration** app and the **Loot Campaigns** tab. You can switch between different list views by selecting the current list view and selecting another from the dropdown list. You can pin a specific list view so that the same list view is pre-selected when a user navigates to that tab.

The screenshot shows the 'Recently Viewed' list view in the 'Loot Campaigns' tab. At the top left, there's a dropdown menu labeled 'Recently Viewed' with a red arrow pointing to it. Next to it is a 'Pin list view' button. To the right is a search bar with a red arrow pointing to it. The main area shows a table with one item: '1 item - Updated a few seconds ago'. The table has columns for 'LOOT CAMPAIGN NAME' and '1 LOOT CAMPAIGN'. The bottom right corner of the screen shows standard Salesforce list view controls like 'New', 'Import', and 'Change Owner'.

2. Let's add some columns to the **Recently Viewed** list view.
3. In top-right, click on gear icon and then **Edit Object**. This will load the object configuration page for the **Loot Campaign** object.

The screenshot shows the 'Edit Object' configuration page for the 'Loot Campaign' object. At the top right, there's a gear icon which is highlighted with a red box. Below it is a sidebar with various options: 'Setup', 'Developer Console', 'Edit Page', and 'Edit Object'. The 'Edit Object' button is also highlighted with a red box. The main content area is titled 'Travel Approvals' and shows tabs for 'ACTIVITY', 'New Event', 'New Task', 'Log a Call', and 'Email'. There's also a 'Set up an event...' input field and an 'Add' button.

4. On left-hand side, click on the option **Search Layouts**. Click on the on the end of the **Search Results** row and select **Edit** from the drop-down.

| Details | Search Layouts | 6 Items, Sorted by Layout | Quick Find |
|-----------------------------|----------------------|---------------------------|---|
| Fields & Relationships | LAYOUT | COLUMNS DISPLAYED | BUTTONS DISPLAYED |
| Page Layouts | List View | N/A | New, Open in Quip, Accept, Change Owner, Change Owner |
| Lightning Record Pages | Lookup Dialogs | Loot Campaign Name | N/A |
| Buttons, Links, and Actions | Lookup Phone Dialogs | Loot Campaign Name | N/A |
| Compact Layouts | Search Filter Fields | N/A | N/A |
| Field Sets | Search Results | Loot Campaign Name | N/A |
| Object Limits | Tab | Loot Campaign Name | N/A |
| Record Types | | | |
| Related Lookup Filters | | | |
| Search Layouts | | | Edit |
| Triggers | | | |
| Validation Rules | | | |

5. Let's now add the columns we want to show on the **Recently Viewed** list view. Select the following columns and using the arrows, move them from left-hand side to the right-hand side.

- Start Date
- End Date
- Region
- Active?

Your screen should look like the following:

Edit Search Layout
Loot Campaign Search Results

Select the fields to include in this search layout. Note that your choices only determine the display of search results and do not affect the fields that are actually searched. Please refer to the online help for [more information on search fields](#).

| Available Fields | Selected Fields |
|---|--|
| Record ID Owner Alias Owner First Name Owner Last Name Created By Alias Created By Created Date Last Modified By Alias Last Modified By Last Modified Date Last Activity Date | Loot Campaign Name Start Date End Date Region Active? Up Down Add Remove |

Override the search result column customizations for all users

Standard Buttons
There are no customizable standard buttons for this view.

Custom Buttons
[Click here to create a new custom list button](#)

Save **Cancel**

6. Click **Save** button.

7. Navigate back to your **Loot Administration**. Note the **Recently Viewed** list view on the **Loot Campaigns** now have the columns we just added. It should look like the following.

Create a Custom List View

You can also create a custom List View for your own needs. It can be private only to you or you can make it accessible to other users. Let's say we want to create a List View to show all Loot Campaigns for the West Region.

1. Click the List View gear icon and select **New** option.

2. Name the new list view "**West Region Campaigns**" and make sure that "**All users of the system can see this list view**" is selected. Your configuration window should look like following. Click the **Save** button.

| | |
|---|--|
| List Name | West Region Campaigns |
| List API Name | West_Region_Campaigns |
| Who sees this list view? | <input type="radio"/> Only I can see this list view <input checked="" type="radio"/> All users can see this list view <input type="radio"/> Share list view with groups of users |
| <input type="button" value="Cancel"/> <input type="button" value="Save"/> | |

- Your screen will now look like the following.

The screenshot shows the 'Loot Campaigns' section of the 'West Region Campaigns' view. The list contains one item, 'LC-000000'. On the right, there is a 'Filters' sidebar with a single filter applied: 'Filter by Owner: My loot campaigns'.

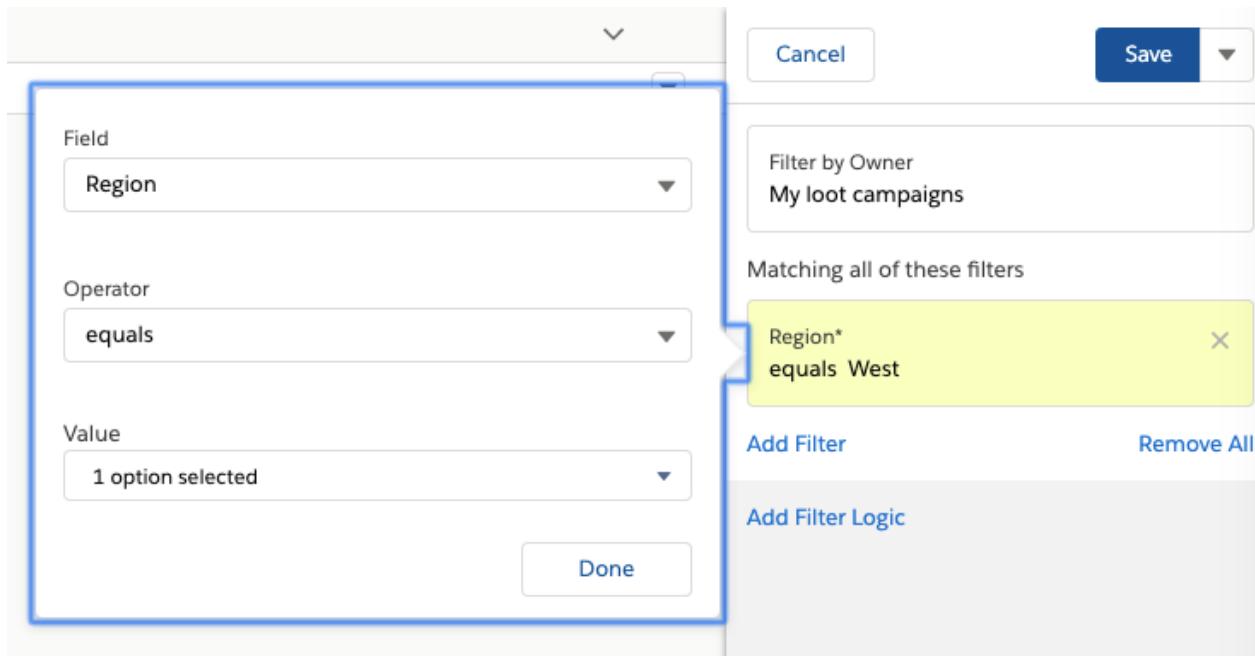
- Let's change the 'Filter by Owner' filter to look at requests logged by all users in our custom list view. Click on the 'Filter by Owner' tile and select 'All loot campaigns' and click 'Done'.

The image shows two overlapping modal dialogs. The left dialog is titled 'Filter by Owner' and contains three radio button options: 'All loot campaigns' (selected), 'My loot campaigns', and 'Queue owned loot campaigns'. The right dialog is titled 'Filters' and shows the selected filter 'All loot campaigns' in a list. Below the list are 'Add Filter' and 'Remove All' buttons.

- Next let's add a filter to the list view to only show loot campaigns that are assigned to the West Region. On right-hand side of screen, click the **Add Filter** button. Select the following values for the filter:

| Parameter | Value |
|-----------|--------|
| Field | Region |
| Operator | equals |
| Value | West |

Your screen should look like the following. Click the **Done** button.



6. Click the **Save** button when filters are complete.
7. As we did earlier, let's add some columns now to this list view. We'll add the same columns as we did earlier. Click the **List View** gear icon on right and then select **Select Fields to Display** from drop-down.
 - Start Date
 - End Date
 - Region
 - Active?

Click **Save** button. Your screen should now look like following. You can hide the List View or hide filters by click on the funnel icon on the right-hand side.

The screenshot shows a list view titled 'Loot Campaigns' with a filter applied for 'West Region Campaigns'. A green banner at the top right says 'List view updated.' A red box highlights the funnel icon on the right side of the header. The list view table has columns: LOOT CAMPAIGN NAME, START DATE, END DATE, REGION, and ACTIVE?. One item is listed: 'LC-00000' with start date '9/1/2019', end date '9/30/2019', region 'West', and active status checked. To the right of the table is a 'Filters' sidebar with the applied filter 'Region equals West' and links for 'Add Filter' and 'Remove All'.

Theming and Branding Your Salesforce Org

1. From Setup, enter Themes and Branding in the Quick Find box, then select **Themes and Branding**.
2. You will see a list of out of the box Salesforce themes. From here you can view, preview, and activate an existing theme, or click **New Theme** to create your own.

| NAME | DEVELOPER NAME | DESCRIPTION | LAST MODIFIED | THEME TYPE | ACTIVE | |
|---------------------|--------------------|--|---------------|------------|--------|--|
| Lightning Lite | LightningLite | A streamlined, white-background desi... | Oct 31, 2017 | Salesforce | | |
| Lightning Blue | Lightning | The sky's the limit with Salesforce's sig... | Oct 31, 2017 | Salesforce | ✓ | |
| Cloudy Sky | CloudySky | Misty sea-green and gray mingle in thi... | Oct 31, 2017 | Salesforce | | |
| Lightning Ridge | LightningRidge | Majestic blue ridges dominate this dre... | Oct 31, 2017 | Salesforce | | |
| Codey Canyon | CodeyCanyon | Sinuous red rocks recall the Western la... | Oct 31, 2017 | Salesforce | | |
| Einstein Relativity | EinsteinRelativity | An atmospheric blue-green theme cel... | Oct 31, 2017 | Salesforce | | |
| Seasonal Flair | Seasonal | Go with the flow! Our seasonal theme ... | Oct 31, 2017 | Salesforce | | |

3. Activate the **Lightning Lite** theme by clicking the downward facing arrow and clicking **Activate**.

| NAME | DEVELOPER NAME | DESCRIPTION | LAST MODIFIED | THEME TYPE | ACTIVE | |
|---------------------|--------------------|--|---------------|------------|--------|--|
| Lightning Lite | LightningLite | A streamlined, white-background desi... | Oct 31, 2017 | Salesforce | | |
| Lightning Blue | Lightning | The sky's the limit with Salesforce's sig... | Oct 31, 2017 | Salesforce | ✓ | |
| Cloudy Sky | CloudySky | Misty sea-green and gray mingle in thi... | Oct 31, 2017 | Salesforce | | |
| Lightning Ridge | LightningRidge | Majestic blue ridges dominate this dre... | Oct 31, 2017 | Salesforce | | |
| Codey Canyon | CodeyCanyon | Sinuous red rocks recall the Western la... | Oct 31, 2017 | Salesforce | | |
| Einstein Relativity | EinsteinRelativity | An atmospheric blue-green theme cel... | Oct 31, 2017 | Salesforce | | |
| Seasonal Flair | Seasonal | Go with the flow! Our seasonal theme ... | Oct 31, 2017 | Salesforce | | |

4. This theme will mainly change the background of your Salesforce org pages to a clear/white background. You can also explore creating a new them by clicking the **New Theme** button.

Keep these considerations in mind when working with themes:

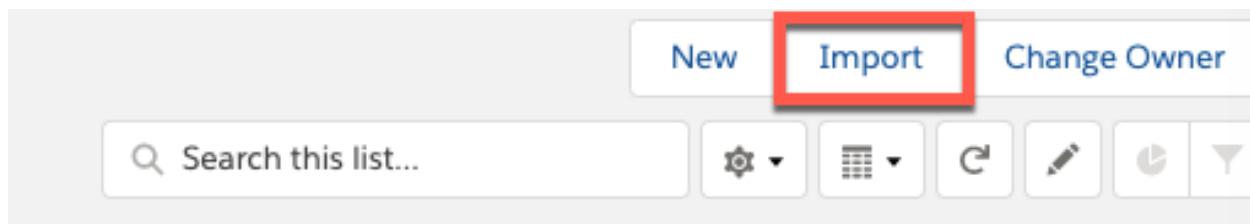
- Only one theme can be active at a time, and a theme applies to your entire org.
- By default, orgs use the built-in Lightning Blue theme.
- You can create up to 300 custom themes, but you can't modify or clone the built-in themes provided by Salesforce.
- Themes don't apply to Salesforce Classic or to mobile.
- Even if you haven't selected the option to override themes in the App Manager, your app's brand image and color always override the Lightning Lite and Lightning Blue themes.

Lab 4 – Import and Create Data

Import Data for the Prize Object

Now that we have created the data model and configure the UI, let's use the Data Import Wizard to easily import load data in CSV files.

1. Access the **Prizes** tab in the Loot Administration app and click the **Import** button on the top right corner.



2. The Data Import Wizard screen that opens up already has the Prize object pre-selected because it was accessed from the Prizes tab. Click on Prizes.
3. Click on **Add New Records** and select **Name** for the **Match By** dropdown. Leave all other options as the default selection.
4. Drag the CSV file named '**Prize.csv**' in the **Salesforce Workshop** folder onto the section '**Where is your Data Located?**'. Alternatively, click **Choose File** and select the file from your file system.

A screenshot of the Data Import Wizard screen. At the top, there are tabs for 'Choose data' (selected), 'Edit mapping', and 'Start import'. The main area is titled 'Import your Data into Salesforce' with a note that you can import up to 50,000 records at a time. There are three main sections: 1) 'What kind of data are you importing?' with tabs for 'Standard objects' (selected) and 'Custom objects', showing 'Prizes' is chosen. 2) 'What do you want to do?' with 'Add new records' selected, showing 'Match by: Name' and 'Trigger workflow rules and processes?'. 3) 'Where is your data located?' where 'CSV' is selected and a file named 'Prize.csv' is chosen from the 'Salesforce Workshop' folder. The file details show 'ISO-8859-1 (General US & Western European, ISO-LATIN-1)' and 'Values Separated By Comma'.

5. Click **Next**.

6. The name of column headers in the CSV file matches the names of the field labels of the Prize object. In this scenario, the Data Import Wizard automatically maps the field of the Prize Object to the column headers found in the CSV. If you like, you can manually change these mappings.

Edit Field Mapping: Prizes
Your file has been auto-mapped to existing Salesforce fields, but you can edit the mappings if you wish. Unmapped fields will not be imported.

[Help for this page](#)

| Edit | Mapped Salesforce Object | CSV Header | Example | Example | Example |
|--------|--------------------------|-----------------|-----------------------|-----------------------|--|
| Change | Prize Name | Name | Steam Gift Card | PS4 | Gaming Mouse |
| Change | Prize Image URL | Prize Image URL | https://media.xogrp.c | https://pbs.twimg.com | https://imgcache.dealmoon.com/img.dealmoon.com/images/c/15/07/10/559fcdb10dcf4.jpg_3 |

7. Click **Next** and click **Start Import** on the next screen. On the success message popup that appears click on **OK**. The data is loaded as a background batch job and you will be redirected to the status of that batch job. These are very small files and the records should be uploaded instantly. You will see a similar screen.

The screenshot shows the Bulk Data Load Jobs page. At the top, there's a header with a gear icon labeled 'SETUP' and 'Bulk Data Load Jobs'. Below it, a sub-header says 'Bulk Data Load Job 7501D000001USyX' with a 'Help for this Page' link. The main content area is titled 'Bulk Data Load Job Detail' with a 'Reload' button. It displays various job details:

- Job ID: 7501D000001USyX
- Submitted By: User User
- Start Time: 9/9/2019 8:29 AM PST
- End Time: 9/9/2019 8:29 AM PST
- Time to Complete (hh:mm:ss): 00:18
- Object: Prize
- External ID Field: Name
- Content Type: CSV
- Concurrency Mode: Parallel
- API Version: 46.0

On the right, there's a 'Job Status' section with columns for Status, Total Processing Time (ms), API Active Processing Time (ms), Apex Processing Time (ms), and Status. The status is 'Closed' with values 311, 247, 0, and 0 respectively. A note says 'Job progress, Records processed and failed' with a red box around the 'Failed Batches' row (0). Red arrows point from the 'CSV files for request and results' section to the 'Batches' table and the 'Status' section.

| Batches | | Job Status | | | | | | | | | | |
|--------------|-------------|-----------------|------------------|------------------|----------------------------|---------------------------------|---------------------------|-------------------|----------------|-------------|---------------|--------|
| View Request | View Result | Batch ID | Start Time | End Time | Total Processing Time (ms) | API Active Processing Time (ms) | Apex Processing Time (ms) | Records Processed | Records Failed | Retry Count | State Message | Status |
| View Request | View Result | 7511D000001ielg | 9/9/2019 8:29 AM | 9/9/2019 8:29 AM | 311 | 247 | 0 | 6 | 0 | 0 | Completed | |

8. Navigate to the **Prizes** tab in the **Loot Administration** tab. Switch to the **All** list view by clicking the downward arrow next to the **Recently Viewed** list view. Pin this list view by



clicking the pin icon next to the name of the list view. You should see 6 Prize records in the **All** list view.

| | PRIZE NAME | PRIZE IMAGE | CREATED BY | CREATED DATE |
|---|------------------|-------------|------------|------------------|
| 1 | Gaming Headphone | | User User | 9/9/2019 8:29 AM |
| 2 | Gaming Keyboard | | User User | 9/9/2019 8:29 AM |
| 3 | Gaming Mouse | | User User | 9/9/2019 8:29 AM |
| 4 | PS4 | | User User | 9/9/2019 8:29 AM |
| 5 | Steam Gift Card | | User User | 9/9/2019 8:29 AM |
| 6 | XBOX | | User User | 9/9/2019 8:29 AM |

Create Campaign Prize Items

Users have multiple ways they can create records in Salesforce. Let's explore some of the options by creating some Campaign Prize Items for the Loot Campaign record we just created.

Create Records from a Related List

1. Access the **Loot Campaigns** tab and click on loot campaign record you created in the previous exercise.
2. Click on **Related** after the record detail page opens up.

The screenshot shows the 'Loot Administration' interface. At the top, there's a navigation bar with tabs: 'Loot Campaigns', 'Prizes', 'Participants', 'Campaign Prize Items', 'Selected Loot Items', 'Loot Winners', 'Chatter', and 'Reports'. Below the navigation bar, the main area displays a 'Loot Campaign' record with the ID 'LC-000001'. The record has two tabs: 'Related' (which is highlighted with a red box) and 'Details'. The 'Details' tab contains fields for 'Loot Campaign Name' (set to 'LC-000001'), 'Start Date' (set to '9/1/2019'), 'End Date' (set to '9/30/2019'), 'Created By' (set to 'User User, 9/9/2019 8:45 AM'), 'Owner' (set to 'User User'), 'Active?' (unchecked), 'Region' (set to 'West'), and 'Last Modified By' (set to 'User User, 9/9/2019 8:45 AM').

3. Click on the **New** button on the Campaign Prize Items related list.

The screenshot shows the Salesforce interface for a 'Loot Campaign' record with ID 'LC-000001'. The 'Related' tab is selected, displaying the 'Campaign Prize Items' list. A red box highlights the 'New' button in the top right corner of the list view.

4. Since we are creating this Campaign Prize Item record from the context of a Loot Campaign record, you will notice that the Campaign value on the record creation form is already populated. Enter the following values for the new record and click **Save**.

| Field | Value |
|--------------------------|--|
| Campaign Prize Item Name | PS4 |
| Prize | PS4 (Lookup fields have type ahead search behavior. Type PS4 in the field. Note that you might have to scroll the modal to see the results.) |

The screenshot shows the 'New Campaign Prize Item' dialog. The 'Prize' field is populated with 'PS4'. The 'Save' button at the bottom right is highlighted with a mouse cursor.

5. Create another Campaign Prize Item record with the following values.

| Field | Value |
|--------------------------|---|
| Campaign Prize Item Name | XBOX |
| Prize | XBOX (Lookup fields have type ahead search behavior. Type PS4 in the field. Note that you might have to scroll the modal to see the results.) |

6. Once both records are created, you should see record information in the Campaign Prize Items related list.

The screenshot shows the Salesforce interface for the 'Loot Administration' app. At the top, there's a navigation bar with tabs like 'All', 'Search Loot Campaigns and more...', 'Loot Administration', 'Loot Campaigns', 'Prizes', 'Participants', 'Campaign Prize Items', 'Selected Loot Items', 'Loot Winners', 'Chatter', and 'Reports'. Below the navigation bar, the main area shows a 'Loot Campaign' record with the ID 'LC-000001'. Under the 'Campaign Prize Items' tab, there are two entries: 'PS4' and 'XBOX'. Each entry has a small image of the respective prize item.

| CAMPAIGN PRIZE ITEM: CAMPAIGN PRIZE ITEM N... | PRIZE NAME | PRIZE IMAGE |
|---|------------|-------------|
| PS4 | PS4 | |
| XBOX | XBOX | |

Create Records from a Tab's List View

1. Another way we can create a record is from a list view located on an object's dedicated tab. Access the **Campaign Prize Items** tab in the **Loot Administration** app.
2. You will see the two recently created Campaign Prize Items listed in the **Recently Viewed** list view. Click on the **New** button on the top right corner of the list view.

Campaign Prize Items Recently Viewed

2 items · Updated 2 minutes ago

| | CAMPAIGN PRIZE ITEM NAME |
|---|--------------------------|
| 1 | XBOX |
| 2 | PS4 |

- Notice that none of the fields on the record creation form are populated now because the Campaign Prize Item is not being created from within the context of a campaign or a prize. Enter the following values for the record and click **Save**.

| Field | Value |
|--------------------------|---|
| Campaign Prize Item Name | Gaming Mouse |
| Campaign | Name of the Campaign record in the format LC-00000X. Select the Campaign record from the type ahead search results. |
| Prize | Gaming Mouse |

- Create another Campaign Prize Item record.

| Field | Value |
|--------------------------|---|
| Campaign Prize Item Name | Gaming Headphone |
| Campaign | Name of the Campaign record in the format LC-00000X. Select the Campaign record from the type ahead search results. |
| Prize | Gaming Headphone |

- You will be redirected to the detail page for the newly created Campaign Prize Item record. Navigate to the Loot Campaign record by clicking on the Campaign field and confirm that all the Campaign Prize Items are listed in the Campaign Prize Item related list.

Lab 5 – Data Validation and Process Automation

Create a Validation Rule for the Loot Campaign Object

Let's create a validation rule to enforce that the end date for a Loot Campaign must always be > the start date.

1. Access Setup by clicking the gear icon in upper-right and select **Setup**.
2. Next, we need to open the configuration screen for the Platform object. Click on **Object Manager** and access the **Loot Campaign** object.
3. You should now be on the configuration page for the Request object. Click on the **Validation Rules** option on left-hand side. Click on the **New** button.

The screenshot shows the Salesforce Object Manager interface for the 'Loot Campaign' object. On the left, there's a sidebar with various configuration options like Details, Fields & Relationships, Page Layouts, etc. The 'Validation Rules' section is highlighted with a red box. At the top right of the main content area, there's a 'New' button, which is also highlighted with a red box. The main content area displays a table for Validation Rules, showing columns for Rule Name, Error Location, Error Message, Active status, and Modified By. A note at the bottom of the table says 'No items to display.'

4. The validation rule configuration window will open.

The screenshot shows the 'Request Validation Rule' configuration window. It includes fields for Rule Name ('Discount_Percent_c>0.30'), Active status (checked), Description, Error Condition Formula ('Discount_Percent_c>0.30'), Functions dropdown (showing ABS, ADDMONTHS, AND, BEGINS, BLANKVALUE, BR), Error Message ('Discount percent cannot exceed 30%'), and a 'Check Syntax' button. A tooltip for the ABS function is displayed, stating 'Returns the absolute value of a number, a number without its sign'. There are also 'Quick Tips' and 'Operators & Functions' sections.

5. Create a new validation rule with the following parameters -

| Parameter | Value |
|-------------------|---|
| Rule Name | Date_Validation |
| Active | <i>Make sure to keep this selected/checked.</i> |
| Description | Validate that the end date for a Loot Campaign is greater than the start date |
| Condition Formula | <p>End_Date__c < Start_Date__c NOTE: When writing a validation rule, your condition formula should return “true” for your false condition.</p> |
| Error Message | Please make sure the end date is greater than the start date |
| Error Location | Select Field and pick “End Date” as the location for the error |

Your screen should look like the following -

The screenshot shows the 'Validation Rule Edit' interface. At the top, there are three buttons: 'Save', 'Save & New', and 'Cancel'. The 'Rule Name' field contains 'Date_Validation'. The 'Active' checkbox is checked. The 'Description' field contains the text: 'Validate that the end date for a Loot Campaign is greater than the start date'. In the 'Error Condition Formula' section, the formula 'End_Date__c < Start_Date__c' is entered. A dropdown menu titled 'Functions' is open, listing various functions like ABS, ADDMONTHS, AND, BEGINS, BLANKVALUE, BR, etc. Below the formula, a 'Check Syntax' button is shown with the message 'No errors found'. In the 'Error Message' section, the example 'Discount_Percent__c>0.30' is shown, along with the note 'This message will appear when Error Condition formula is true'. The 'Error Message' field contains the text 'Please make sure the end date is greater than the start date'. At the bottom, the 'Error Location' is set to 'Top of Page' and 'Field End Date'. The bottom navigation bar includes 'Save', 'Save & New', and 'Cancel' buttons.

6. Click the **Save** button. The following window will display.

| Rule Name | Date_Validation | Active |
|-------------------------|---|-------------------------------------|
| Error Condition Formula | End_Date__c < Start_Date__c | <input checked="" type="checkbox"/> |
| Error Message | Please make sure the end date is greater than the start date | |
| Description | Validate that the end date for a Loot Campaign is greater than the start date | |
| Created By | User User, 9/9/2019 2:42 PM | |
| Modified By | User User, 9/9/2019 2:42 PM | |

7. Try your validation rule by updating an existing Loot Campaign record or creating a new one.

Loot Campaign Name: LC-000000

Related Details

Loot Campaign Name: LC-000000

Owner: User User

* Start Date: 10/11/2019

Active?:

* End Date: 9/30/2019

Region: West

Please make sure the end date is greater than the start date

Created By: User User, 9/8/2019 5:55 PM

Modified By: User User, 9/8/2019 5:55 PM

Review the following fields

- End Date

Cancel Save

Create a Process Builder Process to send Campaign Activation Emails

Salesforce provides workflow capabilities that provide a declarative, drag-n-drop design environment to build our business process logic. The Salesforce Lightning Process Builder allows you to automate the following capabilities:

- creating or update a record based on record changes or Platform Events
- sending email alerts
- invoke a sub-process
- post to Chatter to alert followers of a record or to record some event
- submit record for approval
- invoke Apex code for highly customized logic implemented in a programming language
- invoke Open API based external services

In this exercise we will create a process to send an email to a target audience when a campaign is activated with details of the campaign.

Email Alerts and Email Templates

While you can send one-off emails to customers, partners and colleagues from multiple places within the Salesforce UI, sending an email alert in Salesforce involves creating an **Email Alert** which in turn requires an email template. The package you installed earlier contained the **Loot Campaign Alert** and the **Loot Campaign Email Template**. Let's take a look.

1. Access the **Setup** menu and type **Email Alerts** in the Quick Find box and click Email Alerts. You will see a screen with instructional information about Email Alerts. Click the **Do not show this message again** checkbox and click **Continue**. The next screen displays the list of available Email Alerts, including the **Loot Campaign Alert**. You will also notice the **Loot Campaign Email Template** is also listed next to the email alert's name.

The screenshot shows the Salesforce Setup interface with the 'Email Alerts' search term entered in the quick find bar. The 'Email Alerts' section is selected under 'Workflow Actions'. The main area displays a table for 'All Email Alerts' with one entry: 'Loot Campaign Alert' (Action: Edit | Del, Description: Loot Campaign Alert, Email Template Name: Loot Campaign Email Template). The table includes columns for Action, Description, Email Template Name, Object, and Last Modified Date (9/9/2019).

2. Let's check out the Email Template. Click on the **Loot Campaign Email Template**. You should see a screen similar to this.

SETUP

Classic Email Templates

Custom Email Template
Loot Campaign Email Template Help for this Page

Preview your email template below.

Email Template Detail

| | | | | | | | |
|----------------------|---|---|--|-----------------------------------|------------------------|-----------------------|--|
| Folder | Blizzards Templates | Edit Properties | Edit HTML Version | Edit Text Version | Delete | Clone | |
| Email Template Name | Loot Campaign Email Template | | | | | | |
| Template Unique Name | Loot_Campaign_Email_Template | Available For Use <input checked="" type="checkbox"/> | | | | | |
| Encoding | General US & Western Europe (ISO-8859-1, ISO-LATIN-1) | Last Used Date | | | | | |
| Author | User User [Change] | Times Used | | | | | |
| Description | | Modified By | User User, 9/5/2019 11:35 AM | | | | |
| Created By | User User, 9/5/2019 11:35 AM | | | | | | |

[Edit Properties](#)

[Edit HTML Version](#)

[Edit Text Version](#)

[Delete](#)

[Clone](#)

Email Template

[Send Test and Verify Merge Fields](#)

Subject : Loot Campaign for ((case(month(today)),1,'January',2,'February',3,'March',4,'April',5,'May',6,'June',7,'July',8,'August',9,'September',10,'October',11,'November',December')) is now Live!

HTML Preview



Plain Text Preview

[Click HERE to opt in for Loot!](#)

Step 1: Follow the link, then drag & drop your selections into the opt-in window.
%3Fisdtm%3Dn1%27;

3. Salesforce email templates can have HTML and/or Text versions. This email template is primarily an HTML template and has a corresponding Text Version that gets created automatically based off the text in the HTML version. The Text Version can however be edited and be different from the HTML version.
 4. Click the **Edit HTML Version** button to view the HTML content that makes up the email template. The most important thing to note is that data from multiple Salesforce objects, including formula field style formulas can be included in the content of the email.

SETUP

Classic Email Templates

Custom Email Template Edit

Loot Campaign Email Template

Paste the HTML code for your custom HTML email in the box below. Use merge fields to personalize your email content. If the text version of the template is left blank, this version will be stripped of HTML and sent as the text version.

Available Merge Fields

| Select Field Type | Select Field | Copy Merge Field Value |
|----------------------|--------------|-----------------------------------|
| Loot Campaign Fields | Start Date | {!Loot_Campaign__c.Start_Date__c} |

Copy and paste the merge field value into your HTML content below.

Save Preview Cancel

Object Merge Fields to insert into HTML or Text Content

HTML Email Content

Subject: Loot Campaign for {case(month(today()),1,'January',2,'February',3,'March',4)}

HTML Body:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional //EN"
"http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html
  xmlns="http://www.w3.org/1999/xhtml"
  xmlns:ms="urn:schemas-microsoft-com:office:office"
  xmlns:x="urn:schemas-microsoft-com:xml">
  <head>
    <!--[if gte msie 9]>
      <!-->
      <meta OfficeDocumentSettings
        AllowPNG = <!-->
        PixelsPerInch = 96 />
      <!-->
      <meta OfficeDocumentSettings
        PixelsPerInch = 96 />
    <!-->
  </head>
  <meta content="text/html; charset=utf-8" http-equiv="Content-Type" />
  <meta content="width=device-width" name="viewport" />
  <!--[if lte IE 8]>-->
  <meta content="IE=edge" http-equiv="X-UA-Compatible" />
  <!--<!-->
  <title>
    <!-->
  </title>
  <!--[if lte IE 8]>-->
```

Formulas to display data can also be used similar to Formula fields

HTML Content

Help for this Page

5. Search for <https://login.salesforce.com> in the email body and replace that with the following <https://<my-domain-name>/lightning/n/Loot>. Your domain name can be found in the browser URL. Here is a sample URL - <https://ability-enterprise-4635-dev-ed.lightning.force.com/lightning/n/Loot>. Here ability-enterprise-4635-dev-ed.lightning.force.com is the domain name.
6. Click **Preview**. A preview of the Email's content opens up in a new tab. If you like click the **HERE** link and confirm it opens up the Loot App. Go back to the Email Template editor and click **Save**.



Click [HERE](#) to opt in for Loot!

Step 1: Follow the link, then drag & drop your selections into the opt-in window.

Step 2: Rank your selections by preference.

Step 3: SAVE (For the love of Elune, save your changes!)

Winners will be randomly selected and notified via email.

Prizes can be picked up from the LOOT DEPOT during listed operating hours.

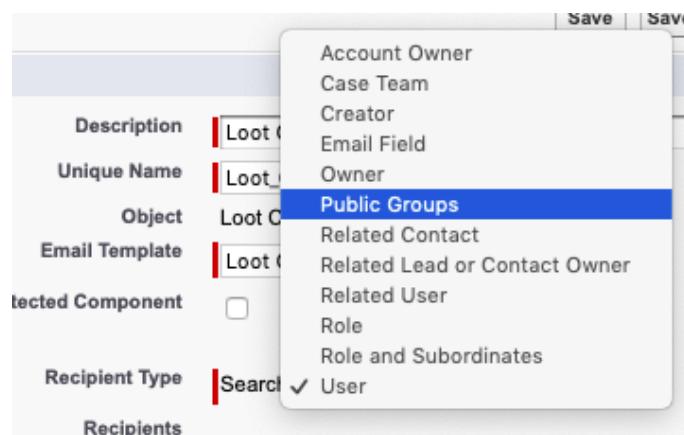
If you have questions, please email xyz@blizzard.com

7. Navigate back to the list of **Email Alerts** via the Quick Find search box. Click on the **Loot Campaign Alert**.

8. Click on **Edit**. You will see the screen on the following page.

The screenshot shows the 'Edit Email Alert' interface. At the top, there are buttons for Save, Save & New, and Cancel. Below that, the 'Edit Email Alert' section includes fields for Description (Loot Campaign Alert), Unique Name (Loot_Campaign_Alert), and Email Template (Loot Campaign Email Te). A red box highlights the 'Email Template' field, with a red arrow pointing to it labeled 'Email template selection'. Another red box highlights the 'Recipient Type' dropdown, with a red arrow pointing to it labeled 'Recipient Type Selector'. The 'Recipients' section shows an 'Available Recipients' list containing 'User: Integration User', 'User: Security User', and 'User: User User'. An 'Add' button is next to the list, and a 'Selected Recipients' box contains 'Loot Campaign Owner'. Below this, a note says 'You can enter up to five (5) email addresses to be notified.' and there's a 'Additional Emails' input field. At the bottom, there's a 'Choose From Email Address' section with a 'From Email Address' dropdown set to 'Current User's email address'. A red box highlights the 'From Email Address' dropdown, with a red arrow pointing to it labeled 'Choose From Email Address'. There's also a checkbox for 'Make this address the default From email address for this object's email alerts.' At the very bottom are Save, Save & New, and Cancel buttons.

9. Click on the **Recipient Type** dropdown and notice the options available for email recipients. One of the types is a **Public Group**. A group consists of a set of users. A group can contain individual users, other groups, or the users in a particular role or territory. Everyone in the organization can use public groups. For example, an administrator can create a group for an employee carpool program. All employees can then use this group to share records about the program. Find more information about Groups here – [What Is a Group?](#)



10. Think about how you could use Groups in the scenario.

11. Click **Save**.

Create a Process to send Loot Activation Email

Let's create a process that uses the **Email Alert** process builder action to send the activation email.

1. Access **Setup** menu and navigate to the **Home** tab.
2. On left-hand side, select **Process Automation > Process Builder** (or use the Quick Find and search on "Process"). You should see a window like the following:

The screenshot shows the Salesforce Process Builder interface. At the top, there is a navigation bar with icons for Setup, Home, Object Manager, and a search bar labeled 'Search Setup'. Below the navigation bar, the main title is 'Process Builder' with a back link '← Back To Setup' and help links. A sidebar on the left titled 'My Processes' shows '0 items' and a 'New' button. The main content area has a heading 'Welcome to the Process Builder!' followed by a brief introduction. It includes links to 'Using the Process Builder (documentation)', 'Process Builder Overview (video)', and 'Learn about the Process Builder using an interactive learning path called Trailhead'. To the right, there is a large callout box with the text: 'It takes only a few clicks to: Select your object An opportunity, for example. Define your criteria Let's start this process when the opportunity's stage is Closed - Won and its amount is greater than \$500,000. Choose what to automate Let's create a contract and associate it with the opportunity's account, congratulate the owner by posting to the Sales Chatter group, and create a follow-up task scheduled to execute six days after the opportunity's close date. Activate the process You're done!'. The entire interface is set against a light blue background.

3. Click the **New** button in upper right.

4. Create a new Process with the following parameters.

| Parameter | Value |
|-------------------------|--|
| Process Name | Loot Activation |
| API Name | Loot_Activation (this will automatically get set when you tab out of the Process Name field) |
| Description | Leave blank |
| The process starts when | A record changes |

Your screen should look like following:

It takes only a few clicks to: X

New Process

Process Name * API Name * ⓘ

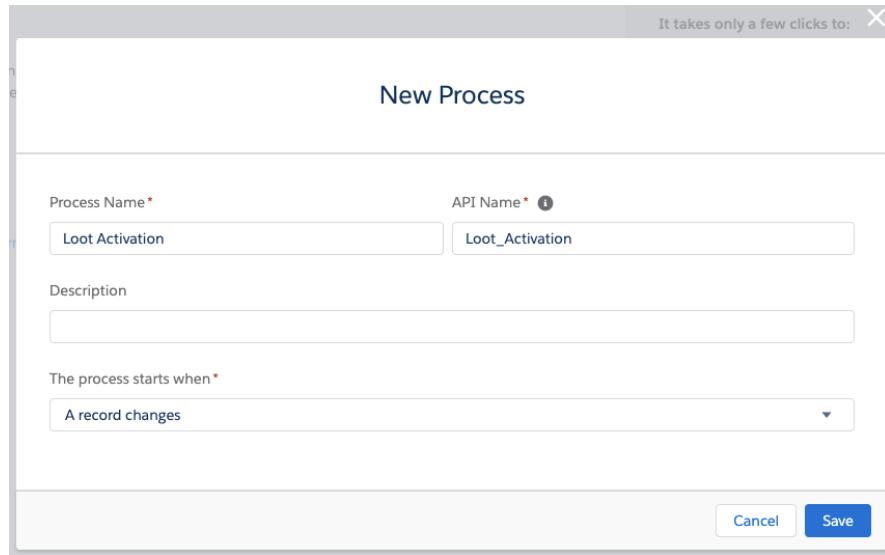
Loot Activation Loot_Activation

Description

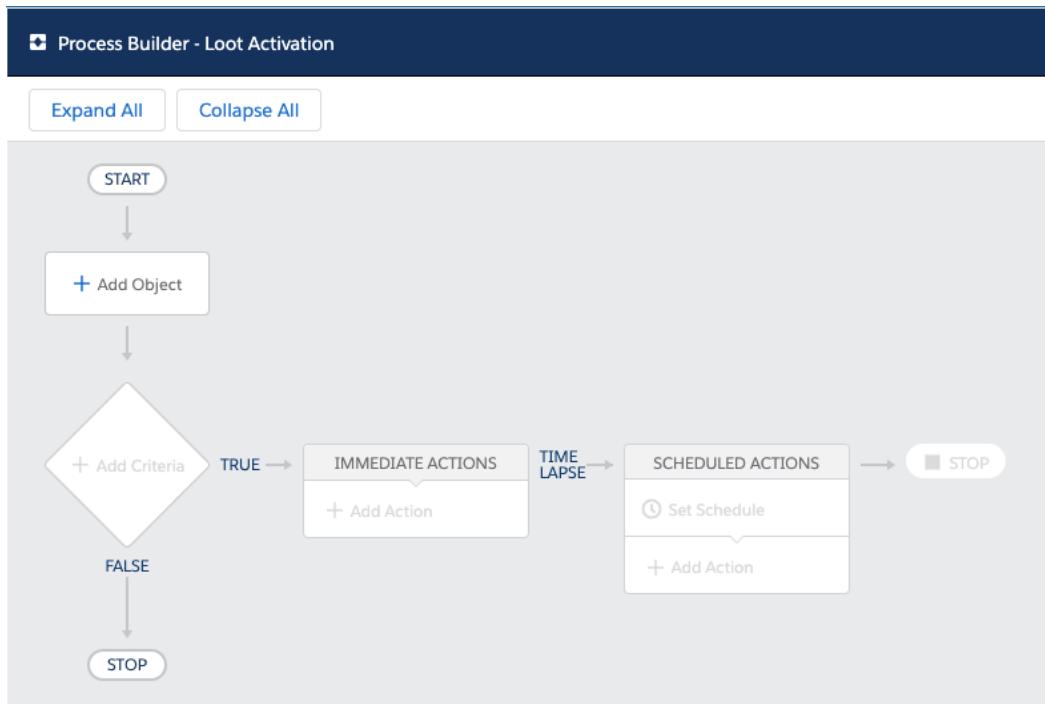
The process starts when *

A record changes

Cancel Save



5. Click Save.
6. You will now be presented with the Process Builder design window as shown below.



7. First click on the **Add Object** box. This is where we configure which object we want this process rule to run when a record is created or modified. A window will show on right-hand side like following:

Choose Object and Specify When to Start the Process

Object * ⓘ
Loot Campaign

Start the process *
 only when a record is created
 when a record is created or edited

> Advanced

8. Set the following parameters

| Parameter | Value |
|-------------------|--|
| Find an object... | Loot Campaign |
| Start the process | Choose “when a record is created or edited” option |
| Advanced | <i>Do not change</i> |

9. Click Save button
 10. Next click on the **Add Criteria** icon on the process designer.
 11. You will have a pop-up window where you configure your criteria when your processing logic will execute. Configure the window with following options:

| Parameter | Value |
|--------------------------------|--|
| Criteria Name | Is Campaign Active? |
| Criteria for Executing Actions | Conditions are met |
| Set Conditions | <i>Create a rule: [Loot_Campaign__c.Active__c] Equals [Boolean] [True]</i> |
| Conditions | All of the conditions are met (AND) |
| Advanced | <i>Do not change</i> |

Your window should look like the following

Define Criteria for this Action Group

Criteria Name * ⓘ
Is Campaign Active?

Criteria for Executing Actions *

Conditions are met
 Formula evaluates to true
 No criteria—just execute the actions!

Set Conditions

| Field * | Operator * | Type * | Value * |
|-----------------------|------------|---------|---------|
| 1 [Loot_Campaign... Q | Equals | Boolean | True |

+ Add Row

Conditions *

All of the conditions are met (AND)
 Any of the conditions are met (OR)
 Customize the logic

> Advanced

12. Click **Save** button.
13. Click on the **Add Action** link in the IMMEDIATE ACTIONS section to the right of the “Is Campaign Active?” decision box.
14. In the pop-up configuration window, set the following parameters:

| Parameter | Value |
|-------------|---|
| Action Type | Email Alerts |
| Action Name | Activation Email |
| Email Alert | Loot_Campaign_Alert (this field has typeahead search) |

Your window should look like the following:

Select and Define Action



Action Type *

Email Alerts

Action Name * ⓘ

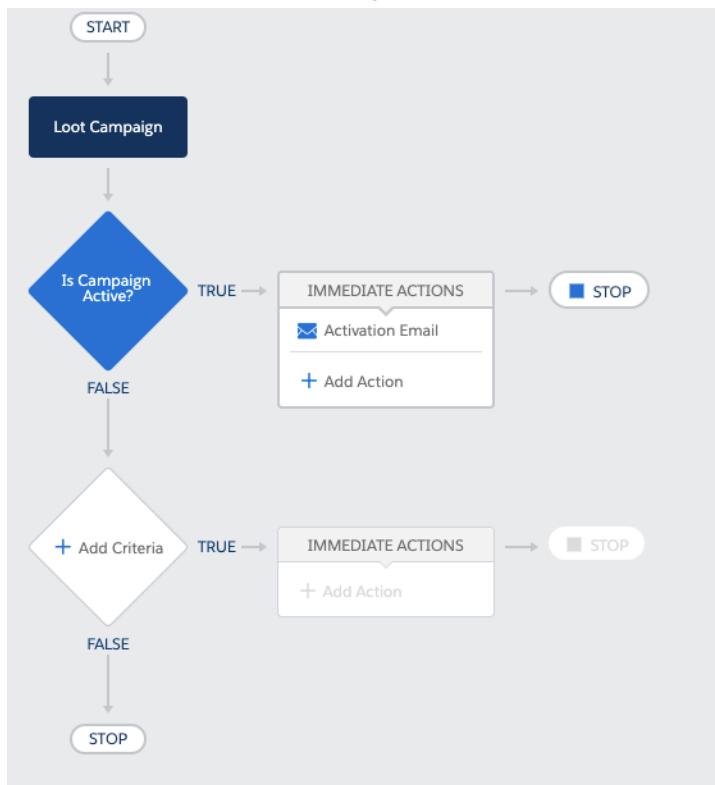
Activation Email

Email Alert *

Loot_Campaign_Alert

Select an existing email alert for the object that this process is associated with. If none exist, [create one](#).

15. Click **Save** button.
16. You have now configured a business process that will create a task for an in progress request. Your process will look like following.

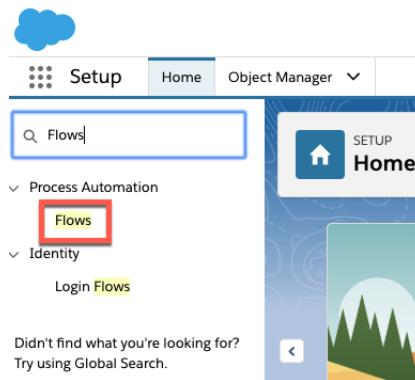


17. One last step is needed for this process. Click the **Activate** button in upper-right. Click **Confirm** on the pop-up window.
18. Let's test the process. Navigate to the Loot Campaign Record and edit the Loot Campaign record you created earlier so that the '**Active?**' checkbox is checked. If everything was configured right you should be receiving an email related to your Salesforce user account right about now.
19. Also go checkout the **Loot** app. What do you see?

Update the Get Campaign Winner Flow

The package that you installed earlier has an incomplete and inactive flow that will help us draw a random winner for the Loot Campaign. Please note that this isn't based on the algorithm or process used by Blizzard today. The idea of this exercise is to help you familiarize with the Flow Builder tool.

1. Navigate to **Setup** and search for **Flows** in the **Quick Find** box.



2. Click on **Get Campaign Winner**.

| View: All Flows | | Edit Create New View | | New Flow | |
|-----------------|---------------------|------------------------|---------------------|--------------------|-----------|
| Action | Flow Label | Description | Last Modified By | Last Modified Date | Is Active |
| Open Edit | Get Campaign Winner | Abhishek Chaturvedi | Abhishek Chaturvedi | 9/12/2019 12:20 PM | ✓ |

Paused and Waiting Interviews

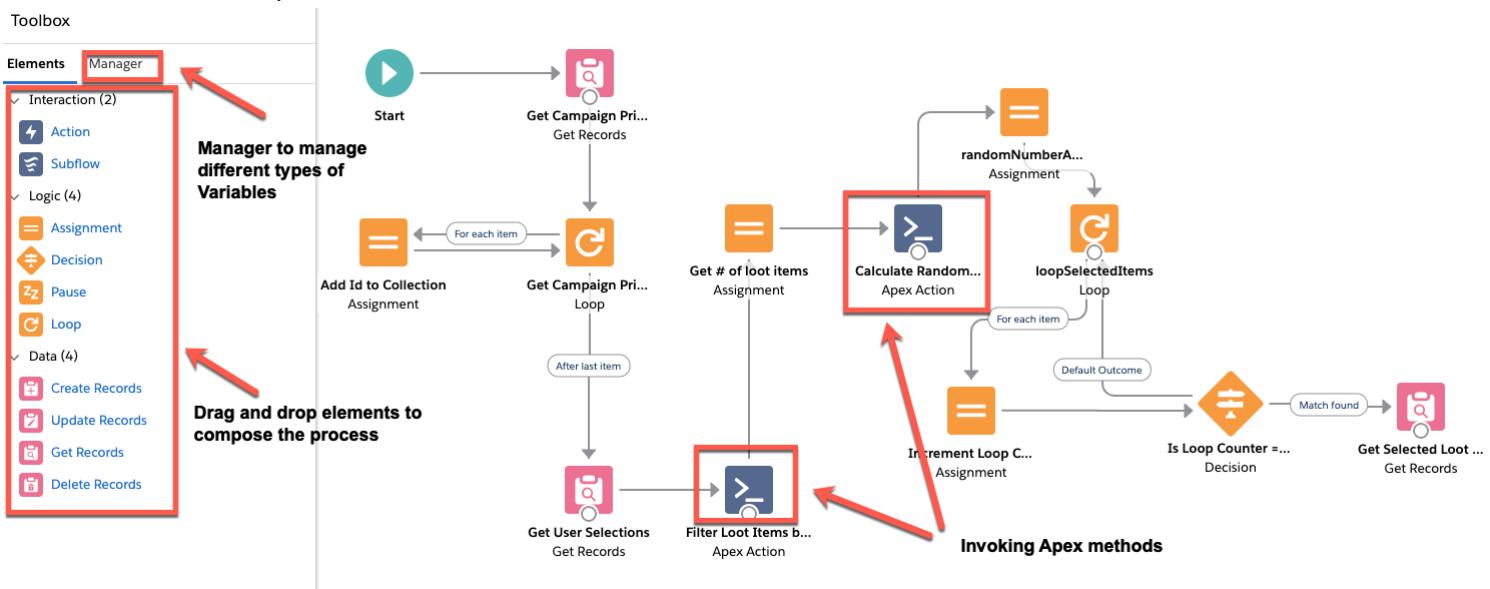
3. You will see the details of the Flow. A flow can have multiple versions. Only one version of a flow can be active at a time. Note the **Type** property of the flow. This is an Autolaunched Flow, which means that it has no visual components and runs as a background process. Also note the **URL** property of the flow. This property can be used to invoke the flow from other components in Salesforce.
4. Click **Open** next to the Flow Label.

| Flow Detail | | Flow Versions | |
|-------------|---------------------------|---------------|---|
| Action | Flow Label | Version | Description |
| Edit | Get Campaign Winner | 1 | Built with Flow Builder |
| Open | /flow/Get_Campaign_Winner | | Created Date 9/12/2019 11:38 AM |
| Run | | | Modified By Abhishek Chaturvedi, 9/12/2019 11:39 AM |
| Delete | | | |

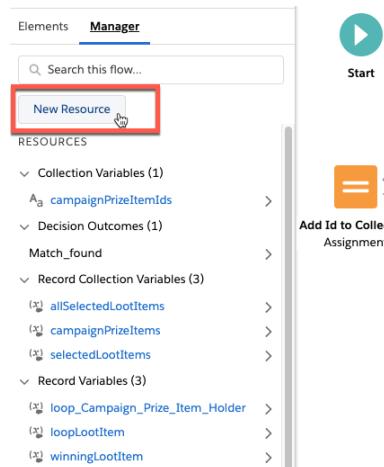
5. Clicking on Open will redirect you to the Flow Builder screen. Take a few minutes to observe the components of the Flow.

- The flow will work in the context of a Loot Campaign. It will receive the record Id of a Loot Campaign record.
- We use the Loot Campaign's Id to retrieve the Campaign Prize Item's associated with the Loot Campaign.
- Once we have a list of Loot Campaign Prize Items, we get a list of Selected Loot Items filtered by the list of Campaign Prize Items. Since the list is dynamic and Flows don't have an equivalent of a SQL 'IN' clause that can operate with a dynamic list, we are taking the help of Apex code to filter the loot items.
- Once we have a list of eligible loot items, we use Flows system variables to get the size of the list and again utilize some Apex to generate a random number. Based on the random number, we select the Selected Loot Item.

In this exercise you will be adding components to create a Loot Winner Object and update the Participant record's Last Prize Win date field.



6. Click on the **Manager** tab and click on **New Resource**



7. On the screen that pops up, enter the following details.

| Parameter | Value |
|------------------------------------|----------------|
| Resource Type | Variable |
| API Name | lootDrawWinner |
| Data Type | Record |
| Allow multiple values (collection) | Unchecked |
| Object | Loot Winner |

New Resource

*Resource Type
Variable

*API Name
lootDrawWinner

Description

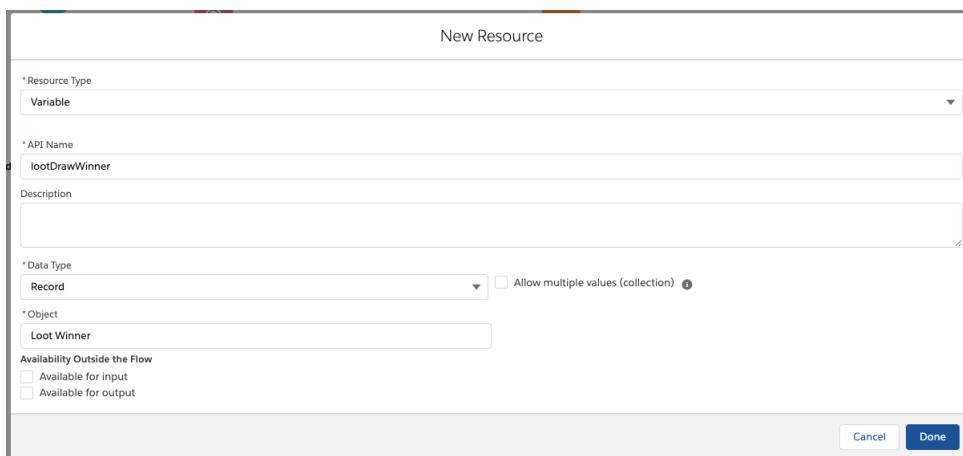
*Data Type
Record

*Object
Loot Winner

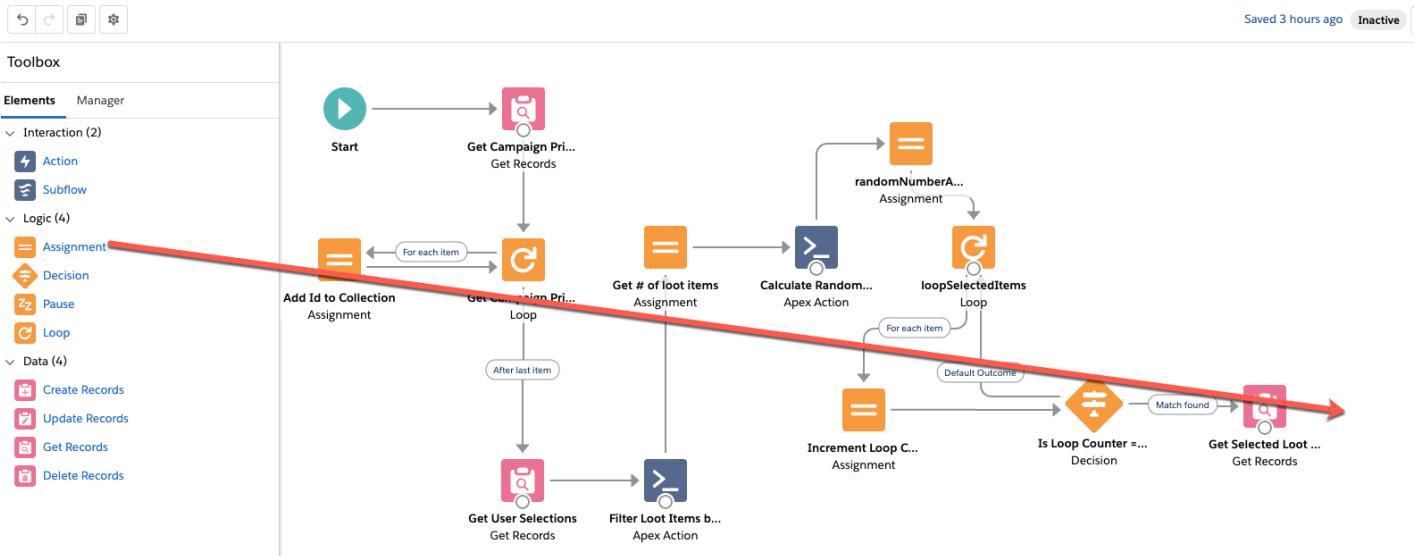
Allow multiple values (collection)

Availability Outside the Flow
 Available for input
 Available for output

Cancel Done



8. Drag an **Assignment** element to the right of the **Get Selected Loot Item** element.



9. On the modal window that opens enter the following details. To add a second assignment, click +Add Assignment. Click Done after adding all assignments.

| Parameter | Value |
|----------------------------|---|
| Label | Assign Values to Loot Winner Variable |
| API Name | Assign_Values_to_Loot_Winner_Variable (auto populates) |
| Variable | {!lootDrawWinner.Participant__c} NOTE - You will see autopopulate behavior. Start typing lootDrawWinner. Select lootDrawWinner and you will see a list of Loot Winner fields that you can select from since this variable is of type Record. |
| Operator | Equals |
| Equals | {!winningLootItem.Participant__c} |
| 2 nd Assignment | |
| Variable | {!lootDrawWinner.Prize__c} |
| Operator | Equals |
| Equals | {!winningLootItem.Prize__c} |

10. Drag a **Create Record** element below the **Assignment** element you just created. On the modal window that pops up enter the following values. Click **Done** when complete.

| Parameter | Value |
|------------------------------|--|
| Label | Create Loot Winner Record |
| API Name | Create_Loot_Winner_Record (auto populates) |
| How Many Records to Create | One |
| How to set the Record Fields | Use all values from a Record Variable |
| Select Variable | !lootDrawWinner |

New Create Records

Create Salesforce records using values from the flow.

* Label: Create Loot Winner Record * API Name: Create_Loot_Winner_Record

Description:

How Many Records to Create: One Multiple

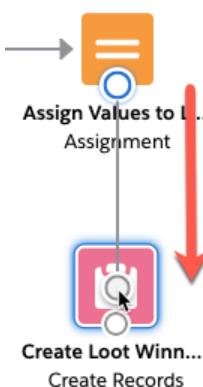
How to Set the Record Fields: Use all values from a record variable Use separate variables, resources, and literal values

Select Variable: * Record Variable: (!lootDrawWinner)

Make sure that ID is blank. After the flow creates the records, ID is set to match the record that was created. ⓘ

Cancel Done

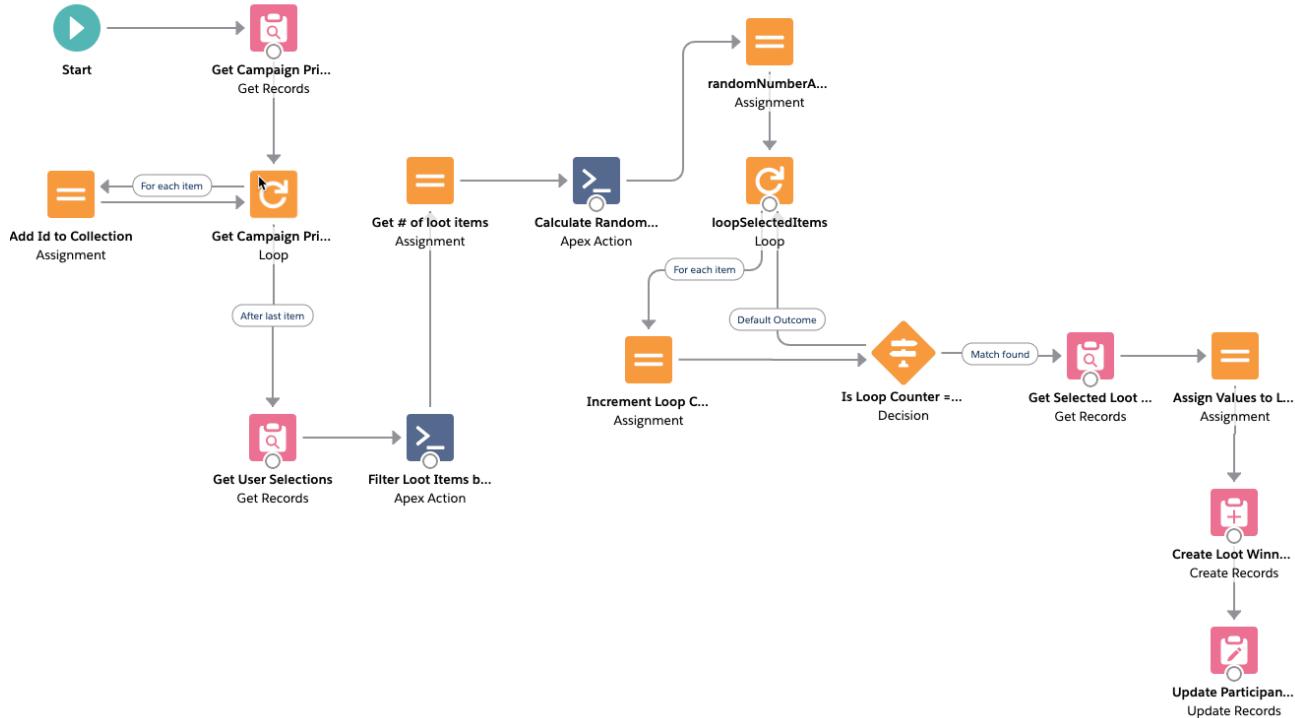
11. Connect the Assignment element to the Create Record element by dragging the circle under the Assignment element to the circle under the Create Record element.



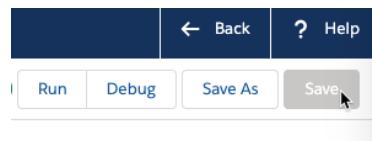
12. Drag an **Update Record** element next to the Create Loot Winner element you just configured. On the modal popup enter the following information and click **Done**.

| Parameter | Value |
|--|---|
| Label | Update Participant Last Win Date |
| API Name | Update_Participant_Last_Win_Date |
| How to Find Records to Update and Set Their Values | Specify conditions to identify records , and set fields individually |
| Object | Participant |
| Filter Participant Records | |
| Condition Requirements | Conditions are Met |
| Field | Id |
| Operator | Equals |
| Value | {!winningLootItem.Participant__c} |
| Set Field Values for Participant Records | |
| Field | Last_Prize_Win__c |
| Value | <p>{\$Flow.CurrentDate}</p> <p>NOTE – Look for \$Flow in the auto suggestions, click into and choose Current Date</p> |

13. Connect the **Create Loot Winner** element to the **Update Participant** element you just created. Your flow should now look like this



14. Click **Save** and then **Back** on the top right corner.



15. Click on **Activate** on the flow detail page. The flow is ready to be used now.

| Flow Detail | | Flow Versions | | | | | | | | | | | | | | | | | |
|--|---|----------------------|---|--------------|--------------------|-------------------|-------------|------------|--------------|------|--------|------------|---------------------|---|--|--------------|--------------------|-------------------|----------|
| Flow Label Get Campaign Winner | Edit Open Run Delete | Action Open Run | Flow Label Get Campaign Winner | | | | | | | | | | | | | | | | |
| Description | | Version | 1 | | | | | | | | | | | | | | | | |
| URL | /flow/Get_Campaign_Winner | Description | | | | | | | | | | | | | | | | | |
| Activated/Deactivated By | | Built with | Flow Builder | | | | | | | | | | | | | | | | |
| Created By | Abhishek Chaturvedi, 9/12/2019 11:38 AM | Created Date | 9/12/2019 12:19 PM | | | | | | | | | | | | | | | | |
| | | Type | Autolaunched Flow | | | | | | | | | | | | | | | | |
| | | Namespace Prefix | | | | | | | | | | | | | | | | | |
| | | Type | Autolaunched Flow | | | | | | | | | | | | | | | | |
| | | Active Version | | | | | | | | | | | | | | | | | |
| | | Template | False | | | | | | | | | | | | | | | | |
| | | Modified By | Abhishek Chaturvedi, 9/12/2019 12:19 PM | | | | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Action</th> <th>Flow Label</th> <th>Version</th> <th>Description</th> <th>Built with</th> <th>Created Date</th> <th>Type</th> <th>Status</th> </tr> </thead> <tbody> <tr> <td>Open Run</td> <td>Get Campaign Winner</td> <td>1</td> <td></td> <td>Flow Builder</td> <td>9/12/2019 12:19 PM</td> <td>Autolaunched Flow</td> <td>Inactive</td> </tr> </tbody> </table> | | | | Action | Flow Label | Version | Description | Built with | Created Date | Type | Status | Open Run | Get Campaign Winner | 1 | | Flow Builder | 9/12/2019 12:19 PM | Autolaunched Flow | Inactive |
| Action | Flow Label | Version | Description | Built with | Created Date | Type | Status | | | | | | | | | | | | |
| Open Run | Get Campaign Winner | 1 | | Flow Builder | 9/12/2019 12:19 PM | Autolaunched Flow | Inactive | | | | | | | | | | | | |

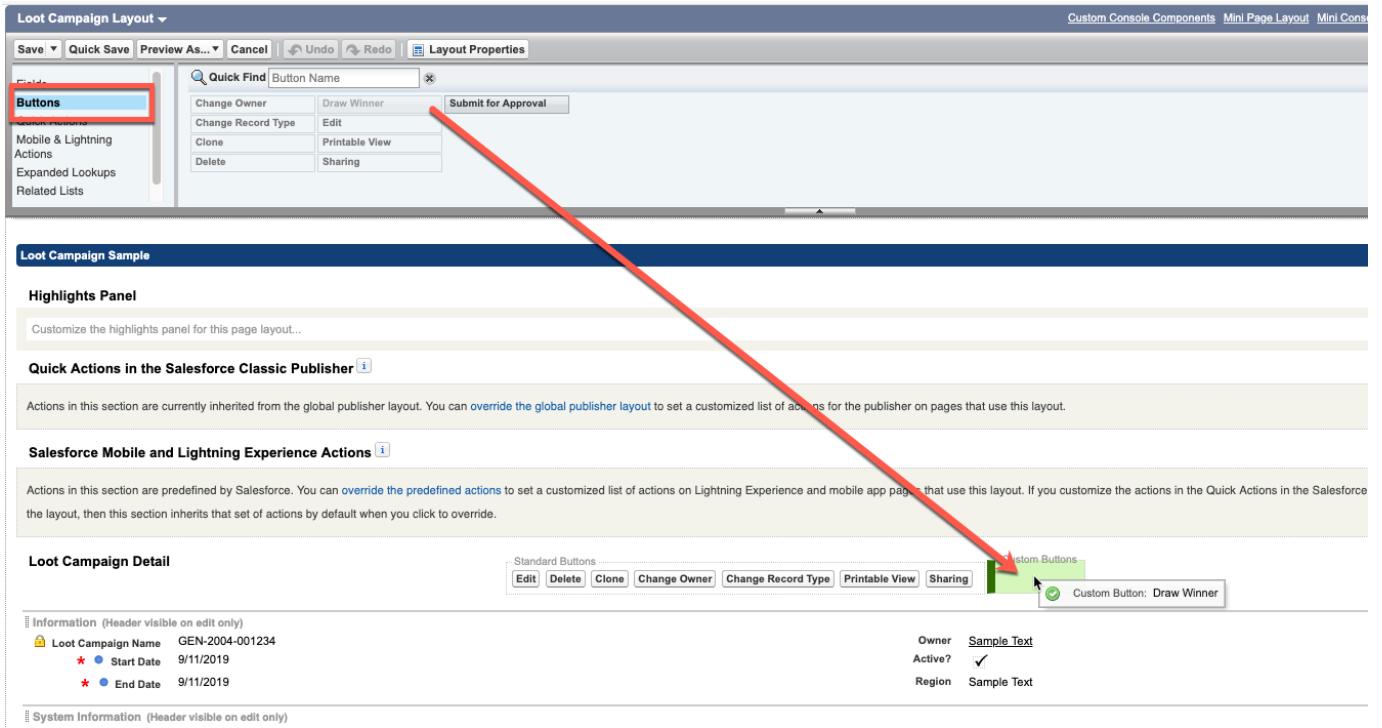
Invoking the Flow via a Button

As you saw in the presentation, there are multiple ways of invoking a flow in Salesforce. In this case we are using a button on the Loot Campaign object to draw a winner.

1. Navigate to the **Object Manager** in **Setup** and access the **Loot Campaign** object.
2. Click on **Button, Links and Actions** and click on the **Draw Winner** button.
- 3.

| Custom Button or Link Detail | | | |
|------------------------------|---|--|--|
| Label | Draw Winner | Edit | Window Open Properties |
| Name | Draw_Winner | Delete | Where is this used? |
| Behavior | Display in new window | Object Name | <u>Loot Campaign</u> |
| Button or Link URL | <code>/flow/Get_Campaign_Winner?recordId={!Loot_Campaign__c.Id}&retURL=/lightning/o/Loot_Winner__clist?filterName=Recent</code> | Link Encoding | Unicode (UTF-8) |
| Height (in pixels) | 600 | Display Type | Detail Page Button |
| 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"/> |
| Description | | | |
| Created By | Abhishek Chaturvedi, 9/12/2019 11:38 AM | | |
| | Edit | Window Open Properties | Delete |
| | Where is this used? | | |

4. The **Draw Winner** button is a custom button created for the **Loot Campaign** object. This button invokes a URL when it is clicked. In this case we are using the flow's URL. Just like a regular URL, you can pass parameters to the flow using key value pairs like URL parameters. Use any variable names from the flow as the key, and you can pass in either hard coded values or values from the current Loot Campaign record or related records to the flow. These values or merge fields can be inserted using a formula editor just like the one you use for creating formula fields.
5. We are passing two parameters to the flow. A **recordId** parameter which we defined in the flow and will have the value of the current record's Id. The second parameter is a standard parameter named **retURL** which determines where the user should be redirected after the flow. Feel free to click **Edit** and explore further.
6. We don't have to do anything to the button. Navigate to the **Loot Campaign Layout** page layout. Click on **Buttons** and add the **Draw Winner** button to the page layout in the **Custom Buttons** section.

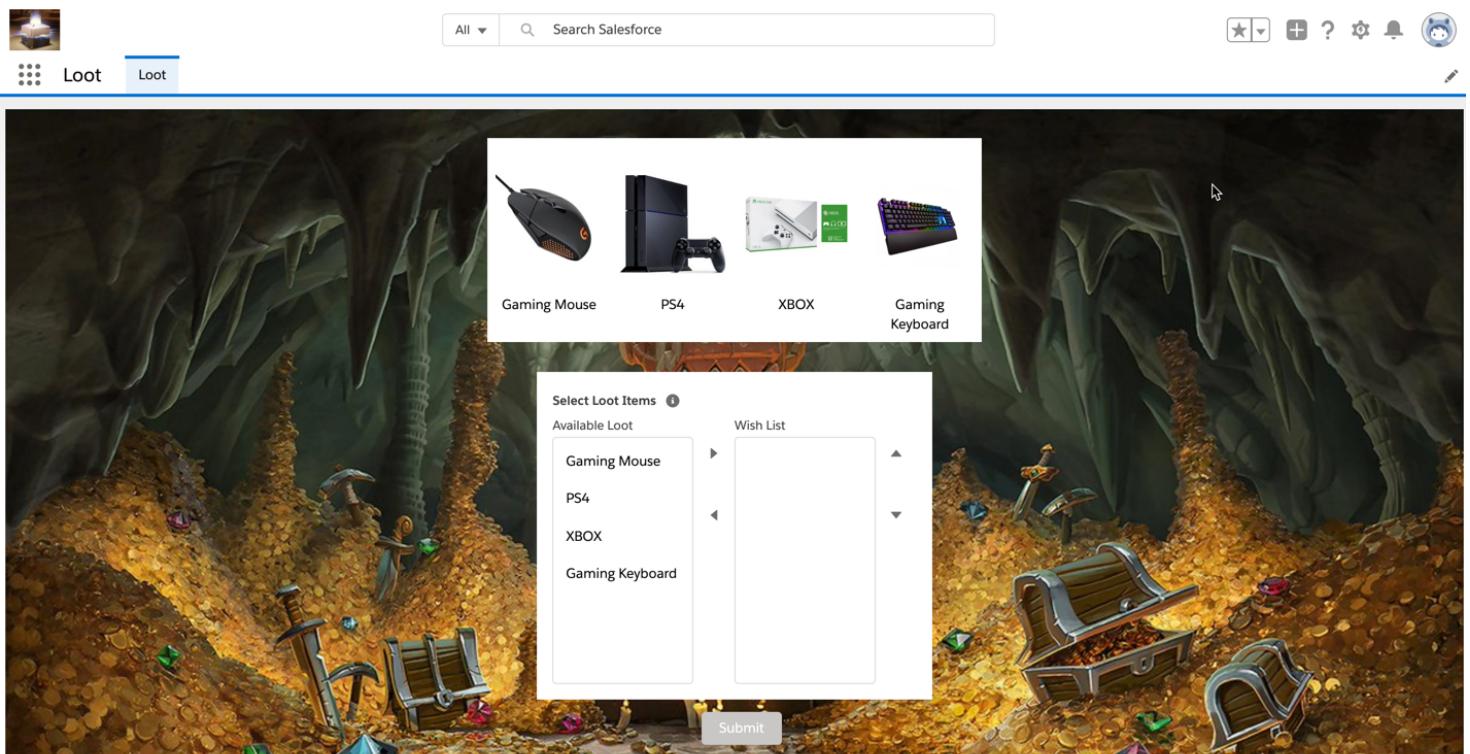


7. Click Save.

Lab 6 – Try out the Loot App

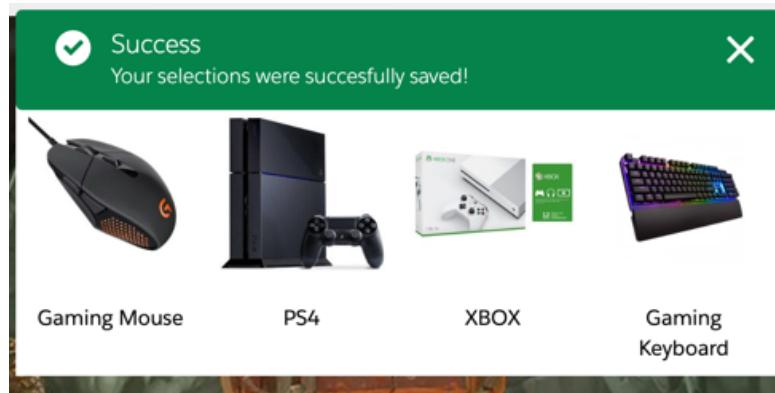
Now that we have configured everything to administer a Loot Campaign and for end users to be able to select loot items, let's try out the Loot App.

1. Navigate to the **Loot** app via the **App Launcher** menu. You should see a screen like the following screen shot. Remember that we created this campaign for **West** region and assigned the **West** region for your user record. The **lootSelector** Lightning Web Component has logic to make sure that correct audience sees the campaigns assigned to them. Later you can change the region of your user to East and see if you can still see the campaign.

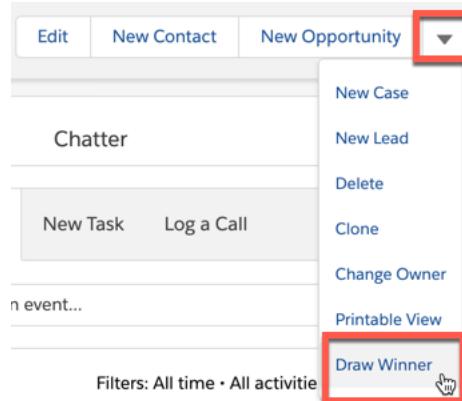


2. While we added only one component to the page using the Lightning App Builder, there are actually multiple components on the screen contained within the single component. Here the images on the top are from a separate component but it has been nested in the **lootSelector** component. The components also use Salesforce Lightning Design System.
3. The Loot Item selector dual picklist itself is a Lightning base component and can be configured easily to tie to a Salesforce Object.
4. Move any 3 items from the **Available Loot** section to the **Wish List** section. Reorder them if you wish. Click **Submit** and you should see a toast notification confirming your selection. The toast is also easily created via standard libraries and functions available for Lightning

Web Components. These selections will be retained even if you navigate away from the app.



5. A lot of things happened in the background when clicked **Submit**. A **Participant** record was created based on your user details. **Selected Loot Items** records were also created corresponding to your choices with the correct order of preferences.
6. Navigate to the **Loot Administration** app and go to the respective tabs for **Participants** and **Selected Loot Items** tab to see the newly created records. Remember you can also see **Selected Loot Items** for each **Participant** on the participant record itself in the **Related** tab.
7. We could load more participant data and create more Selected Loot Items but for now we will just draw a winner to see our flow in action. Navigate to the **Loot Campaign** record you created. If you don't see the **Draw Winner** button, click on the downward arrow next to the **New Opportunity** button, locate the **Draw Winner** button and click it.



8. You will be redirected to the **Loot Winners** tab and you should see a **Loot Winner** record created. Click on the record.

| LOOT WINNER NAME |
|------------------|
| LW-000001 |

9. On the detail page for the **Loot Winner**, you should see the Participant, Selected Loot Items and Draw Date populated. This was all done by the flow we configured! Also remember the Draw Date is a formula field based on the **Participant** record.

| Field | Value |
|------------------|--|
| Loot Winner Name | LW-000001 |
| Participant | Abhishek Chaturvedi |
| Prize | PS4 |
| Draw Date | 9/12/2019 |
| Created By | Abhishek Chaturvedi , 9/12/2019 12:22 PM |
| Owner | Abhishek Chaturvedi |
| Last Modified By | Abhishek Chaturvedi , 9/12/2019 12:22 PM |

10. Click on the **Participant** name and navigate to the related participant record. See if the **Last Prize Win** date has been updated.

| Field | Value |
|-------------------|--|
| Participant Name | Abhishek Chaturvedi |
| Participant Email | achaturvedi@salesforce.com |
| Created By | Abhishek Chaturvedi , 9/12/2019 11:41 AM |
| Last Prize Win | 9/12/2019 |
| Region | West |
| Owner | Abhishek Chaturvedi |
| Last Modified By | Abhishek Chaturvedi , 9/12/2019 12:23 PM |

11. All set! Loot App tour complete!

Lab 7 – Optional - Collaboration and Mobility

Enable Record Collaboration

Salesforce includes built in capabilities to collaborate within a Salesforce org and in the context of a record as well. You can follow people as well as data. This includes being able to collaborate around a single record in Salesforce. Here is an overview of the main Chatter tab.

The screenshot shows the Salesforce Chatter tab. On the left, there's a sidebar with 'What I Follow' (including 'To Me', 'Bookmarked', 'Company Highlights', 'My Drafts', 'STREAMS', and 'SFDX') and 'Recent Groups' (including 'Pathfinders Salesforce...', 'Salesforce DX (SFDX)', 'Bay Area Distribution ...', 'Tesla Model 3 (Future)...', and 'IT Enterprise Integrati...'). The main feed area has a 'Post' button with options 'Question', 'Thanks', and 'Poll'. A red box highlights the 'Post' button with the text 'Post an update, ask a question, give thanks or post a poll'. Below it is a search bar labeled 'Search Feed'. To the right, there's a sidebar titled 'Einstein Recommendations' showing profiles for Scott Jorgensen, Polly Sumner, and Q Branch, each with '+ Follow' and 'Skip' buttons. Another red box highlights the '+ Follow' button for Scott Jorgensen. At the bottom of the sidebar, there's a section for 'Trending Topics' with links like 'Salesforce Ohana', 'JP', 'Service Cloud SDO', 'WorldsBestWorkplaces', and 'Superproud'.

1. Access Setup by clicking the gear icon in upper-right and select **Setup**.
2. In the left-hand **Quick Find** search window, enter the keyword “**Chatter**”

The screenshot shows the Salesforce Setup Home page. The top navigation bar has 'Setup', 'Home', and 'Object Manager'. The 'Search Salesforce' bar contains the text 'Chatter'. The left sidebar has a tree view with 'Feature Settings' expanded, showing 'Chatter' selected. Under 'Chatter', there are sub-options: 'Chatter Settings', 'Email Settings', 'Feed Item', 'Feed Tracking', 'Groups', 'Influence', and 'Triggers'. The main content area has a banner for 'Go Mobile' with the text 'Prepare the Salesforce mobile app for your users.' and a 'Get Started' button.

3. Select **Feed Tracking**. You should now be presented with the Feed Tracking window configuration window. In the left-hand side of window is a list of objects, pick **Prize**.
4. Click the **Enable Feed Tracking** checkbox near the middle of the screen.
5. Enable Feed Tracking for all the fields by checking all the checkboxes including the checkbox against **All Related Objects**. Selecting these will result in a message being posted to the record’s chatter feed any time one of the checked fields changes. This is a way to keep people informed of changes to the records.

Feed Tracking

Enable feed tracking for objects so users can follow records of that object type. Select fields to track so users can see feed updates when those fields are changed on records they follow.

| | |
|---------------------------|----------|
| Lead | 3 Fields |
| Location | |
| Loot Campaign | 4 Fields |
| Loot Winner | |
| Maintenance Asset | |
| Maintenance Plan | |
| Metric | 0 Fields |
| Operating Hours | |
| Opportunity | 5 Fields |
| Order | |
| Order Product | |
| Participant | |
| Performance Cycle | 0 Fields |
| Prize | |
| Product | |
| Product Consumed | |
| Product Item | |
| Product Item Transaction | |
| Product Request | |
| Product Request Line Item | |
| Product Required | |
| Product Transfer | |
| Report | |
| Resource Absence | |

Fields in prizes

Enable Feed Tracking

You can select up to 3 fields.

Owner Prize Name Prize Image URL

You can also display feed activity for related objects.

All Related Objects Enable Feed Tracking

6. Click **Save** button.
7. Navigate back to the **Loot Administration App** and click on the **Prizes** tab. Select a **Prize** record. You should see a record detail page like below. You should have a **Chatter** tab on right-side of screen as highlighted.
8. Update any of the fields you enabled feed tracking for and check the Chatter update.

Loot Administration Loot Campaigns Prizes Participants Campaign Prize Items Selected Loot Items Loot Winners Chatter Reports Dashboards

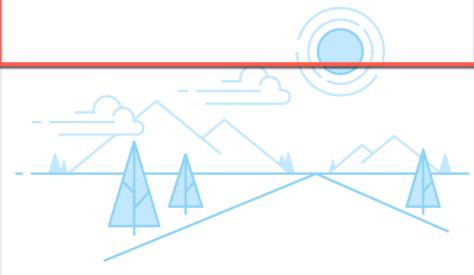
Gaming Headphone

Edit New Contact New Opportunity

| | |
|--|--|
| Related | Details |
| Prize Name Gaming Headphone | Prize Image URL https://tpucdn.com/review/onikuma-k5/images/small-v1558119494.png |
| Prize Image  | Owner User User |
| Created By User User , 9/9/2019 8:29 AM | Last Modified By User User , 9/9/2019 8:29 AM |

Activity **Chatter**

Share an update...



You can also ‘Follow’ any updates to the fields on the record or any Chatter posts that are made to this record by clicking the ‘+ Follow’ button.

Mobile Access for the Loot Administration App

For this exercise we need to access the Salesforce mobile app. You can access the Salesforce app via the Apple App Store or the Google Play Store. Use the following links to download them on your device –

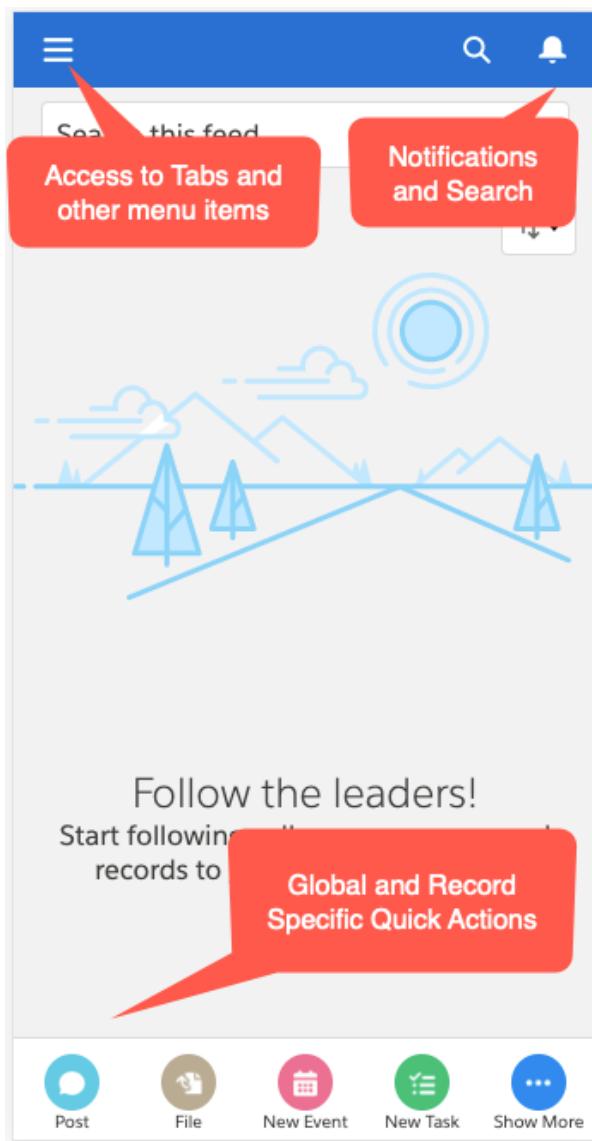
[Salesforce Mobile on the Apple App Store](#)

[Salesforce Mobile on the Google Play Store](#)

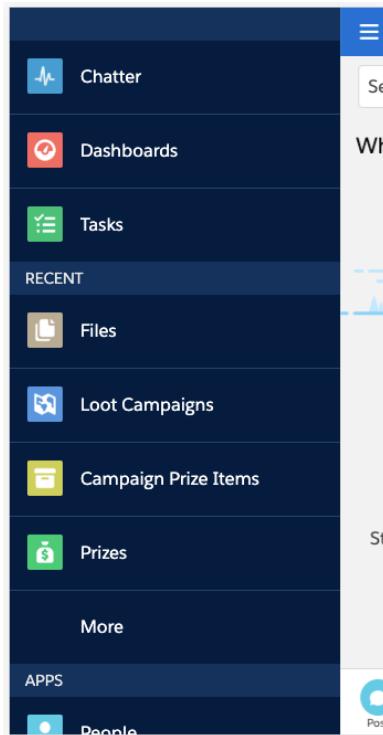
You can also use the following Chrome extension from the Chrome Web Store to emulate a mobile form factor

[S1 Demo Chrome Extension](#)

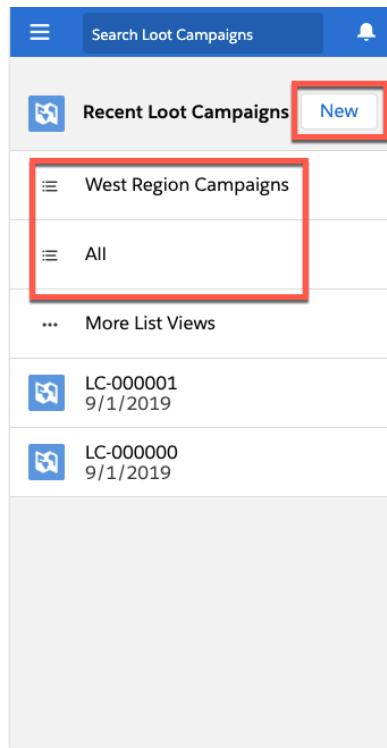
1. Open the mobile app or the chrome extension and log in with your Salesforce user name and password. You should see the following screen.



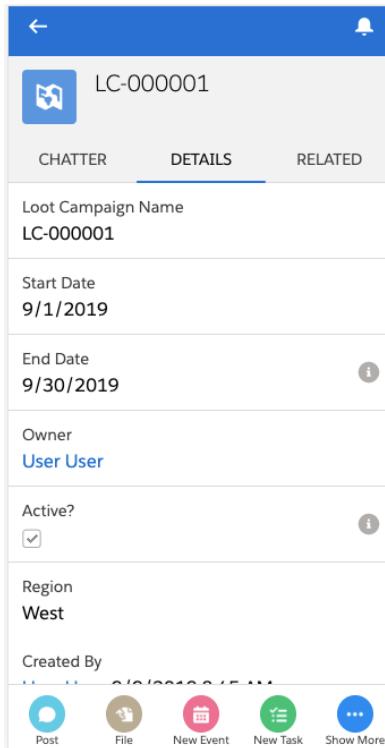
2. Click on the hamburger menu to reveal menu items. Scroll down to see the different sections if the menu. If you don't see the tab you're looking for under the 'Recent' section click on 'More' to reveal more tabs.



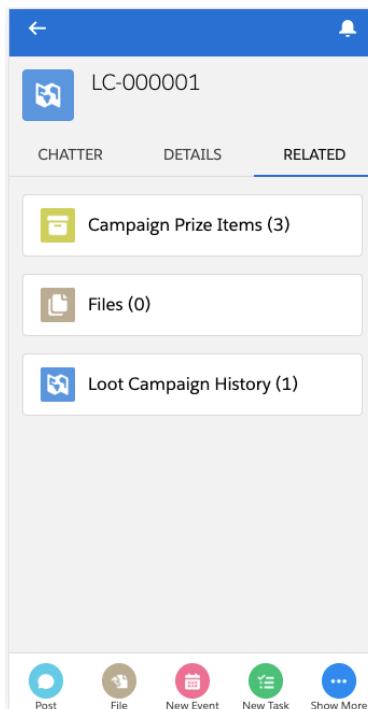
3. You can see the list views you created, recent Request records you accessed and a button to create new Request records.



4. Click on a Loot Campaign Record. You will see the same fields that you added to the Page layout on the mobile screen. The permissions you set for record access will also be respected in the mobile app.



5. Click on the **Related** tab to see the related lists associated with the Loot Campaign. You should see a screen like the following.



6. Click on the **Campaign Prize Item** card. You will see high level details of the Campaign Prize Items. You can click into each for Campaign Prize Item record to see more details. You can also create a new Campaign Prize Item by clicking the 'New' button.

The screenshot shows a mobile application interface for managing campaign prize items. At the top, there is a blue header bar with a back arrow on the left and a bell icon on the right. Below the header, the title "Campaign Prize Items" is displayed next to a green folder icon, with "3 items" underneath. The screen is divided into three horizontal sections, each representing a different prize item:

- PS4**: Shows a thumbnail image of a black PS4 console and a controller. To the left, it says "Prize Na..." and "PS4".
- XBOX**: Shows a thumbnail image of an Xbox console. To the left, it says "Prize Na..." and "XBOX".
- Gaming Mouse**: Shows a thumbnail image of a black gaming mouse. To the left, it says "Prize Na..." and "Gaming Mouse".

At the bottom of each section, there is a red-bordered "New" button with a plus sign inside, indicating the option to add a new item.