Hands-On Admin Workshop

Based on the Summer '22 Release

Presented by Salesforce Canada

WORKSHOP GUIDE OVERVIEW

Introduction & Setup

Hey there, Trailblazer! Welcome to the Salesforce Hands-on Admin Workshop! This guide will walk through the steps taught in our guided classroom setting, including extra credit activities, and will be useful as a take-home reference on a range of Salesforce admin tasks.

The modules included in this guide will transform the Salesforce Platform to build a **camp management application**. Administrators will work in the Lightning User Experience to build and manage the app, learn how to create the data model to support the needs of the camp, apply logic and automation, and build a user interface that makes managing the camp an easy and engaging experience.

Prerequisites

- No prior knowledge of Salesforce is required!
- To do this workshop, all you need is a modern browser and an Internet connection
- Each student should have their own computer (a tablet may not work well for all sections)
- An iPhone or Android phone is desirable for the mobile modules, but not necessary

Browser Requirements

The following browsers are supported when working in the Lightning Experience (all at current version):

- Google Chrome (preferred)
- Mozilla Firefox
- Apple Safari
- Microsoft Edge Chromium

Module Order

This workshop guide is written to be completed in sequential order. Skipping modules may prevent you from being able to proceed, since parts of the data model or logic may not have been previously completed. Any activities that are marked as ***Extra Credit*** can be skipped without impacting the remaining modules.

Module A: Create your free Developer Edition Org

This module will show you how to create a Developer Edition (DE) Salesforce org.
DE instances are free Salesforce environments (with capabilities similar to Enterprise Edition level) that provide you with a space to learn new skills and test ideas without impacting your main Salesforce environment or your sandboxes.

Create a new login for this workshop.
Please DO NOT use your company's Salesforce org for this workshop.

Side note: You may be familiar with Trailhead (https://trailhead.salesforce.com/), Salesforce's interactive website for self-paced hands-on learning. Within Trailhead, you also create unique environments called Trailhead Playgrounds to complete learnings. These are similar to DE orgs, but built specifically for use with Trailhead's modules. If you'd like to use a DE org within Trailhead though, you can click the name of your org at the bottom of any hands-on challenge or project step in Trailhead, then click *Connect Org* and log in to your DE org. Once you've linked your DE org to your Trailhead account, you'll be able to launch it from any hands-on challenge.

Activity 1: Sign up for a new "Dev Org"

Open a browser and navigate to http://developer.salesforce.com/signup
Fill in the form provided:

- Enter your **first name** and **last name**
- Use an **email** address that you have access to during this workshop
- Create a **username** using this format: **firstname.lastname@workshop.hoaw** (Salesforce requires all usernames to be unique)

- **Accept** the Master Services Agreement checkbox

Check your email – you will receive an email from Salesforce asking you to verify your DE account. Upon verifying from the email link, you will be asked to create a password for this account - make sure it is unique! Once complete, you should land on the Setup page.

Write down your username and password (optional) for this workshop:

Username: ________________________________

Password (optional): ________________________

(Note: Writing down passwords isn't generally a good idea for your org's security - so please make sure this isn't a password you've used before if you do write it down!)

Congratulations! You have now created a Salesforce DE org! You may hear the terms "org", "instance", and "environment" used interchangeably. They all mean the same thing – your personal Salesforce playground! You will have access to this DE org whenever you need as long as there has been activity in the past six months. More information can be found at https://developer.salesforce.com/page/Developer_Edition.

Activity 2: Download Workshop Files

To support the workshop today, Salesforce has created a few resources to help you out.

You will be able to find them on the GitHub page https://github.com/SalesforceCA/HOAW.

1. Open up the following link in your web browser:
   https://github.com/SalesforceCA/HOAW

2. Click the green **Code** button, then click **Download ZIP** (HOAW-Master.zip).

3. After downloading the zip file, make sure the zip file has been unzipped to an easily accessible location on your computer (e.g. your Desktop).

Module B: Create the Data Model

Before you get started in building your data model, let's tackle a few key concepts.

Think about all the data that surrounds a camp:

- Who are the campers that are attending?
- Who is organizing the camp? What activities will be available?
- What details about a camp need to be tracked and updated?
- Who needs access to this information? How will they use it? How should they see it?

All these questions are rooted in how you set up your data model. That is why it is your first step in building your camp management application.

In Salesforce, we think about data in three key structures: **Objects**, **Fields**, and **Records**:

- **Objects** – Salesforce uses objects to contain all information related to a subject. In the above statement, the subject is a **Camper**. All campers have similar attributes, and can be collected together and stored within that object in Salesforce.

- **Fields** – Salesforce uses fields to define the attributes and details about a subject. In the above statement, this would be **age**, **email**, **guardian**, and **allergies**. These attributes would be fields on the Camper object.

- **Records** – Salesforce uses records to identify instances of an object. Every camper might have a different combination of attributes, but they would all be records in the Camper object.

If you were to compare this to a spreadsheet, an Object is a table, Fields are the columns in that table, and Records are rows added to the table.

This means that you can move just about any existing spreadsheet into Salesforce by creating the right data model to support it! How cool is that?!
But hold on a second - before you build a data model from scratch, it is always smart to see if someone has already built it. The Salesforce AppExchange is a marketplace of pre-built apps that can fit right into your Salesforce org and get you going towards your goal much faster. Check out the AppExchange at https://appexchange.salesforce.com/.

Unfortunately, there isn't a camp management application found on the AppExchange that meets our specific needs.

But no worries, by the end of this workshop in just a few hours, we'll have it built out and ready to use!

Let's Get Started!

Before you start building your data model, you will want to start with the end in mind – what insights will you get from the data. Camp managers have been asking for three key insights:

- **Staff Planning** – how should the camp make hiring decisions based on the campers registered?

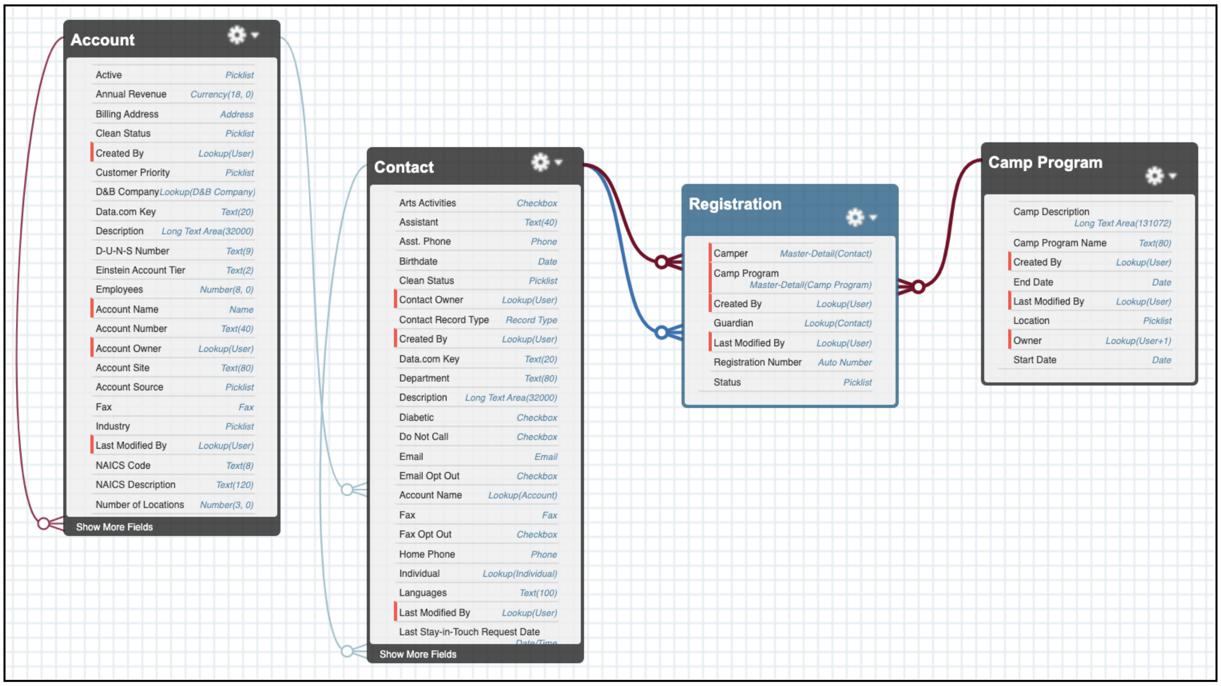
- **Supply Planning** – how many supplies are needed to support camp activities?

- **Safety** – who are the key campers that camp managers should keep an eye on?

Additionally, camp managers have been asking for a more automated process for handling campers with nut allergies.

The following image shows the objects and fields that you are going to use today:

Preview of our Data Model



- **Contacts** - Standard Object - To track your campers and their guardians
- **Accounts** - Standard Object - To connect Contacts belonging to the same family
- **Camp Programs** - Custom Object - To track details about the multiple camp activities that will run throughout the season
- **Registration** - Custom Object **-** The campers will be connected to a Camp Program through a Registration

Activity 1: Modify the Account and Contact objects

Rename Tabs and Labels

From the Setup page, we'll begin by changing the standard label for Account to Family. This label will make more sense to the camp managers because it's in language familiar to their day-to-day needs.

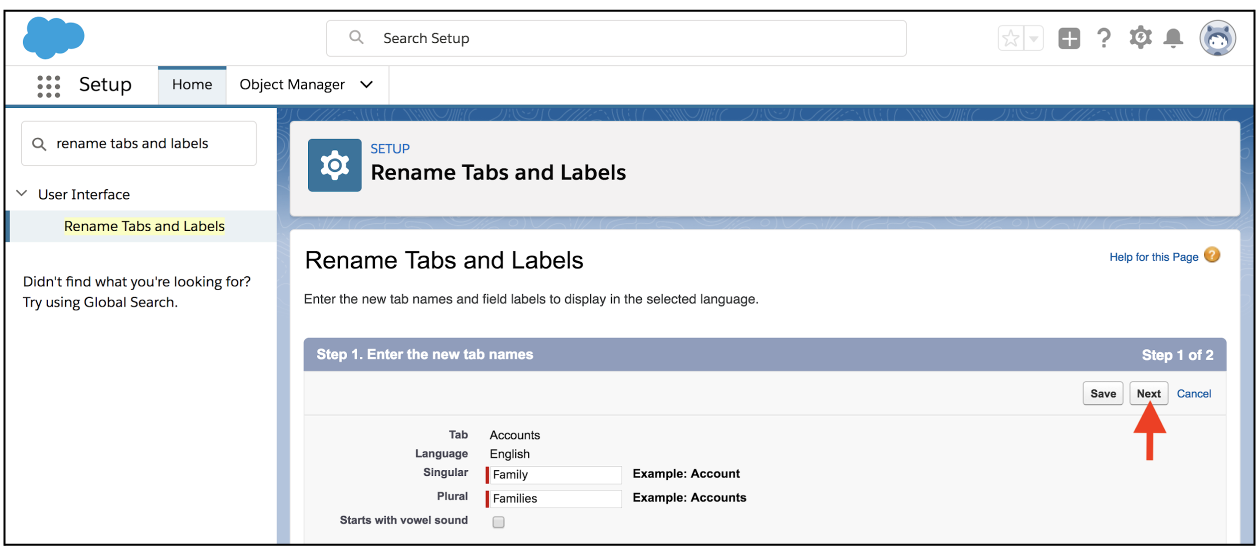
1. In the Quick Find search in the left navigation, type **Rename** and select the menu link for **Rename Tabs and Labels**

2. Click on the **Edit** link in the Accounts row.

3. Rename the singular name to **Family**.

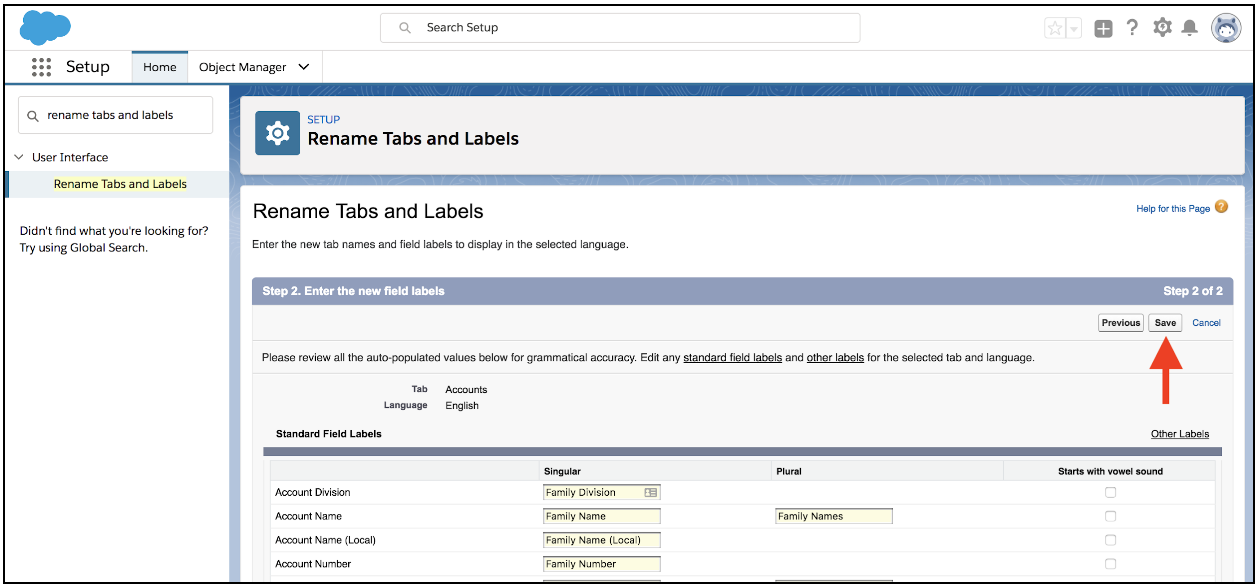
4. Rename the plural name to **Families**.

5. Deselect the checkbox for **Starts with vowel sound** (this identifies if we should refer to it as a Family or an Family) and click **Next**.



Click **Next** (not **Save**!) to confirm that all field labels related to Account have changed to Family.

6. Once you've confirmed all the fields related to Account have changed to "Family" on the next screen, click **Save**.



You have now changed the label of the standard Account object to Family.

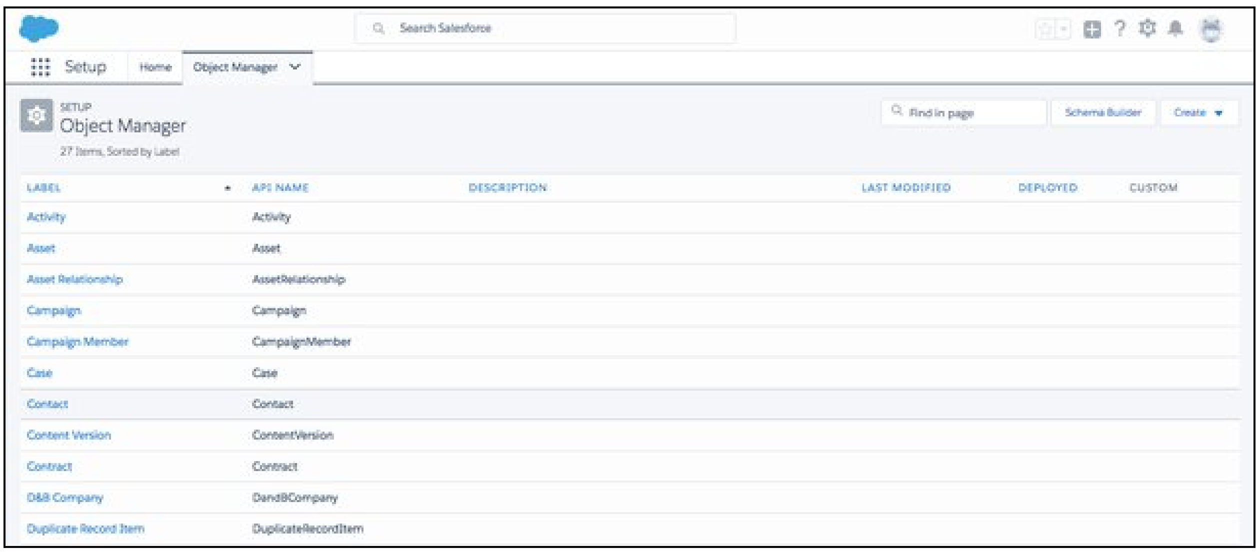
Create Record Types

Now, let's modify your Contact object to track both Campers and Guardians. To do this, you are going to create **record types** for this object.

A record type allows us to use the same Salesforce object for different purposes. You may track different attributes about a guardian than you would a camper, but still maintain some common attributes. Instead of creating separate custom objects for both, record types allow you to use the same object and assign different page layouts, different processes, and even different picklist values to each.

1. In Setup, click on the **Object Manager** tab at the top of the screen.

2. From Object Manager, find the **Contact** object and click on the label link.



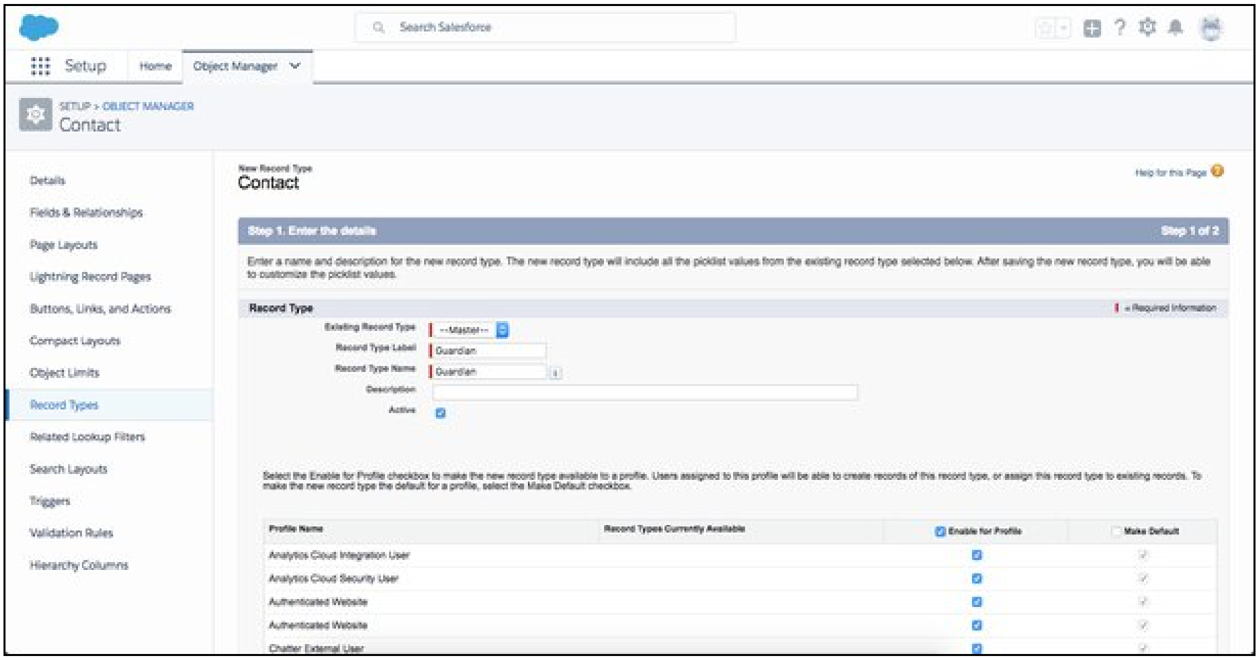
3. In the left navigation, click on the **Record Types** menu item.

4. Click the **New** button.

5. Set the record type label to **Guardian** and hit the tab key.

6. The record type name should autofill. If it doesn't, set the name to **Guardian**.

7. Confirm the **Active** checkbox is checked and **Make Available** in the table header is checked below to enable the record type for all profiles.



8. At the bottom of the page, click **Next**.

9. Apply the page layout to all profiles for this record type to **Contact Layout**.

10. At the bottom of the page, click **Save and New**.

Now, let's repeat the same steps above and create a record type for **Camper**.

11. Set the record type label to **Camper** and hit the tab key.

12. The record type name should autofill. If it doesn't, set the name to **Camper**.

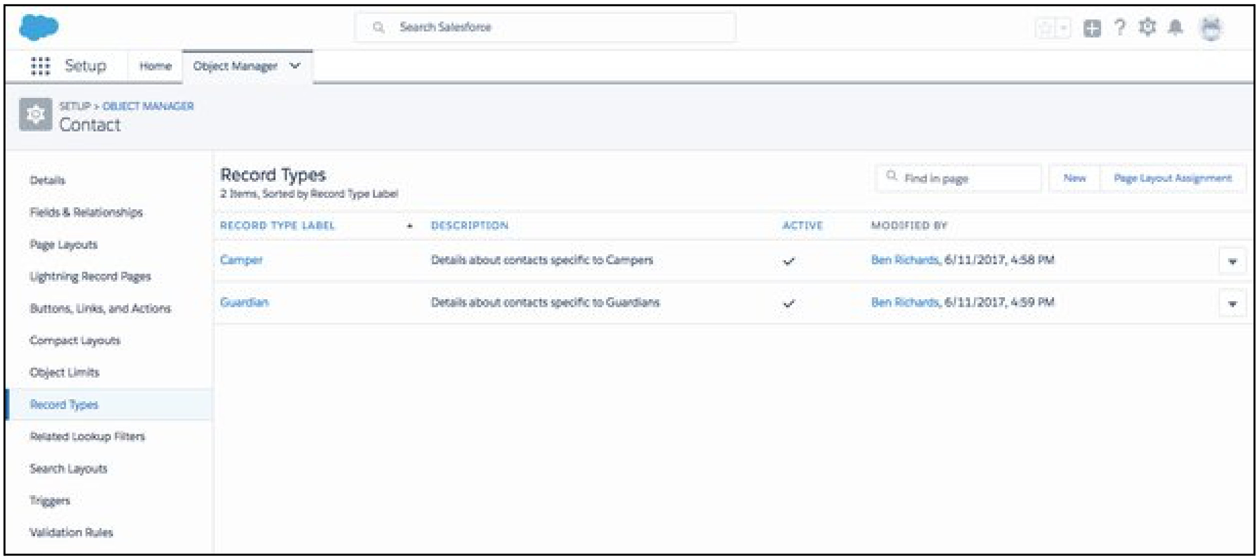
13. Check the **Active** checkbox and click **Make Available** in the table header below to enable the record type for all profiles.

14. At the bottom of the page, click **Next**.

15. Apply the page layout to all profiles for this record type to **Contact Layout**.

16. At the bottom of the page, click **Save**.

To review the record types that have been created, click on the **Record Types** menu item in the left navigation. You should now see both record types created and active, like this:



Create new Custom Fields on the Contact object

Camp managers want to know if a Camper has a nut allergy, is diabetic, and if they are able to participate in Water Activities and Arts Activities while at camp.

These aren't standard attributes Salesforce usually tracks about Contacts, so let's add **custom fields** to track this data for our Contacts *(PS: In an upcoming module, we'll make sure these fields are only visible on records with the Camper Record Type by defining Page Layouts - stay tuned!)*.

1. From **Object Manager** and in the **Contact** object settings, click on the **Fields & Relationships** menu item in the left navigation.

2. Click **New**.

3. Create a **Nut Allergy** field:
    a. Select the **Checkbox** data type.
    b. Set the field label to **Nut Allergy** and press tab to automatically set the field name to **Nut_Allergy**.
    c. Set the default value to **Unchecked** and click **Next**.
    d. Review the profiles that will be able to see this field and click **Next**.
    e. Confirm the field will be added to the **Contact Layout**, then click **Save and New**.

4. Create a **Diabetic** field:
    a. Select the **Checkbox** data type.
    b. Set the field label to **Diabetic** and press tab to automatically set the field name to **Diabetic**.
    c. Set the default value to **Unchecked** and click **Next**.
    d. Review the profiles that will be able to see this field and click **Next**.
    e. Confirm the field will be added to the **Contact Layout**, then click **Save and New**.

5. Create a **Water Activities** field:
    a. Select the **Checkbox** data type.
    b. Set the field label to **Water Activities** and press tab to automatically set the field name to **Water_Activities**.
    c. Set the default value to **Unchecked** and click **Next**.
    d. Review the profiles that will be able to see this field and click **Next**.
    e. Confirm the field will be added to the **Contact Layout**, then click **Save and New**.

6. Create an **Arts Activities** field:
    a. Select the **Checkbox** data type.
    b. Set the field label to **Arts Activities** and press tab to automatically set the field name to **Arts_Activities**.
    c. Set the default value to **Unchecked** and click **Next**.
    d. Review the profiles that will be able to see this field and click **Next**.
    e. Confirm the field will be added to the **Contact Layout**, then click **Save**.

Now that you have modified the Account and Contact objects for use in your application, it is time to build a few custom objects to track information about camp programs and registrations.

You may be asking, why did you use the Account and Contact objects instead of creating custom objects? Savvy Salesforce Admins will use standard functionality and objects as much as possible. It saves time from rebuilding a data model from scratch, and there are often additional features provided by Salesforce included in standard objects that you would not be able to benefit from if you tried to make them yourself.

Activity 2: Create the Camp Program object and tab

Create a Custom Object

When thinking about your camp management application, you will want to think about dependencies. For example, for a Camper to be registered, we first need to define Camp Programs that they can register for. In other words, if you haven't created a way to track Camp Programs, then you can't create the Registration related to them.

This concept applies when designing the data model. You need to build your Camp Program object *before* your Registrations object, so it exists when you want to create a relationship.

Let's build our custom object by loading data from a spreadsheet. Creating custom objects in Salesforce has never been faster!

1. In Setup, click on the **Object Manager** tab at the top of the screen.

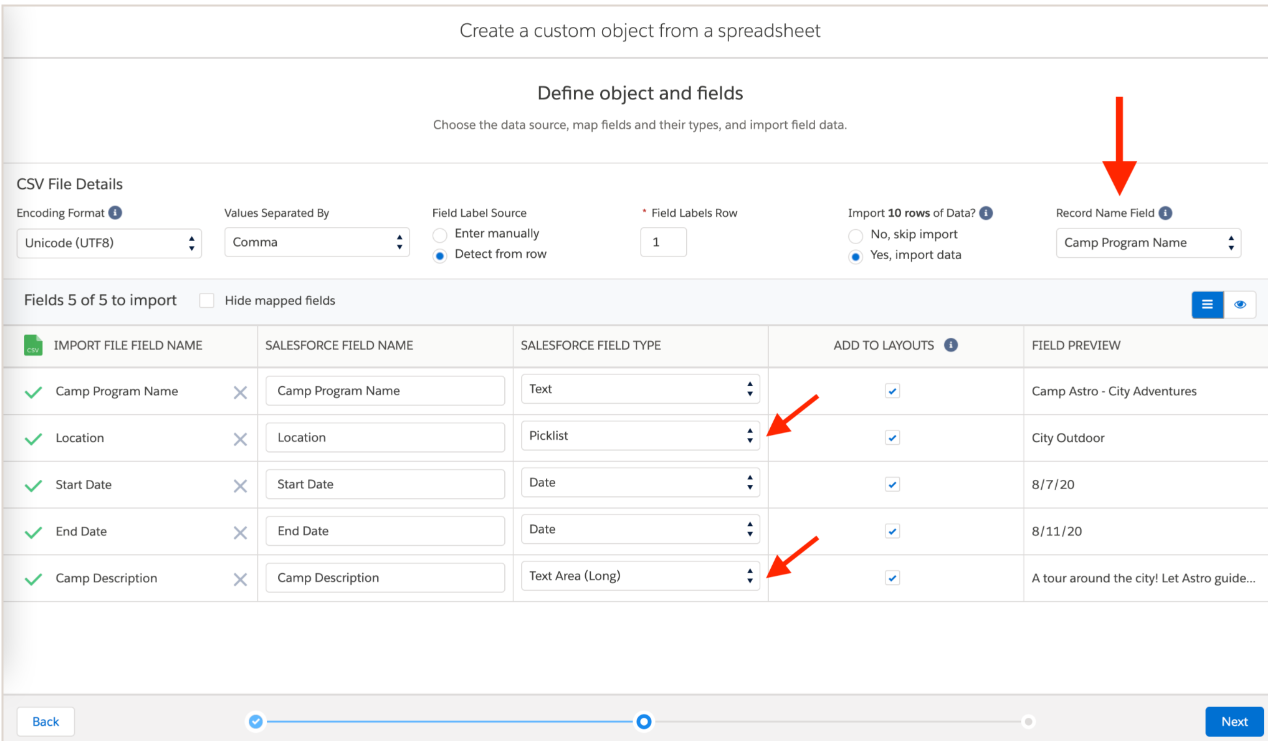
2. Click on the **Create** button in the top right of the screen, then select **Custom Object From Spreadsheet**.

    a. Click **Log in with Salesforce** - You might need to log into Salesforce again. Enter your credentials using the username and password you created earlier. Hint: If you used the suggested format, your username will look a bit like this: **firstname.lastname@workshop.hoaw**

    b. Click **Allow** to grant access.

    c. Click the **Upload** button and upload the **CampPrograms_Sample.csv** file from your HOAW_Master folder.

On the **Define object and fields** page, we will need to make some adjustments to ensure the data is entered correctly:



1. For the **Record Name Field** picklist in the top right of the page, select **Camp Program Name**.

Make sure you complete Step 1. It's important to ensure this step is completed correctly to avoid errors when we upload more data later on.

2. Change the field type for **Location** to **Picklist**.

3. Change the field type for **Camp Description** to **Text Area (Long)**.

4. Click **Next**.

5. Change the label to **Camp Program**.

6. Change the plural label to **Camp Programs**.

7. Under **Advanced Settings**, make sure all the items are checked, then click **Finish**.

Nice work! Your Camp Program object should now be created. If you have a lot of fields you want to create, using the spreadsheet method saves a LOT of time and it also imports your data for you.

Create a Custom Tab

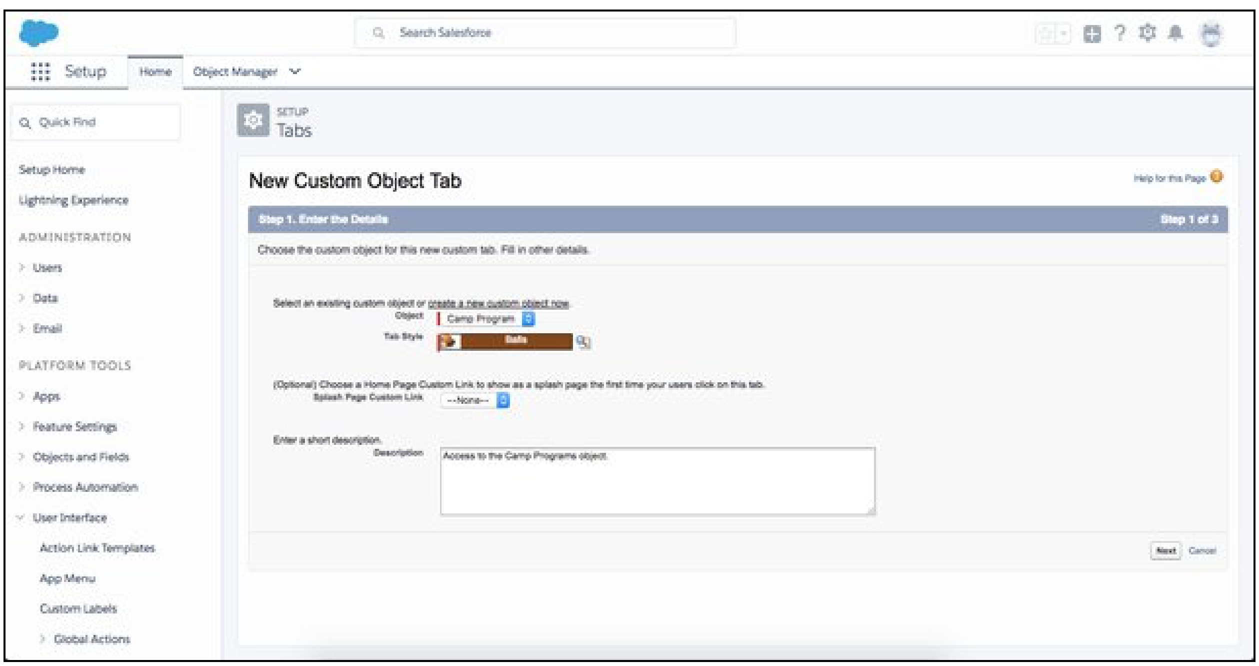
Now that we've created our custom object, we want to make a few adjustments to the object to get it looking right. First, let's edit the Tab for the Camp Program object.

1. Go to **Setup** and click on the **Home** tab.

2. In the Quick Find search in the left navigation, type **Tabs** and select the menu link for **Tabs**.

3. Click the **Edit** link next to Camp Programs under the Custom Object Tabs section.

4. Click the magnifying glass icon to choose a **Tab Style** that fits best for your camp. This will be used as the icon to represent your object to end users. Click **Save**.



Modify Camp Program Fields

Next, let's fix the **Location** field and the order of the values in the picklist.

1. In Setup, go to **Object Manager** and click on **Camp Program** to go to the object's settings.

2. Click **Fields and Relationships** from the menu on the left.

3. Click on the **Location** field.

4. Click the **Reorder** button under the Values section.

5. Check the checkbox for **Display values alphabetically, not in the order entered**. Click **Save**.

Lastly, let's create some space on the page and reduce the number of visible lines for the **Camp Description** field.

1. In the left menu of the Camp Program object, select **Fields & Relationships**.

2. Click on the **Camp Description** field.

3. Click the **Edit** button

4. Change the value in **# Visible Lines** to 3.

5. Click **Save**.

Activity 3: Create the Registration Object and Tab

Before jumping in and creating the Registrations object, let's think about how this object will be used. Each Registration is the connection between a Camper and a Camp Program. When you define the relationships between these objects, think about the nature of those relationships:

- Can a camper be registered in *more than one* camp program?
- Should a camp program have *more than one* registered camper?

If the answers to both are yes, then you are creating a **junction object** to represent a many-to-many relationship between campers and camp programs.

This time, we won't create the Registration object from a spreadsheet - we'll go the longer, more "typical" way so you know how to create a new object and fields when you don't have a spreadsheet already made.

1. In Setup, click on the **Object Manager** tab at the top of the screen.

2. On the top right, click **Create** and select **Custom Object**
   a. Set the custom object label to **Registration** and hit the tab key.
   b. Set the plural label to **Registrations**.
   c. Set the record name to **Registration Number**, with data type **Auto Number**.
   d. Set the display format to **CR-{000000}**
   e. Set the starting number to **1**

3. Click all the checkboxes in each of the following sections: **Optional Features**, **Search Status**, and **Object Creation Options.**

Ensure that you have checked the **Launch New Custom Tab Wizard** checkbox. This will allow you to edit the **Tab Style**.

4. Click **Save**

5. Click the magnifying glass icon to choose a **Tab Style** that fits best for your registrations (whatever you like!). This will be used as the icon to represent your object to end users. Click **Next**.

6. Confirm the tab visibility is set to **Default On** for all profiles, then click **Next**.

7. Deselect the checkbox in the table header for **Include Tab**. You do not want to add this object and tab to existing apps in Salesforce as you are building a new app.

8. Click **Save**.

Create Master-Detail Relationships

When thinking about relationships (in Salesforce terms, anyway), you want to think about whether a Registration can exist *without* a Camper or a Camp program. If the answer is no, then you should probably create the relationship as **master-detail**.

This means that a Registration cannot exist without an assigned Camper, and without a specified Camp Program. When adding fields, let's start with building the right relationships.

1. In Setup, go to **Object Manager > Registration**. In the left navigation, click on the **Fields and Relationships** menu item.

2. Click **New**.

3. Create a **Camper** field:
    a. Select the **Master-Detail Relationship** data type, then click **Next**.
    b. Relate to the **Contact** object.

c. Set the field label to **Camper**, and press tab to automatically set the field name to **Camper**.
d. Set the child relationship name to **Registrations** and click **Next**.
e. Review the profiles that will be able to see this field and click **Next**.
f. Confirm the field will be added to the **Registration Layout**, then click **Next**.
g. Set the related list label to **Registrations**, add the related list to all layouts, then click **Save and New**.

4. Create a **Camp Program** field:
    a. Select the **Master-Detail Relationship** data type, then click **Next**.
    b. Relate to the **Camp Program** object.
    c. Set the field label to **Camp Program**, and press tab to automatically set the field name to **Camp Program**.
    d. Set the child relationship name to **Registrations** and click **Next**.
    e. Review the profiles that will be able to see this field and click **Next**.
    f. Confirm the field will be added to the **Registration Layout**, then click **Next**
    g. Set the related list label to **Registrations**, add the related list to all layouts, then click **Save and New**.

Create a Lookup Relationship

A lookup relationship is similar to a master-detail relationship. The main difference is that a lookup value is *not always required.* That is, we can add a Guardian lookup on the Registration and a value is not required to save the record.

1. Create a **Guardian** field:
    a. Select the **Lookup Relationship** data type, then click **Next**.
    b. Relate to the **Contact** object.
    c. Set the field label to **Guardian**, and press tab to automatically set the field name to **Guardian**.
    d. Set the child relationship name to **Guardianship** and click **Next**.
    e. Review the profiles that will be able to see this field and click **Next**.
    f. Confirm the field will be added to the **Registration Layout**, then click **Next**.
    g. Set the related list label to **Family Registrations**, add the related list to all layouts, then click **Save and New**.

You have now set up three relationships, including two to the same object. Salesforce allows us to create a maximum of **2 master-detail relationships** on an object, and then as many lookup relationships as required (up to 40 but more can be requested).

Let's finish the Registration object with one more custom field:

1. Create a **Status** field:
    a. Select the **Picklist** data type, then click **Next**.
    b. Set the field label to **Status**.
    c. Select the option for **Enter values, with each value separated by a new line**.
    d. Enter the following values (each on its own row):
        i. Registered
        ii. At Camp
        iii. Completed
        iv. Withdrew
    e. Check the **Use first value as default value** checkbox.
    f. Set the field name to **Status** and click **Next**.
    g. Review the profiles that will be able to see this field and click **Next**.
    h. Confirm the field will be added to the **Registration Layout**, then click **Save**.

Activity 4: Examine the Data Model in Schema Builder

Now that you have added fields to your registration object, let's look at how your data model has turned out. The best view is to look at the data schema.

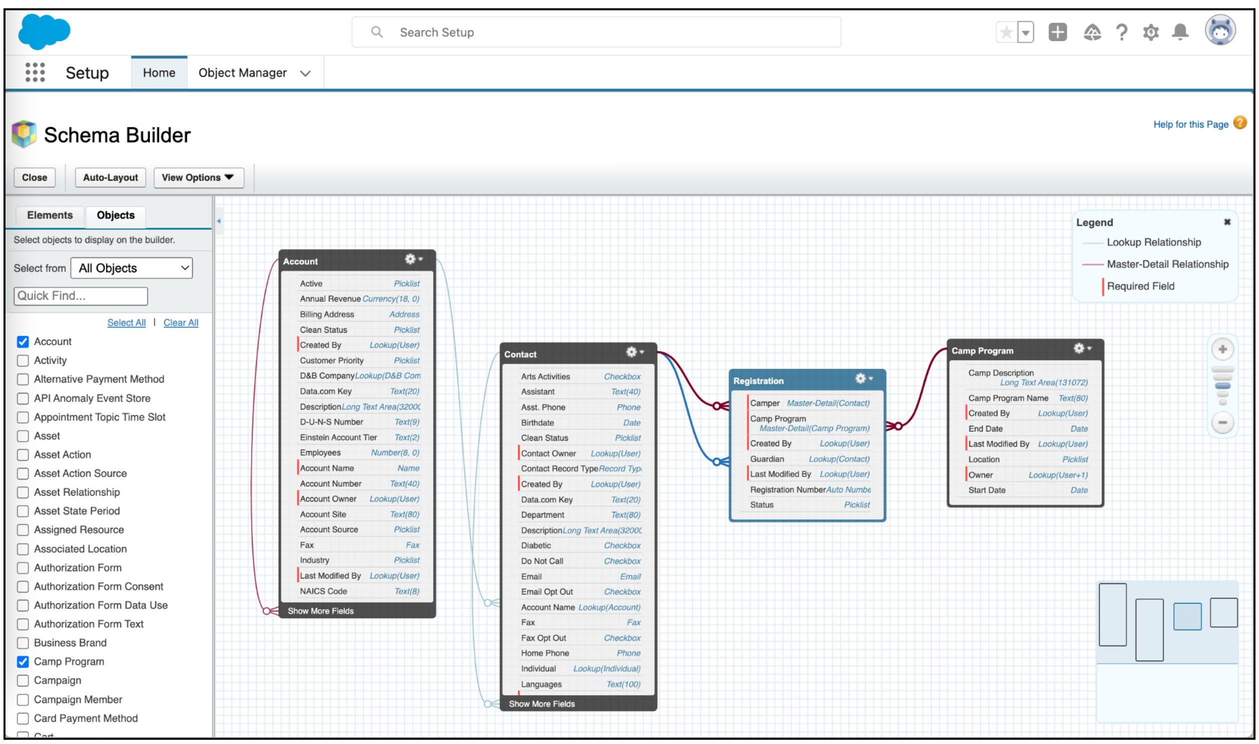
1. In Setup, click on the **Object Manager** tab at the top of the screen.

2. Click on **Schema Builder** in the top right.

3. In the left navigation of Schema Builder, click the **Clear All** link.

4. Select the four objects that you are using in your app: **Account**, **Contact**, **Camp Program**, and **Registration**.

5. Use the mini-map in the bottom right to navigate and organize your page to show all the objects and their relationships with each other.



Excellent! You have now completed building your data model for your application.
With your data model set up, you will now be able to add logic and automation, do reporting, and optimize the user interface to complete your app.

Extra Credit Activity: Create a Roll-up Summary Field and Formula Field

One of the unique attributes of a master-detail relationship is the ability to roll up summary information from the detail object to the master object. Wouldn't it be great to see a count of registrations when looking at a Camp Program? Well with a roll-up summary field, you can do just that.

1. In Schema Builder, click on the **Elements** tab of the left navigation.
2. Drag and drop a **Roll-up Summary** field onto the **Camp Program** object.
3. Set the field label to **Registered Campers** and press tab to automatically set the field name to **Registered_Campers**.
4. Set the **Registrations** object as the summarized object.
5. Set **COUNT** as the summary type
6. Click **Save**.

Now every time a new camper is registered to this camp program, the count will increase automatically. Let's take this one step further. What if you wanted a visual indicator of whether there are spots remaining in this camp program? Well you can use a formula field to show this.

1. In Schema Builder, click on the **Elements** tab of the left navigation.
2. Drag and drop a **Formula** field onto the **Camp Program** object.
   a. Set the field label to **Availability** and press tab to automatically set the field name to **Availability**.
   b. Set the return type to **Text**.
   c. In the formula box, enter the following formula:

```
IF ( Registered_Campers__c > 25, IMAGE ("/img/samples/light_red.gif", "Red"), IMAGE
                ("/img/samples/light_green.gif", "Green") )
```

3. Select the **Treat blank fields as zeroes** checkbox.
4. Click **Save**.

You have now added a visual indicator for availability to the Camp Program object that looks at your roll-up summary field to determine its value. Way to go!

Module C: Design the App Experience

Now that you have the data model in place, it is time to think about how users are going to interact with the data:

- Where are users accessing the data? Web browser? Mobile?
- Will users collaborate on records?
- What information is critical for users to see first?

These questions are answered when you create a user experience dedicated to your camp management application. Let's start designing your app!

Activity 1: Load Sample Data for Camp Management Application

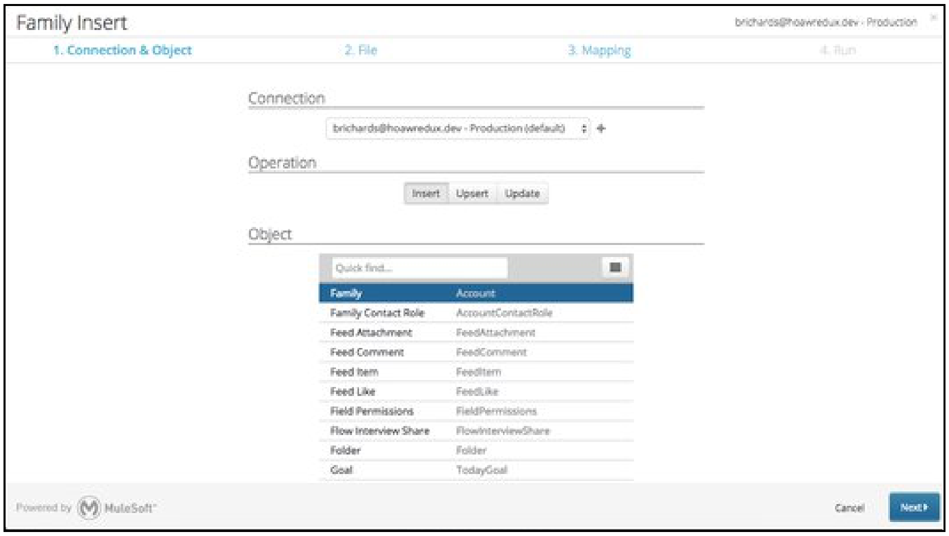
Before you can start to effectively shape the user experience, you need some data to work with. Luckily you don't have to manually create data, some is provided for you.

1. In the same browser as your Salesforce Developer Edition org, open a new tab and navigate to **https://dataloader.io/**.

2. Click **Login with Salesforce** at the top of the page and click **Login**.

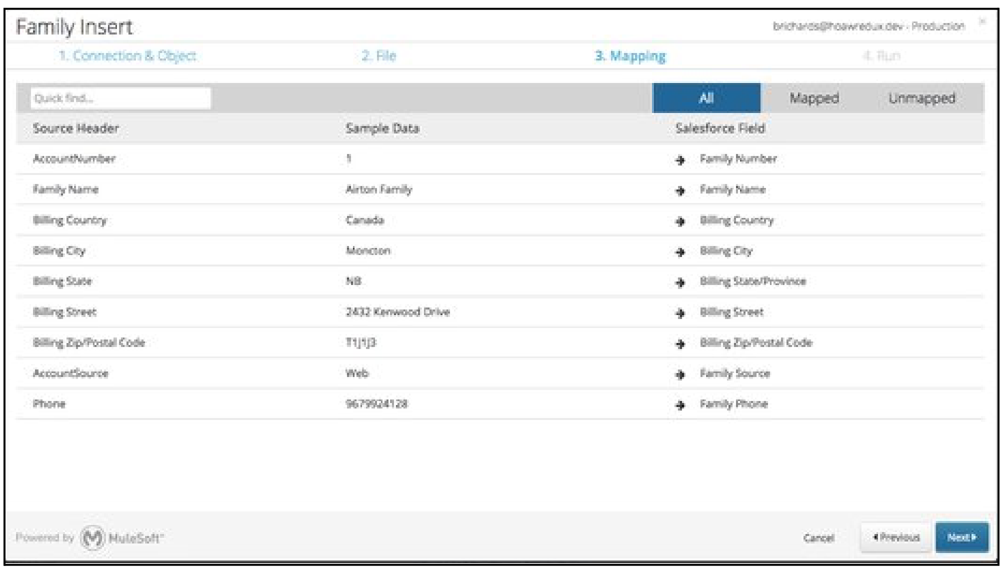
3. Click **Allow** to enable access to your org.

4. Import data on Campground **Families** into Salesforce.
    a. At the top of the page, click **NEW TASK > IMPORT**.
    b. Choose the **Insert** operation.
    c. Search for and select the **Family** object and click **Next**.

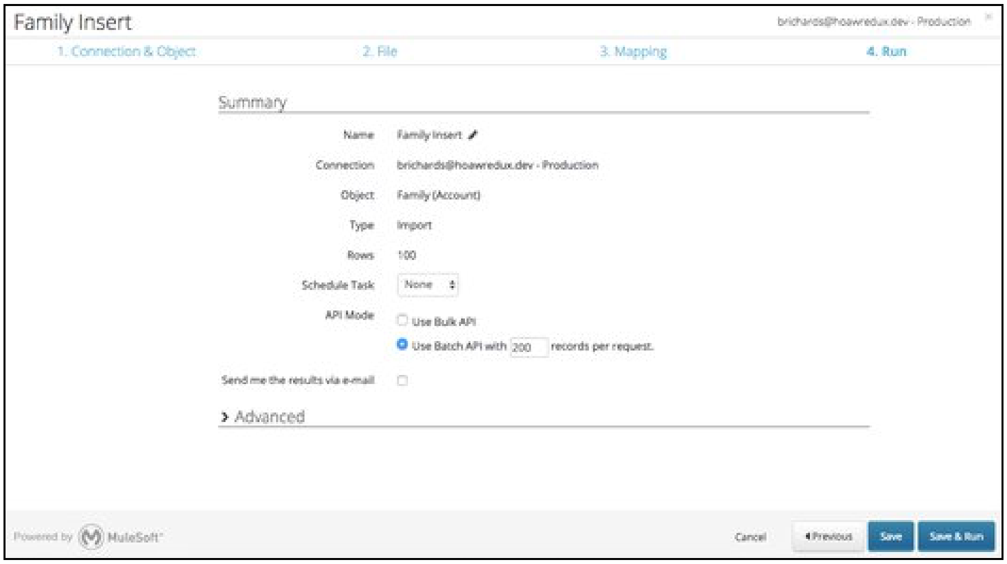


d. Click the **Upload CSV** button and upload the **Families_Sample.csv** file from your HOAW_Master folder.

e. Confirm all fields are mapped and click **Next**.

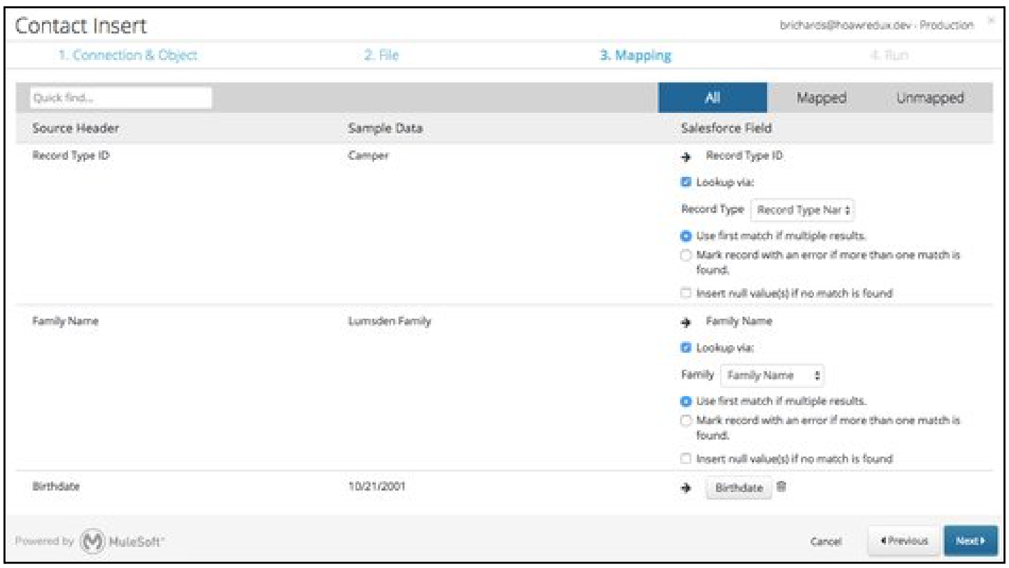


f. Select **Use Batch API** with **200** records per request under API mode.



g. Click **Save & Run**, then click **Run**.

5. Next, we will import **Contacts** into Salesforce
    a. At the top of the page, click **NEW TASK > IMPORT**.
    b. Choose the **Insert** operation.
    c. Search for and select the **Contact** object and click **Next**.
    d. Click the **Upload CSV** button and upload the **Contacts_Sample.csv** file from your HOAW_Master folder.
    e. For the **Record Type ID** field, select the checkbox for **Lookup via** and choose **Record Type Name** from the dropdown.
    f. For the **Family Name** field, select the checkbox for **Lookup via** and choose **Family Name** from the dropdown.
    g. **Confirm all fields are mapped** and click **Next**.

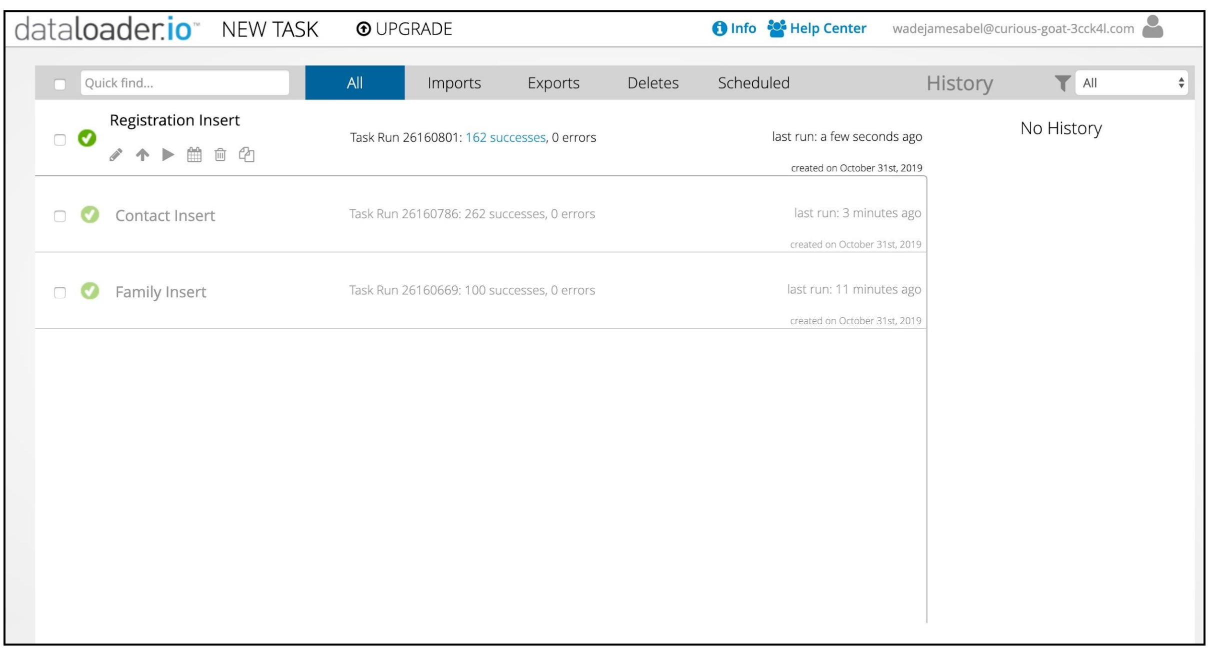


    h. Select **Use Batch API** with **200** records per request under API mode.
    i. Click **Save & Run**, then click **Run**.

6. Import **Registrations** into Salesforce.
    a. At the top of the page, click **NEW TASK > IMPORT**.
    b. Choose the **Insert** operation.
    c. Search for and select the **Registration** object and click **Next**.
    d. Click the **Upload CSV** button and upload the **Registrations_Sample.csv** file from your HOAW_Master folder.
    e. For the **Camp Program** field, select the checkbox for **Lookup via** and choose **Camp Program Name** from the dropdown.
    f. For the **Camper** field, select the checkbox for **Lookup via** and choose **Full Name** from the dropdown.
    g. For the **Guardian** field, select the checkbox for **Lookup via** and choose **Full Name** from the dropdown.
    h. Confirm all fields are mapped and click **Next**.
    i. Select **Use Batch API** with **200** records per request under API mode.
    j. Click **Save & Run**, then click **Run**.

If you see any errors, check the spreadsheet for the errors to see what went wrong. Errors might occur if record types were not created, or fields were not renamed or were misspelled.

Once you've finished, it should look like this:



Congratulations, you have now uploaded data that you can use when designing your app!

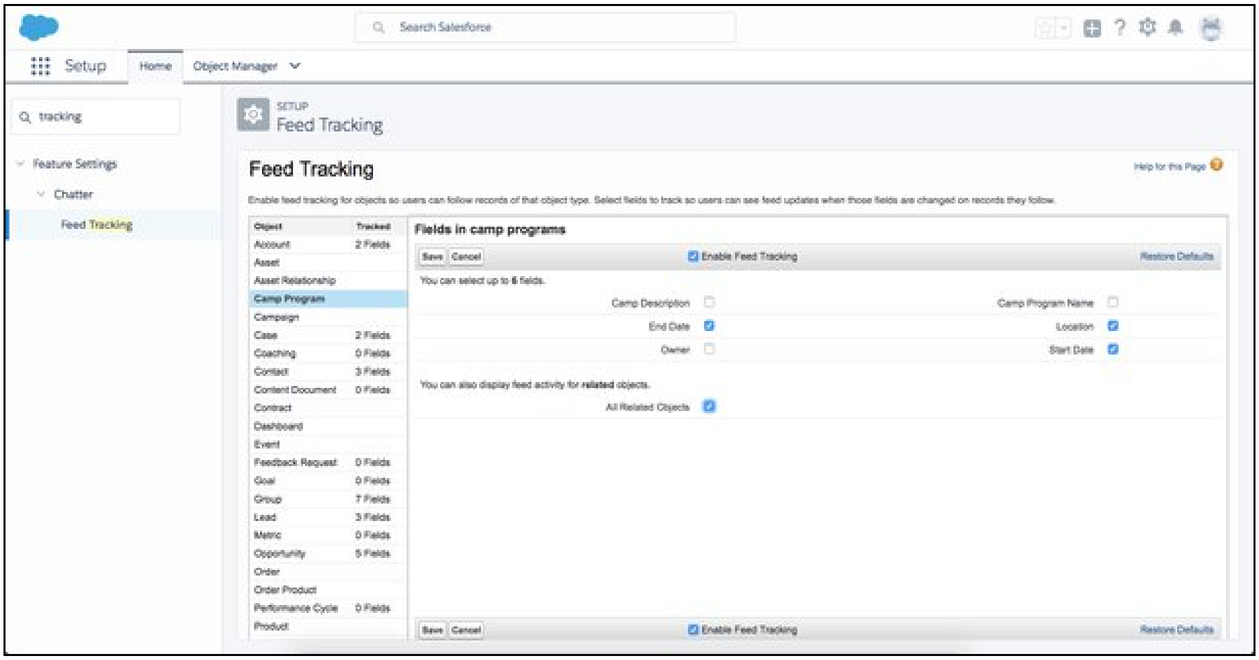
Activity 2: Enable Feed Tracking

Salesforce feed tracking allows users to see when specific fields on a record have changed, as well as collaborate using Chatter.

1. In Setup, click on the **Home** tab at the top of the screen.

2. In the Quick Find search in the left navigation, type **Tracking** and click on the **Feed Tracking** menu item.

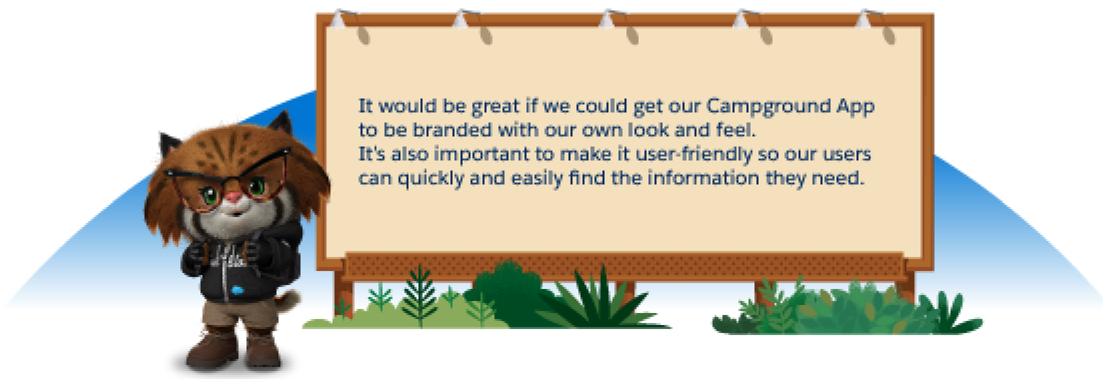
3. Enable Feed Tracking for **Camp Programs**.
    a. Select the **Camp Program** object from the left column.
    b. Select the **Enable Feed Tracking** checkbox.
    c. Select the checkbox for **Start Date**, **End Date**, **Location**, and **All Related Objects**, then click **Save**.



4. Enable Feed Tracking for **Registrations**.
    a. Select the **Registration** object from the left column.
    b. Select the **Enable Feed Tracking** checkbox.
    c. Select the checkbox for **Status**, then click **Save**.

You have now enabled tracking on your custom objects!

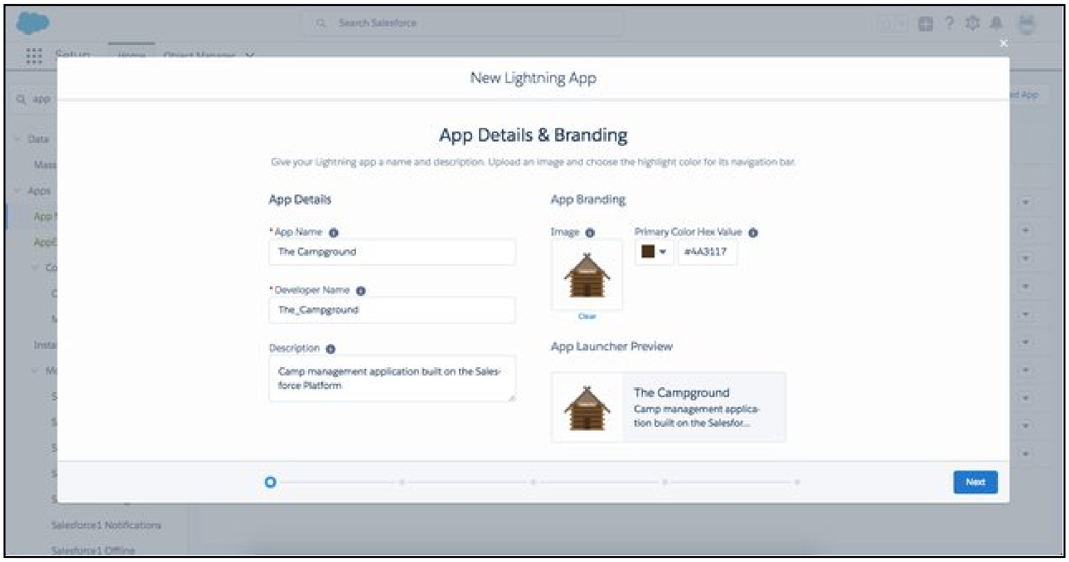
Activity 3: Create a New Lightning App



Salesforce allows users to create Apps that serve specific use cases. Some are provided by Salesforce when you start using the platform, such as Sales, Service, and Marketing.

Today, you are looking at the camp management use case, so let's create an app to make it easy for Camp Managers and other users to do what they need to do.

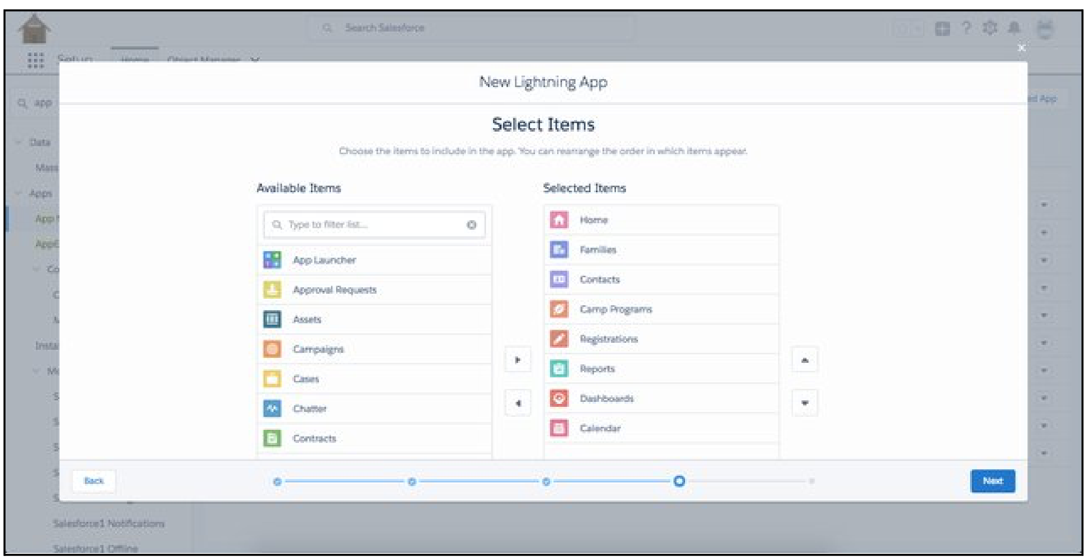
1. In Setup, click on the **Home** tab at the top of the screen.
2. In the Quick Find search in the left navigation, type **App** and click on the **App Manager** menu item.
3. Click on the **New Lightning App** button.
4. Set the app name as **The Campground,** and press tab to automatically set the developer name to **The_Campground**
5. Click the **Upload** button and upload the **CampCabin.png** image from your HOAW_Master folder.
6. Set the Primary Color Hex Value to **#4A3117** and click **Next**.



7. Select the radio button for **Standard navigation** and click **Next**.

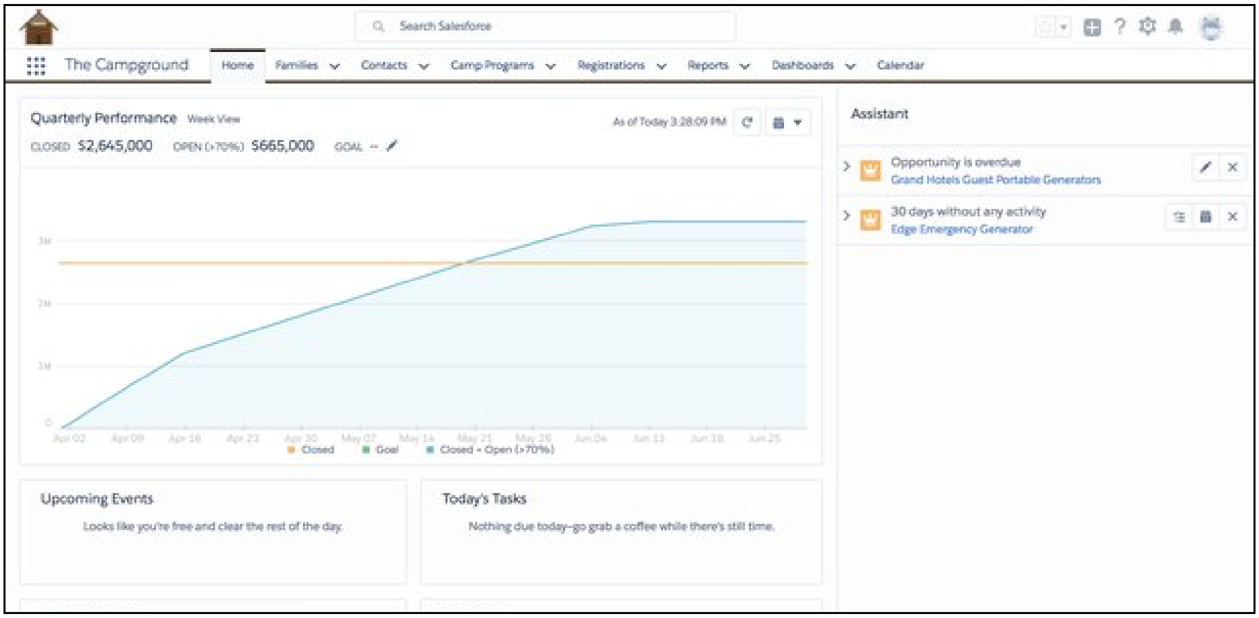
8. Bypass the utility bar setup by clicking **Next**.

9. From the Available Items list, select **Home**, **Families**, **Contacts**, **Camp Programs**, **Registrations**, **Reports**, **Dashboards**, and **Calendar**, then click **Next**.



10. From the list of available profiles, select the **System Administrator** profile, then click **Save & Finish**.

11. Click the App Launcher ( ) and select **The Campground** app.



You've built a custom app for camp management! Woohoo!

Next, let's review how a user would see each of your Objects.

Activity 4: Optimize Object Layouts

Setting object layouts make all the difference for how users interact with data in Salesforce. There are a few layouts that need to be set up:

- **Page Layouts** – Salesforce uses page layouts to define how users see fields, related lists, and actions when looking at a record.

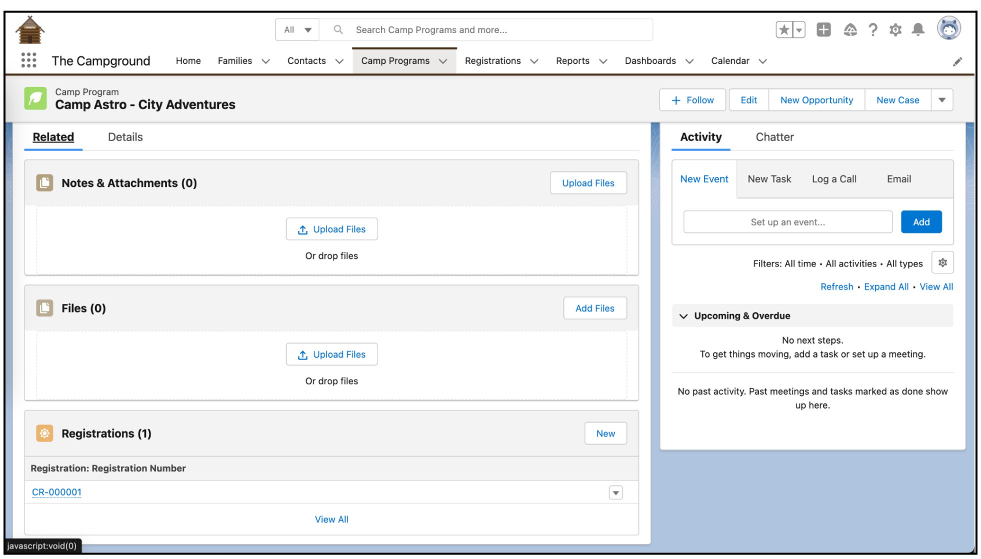
- **Compact Layouts** – A compact layout represents the highlight reel for a record – the few key fields that tell a user all they need to know without having to scroll through the entire details section.

- **Search Layouts** – These layouts define the way records show up in search results, lookups, and list views.

When you create a custom object, Salesforce creates layouts for you, but you will want to review and edit them to make sure they meet the requirements of your app.

Optimize Page Layouts

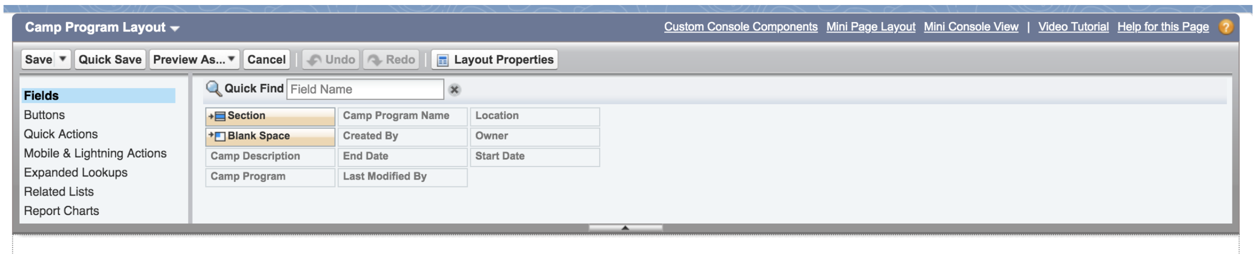
Let's take a look at a Camp Program record. We can see there's a related list of all the registrations, but we can only see the registration number. Wouldn't it be useful if we could learn more about each registration without having to click into the record? We can optimize the way this page looks by changing the page layout of the object.



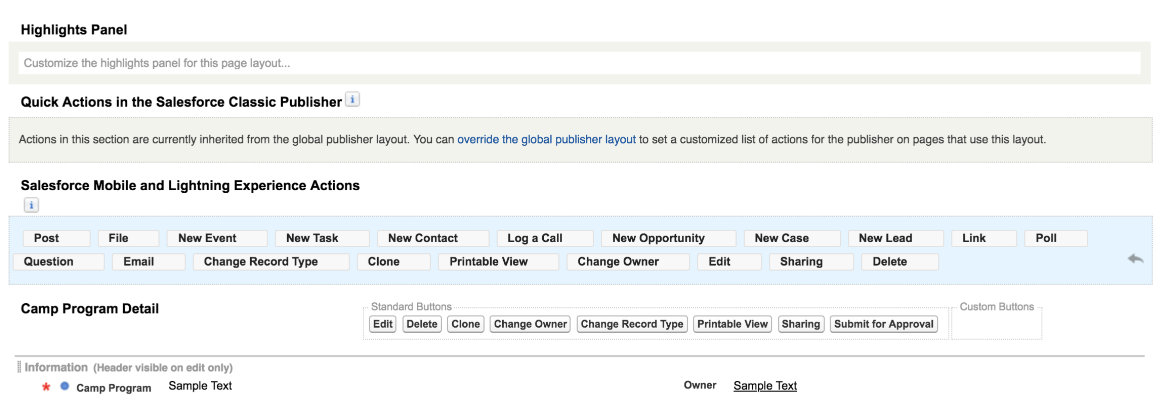
1. Click **Setup** ( ) in the top right of the page and then the **Object Manager** tab.

2. Click on the **Camp Program** object.
3. In the left navigation, click **Page Layouts**, then click on **Camp Program Layout**.

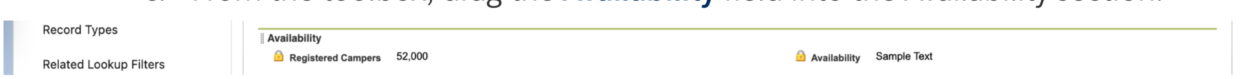
The **toolbox** for your Camp Program Page Layout looks like this:



4. Under the “Salesforce Mobile and Lightning Experience Actions” section, click on the **override the predefined actions** link.

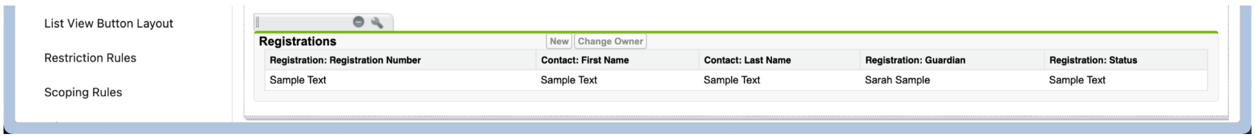


5. ***Optional***: Add section for Availability (requires Extra Credit activity completion).
    a. From the toolbox click on the **Section** component and drag it onto the layout above the System Information section.
        i. Set the section name as **Availability**.
        ii. Set the layout as **2-Column**.
        iii. Set the tab-key order as **Left-Right** and click **OK**.
    b. From the toolbox, drag the **Registered Campers** field into the Availability section.
    c. From the toolbox, drag the **Availability** field into the Availability section.



6. Under the Related Lists section of the Camp Program Page Layout, click on the **Registrations** related list and drag it to the top of the related lists above the Notes & Attachments list.

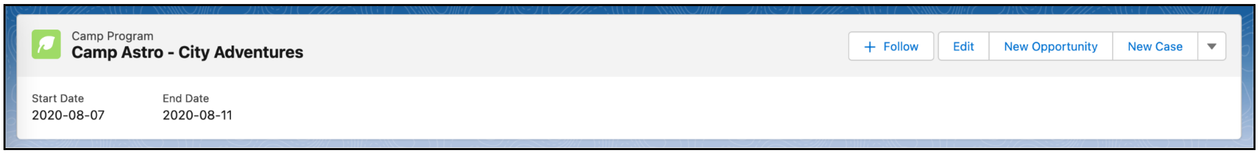
7. Click on the wrench icon () on the **Registrations** related list.
    a. From the available field list, select **Contact: First Name**, **Contact: Last Name**, **Registration: Guardian**, and **Registration: Status** and add them to the Selected Fields column.
    b. Click **OK**



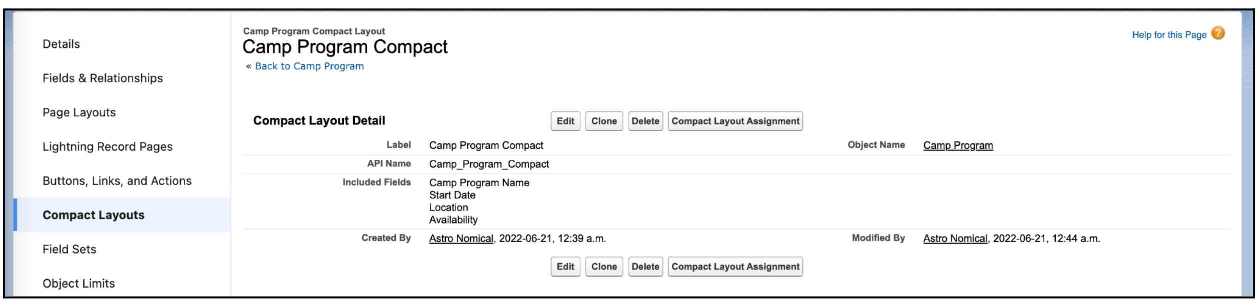
8. In the toolbox header, click **Save**.

Optimize Compact Layouts

On a Camp Program record, key information is shown in the compact layout. Right now it's only showing the Start Date and End Date. Let's add more information in the compact layout so Camp Managers can easily find the information they need.

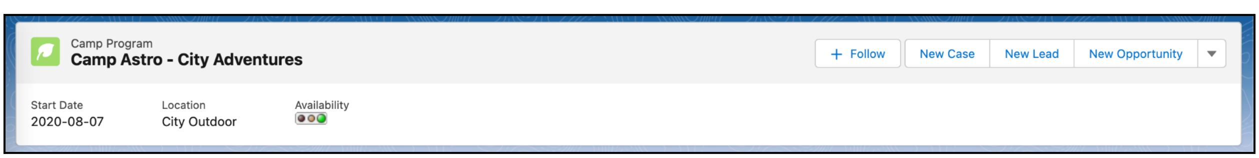


1. From the left navigation, select **Compact Layouts** and click **New**.
   a. Set the label to and press tab to automatically set the name to **Camp_Program_Compact**.
   b. From the list of available fields, select **Camp Program Name**, **Start Date**, **Location**, and **Availability** *(optional)* and add them to the Selected Fields column.



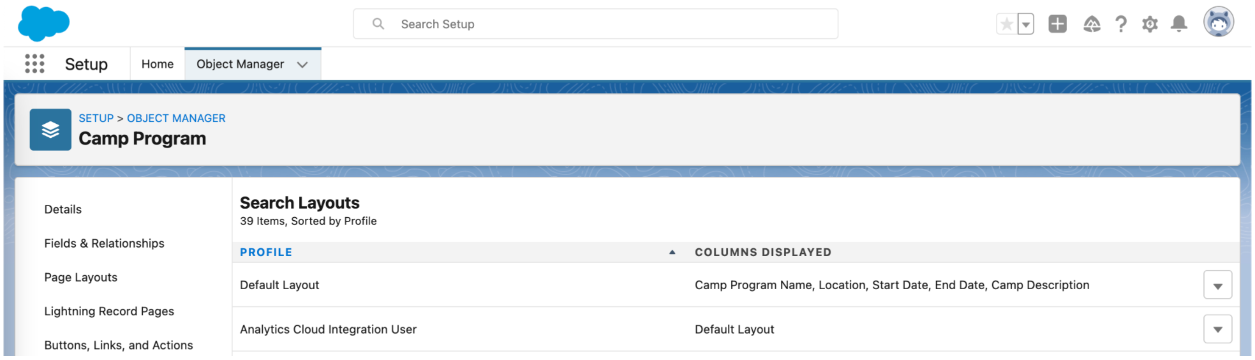
   c. Click **Save**.
   d. Click the **Compact Layout Assignment** button.
   e. Click **Edit Assignment**.
   f. Select **Camp Program Compact** from the dropdown to assign it as the primary compact layout.
   g. Click **Save**.

Once you've changed the compact layout, it should look like this:



Optimize Search Layouts

1. From the left navigation select **Search Layouts**



   a. Click the dropdown button ( ) in the **Default Layout** row and click **Edit**.
   b. From the list of available fields, select **Camp Program Name**, **Start Date**, **End Date**, **Location**, and **Availability** *(optional)* and add them to the Selected Fields column.
   c. Click **Save**.

We've now optimized the Page Layout, Compact Layout, and Search Layout for the Camp Programs object, making it easier for users to navigate and interact with the data.

Optimize Layouts for the Registration Object

Now, let's optimize the layouts for the **Registrations** object.

1. Click on the **Object Manager** tab at the top of the screen.

2. Click on the **Registration** object.

3. In the left navigation, click **Page Layouts** then click on **Registration Layout**.

4. Enable Salesforce Mobile and Lightning Experience Actions by clicking on the **Override the predefined actions** link.

5. In the toolbox header, click **Save**.

6. From the left navigation, select **Compact Layouts** and click **New**.
    a. Set the label to **Registration Compact** and press tab to automatically set the name to **Registration_Compact**.
    b. From the list of available fields, select **Registration Number**, **Camp Program**, **Camper**, **Guardian**, and **Status** and add them to the Selected Fields column.
    c. Click **Save**.
    d. Click the **Compact Layout Assignment** button.
    e. Click **Edit Assignment**.
    f. Select **Registration Compact** from the dropdown to assign it as the primary compact layout, then click **Save**.

7. From the left navigation. select **Search Layouts**.

8. On the **Default Layout** row, click the dropdown button () and click **Edit**.
    a. From the list of available fields, select **Registration Number**, **Camp Program**, **Camper**, **Guardian**, and **Status** and add them to the Selected Fields column.
    b. Select the checkbox to **Override the search result column customizations for all users**. This will allow changes to be reflected across all users in the org. Click **Save**.

Whew! That was a bit of work – but now all of your users will be able to see the right information about the camp programs and registrations wherever they are in Salesforce.

Go on! Take a look in the camp program and registration records to see if you can spot where the changes are.

There are few other things you can do to create tailor your app's user experience:

- Create List Views (great to filter on key records)
- Set up a Kanban view (a card-based layout of a List View that categorizes records by a picklist field)
- Add a Path to a record (a progress bar that is based on a picklist field)
- Create a custom Calendar (ideal to highlight important dates, based on records)

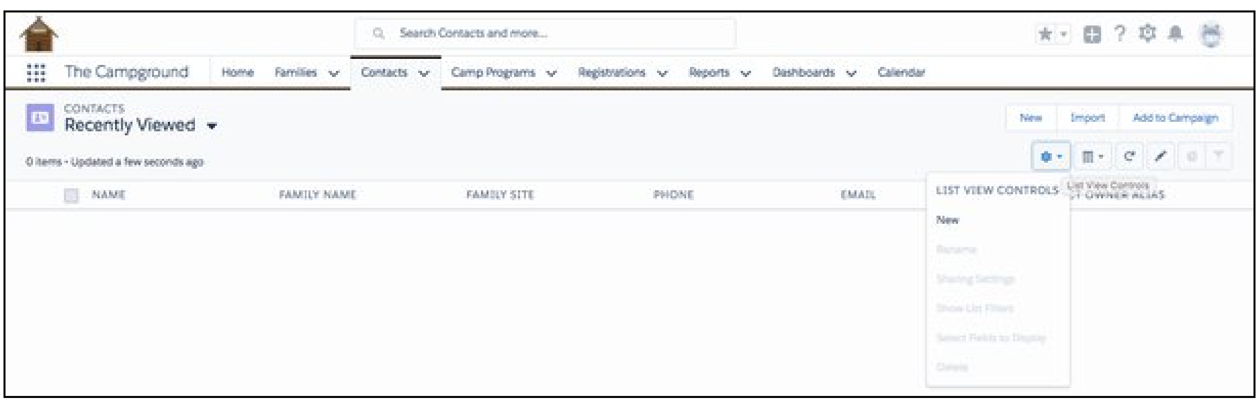
Activity 5: Create List Views and Kanban

Let's start by creating a List View for campers in your Contacts tab.

1. Click the App Launcher ( ) in the top left of the page, then click on **The Campground** App.

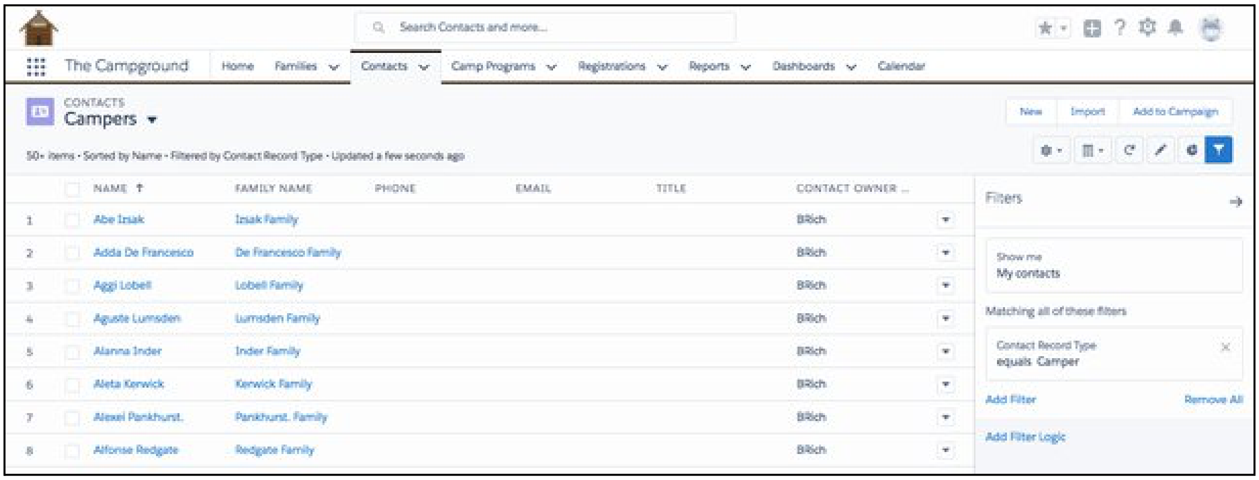
2. Click on the **Contacts** tab at the top of the page.

3. Click the gear icon ( ) in the list view and click **New**.



4. Define the List View's details:
   a. Set the List Name to **Campers**.
   b. Click the radio button for **All users can see this list view** and click **Save**.
   c. On the filters panel to the right, click the **Add Filter** link.

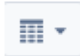
d. Set the field to **Contact Record Type**, the operator to **equals**, and the value to **Camper**, then click **Done**.
e. Click **Save**.



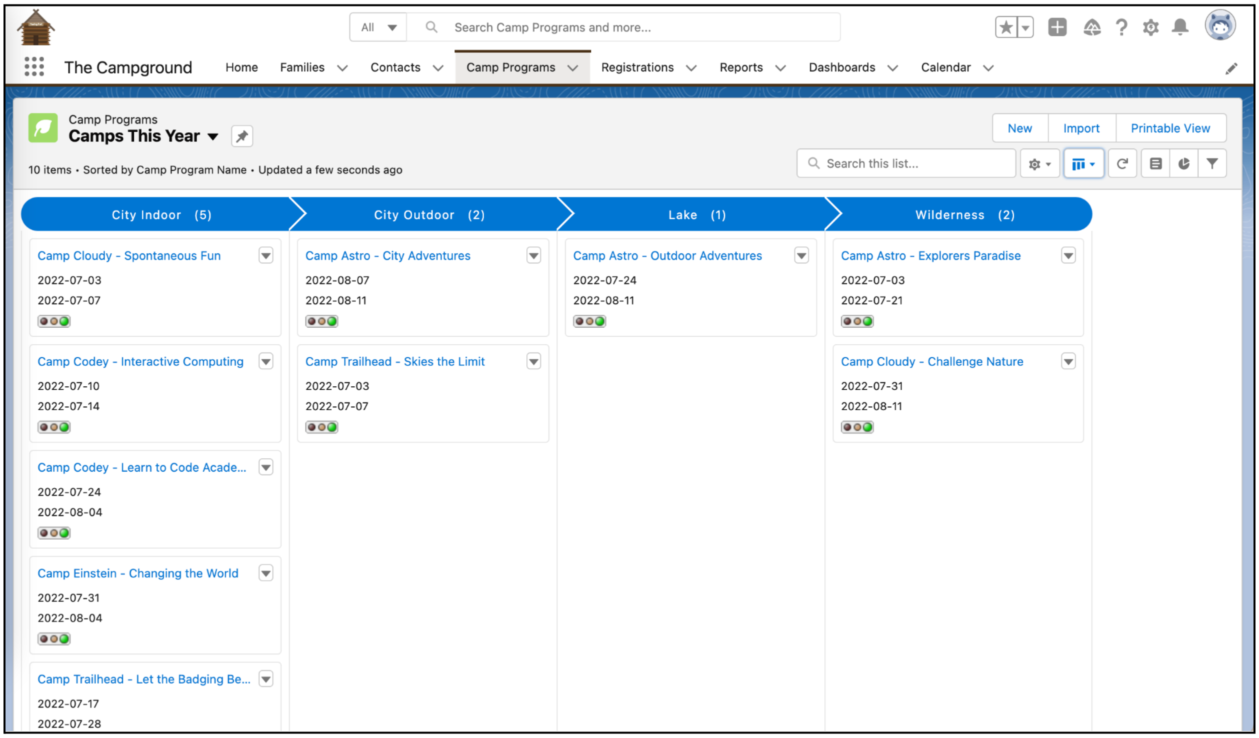
Next, we'll create another List View for our Camp Programs to make it easier to look at the active programs this year.

1. Click on the **Camp Programs** tab at the top of the page.
2. Click the gear icon () in the list view and click **New**.
   a. Set the list name to **Camps This Year**.
   b. Click the radio button for **All users can see this list view** and click **Save**.
   c. On the filters panel to the right, click the **Add Filter** link.
   d. Set the field to **Start Date**, the operator to **equals**, and the value to **THIS YEAR**, then click **Done**.
   e. Click **Save**.
3. Click the gear icon () in the list view and click **Select Fields to Display**.

   a. From the list of available fields, select **Camp Program Name**, **Start Date**, **End Date**, **Availability** *(optional)*, and **Location** and add them to the visible fields column.
   b. Click **Save**.

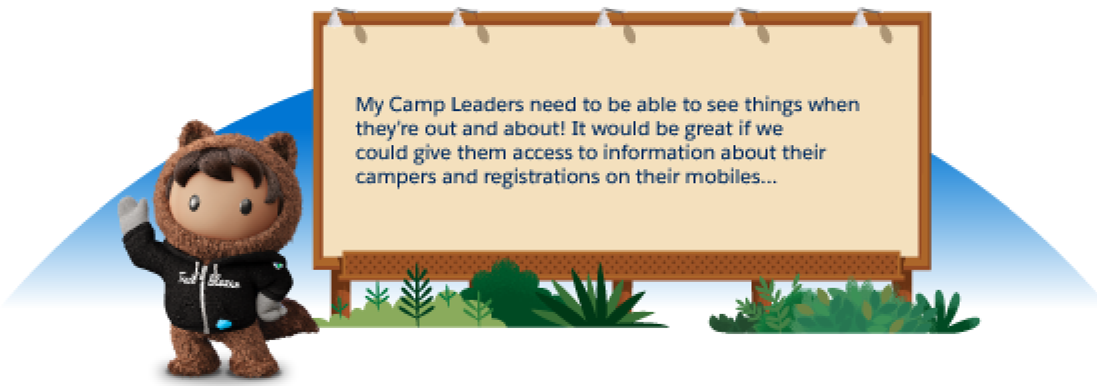
4. Click the list button () in the list view and click **Kanban**.

5. Select **Location** from the Group By dropdown.



You now have filtered List Views ready to easily explore your campers and your camps!

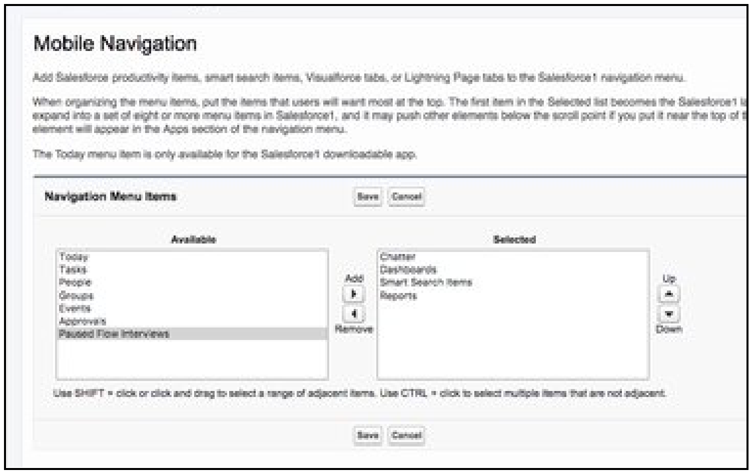
Activity 6: Customize Salesforce Mobile



Wouldn't it be great if you could take your new Camp Management App on the road with you? Good news - when building an app on Salesforce, it is mobile-ready immediately. By setting up page layouts, compact layouts, and search layouts, users will be able to see the same information on their mobile device as they do in a web browser.

There are few unique things you can do to tailor the mobile app, including customizing branding and the navigation. Let's take a look at how.

1. Go to **Setup** and search for **Salesforce Branding** in the Quick Find search.
2. Click **Edit**.
    a. Set the brand color to **#4A3117**.
    b. Click **Choose File** under the loading page logo section and upload the **CampCabin.png** image from your HOAW_Master folder, then click **Save**.
3. In Setup, search for **Salesforce Navigation** in the Quick Find search.
    a. From the selected column, remove everything except for: **Chatter**, **Dashboards**, **Smart Search Items**, and **Reports**.



b. Click **Save**

4. From your phone, log in to the **Salesforce** mobile app with your Developer Edition credentials you created at the start of this workshop. The app can be downloaded from the AppStore or Google Play if you don't already have it.

Launching the app should look something like this:

1. Click on the Menu icon in the bottom right corner and then select App Launcher ( ).

2. Select the **Campground App** - you should see the same tabs on your mobile as you do on desktop!

Your mobile app is ready to use whenever you're not at a computer. As you add to it, all the changes will be there without any extra administration effort.

With your data model in place, and now a compelling user experience for users, you are almost finished building your app! The next step is to add in some logic and automation and prepare reports

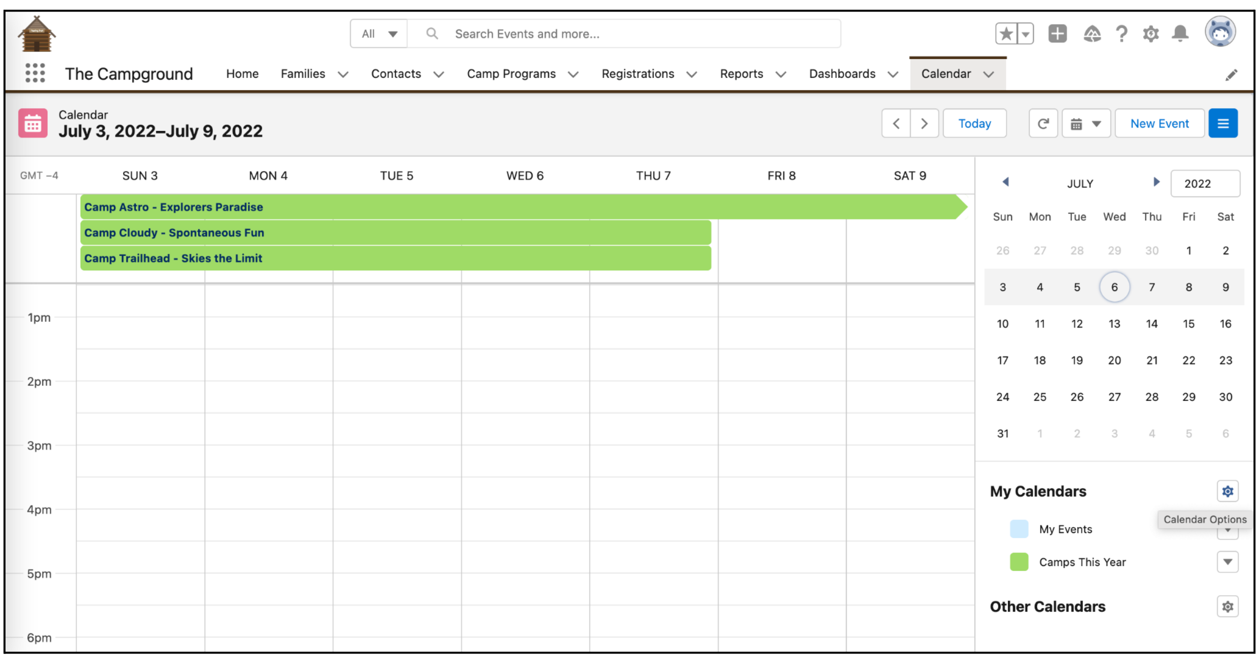
Extra Credit Activity: Create a Custom Calendar

List views are one way to look at your data, but Salesforce also lets you set up calendars to explore records from a calendar view.

1. Click the App Launcher ( ) in the top left of the page and select **The Campground** App.

2. Click on the **Calendar** tab at the top of the page.

3. Click on the gear icon ( ) on the **bottom** right side of the page next to My Calendars and click **New Calendar**.
   a. Select the **Camp Program** object and click **Next**.
   b. Set the calendar name to **Camps This Year**.
   c. Select **Start Date (Date)** under Field for Start.
   d. Select **End Date (Date)** under Field for End.
   e. Select **Camps This Year under Apply a Filter**.
   f. Select **Camp Program Name** under Field Name to Display.
   g. Click **Save**.



You now have a custom calendar that will show what camps are running by week or month!

Extra Credit Activity: Create a Path

A Path is a visual representation of a picklist field and a great way to indicate the progress on a record with a “status” field. Let’s add one to your Registration object to make it easier to update the status of a registration.

1. In Setup, type **Path** in the Quick Find search and select the menu link for **Path Settings**.

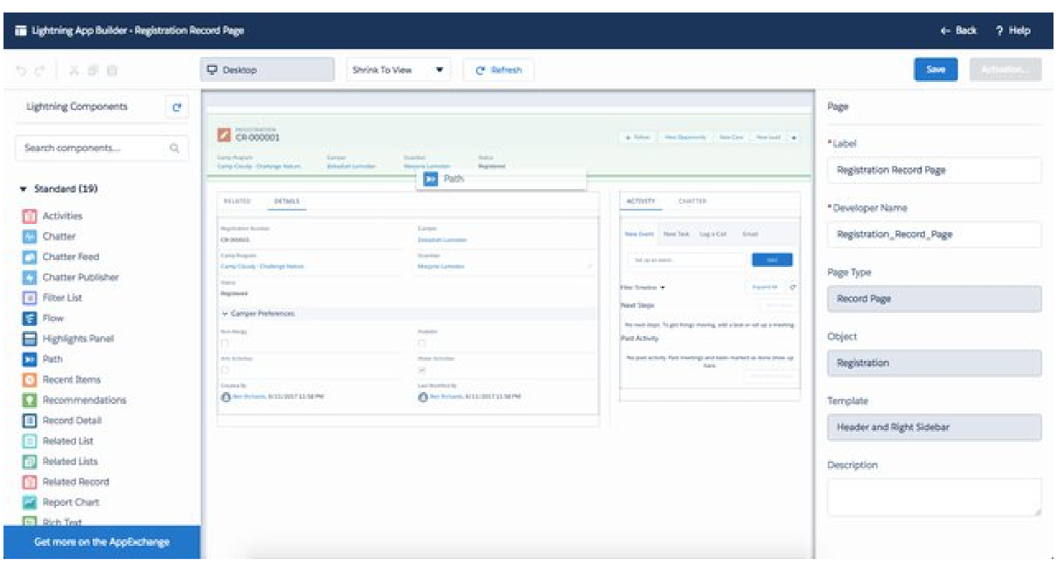
2. Click the **Enable** button.

3. Click **New Path**.
    a. Set the path name as **Registration Status** and press tab to automatically set the API Reference Name to **Registration_Status**.
    b. Select the **Registration** object.
    c. Select the **Status** picklist.
    d. Click **Next**.
    e. Bypass adding fields and guidance steps by clicking **Next**.
    f. Toggle the setting under **Activate Your Path** and click **Finish**.

4. Back in The Campground app, search for **CR-000001** in the global search bar and click on the registration record.

5. Click on the gear icon () at the top right of the page and click **Edit Page**.

6. From the components section of the toolbox on the left, drag and drop the **Path** component under the Highlights Panel.



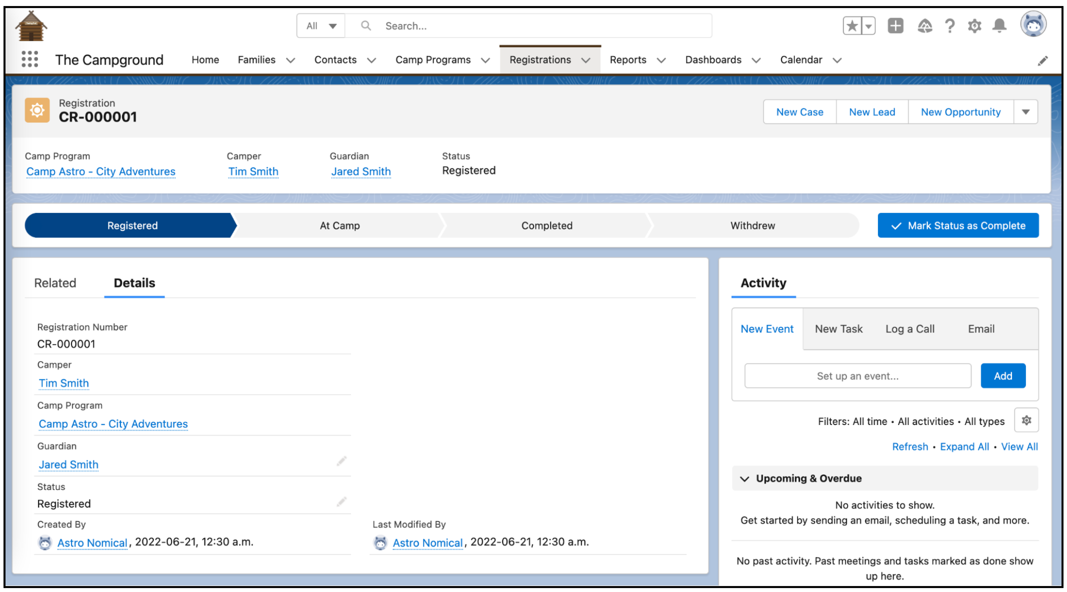
7. Click **Save**, then click **Activate**.

8. Click the **Assign as Org Default** button.

9. Select **Desktop and phone** and click **Next**.

10. Click **Save**.

11. Click **Back** at the top left corner of the page to return to the registration record.



Module D: Add Logic and Automation

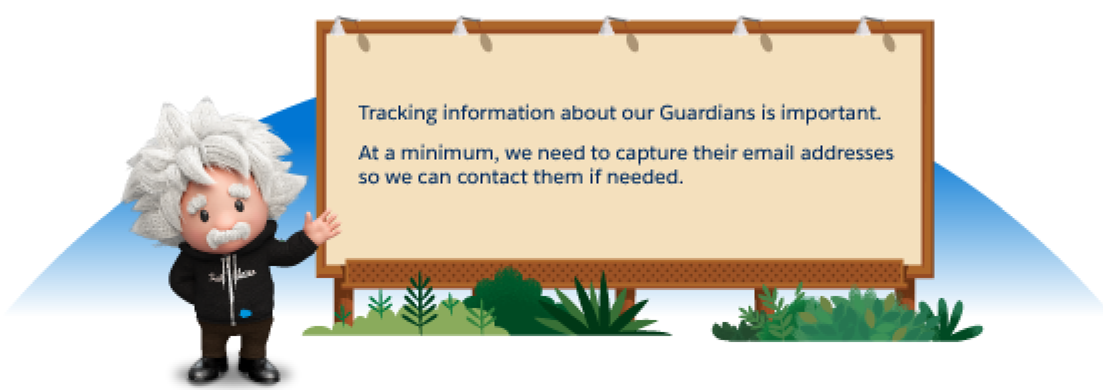
The Salesforce Platform enables administrators to create both simple and complex logic and automation with clicks, not code. This declarative approach to building ensures that you can be agile, flexible, but also powerful!

There are a few types of declarative logic and automation:

- **Validation Rules** – Admins can create criteria-based rules that verify the data a user is entering before it is saved.
- **Flows** – Flows help admins automate business processes by collecting data from users in a streamlined way or performing automated actions in the background.
- **Approvals** – Approval processes automate how records are approved, including from whom to request approval and what to do at each step of the process.

Today, you are going to use Validation Rules and Flows to add some extra functionality to your Camp Management Application.

Activity 1: Create a Validation Rule



Validation rules are helpful to set up conditionally-required fields. Setting universally required fields in Salesforce may cause problems, especially when you are using Record Types. If you're importing data in, you might want to consider turning off Validation Rules so you don't get any errors.

Consider the situation where you want to enforce a rule that all Guardian Contacts must have an email address. If you make the email address field universally required, it will also be required for Campers, which is not necessarily helpful - not every kid has an email! With Validation Rules, you can make a field required under certain conditions, not universally.

Let's make a Validation Rule to ensure all Guardian Contacts have an email address.

1. In Setup, click on the **Object Manager** tab at the top of the page

2. Click on the **Contact** object.

3. In the left navigation, click on the **Validation Rules** menu item and click **New**.
    a. Set the rule name to **Guardian Email Required**.
    b. In the error condition box, set the formula to

    RecordType.Name = "Guardian" && ISBLANK (Email)

    c. In the error message box, set the text to **A guardian must have an email address**.
    d. Set the error location to **Top of Page** and click **Save**.

Now that we've set up the validation rule, let's test it to see it in action.

1. Back in The Campground app, search for **Cathrine Darcy** in the global search bar and click on the contact record.

2. Click on the **Details** tab on the record.

3. Click the pencil icon beside the **Email** field to edit it.

4. Delete the email address and click **Save**.

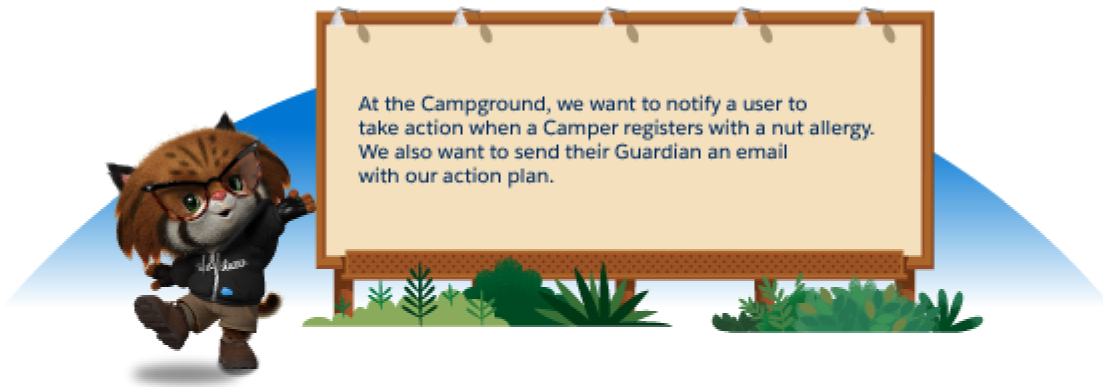
5. Confirm that the validation error pops up (this ensures that it's never left blank!).

6. Click **Cancel**.

Sweet! You have made the email field required, but only for a Guardian contact. That is one example of where validation rules are effective.

Activity 2: Automate with Flows

Let's get Salesforce working for us by building out automation. Flows are the go-to declarative automation tool.



Create an Email Template

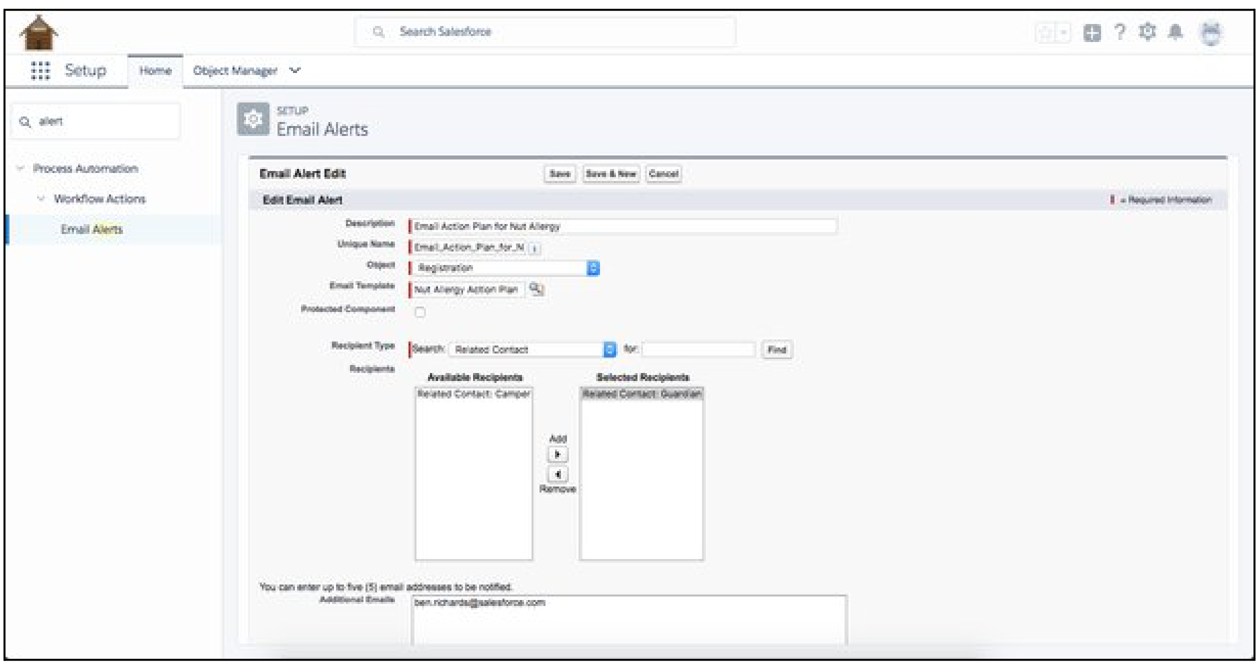
1. Click the App Launcher (⋮⋮⋮), then search for and select **Email Templates**.
2. Click the **New Email Template** button.
   a. Set the email template name to **Nut Allergy Action Plan**.
   b. Set the related entity type to **Registration**.
   c. Set the folder to **Public Email Templates**.
   d. Set the subject to **Our action plan for {{{Registration__c.Camper__c}}}'s Nut Allergy**.
   e. Open the **EmailTemplate.txt** file from your HOAW_Master folder and copy the text.
   f. Paste the text in the HTML Value of the email template.
   g. Click **Save**.

Create an Email Alert

1. In Setup, type **Alert** in the Quick Find search and select the **Email Alert** menu link.

2. Click the **Don't show me this page again** checkbox and then click **Continue**.

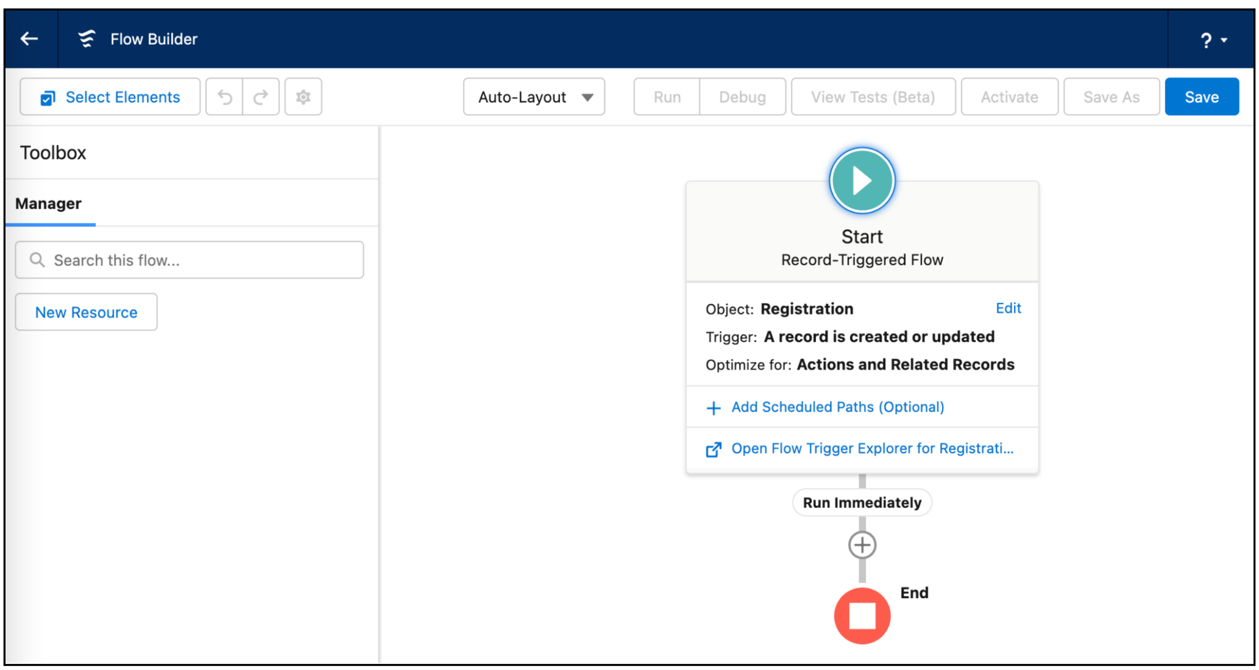
3. Click the **New Email Alert** button.
    a. Set the description as **Email Action Plan for Nut Allergy** and press tab to automatically set the unique name as **Email_Action_Plan_for_Nut_Allergy**.
    b. Select **Registration** as the object.
    c. Click the magnifying glass to open the lookup window, then switch the template list from Classic to Lightning under the dropdown in the top left corner.
    d. Select the **Nut Allergy Action Plan** email template.
    e. Select **Related Contact** for the recipient type.
    f. From the list of available recipients, select **Related Contact: Guardian** and add it to the selected recipients column.
    g. In the additional emails box, enter **your email** (so you can receive the notification as a test). Click **Save**.



Create a Flow

Finally, we can build our Flow to automate sending this email to Guardians who have Campers that register with a Nut Allergy.

1. From Setup, type **Flows** in the Quick Find search and click on the **Flows** menu link.
2. Click **New Flow** to open a new tab in your browser.
3. Select **Record Triggered Flow** and click **Create**.
4. Enter **Registration** under object.
5. Select the radio button for **A record is created or updated** under Configure Trigger.
6. Leave all other settings as default and click **Done**.



7. Add an Element to your Flow by clicking the **+** icon.
8. Scroll down the Add Element list and select **Decision**.

a. Set Label to **Does Camper have a Nut Allergy?** and press tab to automatically set the API name to **Does_Camper_have_a_Nut_Allergy**.

b. Under Outcome Details section, set the outcome label to **Yes**.

c. Under the Condition Requirements, click on **Search resources...** and then click **$Record > Camper__r > Record Type > Name**.

    i. Leave the Operator as **Equals**.

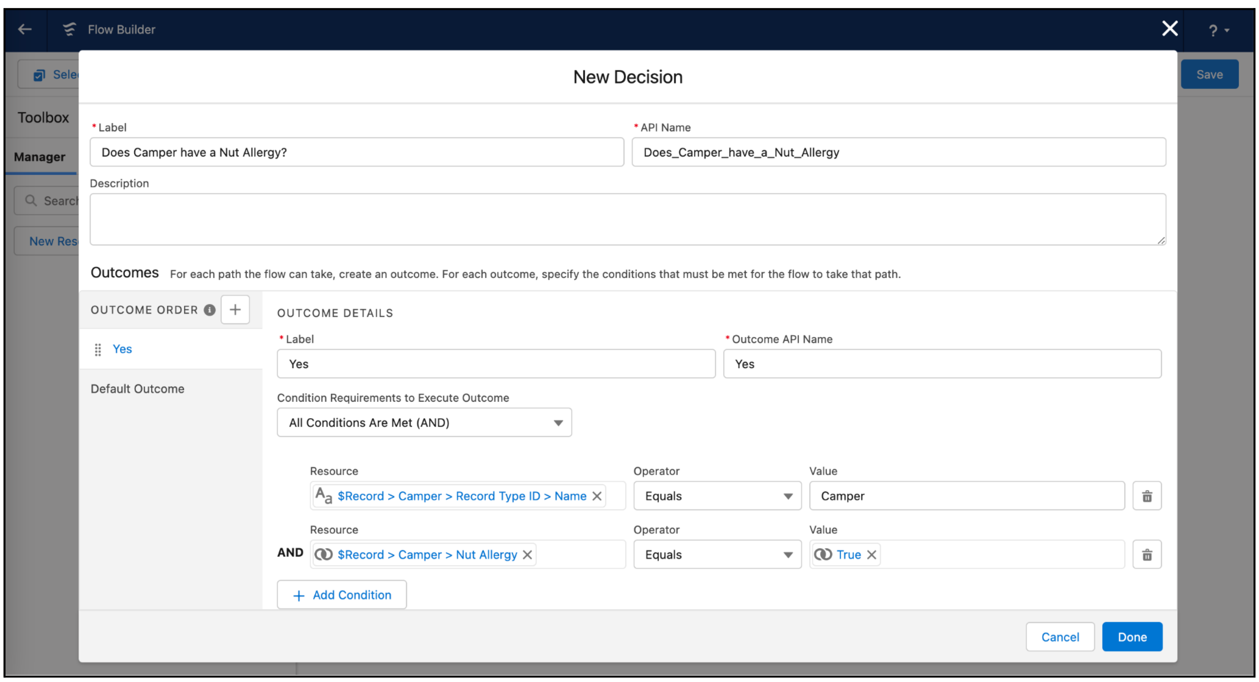
    ii. Type in **Camper** under Value.

d. Click **Add Condition**

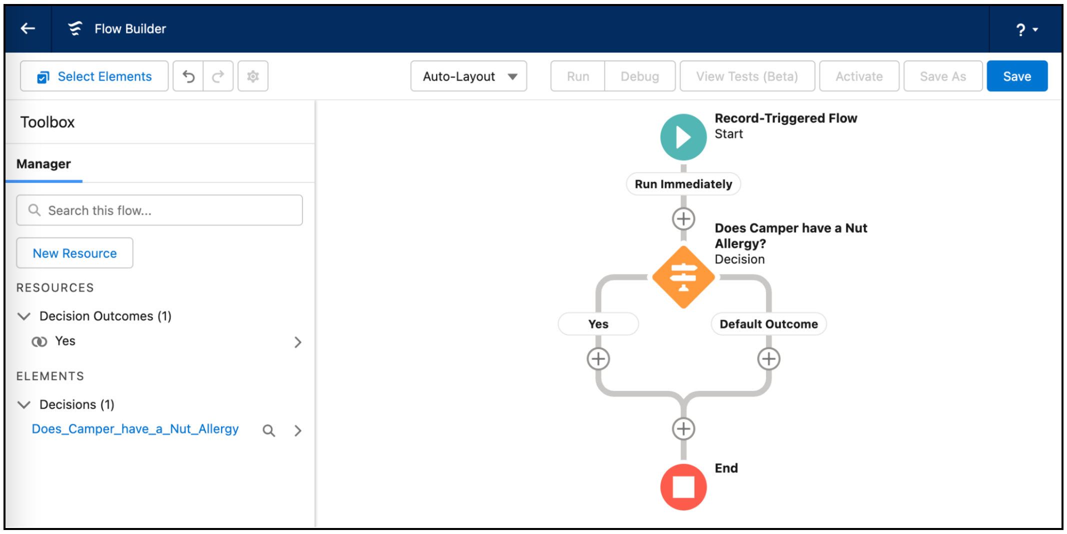
e. Click on **Search resources...** and then click **$Record > Camper__r > Nut_Allergy__c**.

    i. Leave the Operator as **Equals**.

    ii. Type in **True** under Value and then select **{!$GlobalConstant.True}** when it pops up.

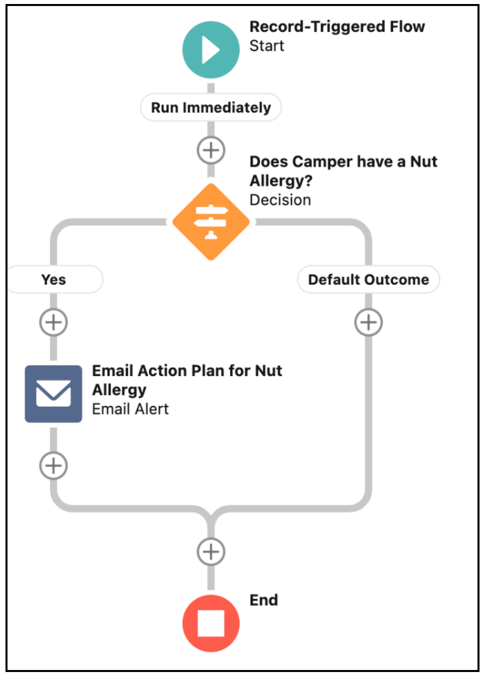


9. Click **Done** and check out the new Decision Element you just added to your Flow:



10. Click the **+** icon under the **Yes** path to add a new Element.

11. Scroll down the Add Element list and select **Send Email Alert**.
    a. Click **Search email alerts...** and select the **Email Action Plan for Nut Allergy** action we created in the previous step.
    b. Set the label to **Email Action Plan for Nut Allergy**
    c. Under Record ID in the Set Input Variables section, click on **Enter value or search resources...** and then click **$Record > Id**.
    d. Click **Done,** and check out the new Email Alert Element you just added to your flow:



12. Click **Save** in the upper right corner.
    a. Set the flow label to **Registration - Email Guardian Nut Allergy Action Plan** and then press tab to automatically set the flow API name to **Registration_Email_Guardian_Nut_Allergy_Action_Plan**.

Debug the Flow

Now, we can test that our Flow works properly by using the Debug function before we activate it.

This is a recommended best practice (as well as building and testing automation in a Sandbox environment - more on that in the Trailhead Trail "Determine Which Application Lifecycle Management Model Is Right for You" if you want to dig in deeper), since automation is live when activated in Production!

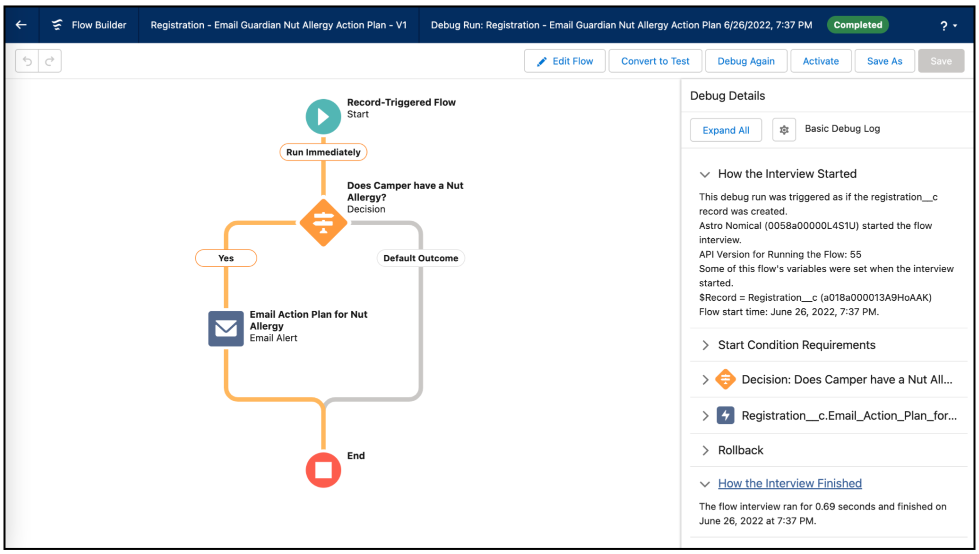
If you've made a mistake, you may accidentally automate things you didn't intend to - like emailing Guardians about nut allergies that don't exist.

Although we're pretty sure these instructions won't lead you wrong, we still think it's helpful to learn how to Debug - so let's check it out.

1. Click on **Debug** from the top menu.

2. Click **Search Registrations...** under the Registration object lookup, search and select **CR-000163** (this is the Registration for Camper Abe Izsak, who does have a Nut Allergy).

3. Click **Run** and verify the flow followed the Yes path:



4. Let's check another Registration record to be sure. Click on **Debug Again** in the top menu.

5. Under the Registration object lookup, search and select **CR-000130** (this is the Registration for Camper Chiquia Lovejoy, who does not have a Nut Allergy).

6. Click **Run** and verify the flow followed the Default Outcome path.

7. Now that we're confident the Flow does what we want, we can click **Activate**.

Congratulations! You just built automation that will save your users time and keep Guardians' minds at ease.

Run the Flow for Real

Let's be extra certain this automation was set correctly by creating a new Registration record for a Camper with a nut allergy.

1. Click the App Launcher ( ) and select **The Campground** app.

2. Search for **Camp Einstein - Changing the World** in the global search bar and select the Camp Program record.

3. Click the **New** button on the Registrations Related List.
    a. Set the Camper to **Abe Izsak**.
    b. Set the Guardian to **Morgan Izsak**.
    c. Leave the status as **Registered**.
    d. Click **Save**.

4. Once the new Registration record is created, the Flow will be triggered.

    The Flow will determine that the related Camper has a Nut Allergy, thensend the Nut Allergy Action Plan email alert to the Guardian.

    (If you set your own email address in the Additional Emails section in the Email Alert, you should also receive a copy of this email within seconds of creating the Registration - pretty nifty!).

Activity 3: Create a Custom Quick Action

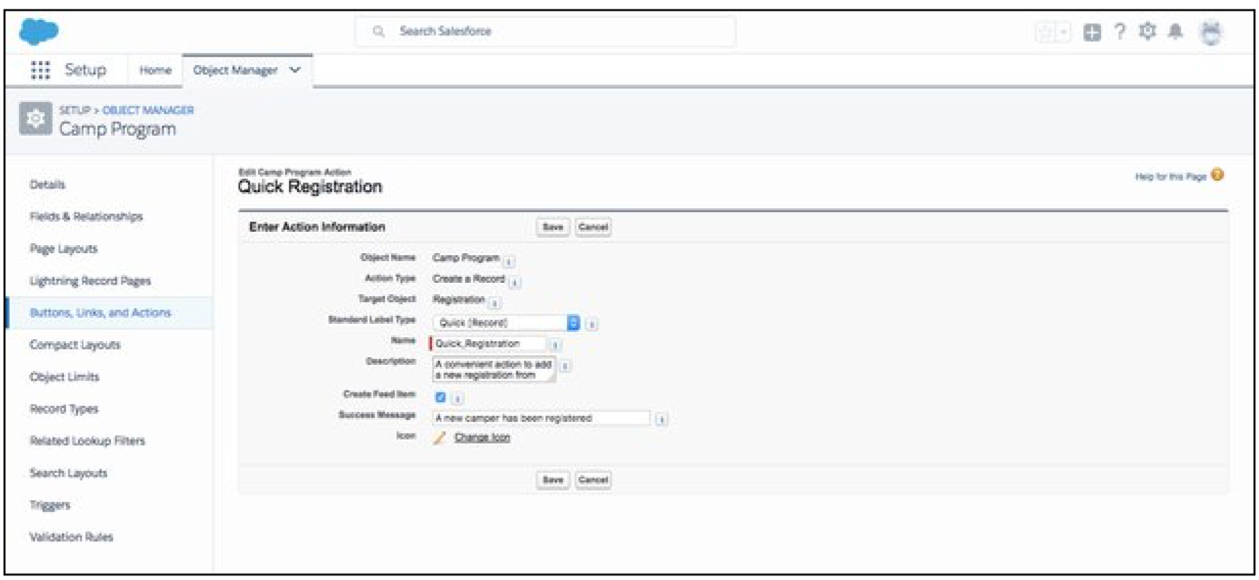
Did you feel like creating a new Registration was a bit annoying? Let's make that easier!

Quick Actions give your users an easier way to create and update portions of data, without having to do more work than necessary. This is also a hit for mobile users, or people who just hate to scroll through lots of fields!

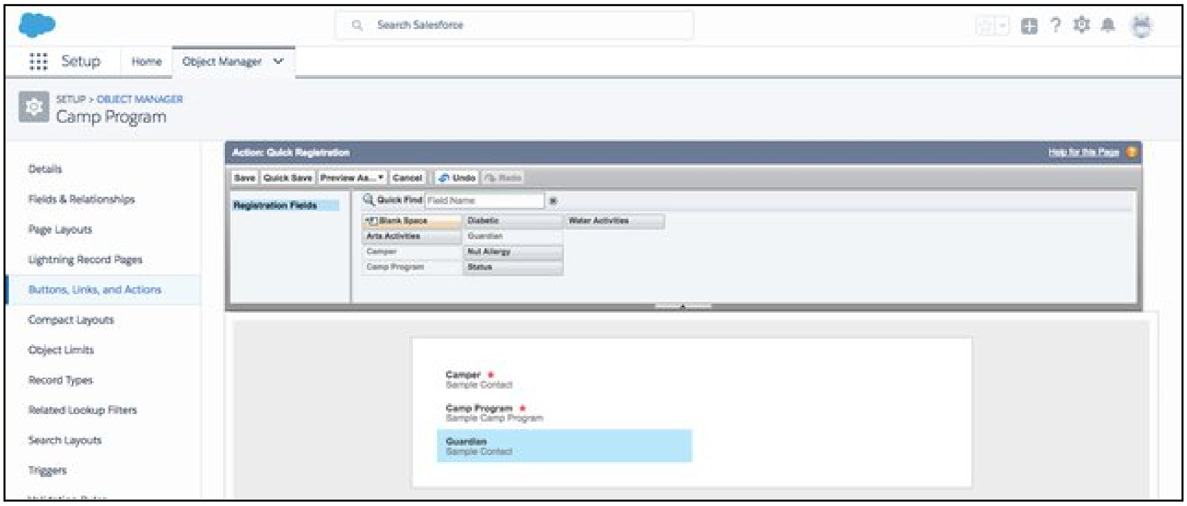
1. Go to Setup and click on the **Object Manager** tab at the top of the screen.

2. Click on the **Camp Program** object.

3. From the left navigation, select **Buttons, Links, and Actions** and click **New Action**.
   a. Set the action type to **Create a Record**.
   b. Set the target object to **Registration**.
   c. Set the standard label type to **Quick [Record]**.
   d. Set the name to **Quick_Registration**.
   e. Select the checkbox for **Create Feed Item**.
   f. Set the success message to **A new Camper has been registered** and click **Save**.



4. From the toolbox, drag and drop the **Guardian** field under Camp Program.



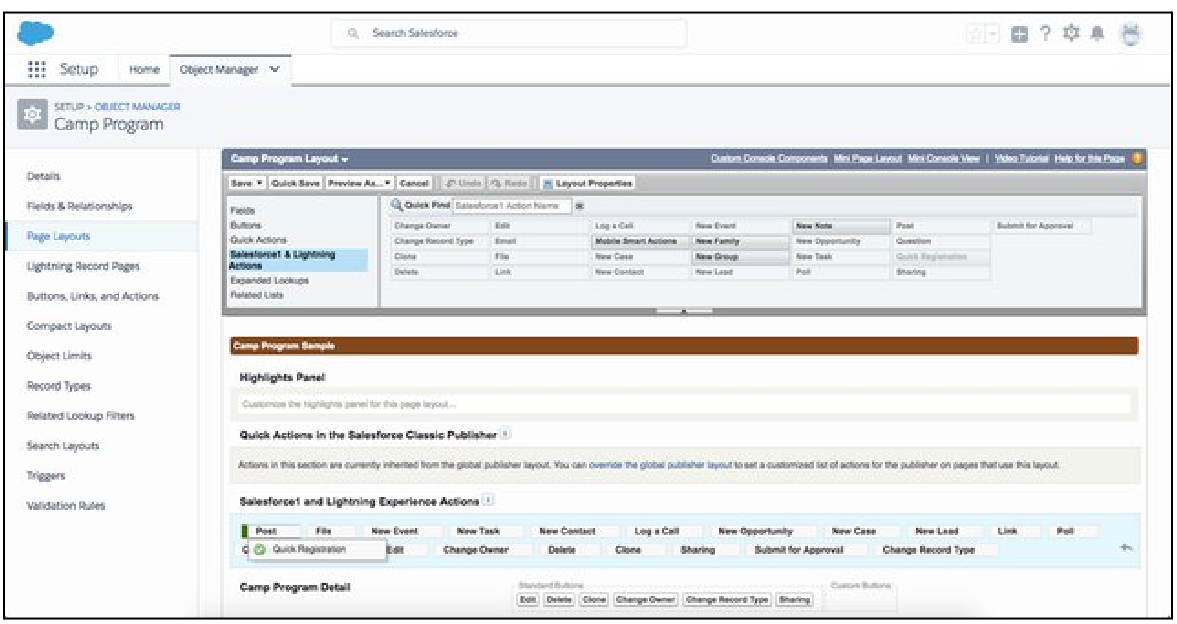
5. In the toolbox header, click **Save**.

6. Under Predefined Field Values, click **New**.
   a. Set the field name to **Status**.
   b. Set the specific value to **Registered**.
   c. Click **Save**

7. From the left navigation, select **Page Layouts** and click **Camp Program Layout**.

8. In the toolbox, click **Mobile and Lightning Actions**.

9. Drag and drop the **Quick Registration** action into the top of the Salesforce Mobile and Lightning Experience Actions page section. Then, from the toolbox header, click **Save**.

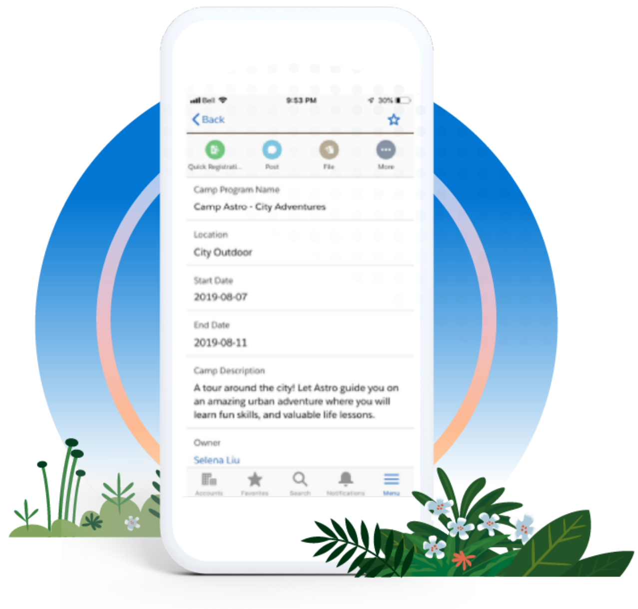


Optional steps to see this in action on Mobile - it's so fast to add Registrations on the go!

10. On your phone, open the **Salesforce** app and click the menu button in the bottom right.
11. In the navigation, select **Camp Programs**.
12. Select **All Records** and click **Camp Astro – City Adventures**.
13. Click on **Quick Registration** in the top left corner.
14. Set the Camper to **Susanne Darcy**.
15. Set the Guardian to **Catherine Darcy**.
16. Click **Save**.

You have now created an easy way for a user to register a camper on a mobile device.

You are almost done with your app - but we want to add some Reports & Dashboards so we have real-time insight into what's going on around The Campground.



Module E: Reports and Dashboards

Let's recap what you have accomplished so far *(it's a lot - give yourself a high-five!).*

- Created a completely custom data model for your business on managing a camp.
- Set up an easy user experience for your users.
- Designed logic and automation to make the application work for you - hooray for efficiency and consistency!

The last thing to do is report on the data in your application. To do it, let's create Reports that show us some key information and combine a bunch of them into a Dashboard so we can see multiple metrics at a glance.

There are four basic types of reports that you can create in Salesforce:

- **Tabular** – A tabular report is used to show a table of data, best for organizing lists when you don't need to create charts.

- **Summary** – Best used when you want to summarize, group, and display data in a chart. A summary report allows users to choose how to organize tabular data.

- **Matrix** – Summary reports allow you to group data on one dimension, while a matrix report allows you to group data on multiple dimensions.

- **Joined** – Used to compare data across two different objects, with a common relationship on both. Joined reports are used infrequently, and can't be used to create charts.

In addition to the different types of Reports, you can also create Dashboards to showcase the charts for your report data.

Both Reports and Dashboards are stored in Folders, which allow Admins to set how Reports and Dashboards can be shared.

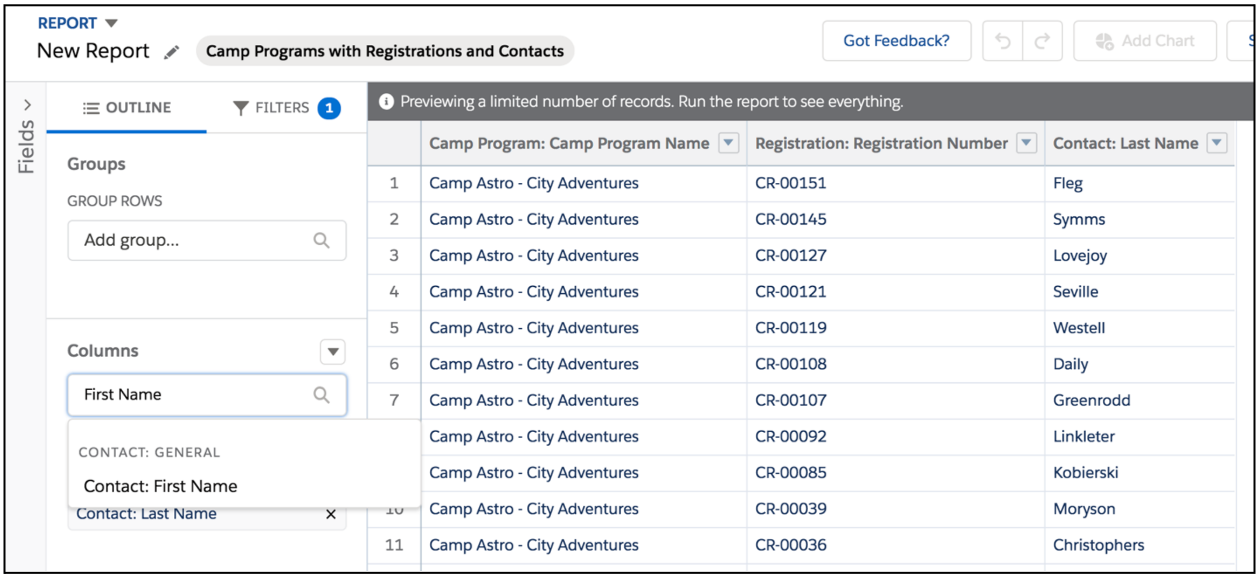
Today, you are going to build a tabular, summary, and matrix report.

Activity 1: Create a Tabular Report

The first report you are going to build will give Camp Managers visibility to the youngest Campers in their care. This report is specifically important to camp managers in the Wilderness programs.

1. Click the App Launcher (⋮⋮⋮) in the top left of the page and select **The Campground** App.
2. Click on the **Reports** tab at the top of the page.
3. Click **New Folder** in the top right corner.
4. Set the folder label to **Camp Management Reports** and press tab to automatically set the folder unique name to **CampManagementReports**.
5. Click **New Report** in the top right corner.
6. Click **Search Report Types...** and search for **Registrations**, then select **Camp Programs with Registrations and Contacts**. Click **Start Report**.

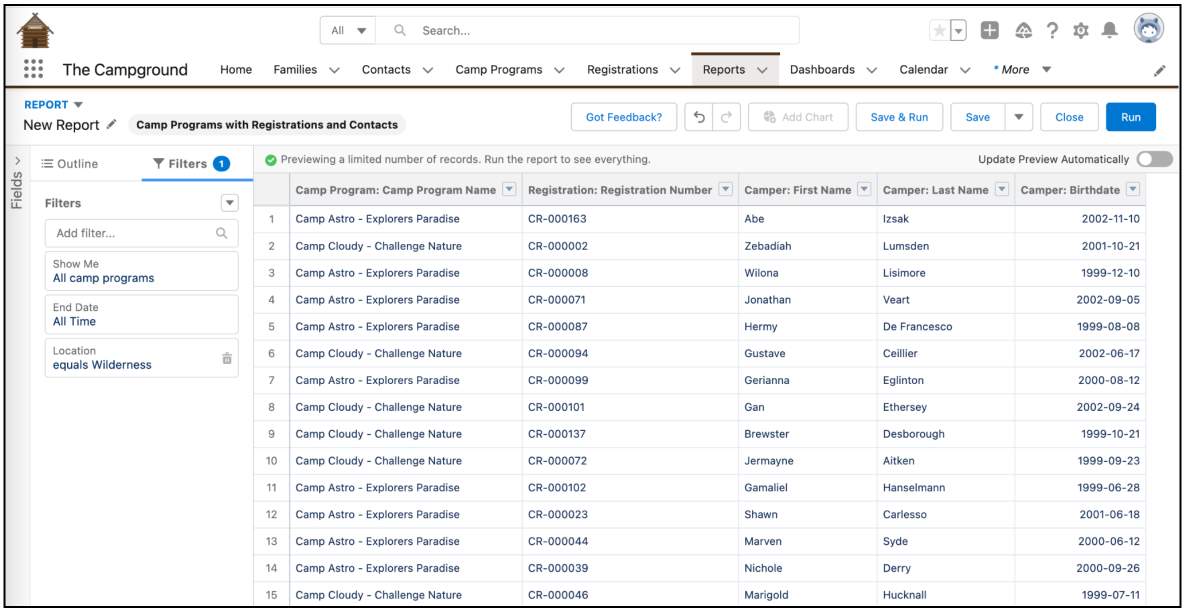
7. In the Columns section under the Outline tab, click **Add column…** and search and select **Camper: First Name**.



8. You can reorder the columns by dragging **Camper: First Name** above **Camper: Last Name**.

9. Using the Columns section, search and select **Camper: Birthdate**.

10. Click on the **Filters** tab.
    a. Click **Add filter…** and search and select **Location**.
    b. Set the operator to **equals**.
    c. Set the value to **Wilderness**.
    d. Click **Apply**.



11. As you change items, you can click the **Refresh** link at the top of your report to preview those changes.

12. To organize the data, let's sort by **Birthdate**.

    a. Click on the dropdown button ( ) next to the **Contact: Birthdate** column.
    b. Set the direction to **Sort Descending**.

13. Click **Save & Run**.

    a. Set the report name to **Young Campers in the Wilderness**.
    b. Set the report unique name to **Young_Campers_in_the_Wilderness**.
    c. Click Select Folder and set the report folder to **Camp Management Reports**, then click **Select Folder** again. Click **Save**.

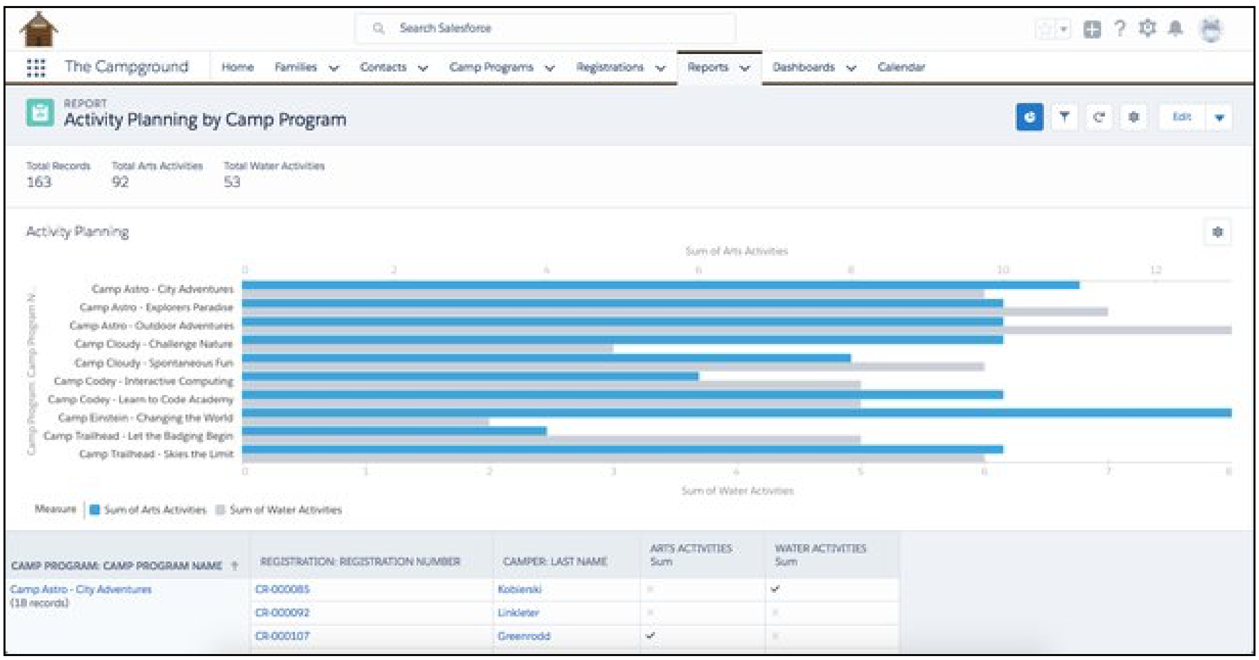
You now have a report that shows the campers from youngest to oldest, registered in a camp program in the Wilderness!

Next, let's build a Summary Report for your app.

Activity 2: Create a Summary Report

Camp managers also want to know how many supplies they need for camps based on campers registered in special activities.

Let's create a report that provides them this information. We want a report that looks a bit like this:



1. Click on the **Reports** tab at the top of the page.
2. Click **New Report** in the top right corner.
3. Click **Search Report Types...** and search for **Registrations**, then select **Camp Programs with Registrations and Contacts**.
4. Click **Start Report**.
5. In the Columns section under the Outline tab, click **Add column...** and search and select **Camper: Arts Activities** and **Camper: Water Activities**.

6. Drag and drop the **Camp Program: Camp Program Name** field from the Columns section into the Groups section.

7. Click **Save & Run**.
    a. Set the report name to **Activity Planning by Camp Program**.
    b. Set the report unique name to **Activity_Planning_by_Camp_Program**.
    a. Click Select Folder and set the report folder to Camp Management Reports, then click Select Folder again. Click Save.

8. Click on the **Add Chart** button at the top of the report.

9. Click on the gear icon () in the chart area.
    a. Click the **Bar** icon to set the display as a bar chart.
    b. Set the chart title to **Activity Planning**.
    c. Set the X-Axis to **Sum of Camper: Arts Activities**.
    d. Click **+Measure**
    e. Set the second axis to **Sum of Camper: Water Activities**.
    f. Set the legend position as **Bottom**.

10. Click the dropdown button () at the top of the report next to the Edit button and click **Save**.

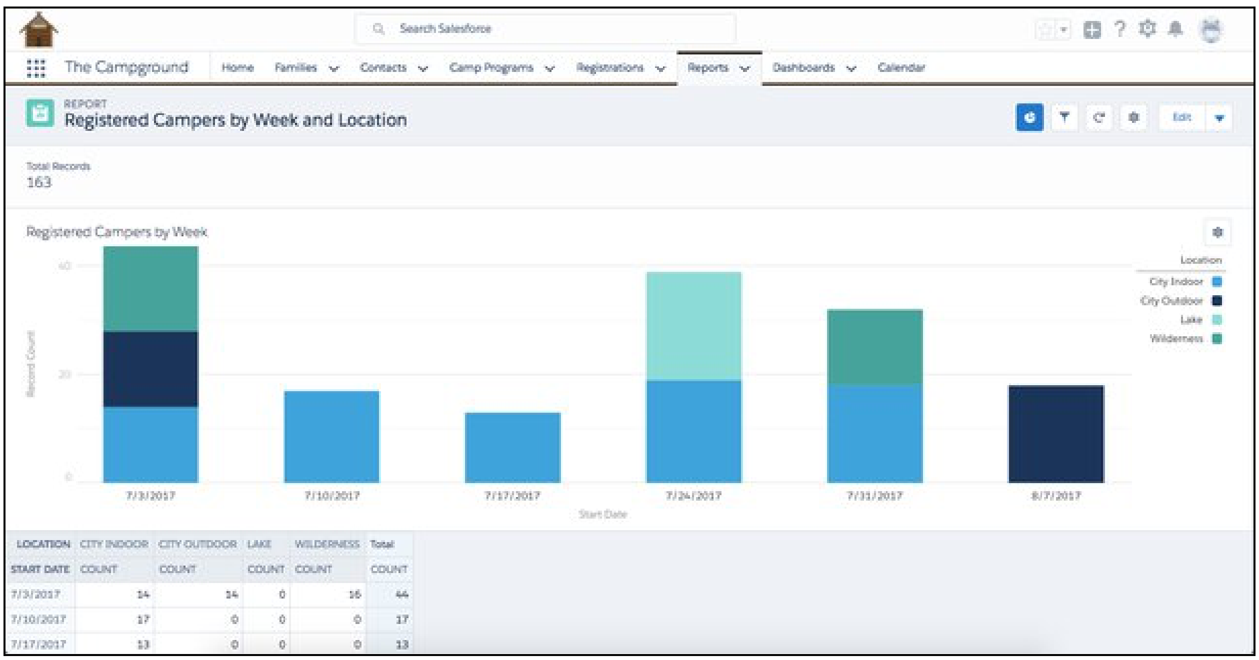
Now, camp managers have easy access to a report to help them prepare for each camp!

Next, let's build a matrix report.

Activity 3: Create a Matrix Report

As camp administrators, you might want to plan your hiring and staffing based on the number of Campers registered each week. In addition, you might want to hire specific staff based on where they will be working. Let's create a report that will provide this insight.

We want a Report that looks like this:



1. Click on the **Reports** tab at the top of the page.

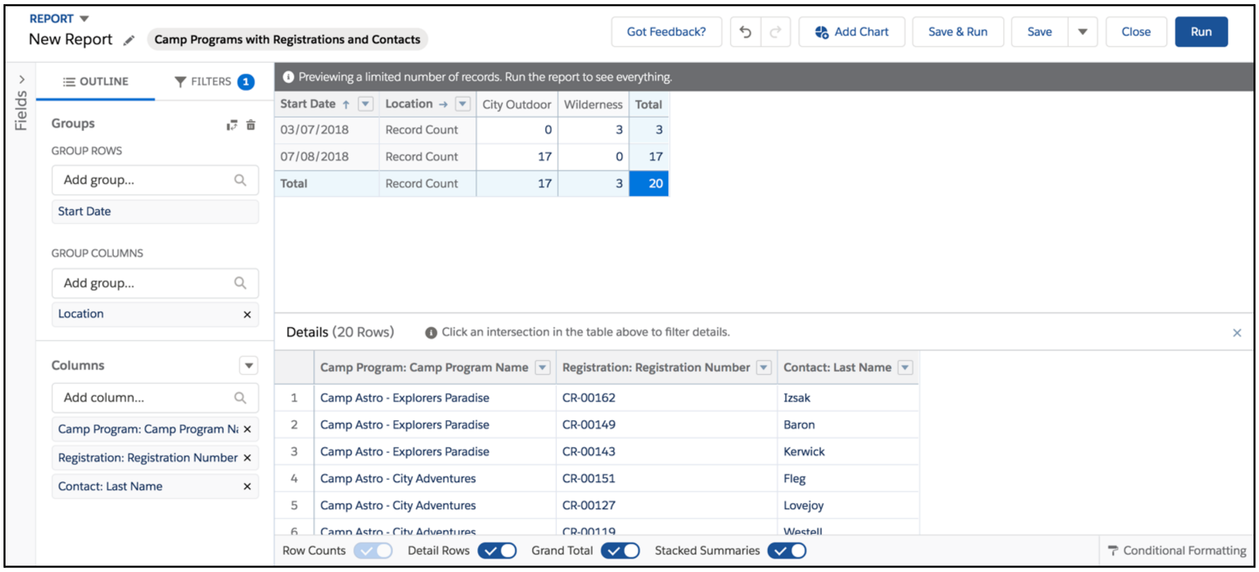
2. Click **New Report** in the top right corner.

3. Click **Search Report Types...** and search for **Registrations**, then select **Camp Programs with Registrations and Contacts**.

4. Click **Start Report**.

5. Click **Add group...** in the groups section under the Outline tab and search and select **Start Date**.

6. Click **Add group…** in the group columns section and search and select **Location**.



7. Click **Save & Run**.
   a. Set the report name to **Registered Campers by Week and Location**.
   b. Set the report unique name to **Registered_Campers_by_Week_and_Location**.
   c. Click Select Folder and set the report folder to Camp Management Reports, then click Select Folder again. Click Save.
8. Click on the **Add Chart** button at the top of the report.
9. Click on the gear icon() in the chart area.
   a. Click the **Stacked Column** icon to set the display as a stacked column chart.
   b. Set the chart title to **Registered Campers by Week**.
   c. Set the Y-Axis to **Record Count**.
   d. Set the legend position to **Right**.
10. Click the dropdown button () at the top of the report next to the Edit button and click **Save**.

Congratulations, you have now finished creating your reports!

Let's complete your analytical insights by building a Dashboard to show your summary and matrix reports for quick viewing of both report charts at the same time.

Activity 4: Create a Dashboard

You will want to make sure that your users have easy access to viewing reports, but they might not want to look at each one individually! Let's create a Camp Manager Dashboard that combines the reports you built into one view.

1. Click on the **Dashboards** tab at the top of the page.

2. Click on the **New Folder** button.

3. Set the folder label to **Camp Management Dashboards** and press tab to automatically set the Folder Unique Name to **CampManagementDashboards**.

4. Click on the **New Dashboard** button.

5. Set the name as **Camp Manager Dashboard**.

6. Click **Select Folder** and set the folder to **Camp Management Dashboards**, then click **Select Folder** again.

7. Click **Create**.

8. Click the **+Component** button.
    a. Select **Young Campers in the Wilderness**, then click **Select**.
    b. Under Columns, remove **Registration: Registration Number**.
    c. Set the Sort By dropdown to **Camper: Birthdate**. Click the arrow next to it to sort the dates by descending.
    d. Change the Max Groups Displayed to **10**.
    e. Click **Add**.
    f. View your new report details as a Dashboard Component - resize longer & wider to view all records (6 squares wide by 10 squares long works well).

9. Click the **+Component** button.
    a. Select **Activity Planning by Camp Program**, then click **Select**.
    b. Set the X-Axis to **Sum of Camper: Arts Activities**.
    c. Change the title to **Arts Activities by Camp Program**.

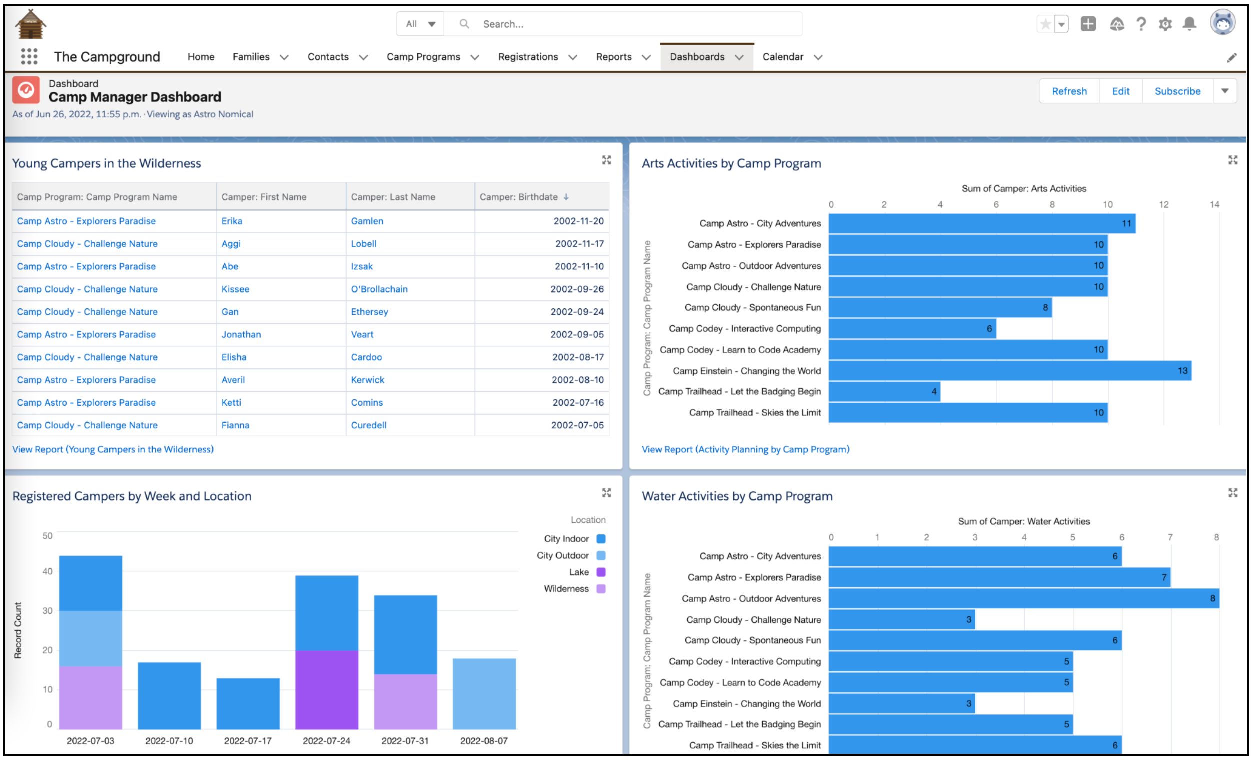
d. Click **Add**.
e. View your new report details as a Dashboard Component - drag and drop to the upper right corner and resize (6 squares wide by 10 squares long fits the remaining horizontal space).

10. Click the **+Component** button.
    a. Select **Activity Planning by Camp Program**, then click **Select**.
    b. Set the X-Axis to **Sum of Camper: Water Activities**.
    c. Change the title to **Water Activities by Camp Program**.
    d. Click **Add**.
    e. View your new report details as a Dashboard Component - drag and drop below the Arts Activities Component and resize (6 squares wide by 10 squares long).

11. Click the **+Component** button.
    a. Select **Registered Campers by Week and Location**, then click **Select**.
    b. Click the **Stacked Column** icon to set the display as a stacked vertical chart.
    c. Set the X-Axis to **Start Date**.
    d. Set the stacked by dropdown to **Location**.
    e. Confirm the title is set to **Registered Campers by Week and Location**.
    f. Click **Add**.
    g. View your new report details as a Dashboard Component - drag and drop to the left side below the Young Campers in the Wilderness Component and resize (6 squares wide by 10 squares long).

12. Click **Save** at the top of the page.

13. Click **Done**.



Awesome! You now have a Dashboard that Camp Managers can use to easily analyze and understand what's going on at The Campground.

Extra Credit Activity: Build an App Page for Camp Management

Dashboards are the gold standard in organizing and sharing reports within Salesforce. However, they have their limits – dashboards can only display report charts, no other information. As an administrator, you have a secret tool in your back pocket – app pages!

Lightning App Pages allow you to create a unique page in your application that is tailor-made for your use case. This can include reports, list views, rich text, and so many other kinds of components. Let's explore how you can build a Lightning App Page.

1. In Setup, type **App Builder** in the quick find search and click the **Lightning App Builder** menu link.

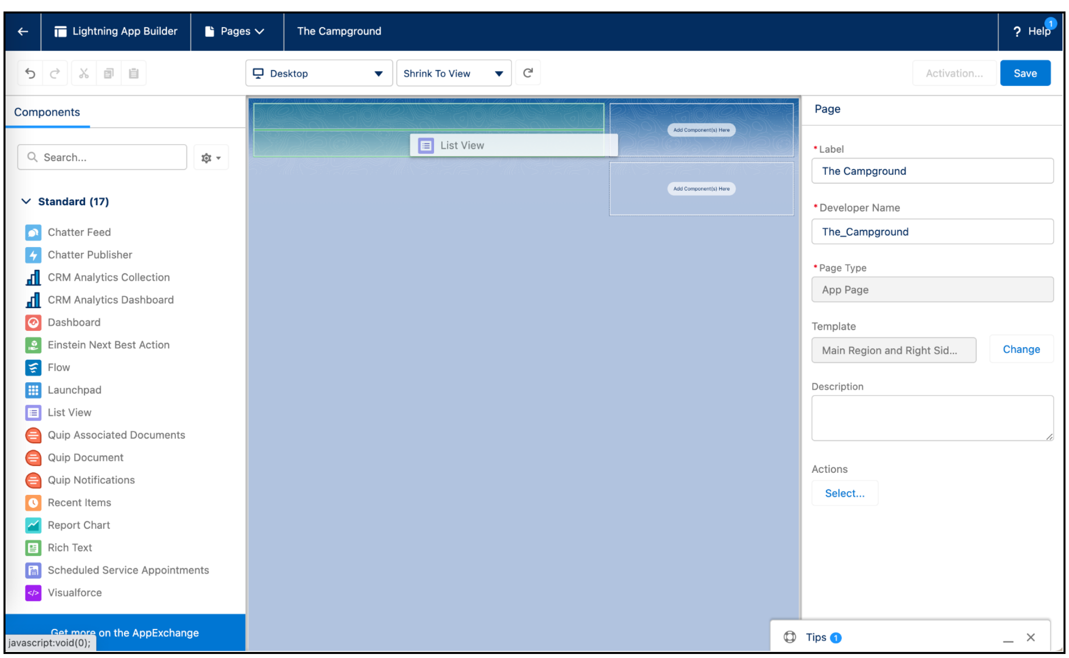
2. Click the **New** button.

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

4. Set the label to **The Campground**.

5. Select the template **Main Region and Right Sidebar** and click **Finish**.

6. From the Lightning Component toolbox, drag and drop the **List View** component into the larger area (Main Left Section).



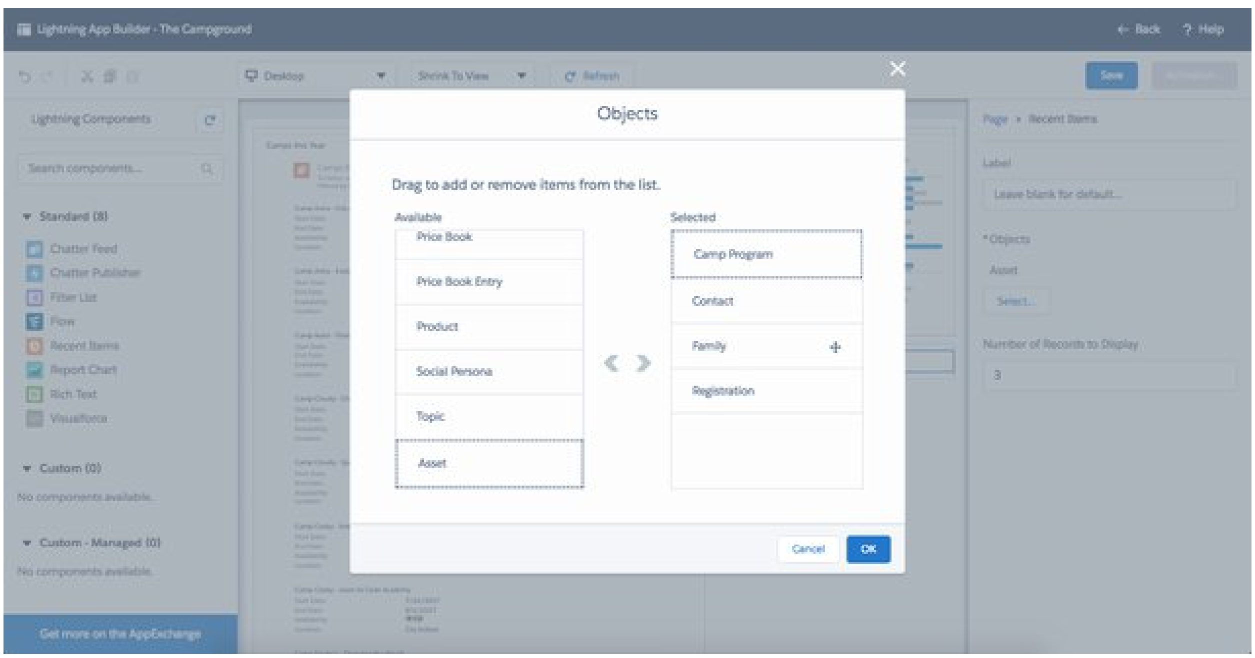
a. In the properties toolbar on the right, set the object to **Camp Program**.

b. Set the filter to **Camps This Year**.

c. Set the number of records to display to **10**.

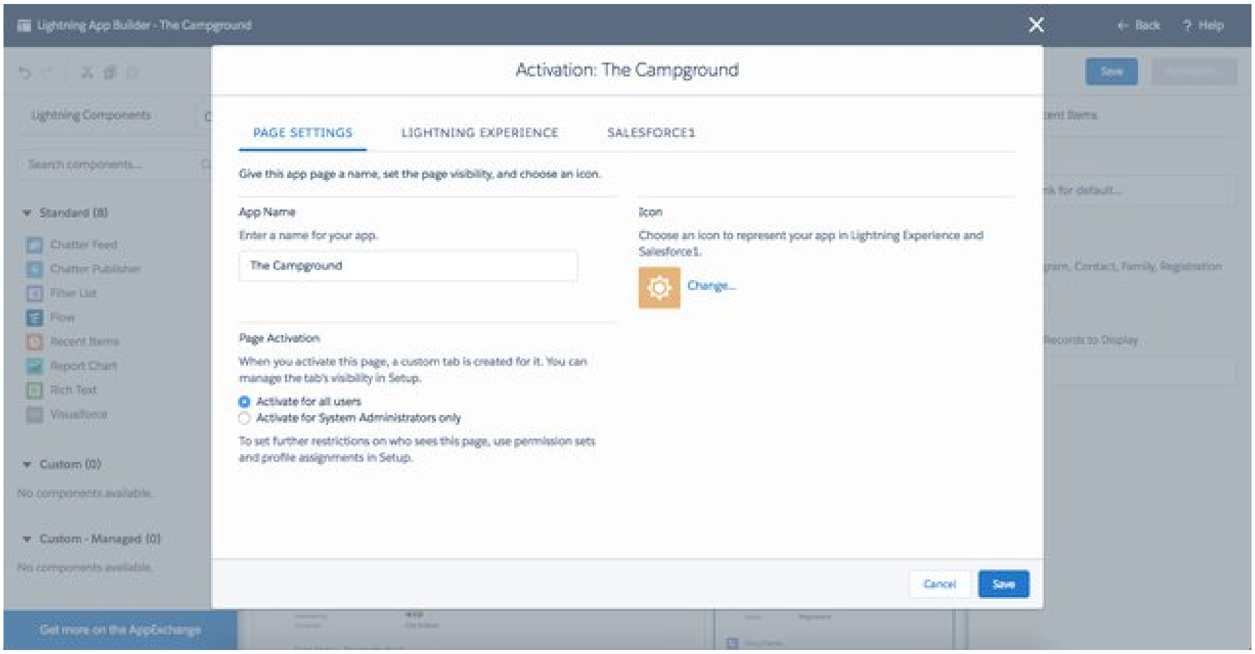
7. From the Lightning Component toolbox, drag and drop the **Report Chart** component into the upper right column.
   a. In the properties toolbar on the right, select the **Activity Planning by Camp Program** report.
   b. Select the checkbox for **Show Refresh Button**.

8. From the Lightning Component toolbox, drag and drop the **Recent Items** component into the lower right column
   a. In the properties toolbar on the right, click the **Select** button under Objects.
   b. Remove the selected object, then add **Camp Program**, **Contact**, **Family**, and **Registration** from the available list to the selected column.

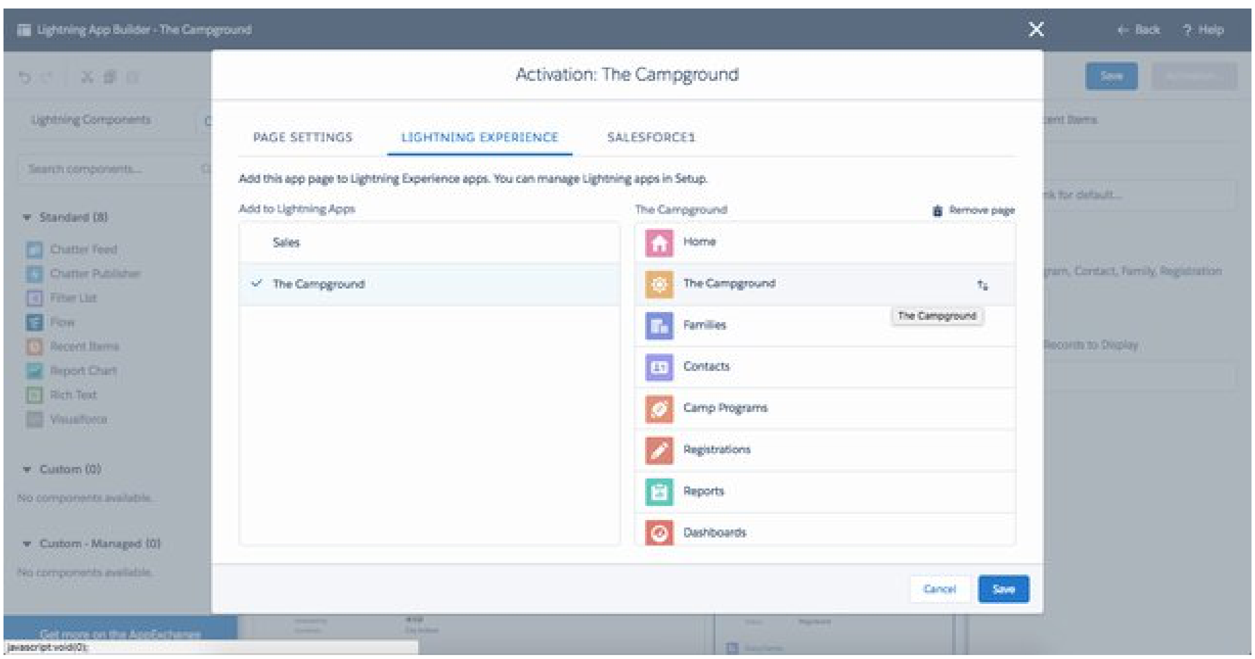


9. Click **Save**, then click **Activate**.

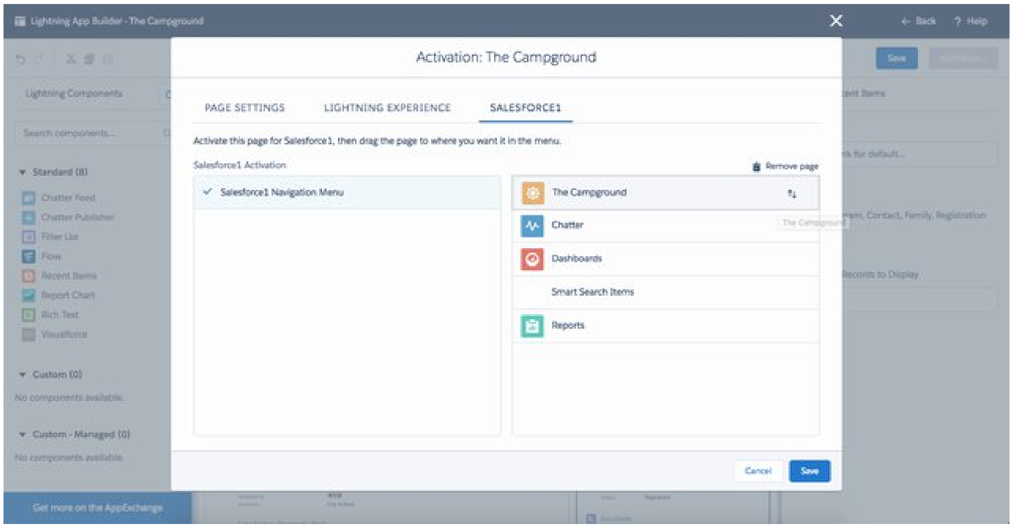
10. Under Page Settings, click the **Change** link to update the icon to the **Sun** ().



11. Click the **Lightning Experience** tab.
    a. Select **The Campground** and click the **Add page to app** button.



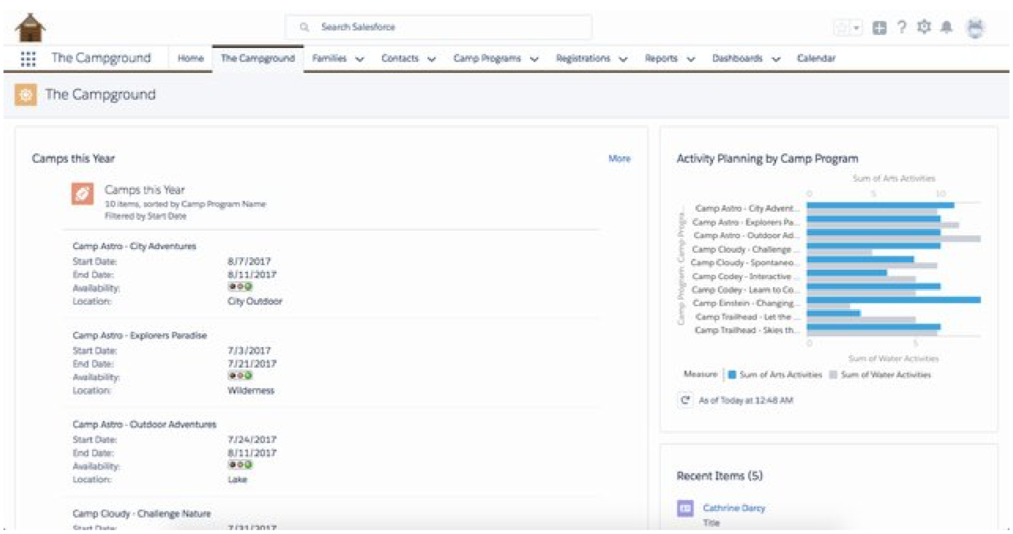
12. Click the **Mobile Navigation** tab.
    a. Click the **Add page to app** button.
    b. Rearrange **The Campground** to the top of the list.



13. Click **Save**, then click **Back** in the top left corner.

14. Click the App Launcher ( ) in the top left of the page, and select **The Campground** App.

15. Click on **The Campground** tab at the top of the page and review your custom app page!



You have now created a specific app page for your camp management application. Similar to the home tab, this is a one-stop shop to understand everything camp management!

Wrap-up: Additional Resources

Your adventure is complete for today - but it's not finished! As a Salesforce Admin, this is just the start of a rewarding journey in your career.

Here are some resources that you should check out next:

- **Certifications** – There are a number of formal Salesforce Certifications that you can get by taking exams to showcase all your Salesforce knowledge. Check out https://trailhead.salesforce.com/en/credentials/administratoroverview/ for details. For most Admins, we recommend starting with the "Administrator" Certification, followed by the "App Builder" and "Advanced Administrator" Certifications.

- **Admin Resources** – Check out the Salesforce Admin site, where you can find helpful and fun content - a blog, a Podcast, videos and more: https://admin.salesforce.com/

- **Developer Resources** – Want to amp your Salesforce game into the programmatic? Check out https://developer.salesforce.com/ to find a wealth of resources to get you well on your way. This is also a great way to connect with other Devs on the Developer Forum.

- **Dreamforce** - The best Salesforce event of the year is our annual conference in San Francisco. We bring together inspirational industry speakers, customers you can learn from, hands-on training workshops, and announce our most exciting product updates. Talk to your Account Executive about getting your passes, and learn more here: https://www.salesforce.com/dreamforce/

- **Trailhead** – We saved the best for last...

  If you enjoyed this hands-on workshop, head on over to Trailhead (https://trailhead.salesforce.com/) for more self-paced learning with informative modules, hands-on exercises, and 'projects' across a range of topics.

  We recommend these Trails to get started:
  - Trailhead Basics
  - Admin Beginner
  - Build Your Career in the Salesforce Ecosystem

On behalf of all of us at Salesforce

Thank you.

salesforce