

Liferay Boot Camp 2021 Digital Edition

Saving time with Low Code Applications



Federico Cosentino
Team Leader and Senior Developer



Saving time with Low Code Applications



What is "low-code"?



Why to use the App Builder



How to use the App Builder

What is “low-code”?

A brief introduction to “low-code”





What is “low-code”?

Low-Code definition:

The term “low-code” was first coined in 2014 by Forrester and used to define development platforms focused on simplicity and ease of use.



What is “low-code”?

“An Enterprise Low-code application platform (LCAP) provides rapid application development and deployment using low-code and no-code techniques such as declarative, model-driven application design and development together with the simplified one-button deployment of applications.”

-Gartner-



What is “low-code”?

Instead of traditional programming, low-code focus on fast and easy visual app building using features like reusable components, drag-and-drop tools and process modeling.

What is “low-code”?

Instead of this:

```

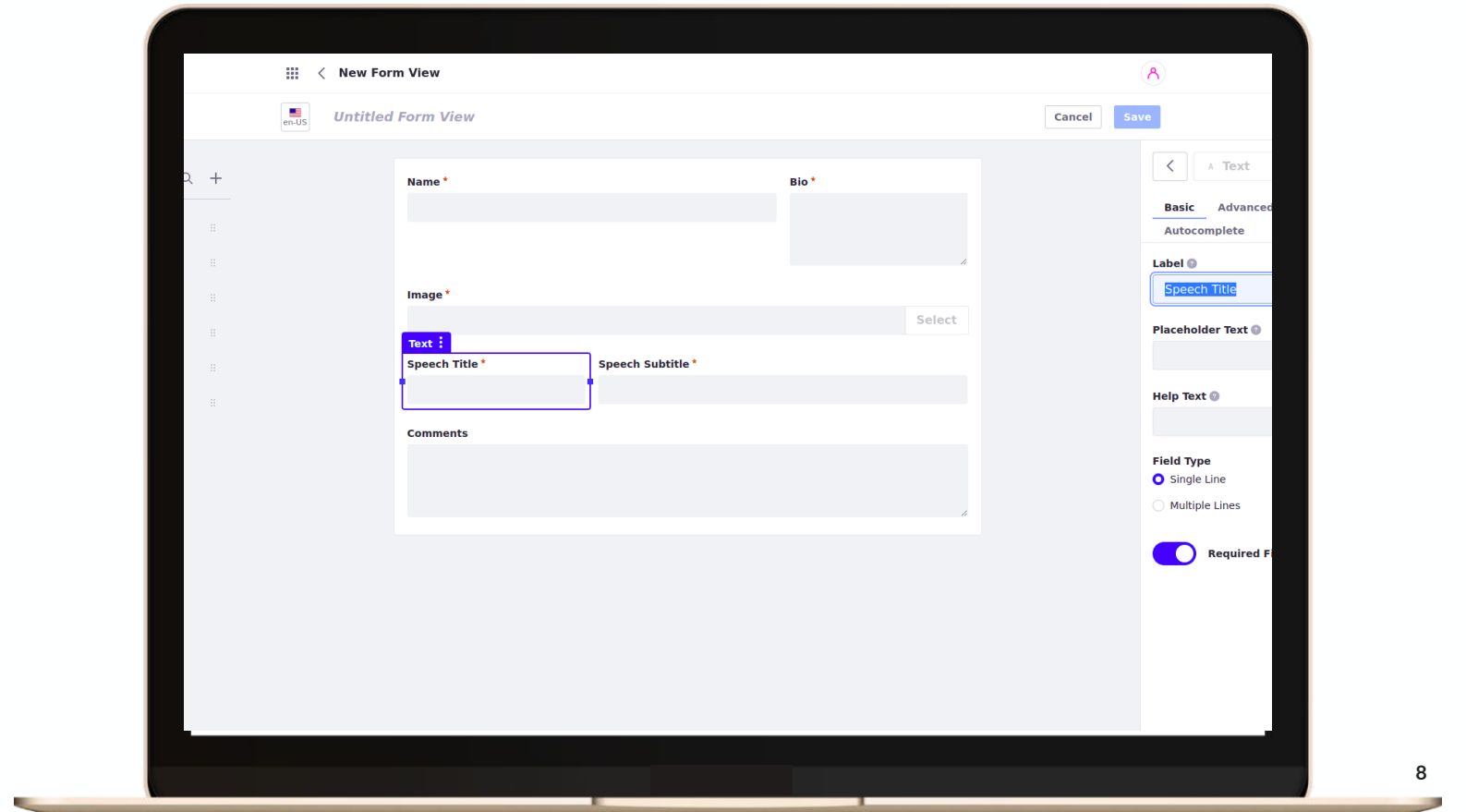
page:import="com.liferay.portal.kernel.util.StringUtil"·%<>%|
page:import="com.liferay.portal.kernel.util.TextFormatter"·%<>%|
page:import="com.liferay.portal.kernel.util.Validator"·%<>%|
page:import="com.liferay.portal.kernel.util.WebKeys"·%<>%|
page:import="com.liferay.portal.kernel.workflow.WorkflowConstants"·%<>%|
page:import="com.liferay.portlet.usersadmin.search.GroupSearch"·%<>%|
page:import="com.liferay.rss.util.RSSUtil"·%<>%|
page:import="com.liferay.site.item.selector.criteria.SiteItemSelectorReturnType"·%<>%|
page:import="com.liferay.site.item.selector.criterion.SiteItemSelectorCriterion"·%<>%|
|
<% page:import="java.io.Serializable"·%>%|
|
<% page:import="java.text.Format"·%>%|
|
<% page:import="java.util.ArrayList"·%>%|
page:import="java.util.Arrays"·%<>%|
page:import="java.util.HashMap"·%<>%|
page:import="java.util.HashSet"·%<>%|
page:import="java.util.List"·%<>%|
page:import="java.util.Map"·%<>%|
page:import="java.util.Objects"·%<>%|
page:import="java.util.Set"·%>%|
|
<% page:import="javax.portlet.PortletMode"·%>%|
page:import="javax.portlet.PortletRequest"·%<>%|
page:import="javax.portlet.PortletURL"·%>%|
|
<liferay-frontend:defineObjects·/>%|
|
<liferay-theme:defineObjects·/>%|
|
<portlet:defineObjects·/>%|
|
<%|
AssetHelper·assetHelper·=·(AssetHelper)request.getAttribute(AssetWebKeys.ASSET_HELPER);|
AssetPublisherCustomizer·assetPublisherCustomizer·=·(AssetPublisherCustomizer)request.getAttribute(AssetPublisherWebKeys.ASSET_PUBLISHER_CUSTOMIZER);|
AssetPublisherDisplayContext·assetPublisherDisplayContext·=·new·AssetPublisherDisplayContext(assetPublisherCustomizer,·liferayPortletRequest);|
AssetPublisherPortletInstanceConfiguration·assetPublisherPortletInstanceConfiguration·=·(AssetPublisherPortletInstanceConfiguration)request.getAttribute(AssetPublisherWebKeys.ASSET_PUBLISHER_PORTLET_INSTANCE_CONFIGURATION);|
AssetPublisherWebConfiguration·assetPublisherWebConfiguration·=·(AssetPublisherWebConfiguration)request.getAttribute(AssetPublisherWebKeys.ASSET_PUBLISHER_WEB_CONFIGURATION);|
AssetPublisherWebUtil·assetPublisherWebUtil·=·(AssetPublisherWebUtil)request.getAttribute(AssetPublisherWebKeys.ASSET_PUBLISHER_WEB_UTIL);|
|

```

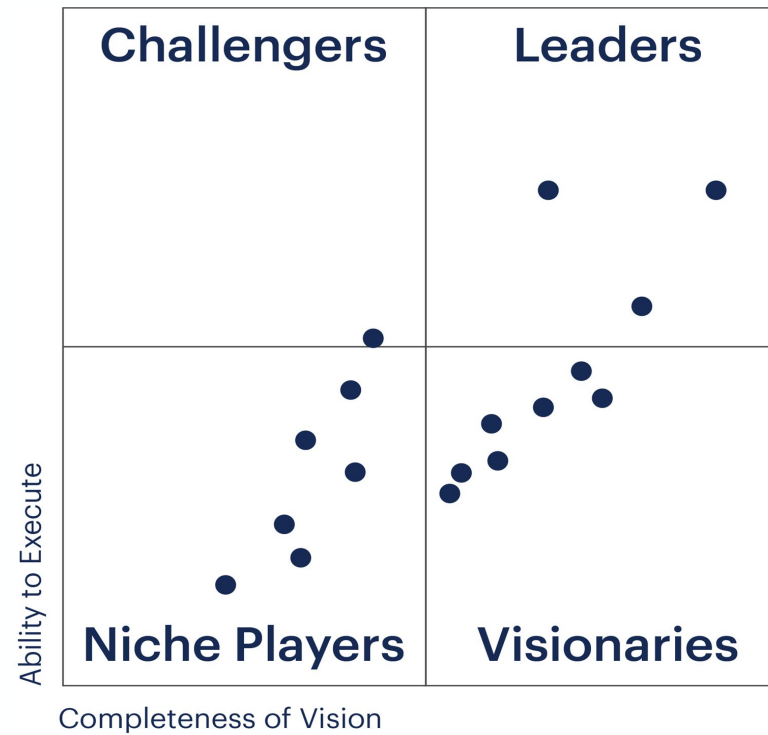


What is “low-code”?

You will have this:



What is “low-code”?



Gartner Magic Quadrant for Enterprise Low-Code Application Platforms

Why to use the App Builder

Liferay & Low Code Applications benefits





Why to use the **App Builder:** Low-Code Benefits

Speed

Costs

Agile

- Creating business apps with less to no code
- Promotes a fast development and deployment process, and speed is a key factor for businesses
- Faster time to market for business applications, being responsive to customers and internal



Why to use the **App Builder:** Low-Code Benefits



- With low code applications you can assemble more applications in less time and costs decline.
- It also diminishes the requirement for additional developers, decreasing employing costs
- Both developers and non-developers can use these products, and they require less training to start.



Why to use the **App Builder**: Low-Code Benefits

Speed

Costs

Agile

- Complete alignment with agile development methodologies, with added acceleration of delivery
- Enables members of the business and marketing teams to collaborate with the it team of a company in the creation of apps
- It makes more easy to let applications suit new prerequisites needing no complex coding changes



Why to use the **App Builder:** Liferay & Low-Code

Centralized Data

Secure Data Access

Role Based Access

Built In Workflow

Liferay
Extension points

No Additional
Software



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Centralized Data

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Extension points

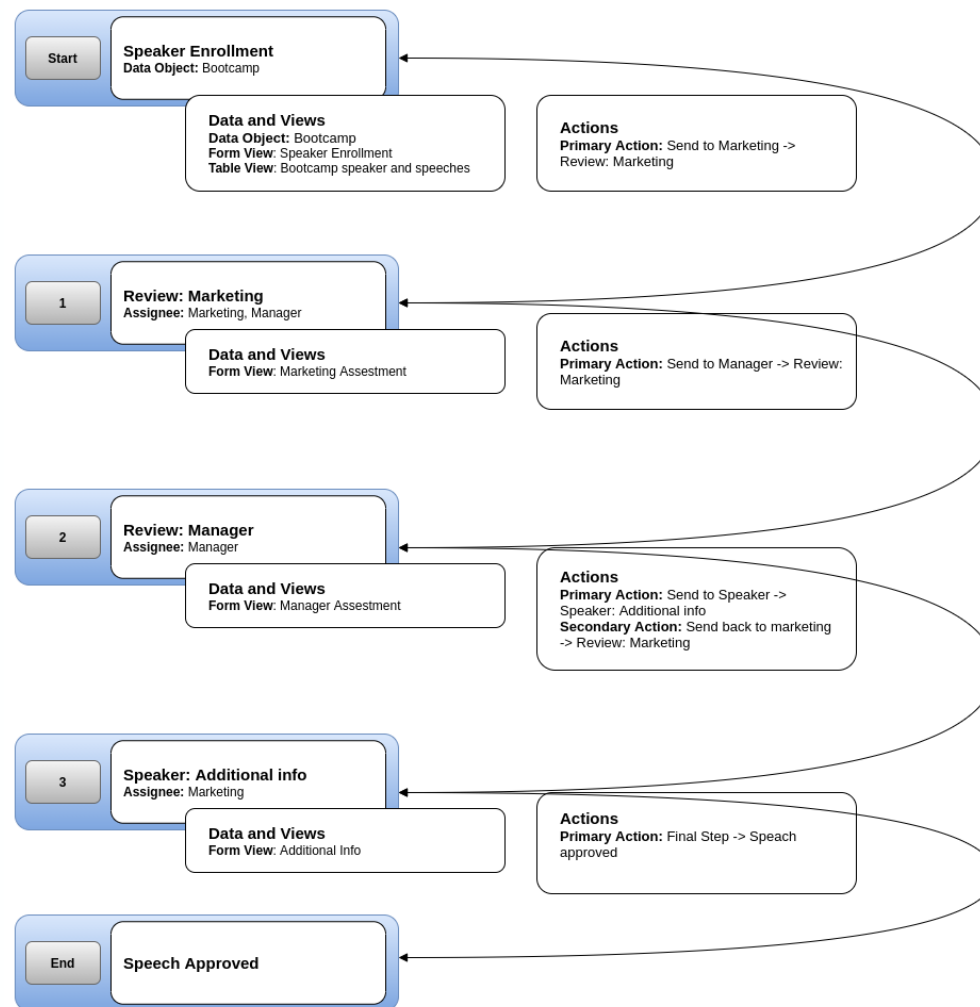
No Additional Software

How to use the App Builder

Let's create our App!

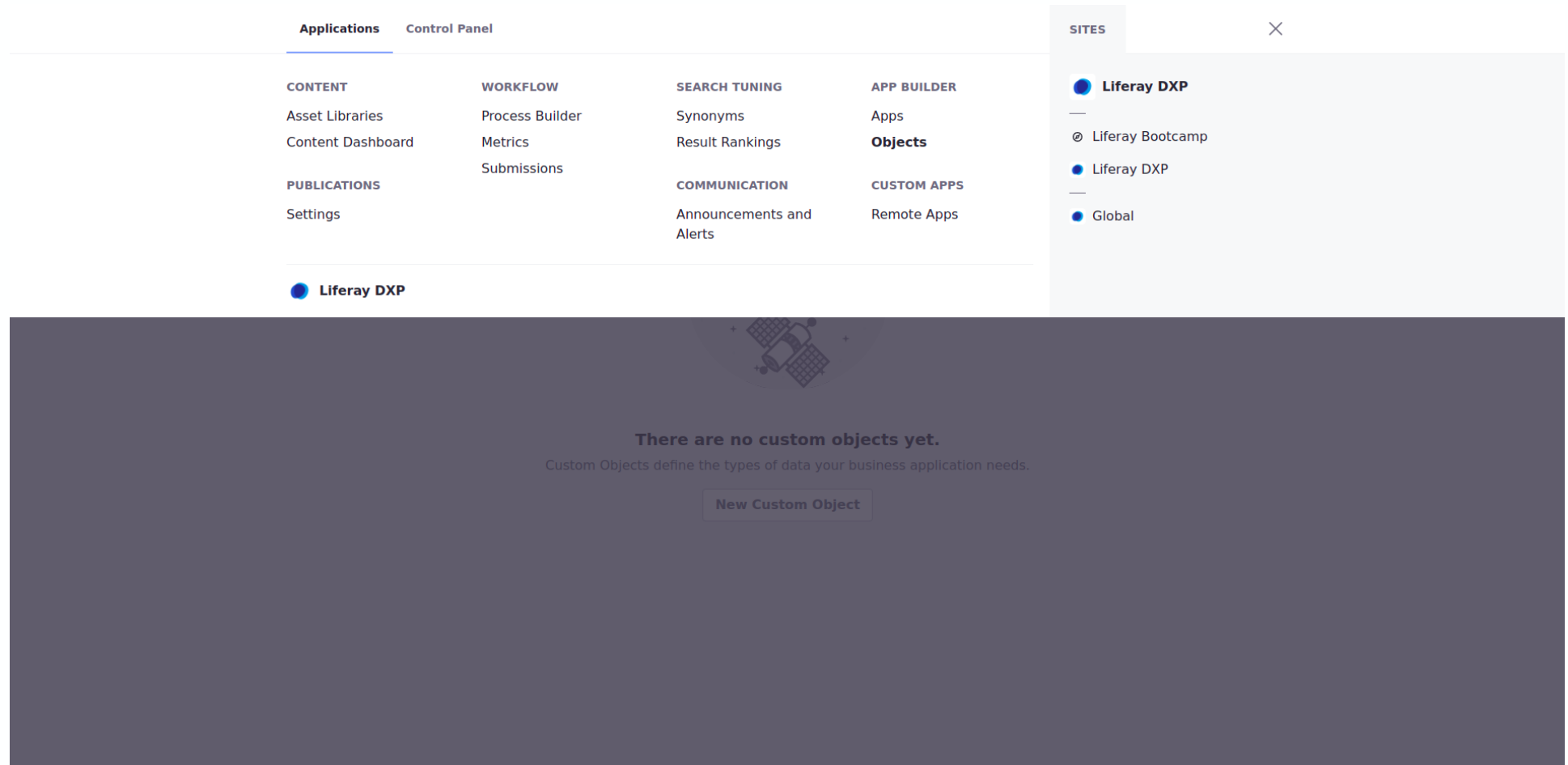


How to use the App Builder





How to use the App Builder






How to use the App Builder

Objects

Filter and Order ▾ ↑↓ Search... 🔍 +



There are no custom objects yet.

Custom Objects define the types of data your business application needs.

[New Custom Object](#)

New Custom Object

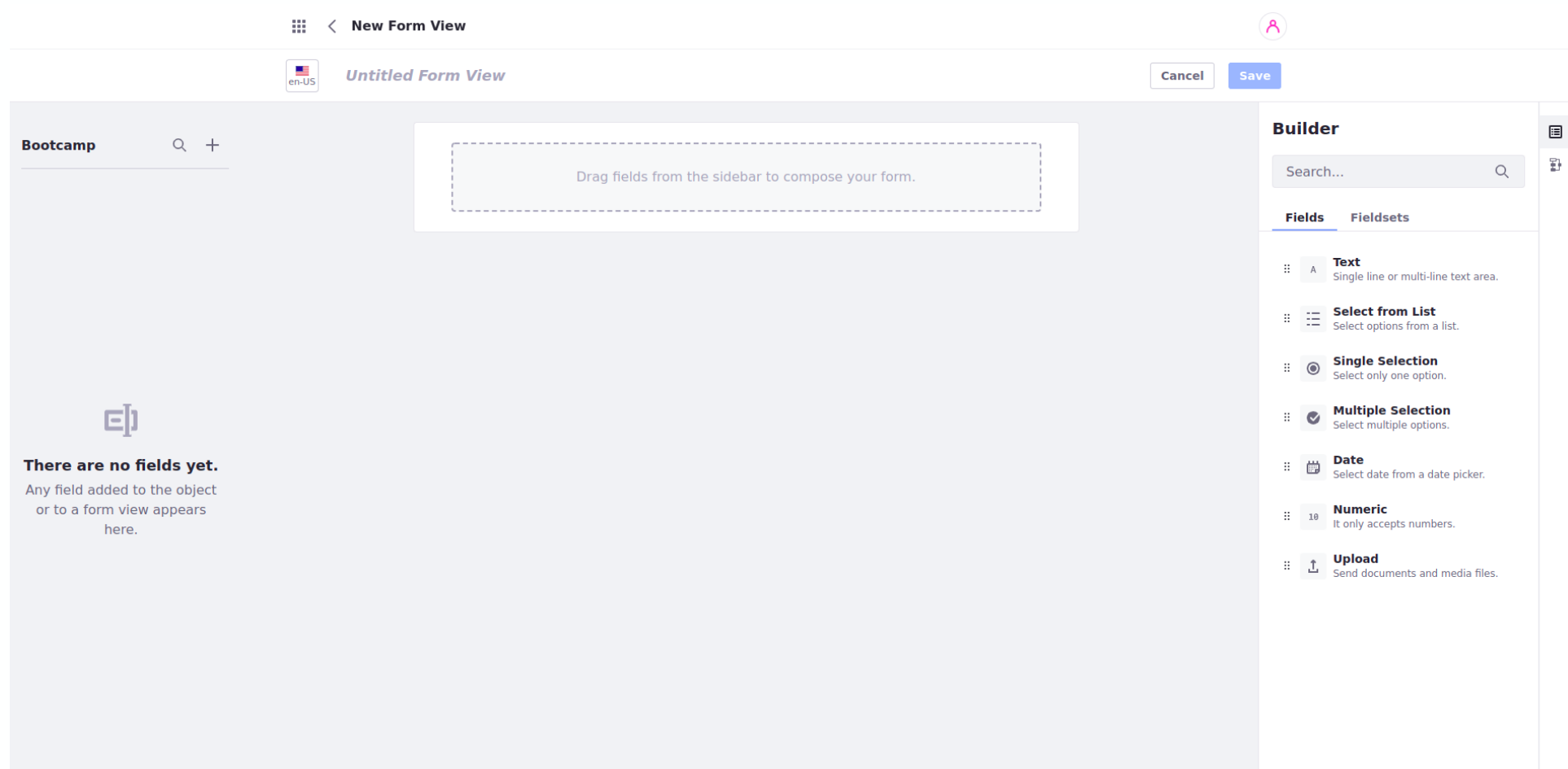
Name*

☒ Continue and Create Form View

[Cancel](#) [Continue](#)



How to use the App Builder





How to use the App Builder

The screenshot shows the 'New Form View' interface in the App Builder. At the top, there's a header with a grid icon, a back arrow, and the text 'New Form View'. Below this, there's a sub-header with a language selector (en-US), the title 'Untitled Form View', and 'Cancel' and 'Save' buttons. The main workspace is divided into three sections. On the left, under the 'Bootcamp' header, there's a search icon and a plus sign. Below this, a list shows a single item: 'Name' with a 'Text' field type. In the center, a text field is being edited. It has a blue border and a label 'Name' above it. On the right, a configuration panel is open. It has tabs for 'Basic' and 'Advanced', with 'Basic' selected. Under the 'Autocomplete' section, there's a 'Label' field with the value 'Name'. Below that are 'Placeholder Text' and 'Help Text' fields, both currently empty. At the bottom of the panel, there's a 'Field Type' section with two options: 'Single Line' (selected with a radio button) and 'Multiple Lines'. Below that is a 'Required Field' toggle switch, which is currently turned off.



How to use the App Builder

en-US **Untitled Form View** Cancel Save

Bootcamp 🔍 +

A Name Text

Text ⋮
Name

Basic Advanced

Autocomplete

Field Reference ⓘ
Field46218208

Predefined Value ⓘ
Enter a default value.

Searchable

- ☐ Disable
- ☒ Keyword
- ☐ Text

☒ Show Label

☐ Repeatable

☐ Validation



How to use the App Builder

The screenshot displays the Salesforce App Builder interface for creating a new form. At the top, a navigation bar includes a grid icon, a back arrow, and the text 'New Form View'. Below this, a sub-header shows a language selector (en-US), the title 'Untitled Form View', and 'Cancel' and 'Save' buttons. The main workspace is divided into three sections. On the left, a 'Bootcamp' sidebar contains a search icon, a plus icon, and a list of components with 'Name' and 'Text' visible. In the center, a large white rectangular field is labeled 'Name'. On the right, a 'Rules' panel features a search bar, a plus icon, and a button with a rule icon. Below this, a circular graphic with a puzzle piece icon is shown, followed by the text 'There are no rules.' and a subtext: 'Define conditions and actions to dynamically change fields and elements in the form.' A 'Create New Rule' button is at the bottom of the rules panel.



How to use the **App Builder**

A screenshot of the 'Create New Rule' dialog box in the App Builder. The dialog has a title bar with a close button (X) and a breadcrumb path '< New Form View'. The main content area is titled 'Untitled Rule'. On the left side, there is a vertical flowchart with three nodes: a start node (circle), a plus node (circle with a plus sign), and an end node (circle with a plus sign). The main area contains three sections: 'Condition' with an 'OR' dropdown, 'If' with two 'Choose an Option' dropdowns, and 'Do' with one 'Choose an Option' dropdown. A dropdown menu is open for the first 'If' condition, showing 'Name' and 'User' as options. At the bottom right, there are 'Cancel' and 'Save' buttons.



How to use the **App Builder**

The screenshot shows the 'Create New Rule' dialog box in the App Builder. The dialog has a title bar with a close button (X) and a breadcrumb path '< New Form View'. The main content area is titled 'Untitled Rule'. On the left, there is a vertical flow diagram with three nodes: a start node (circle), a condition node (circle with a plus sign), and an action node (circle with a plus sign). The 'Condition' section contains an 'If' clause with a dropdown menu set to 'Name' and another dropdown menu set to 'Choose an Option'. A dropdown menu is open, showing the following options: 'Is equal to', 'Is not equal to', 'Contains', 'Does not contain', 'Is empty', and 'Is not empty'. The 'Actions' section contains a 'Do' clause with a dropdown menu set to 'Choose an Option'. At the bottom right, there are 'Cancel' and 'Save' buttons.



How to use the **App Builder**

New Form View

Create New Rule

Untitled Rule

Condition

OR

If User Belongs to Marketing

Actions

Do Choose an Option

- Show
- Enable
- Require
- Autofill
- Calculate

Cancel Save



How to use the App Builder

en-US **Untitled Form View** Cancel Save

Bootcamp 🔍 +

- Name Text
- Bio Text
- Image Upload
- Speech Title Text
- Speech Subtitle Text
- Comments Text

Name *

Bio *

Image * Select

Text

Speech Title *

Speech Subtitle *

Comments

< A Text

Basic **Advanced**

Autocomplete

Label

Speech Title

Placeholder Text

Help Text

Field Type

☒ Single Line

☐ Multiple Lines

☒ Required Field



How to use the App Builder

< New Form View

en-US

Speaker Enrollment

Cancel

Save

Bootcamp

Search

+

A

Name

Text

⋮

A

Bio

Text

⋮

📎

Image

Upload

⋮

A

Speech Title

Text

⋮

A

Speech Subtitle

Text

⋮

A

Comments

Text

⋮

Name *

Bio *

Image *

Select

Speech Title *

Speech Subtitle *

Comments

Builder

Search...

🔍

Fields

Fieldsets

⋮

A

Text

Single line or multi-line text area.

⋮

☰

Select from List

Select options from a list.

⋮

🎯

Single Selection

Select only one option.

⋮

☑

Multiple Selection

Select multiple options.

⋮

📅

Date

Select date from a date picker.

⋮

10

Numeric

It only accepts numbers.

⋮

📎

Upload

Send documents and media files.

#LRBC2021

@Fede_Cosent1no

32



How to use the App Builder

<

New Form View

en-US

Marketing Assestment

Cancel

Save

Bootcamp

+

🔍

Is the speech approved?

Single Selection

Time Slot

Select from List

Live presentation?

Single Selection

Presentation type

Multiple Selection

Comments

Text

Name

Text

Bio

Text

Image

Upload

Speech Title

Text

Speech Subtitle

Text

Comments

Text

Is the speech approved? *

Yes

No

Live presentation? *

Yes

No

Comments

Time Slot *

Choose an Option

Presentation type *

Technical

Business

Builder

Search...

🔍

Fields

Fieldsets

A

Text

Single line or multi-line text area.

Select from List

Select options from a list.

Single Selection

Select only one option.

Multiple Selection

Select multiple options.

Date

Select date from a date picker.

10

Numeric

It only accepts numbers.

Upload

Send documents and media files.

#LRBC2021
@Fede_Cosent1no

33



How to use the App Builder

<

New Form View

en-US

Manager Assesment

Cancel

Save

Bootcamp

Is the speech approved?

Single Selection

Is the topic already co...

Single Selection

Speech topic rating

Single Selection

Comments

Text

Time Slot

Select from List

Live presentation?

Single Selection

Presentation type

Multiple Selection

Comments

Text

Name

Text

Bio

Text

Image

Upload

Speech Title

Text

Speech Subtitle

Text

Comments

Text

Is the speech approved? *

Yes

No

Is the topic already covered? *

Yes

No

Speech topic rating *

1

2

3

4

5

Comments

Builder

Search...

Fields

Fieldsets

Text

Single line or multi-line text area.

Select from List

Select options from a list.

Single Selection

Select only one option.

Multiple Selection

Select multiple options.

Date

Select date from a date picker.

Numeric

It only accepts numbers.

Upload

Send documents and media files.



How to use the App Builder

< New Form View

en-US

Additional Info

Cancel

Save

Bootcamp

T-shirt size

Select from List

Training Availability

Date

Slides

Upload

Gadget Delivery Ad...

Text

Is the speech appro...

Single Selection

Is the topic already ...

Single Selection

Speech topic rating

Single Selection

Comments

Text

Time Slot

Select from List

Live presentation?

Single Selection

Presentation type

Multiple Selection

Comments

Text

Name

Text

Bio

Text

Image

Upload

T-shirt size *

Choose an Option

Training Availaibility *

__/__/__

Slides

Select

Gadget Delivery Address *

Builder

Search...

Fields

Fieldsets

Text

Single line or multi-line text area.

Select from List

Select options from a list.

Single Selection

Select only one option.

Multiple Selection

Select multiple options.

Date

Select date from a date picker.

Numeric

It only accepts numbers.

Upload

Send documents and media files.



How to use the App Builder

< Bootcamp

Form Views

Table Views

Apps

Filter and Order

↑↓

Search...

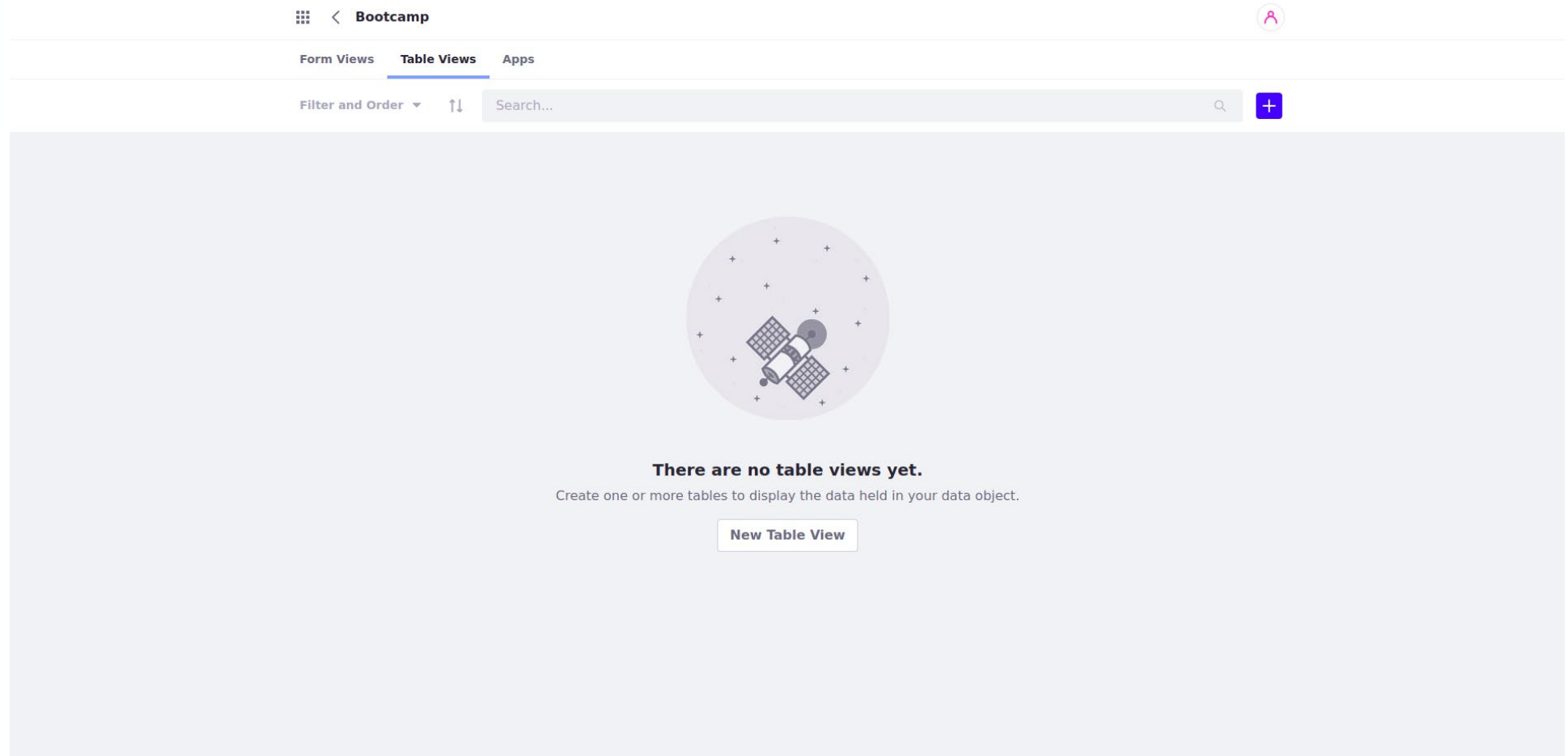
Q

+

Name	Create Date	Modified Date	ID	
Additional Info	a few seconds ago	a few seconds ago	40029	⋮
Marketing Assestment	8 minutes ago	a few seconds ago	40014	⋮
Manager Assestment	3 minutes ago	a few seconds ago	40022	⋮
Speaker Enrollment	14 minutes ago	a few seconds ago	40005	⋮



How to use the App Builder





How to use the App Builder

< New Table View

en-US

Bootcamp Speaker List

Cancel Save

	Name	Speech Title	Is the speech approved?	T-shirt size	Traini
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					
<input type="checkbox"/>					

Search...

Is the speech approved?

Single Selection

Is the topic already cov...

Single Selection

Live presentation?

Single Selection

A

Name

Text

☒

Presentation type

Multiple Selection

Slides

Upload

A

Speech Subtitle

Text

A

Speech Title

Text

Speech topic rating

Single Selection

T-shirt size

Select from List

Time Slot

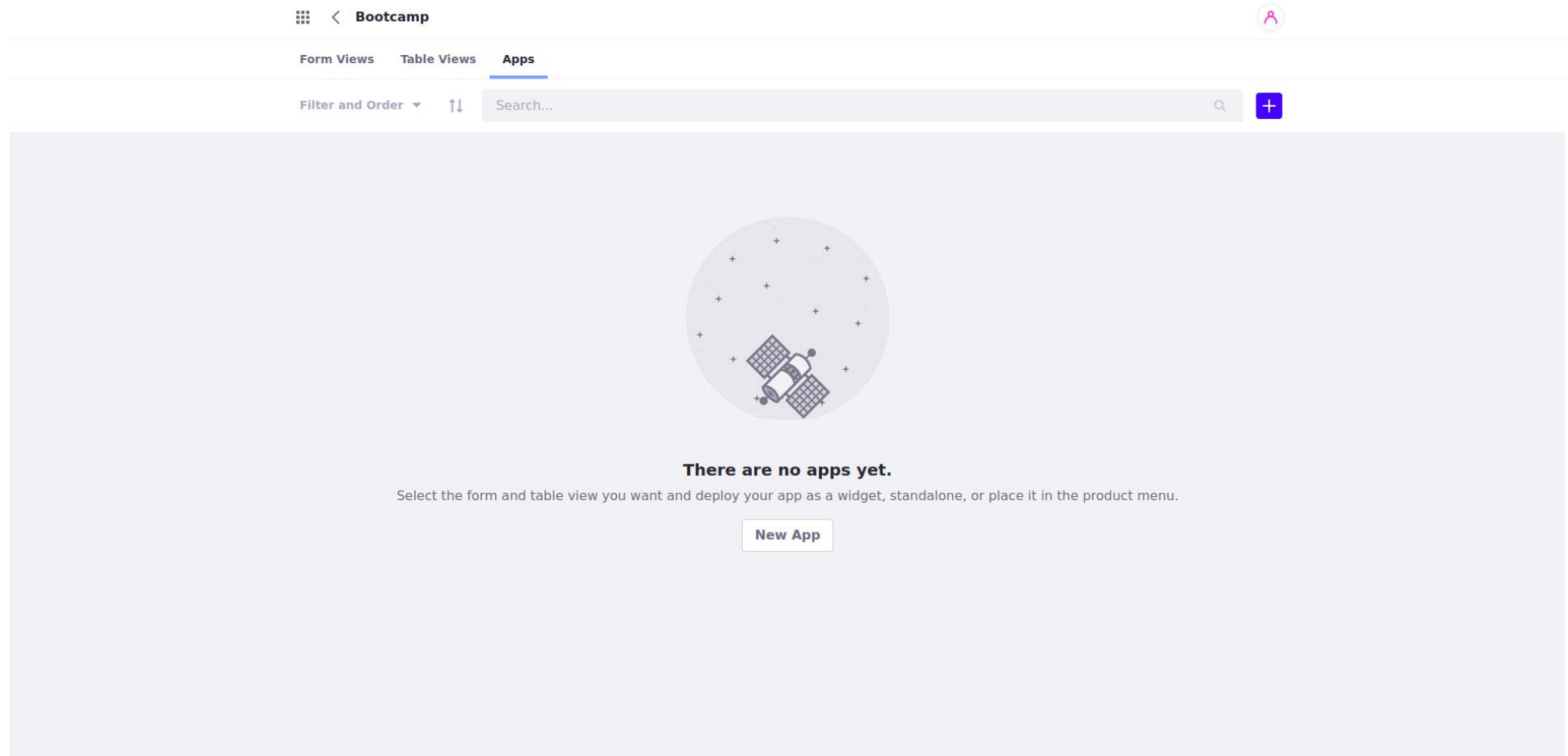
Select from List

Training Availability

Date



How to use the **App Builder**





How to use the App Builder

Applications

Control Panel

CONTENT

Asset Libraries

Content Dashboard

WORKFLOW

Process Builder

Metrics

Submissions

SEARCH TUNING

Synonyms

Result Rankings

APP BUILDER

Apps

Objects

PUBLICATIONS

Settings

COMMUNICATION

Announcements and Alerts

CUSTOM APPS

Remote Apps

Liferay DXP

SITES

×

Liferay DXP

⌕ Liferay Bootcamp

Liferay DXP

Global

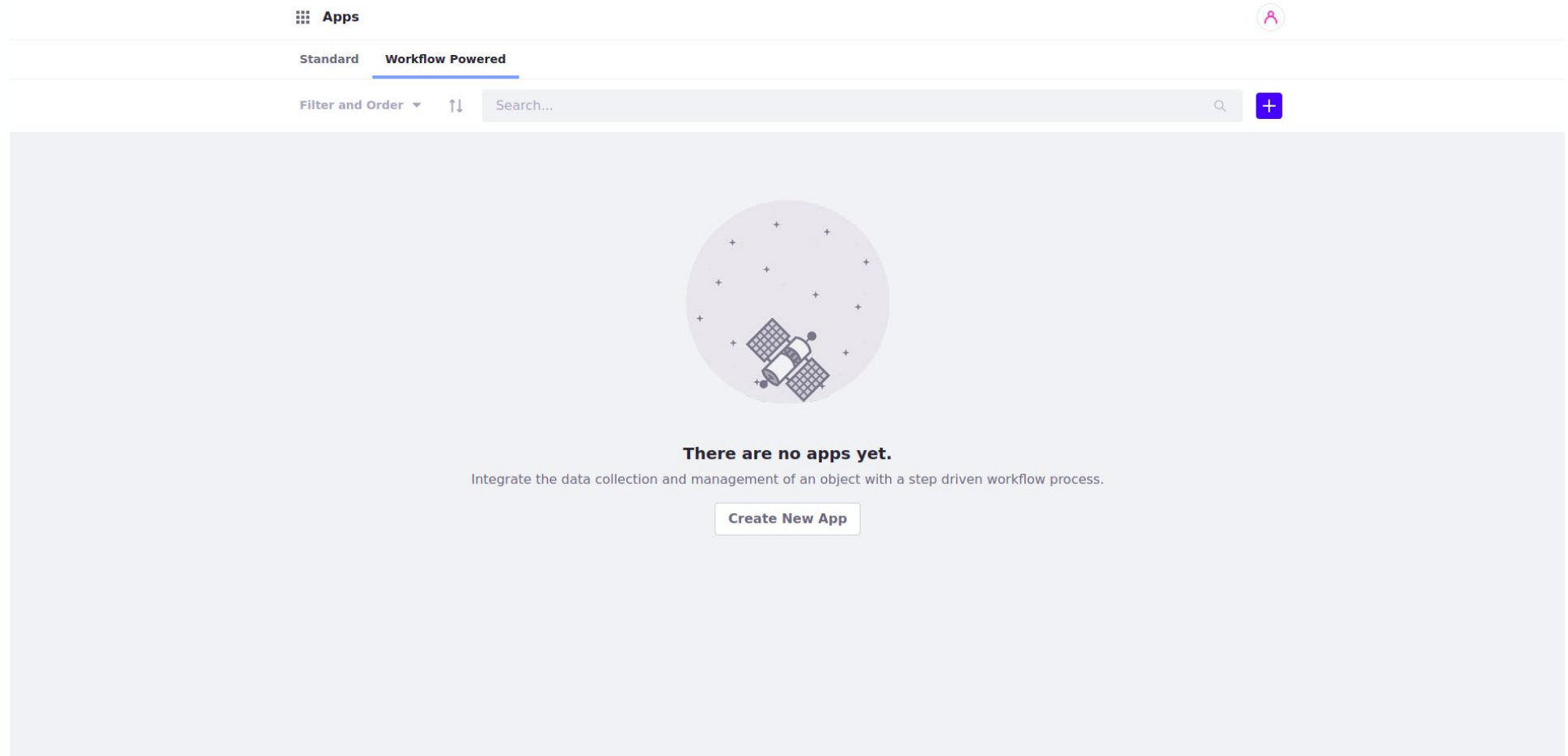
There are no apps yet.

Select the form and table view you want and deploy your app as a widget, standalone, or place it in the product menu.

New App

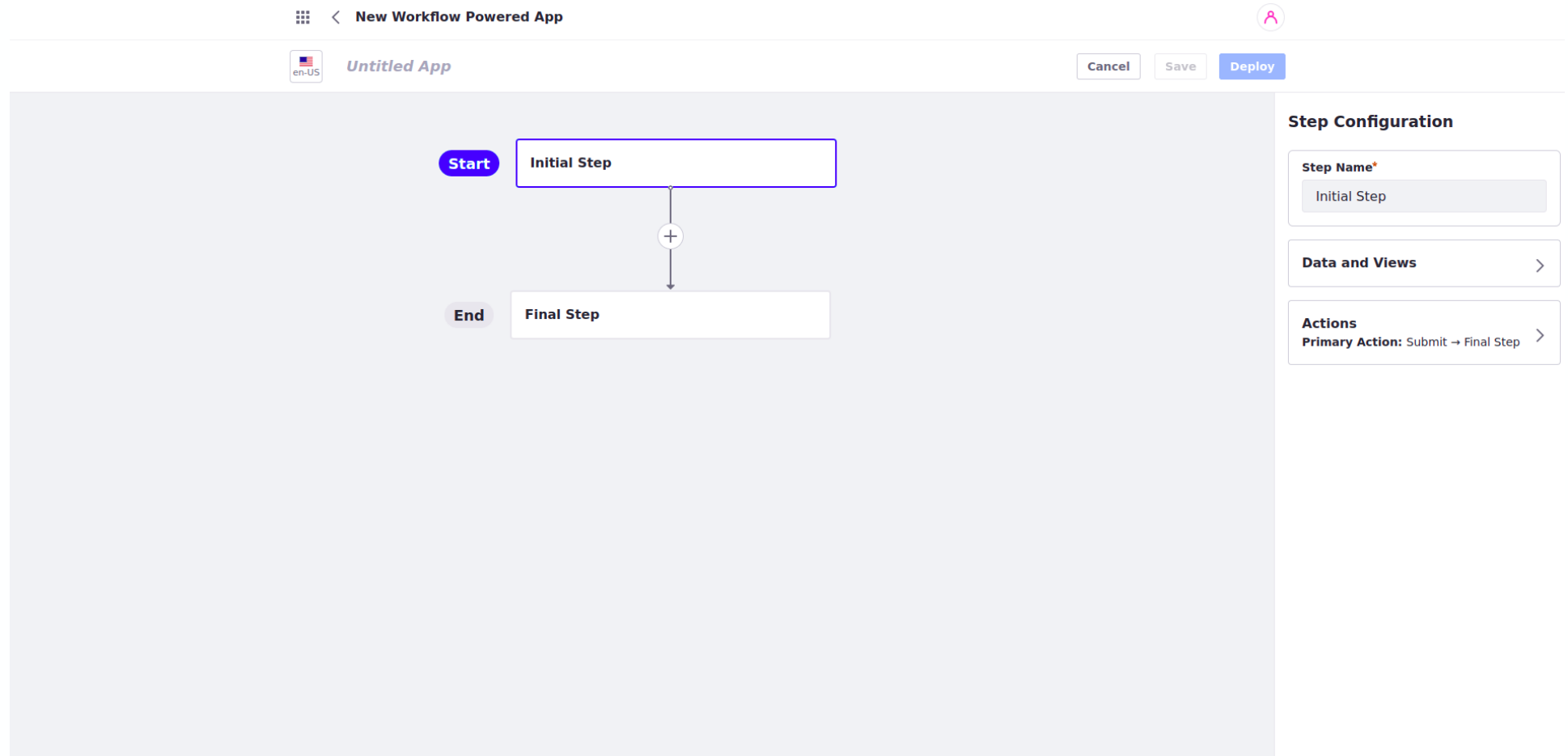


How to use the App Builder



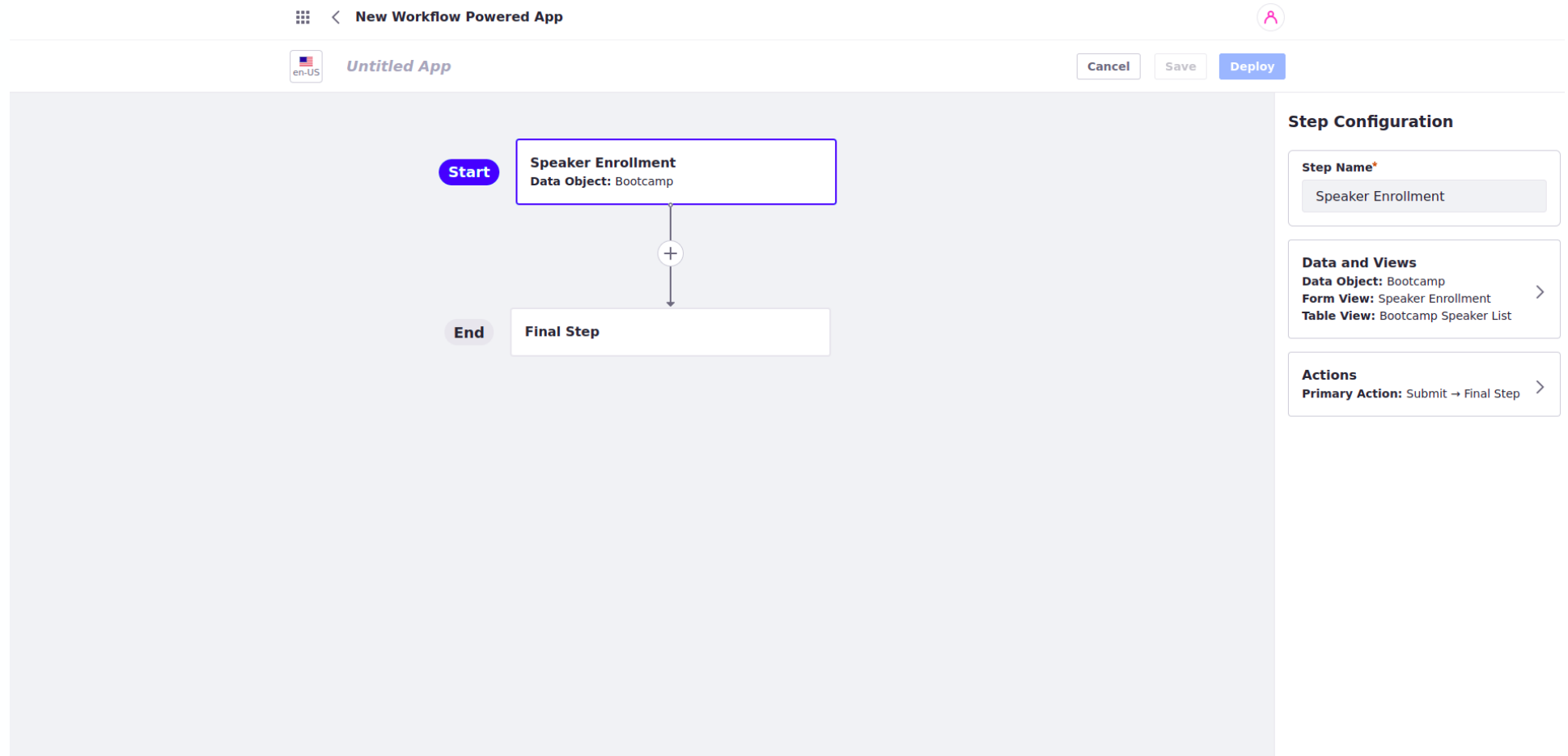


How to use the App Builder



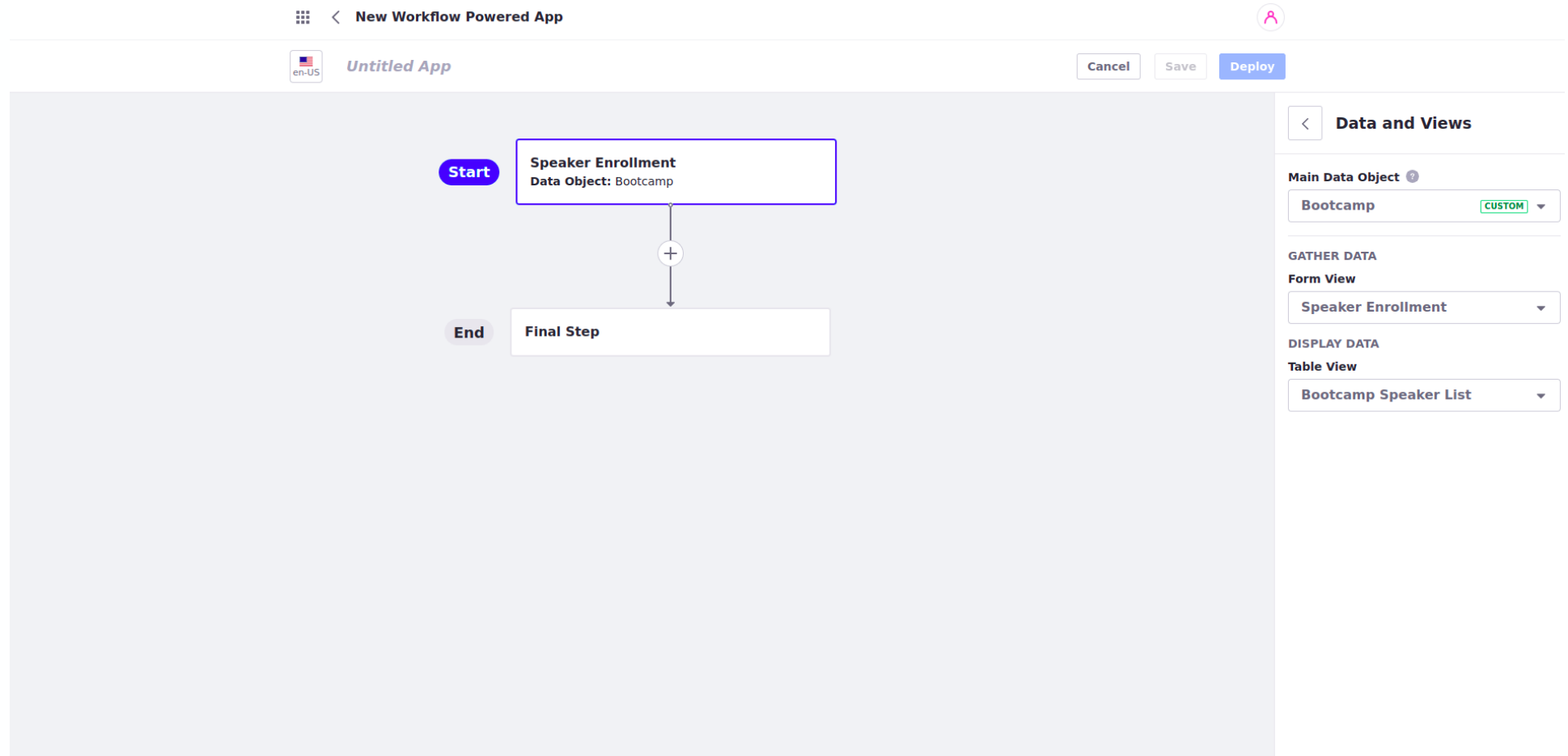


How to use the App Builder



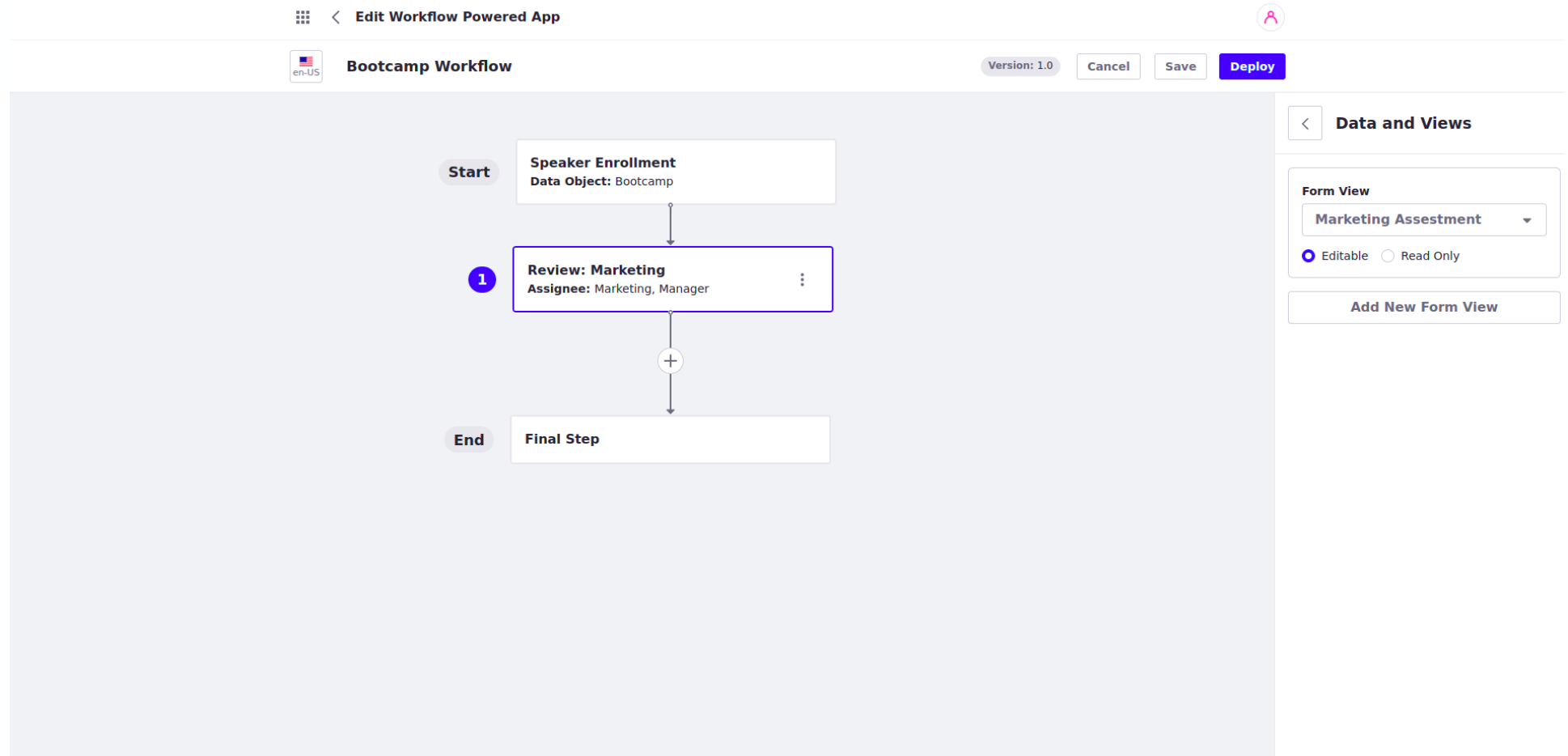


How to use the App Builder



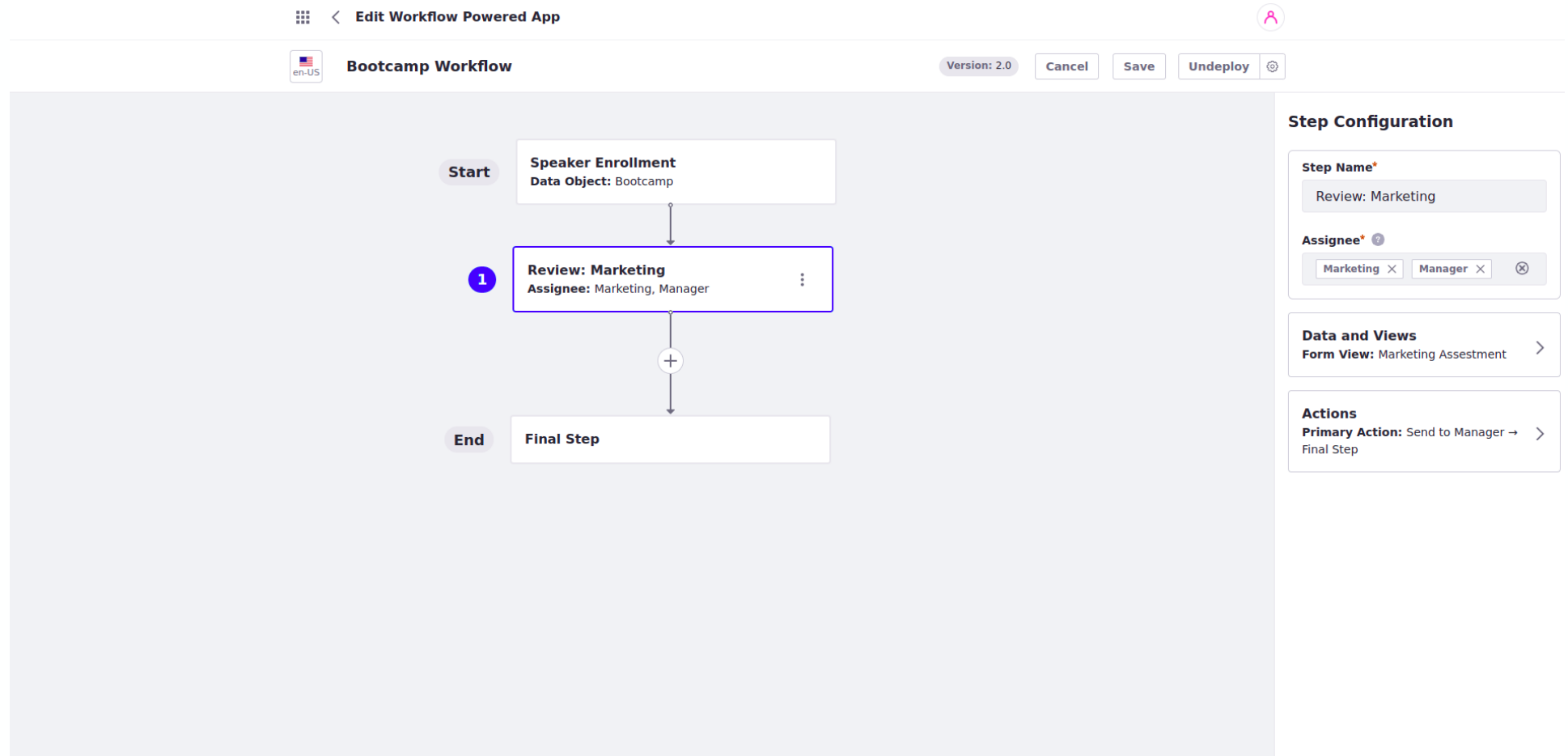


How to use the App Builder



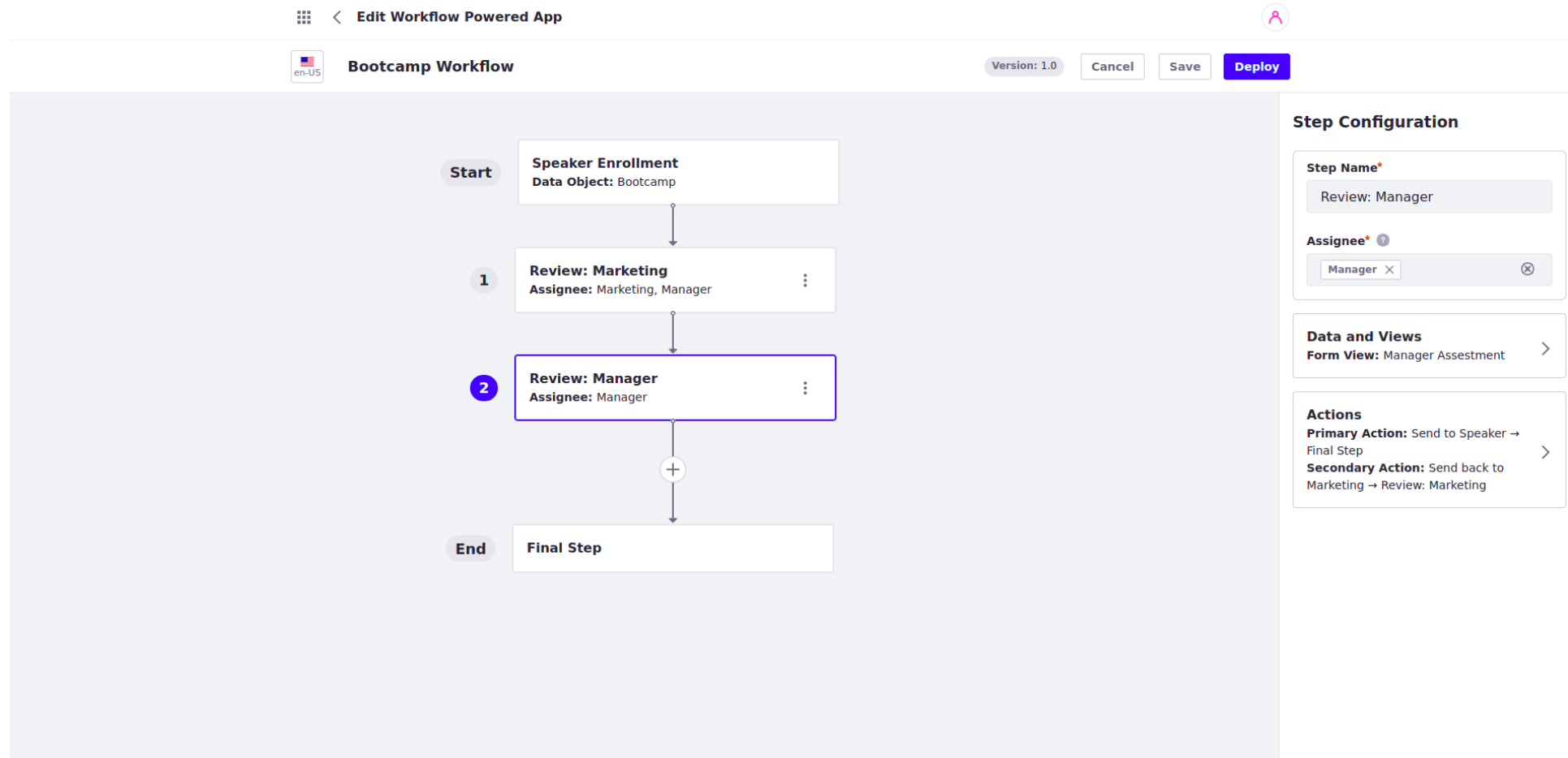


How to use the App Builder



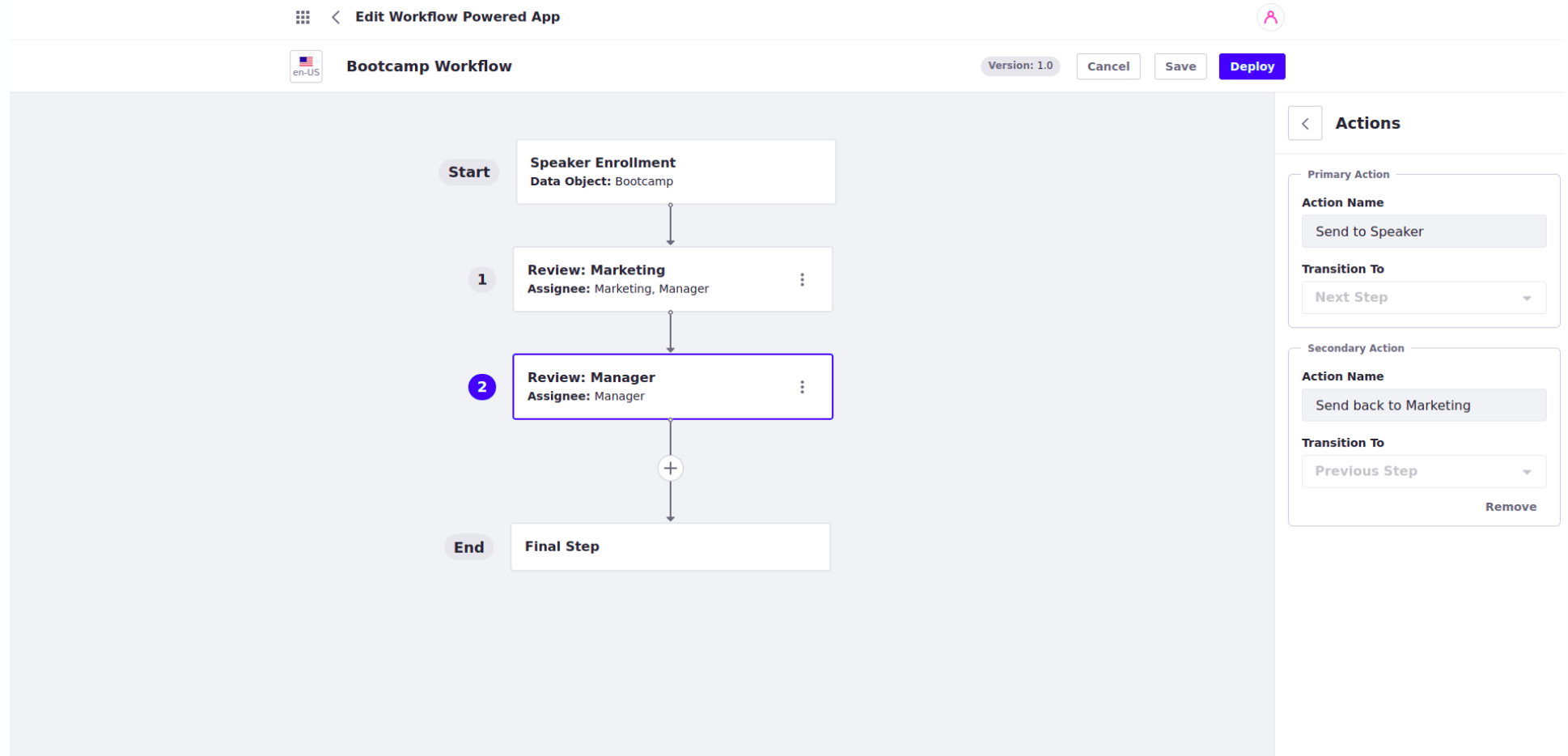


How to use the App Builder



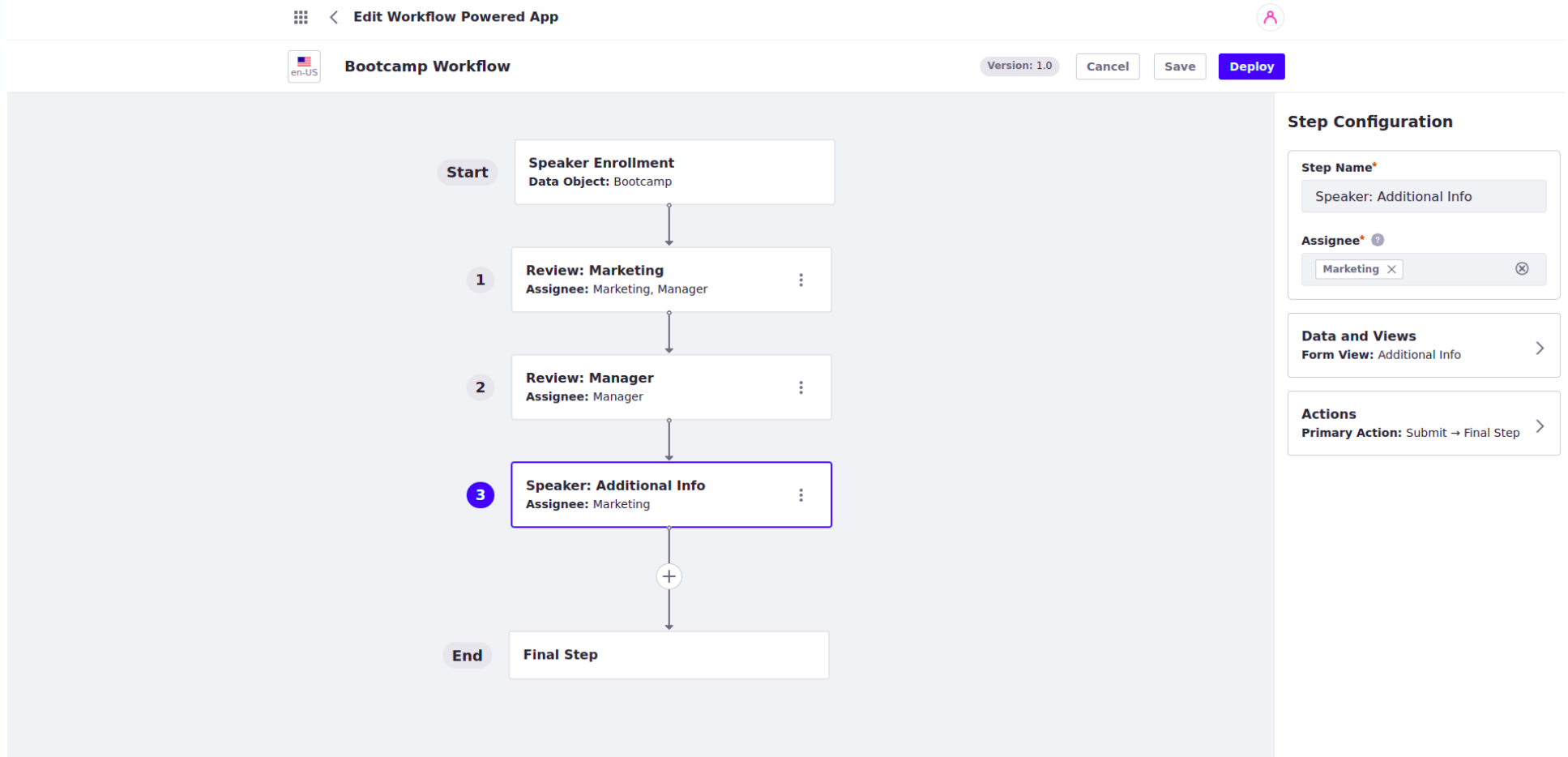


How to use the App Builder



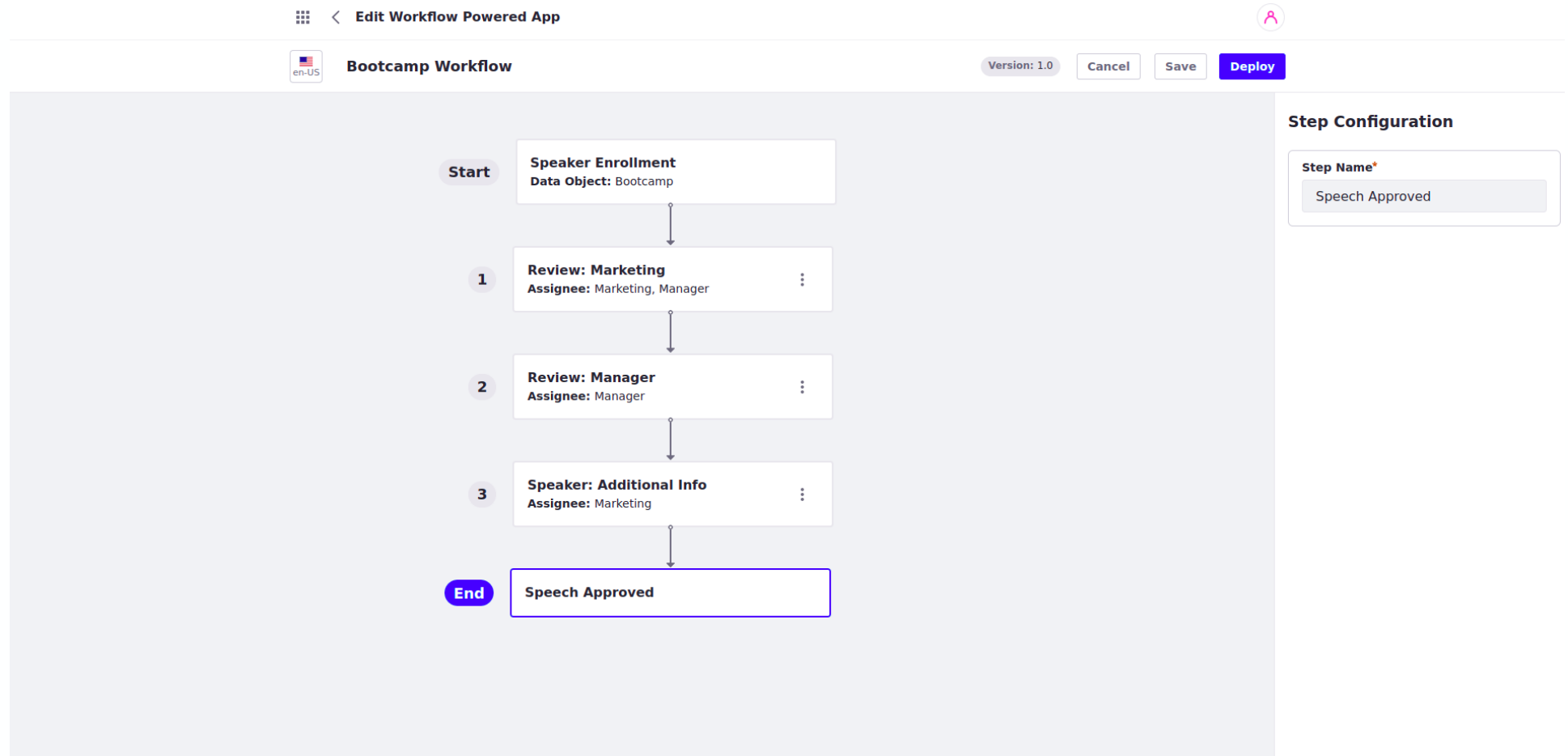


How to use the App Builder



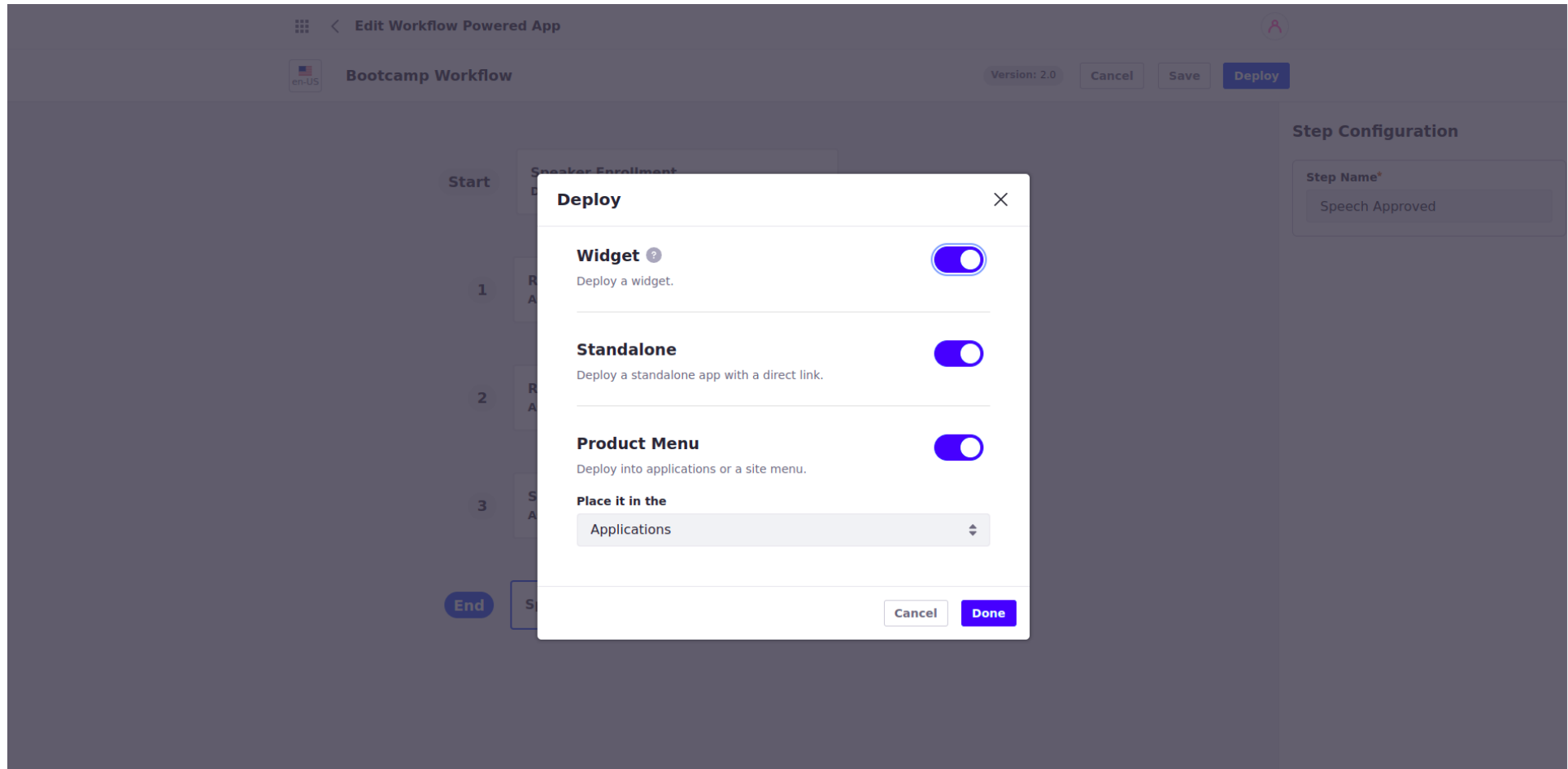


How to use the App Builder



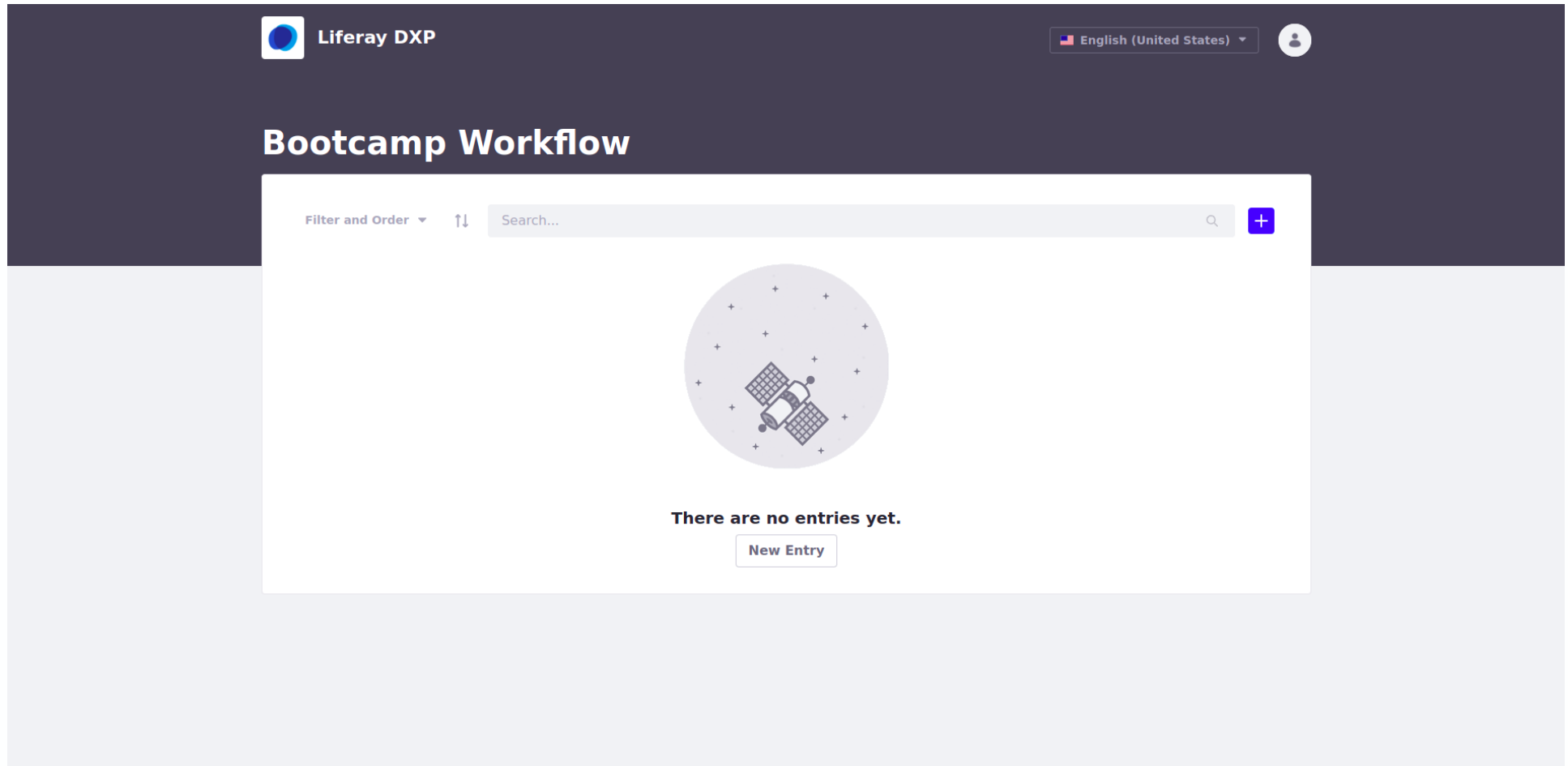


How to use the App Builder





How to use the **App Builder**






How to use the App Builder










How to use the App Builder


☐ < Bootcamp Enrollment

Experience Default 





Page Design 



Publish

 **Liferay Bootcamp**

This search bar is not visible to users yet. [Set up its destination to make it visible.](#)



Bootcamp Enrollment


Place fragments here.


Fragments and Widgets


Search...


Fragments Widgets

HIGHLIGHTED

 Asset Publisher

 Documents and Media

 Navigation Menu

 Web Content Display

APP BUILDER

Bootcamp Workflow


Bootcamp Workflow (F...


Bootcamp Workflow (T...


COLLABORATION

Blogs

Blogs Aggregator

 Calendar

 Dynamic Data Lists Di...

 Form

Invite Members

Message Boards

Questions

Powered By Liferay



How to use the App Builder

Bootcamp Enrollment

Liferay Bootcamp

Bootcamp Enrollment

< Add Entry

Name*

Federico Cosentino

Bio*

Federico is a Senior Developer in SMC where he manage teams and contribute helping the younger developers to growth and enlarge their skills. He is passionate about learning new things and technologies, cooking and spend time with his dog.

Image*

cosentino-bootcamp-pic-1.jpg

Select

×

Speech Title*

Saving time with low code applications

Speech Subtitle*

App Bulder: What it is and how to use it

Comments

Submit

Cancel

#LRBC2021

@Fede_Cosent1no

55



How to use the App Builder

Notifications

Liferay Bootcamp

This search bar is not visible to users yet. Set up its destination to make it visible.

1

Bootcamp Enrollment

NOTIFICATIONS

Notifications List (1)

Requests List (0)

☐

Filter and Order ▾

↑↓

☐

Test Test sent you a Bootcamp Workflow entry in the workflow.
About a minute ago.

⋮



How to use the App Builder

Applications

Control Panel

CONTENT

Asset Libraries

Content Dashboard

PUBLICATIONS

Settings

WORKFLOW

Process Builder

Metrics

Submissions

SEARCH TUNING

Synonyms

Result Rankings

COMMUNICATION

Announcements and Alerts

APP BUILDER

Apps

Objects

CUSTOM APPS

Remote Apps

BOOTCAMP WORKFLOW

Bootcamp Workflow

Liferay DXP

SITES

×

Liferay DXP

—

⌵ Liferay Bootcamp CURRENT

—

Liferay DXP

—

Global

Cancel

Powered By Liferay



How to use the App Builder

Details View

Filter and Order ▾ ↑↓ Search... 🔍 +

Name	Speech Title	Is the speech approved?	T-shirt size	Training Availability	Status	Step	Assignee
Federico Cosentino	Saving time with Low Code Applications	-	-	-	PENDING	Review: Marketing	Marketing and Manager



How to use the App Builder

< Details View



1 of 1 Entry

Status: PENDING

Step: Review: Marketing

Assignee: Marketing and Manager

Version: 2.0

< >  

Marketing Assestment

Is the speech approved?

-

Time Slot

-

Live presentation?

-

Presentation type

-

Comments

-



How to use the **App Builder**

A screenshot of the App Builder interface. The background is a dark grey panel titled 'Marketing Assessment' with a list of form fields: 'Is the speech approved?', 'Time Slot', 'Live presentation', 'Presentation', and 'Comments'. Each field has a minus sign icon to its left. Overlaid on this is a white modal dialog box titled 'Assign to' with a close button (X) in the top right corner. Inside the modal, there is a section 'New Assignee' with a dropdown menu currently showing 'Joe Bloggs'. Below this is a 'Comment' section with a text input area. At the bottom of the modal are two buttons: 'Cancel' and 'Done'.



Q&A



Contatti

FEDERICO COSENTINO

federico.cosentino@smc.it

Twitter @ **Fede_Cosent1no**