
layout: page title: LUIS

permalink: luis.html

Create your first LUIS App

Language Understanding Intelligent Service (LUIS) allows your application to understand what a person wants in their own words. LUIS uses machine learning to allow developers to build applications that can receive user input in natural language and extract meaning from it. A client application that converses with the user can pass user input to a LUIS app and receive relevant, detailed information back.

Create a LUIS.ai account

For this hands-on exercise, you will also need a **LUIS.ai** account.

1. In your browser, navigate to <https://www.luis.ai/>.
2. Click the **Sign in our create an account** button.
3. Authorize the **Luis.ai** application to access your account details.
4. Once your account is created, you will be taken to a simple signup form. Fill out the form with your **Country**, **Company** and **Referral** information.
5. Click the **Continue** button.
6. You will now arrive at the LUIS **My Apps** page.

Create a new LUIS app

You can create and manage your applications on My Apps page. You can always access this page by clicking My Apps on the top navigation bar of LUIS web page.

1. If you are not already there, navigate to the **My Apps** page on the **Luis.ai** website and login: <https://www.luis.ai/applications>.
2. On **My Apps** page, click **New App**.
3. In the dialog box, name your application "Home Automation".

Create a new app ✕

Name (REQUIRED)

Home Automation ✕

Culture (REQUIRED)

English ▼

* App culture is the language that your app understands and speaks, not the interface language.

Description (OPTIONAL)

Application description ...

Create

4. Choose your application culture (for this Home Automation app, we'll choose English), and then click **Create**.

The culture cannot be changed once the application is created.

5. LUIS creates the Home Automation app and opens to the Dashboard. The application dashboard contains summary information about app usage.
6. You can explore your application using the links in the left panel.

Home

Automation

Version: 0.1

Settings

Dashboard

Intents

Entities

Prebuilt domains PREVIEW

Features

Train & Test

Publish App

← Back to App list

Overview

Facts & statistics about the app's data and the received endpoint hits at any period of time ... [Learn more](#)

Dashboard Suggested utterances

App Id: <ApplicationId>

App status

Last train: Not trained yet

Last published: Not published yet

Intent Count	Entity Count	List Entity Count	Labeled Utterances Count
1 / 80	0 / 30	0 / 50	0

Endpoint Hits Per Period

PER DAY (LAST WEEK)

No endpoint hits or utterances to show.

Total Endpoint Hits

SINCE APP CREATION

0

Key Usage

7. Click on **Prebuilt domains** in the left-side navigation pane. Then click on **HomeAutomation**.

Entertainment

The Entertainment domain provides intents and entities related to ... [Learn more](#)

Not added

Events

The Events domain provides intents and entities related to booking ... [Learn more](#)

Not added

Fitness

The Fitness domain provides intents and entities related to tracking ... [Learn more](#)

Not added

Gaming

The Gaming domain provides intents and entities related to managing a ... [Learn more](#)

Not added

HomeAutomation

The Home Automation domain provides intents and entities related to ... [Learn more](#)

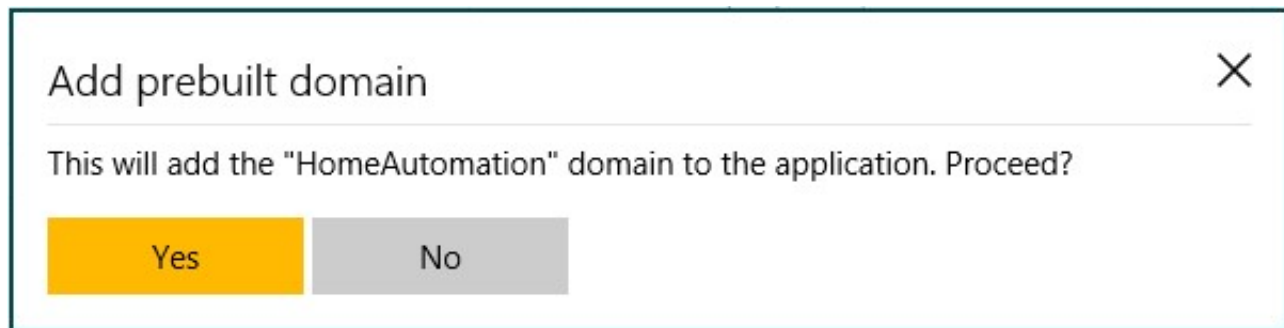
Not added

MovieTickets

The Movie Tickets domain provides intents and entities related to ... [Learn more](#)

Not added

8. Click **Yes** when prompted to add the **"HomeAutomation"** domain to the app.



9. Click on **Intents** in the left-side navigation pane, and you can see that the HomeAutomation domain provides **HomeAutomation.TurnOff**, **HomeAutomation.TurnOn**, and **None** intents in your application. Each intent has sample utterances.

None is an intent provided by all LUIS apps. You use it to handle utterances that don't correspond to functionality your app provides.

Intent Name ↓	Utterances
HomeAutomation.TurnOff	13
HomeAutomation.TurnOn	20
None	4

10. Click on the **HomeAutomation.TurnOff** intent. You can see that the intent contains a list of utterances which are labeled with entities.

Home
Automation
Version: 0.1
Settings
Dashboard
Intents
Entities
Prebuilt domains PREVIEW
Features
Train & Test
Publish App
Back to App list

HomeAutomation.TurnOff

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... [Learn more](#)

Utterances (13) Entities in use (3) Suggested utterances

Type a new utterance & press Enter ...

Save Discard Delete Reassign Intent
Labels view (Ctrl+E): Entities
Search in utterances ...

<input type="checkbox"/>	Utterance text	Predicted Intent
<input type="checkbox"/>	turn [\$HomeAutomation.Operation] [\$HomeAutomation.Device]	Not trained
<input type="checkbox"/>	turn [\$HomeAutomation.Operation] [\$HomeAutomation.Room] lights	Not trained
<input type="checkbox"/>	turn [\$HomeAutomation.Operation] venice lamp	Not trained
<input type="checkbox"/>	[\$HomeAutomation.Room] lamps off please	Not trained
<input type="checkbox"/>	[\$HomeAutomation.Device] [\$HomeAutomation.Operation] please	Not trained

- Click on the **Labels view** and select **tokens**. This shows the text tokens that make up each labeled entity, instead of the name of the entity type.
- If you compare the same utterance in the tokens view and the entities view, you can see that some of the words of each utterance have already been labeled.
- The first utterance is "turn off staircase." The word "off" has been labeled as the type of HomeAutomation.Operation. The word "staircase" has been labeled as the type of "HomeAutomation.Device."

Home
Automation
Version: 0.1
Settings
Dashboard
Intents
Entities
Prebuilt domains PREVIEW
Features
Train & Test
Publish App
Back to App list

HomeAutomation.TurnOff

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... [Learn more](#)

Utterances (13) Entities in use (3) Suggested utterances

Type a new utterance & press Enter ...

Save Discard Delete Reassign Intent
Labels view (Ctrl+E): Tokens
Search in utterances ...

<input type="checkbox"/>	Utterance text	Predicted Intent
<input type="checkbox"/>	turn [off] [staircase]	Not trained
<input type="checkbox"/>	turn [off] [foyer] lights	Not trained
<input type="checkbox"/>	turn [off] venice lamp	Not trained
<input type="checkbox"/>	[living room] lamps off please	Not trained
<input type="checkbox"/>	[fish pond] [off] please	Not trained

- Click **Entities in use**. This shows the entities this app identifies in the utterances.

Entity name	Labeled count
HomeAutomation.Device	Labeled in 9 utterances
HomeAutomation.Operation	Labeled in 6 utterances
HomeAutomation.Room	Labeled in 4 utterances

Train & Test your LUIS App

To validate our app, we should train it. Once we've trained the app, you can test it immediately. We can then publish our app and test the published endpoint in a browser using the generated URL.

1. Click on **Train & Test** in the left-side navigation, then click **Train application**.

2. Type a test utterance like "Turn off the lights" into the Interactive Testing pane, and press Enter.

Turn off the lights

3. The results display the score associated with each intent. Check that the top scoring intent corresponds to the intent you expected for each test utterance.

4. In this example, "Turn off the lights" is correctly identified as the top scoring intent of "HomeAutomation.TurnOff."

The screenshot shows the 'Test your application' page in the Azure AI Studio. The left sidebar has a menu with 'Automation' selected, and 'Publish App' is highlighted under the 'Train & Test' section. The main content area is titled 'Test your application' and includes a 'Train Application' button. Below this, there are tabs for 'Interactive Testing' and 'Batch Testing'. In the 'Interactive Testing' tab, there is a text input field with the value 'turn off the lights'. To the right of the input field, there is a 'Labels view (Ctrl+E)' dropdown menu set to 'Entities' and a 'Reset console' link. The 'Current version results' section shows the 'Top scoring intent' as 'HomeAutomation.TurnOff (0.99)' and 'Other intents' as 'HomeAutomation.TurnOn (0.07)' and 'None (0.07)'.

5. Select **Publish App** from the left-side menu and click the **Publish** button.

The screenshot shows the 'Publish' page in the Azure AI Studio. The left sidebar has a menu with 'Automation' selected, and 'Publish App' is highlighted under the 'Train & Test' section. The main content area is titled 'Publish' and includes a 'Published version' slot, a 'Published date', and a 'Publish to' dropdown menu set to 'Production'. There are checkboxes for 'Enable verbose endpoint response' and 'Enable Bing spell checker'. A 'Publish to production slot' button is highlighted with a red box. Below this, there is a 'Resources and Keys' section with an 'Add Key' button. The 'Timezone' dropdown menu is set to '(GMT) Western Europe Time, London, Lisbon, Casablanca'.

6. After you've successfully published, you can use the Endpoint URL that the **Publish App** page displays.

