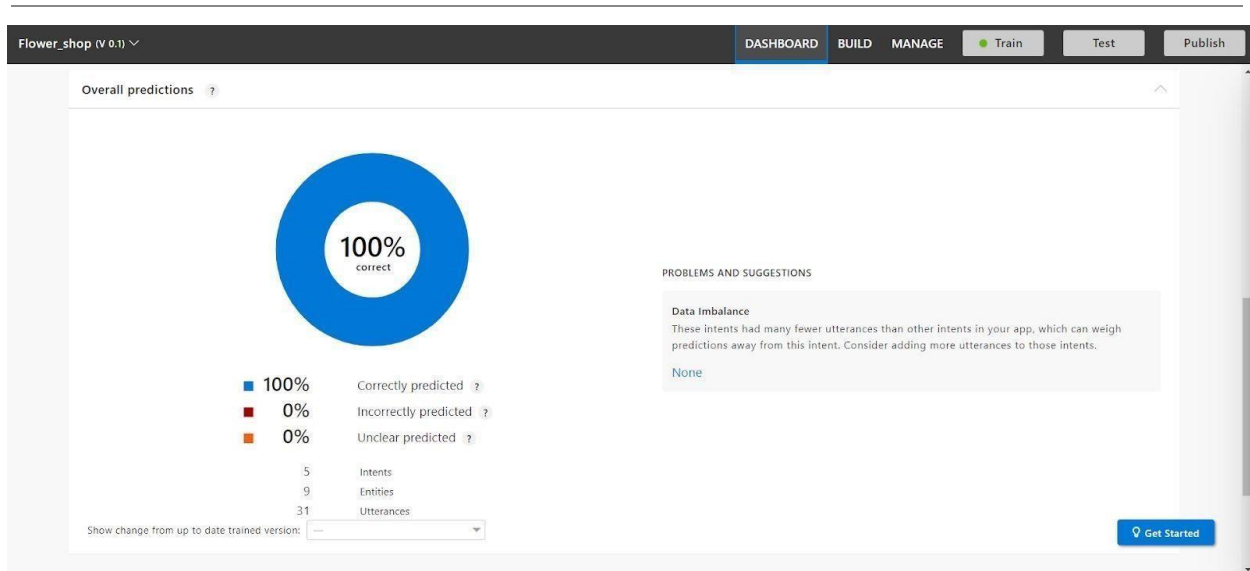


## Task 7.1: Natural language processing (LUIS)



### Test

Start over

Batch testing panel

Type a test utterance

hello

Greetings (0.976)

Inspect

what flower should i buy for valentine

informationrequest (0.938)

Inspect

cancel my order

cancelorder (0.848)

Inspect

order rose from martha

orderflower (0.900)

Inspect

## Task 7.1: Natural language processing (LUIS)

The screenshot shows the 'MANAGE' tab of the Azure LUIS portal for an application named 'Flower\_shop (v 0.1)'. The left sidebar contains a navigation menu with 'Application Settings' expanded, showing 'Application Information', 'Azure Resources' (selected), 'Publish settings', 'Versions', and 'Collaborators'. The main content area is titled 'Azure Resources' and includes an introductory paragraph about LUIS resources. Below this, there is a section for 'Prediction resources' with an 'Add prediction resource' button. A 'Starter\_Key' section provides the following details:

Region:	westus
Primary key:	537fbb24049b40358c7fbc922e1c7172
Endpoint Url:	https://westus.api.cognitive.microsoft.com/luis/api/v2.0
Pricing:	F0 (Free)
Example Query:	https://westus.api.cognitive.microsoft.com/luis/v2.0/apps/ff2f5ea4-c766-43d4-98fc-d0c08ac4aac6?verbose=true&timeZoneOffset=0&subscription-key=537fbb24049b40358c7fbc922e1c7172&q=

Below the example query is a link to 'Change query parameters'. A 'Get Started' button is located in the bottom right corner of the main content area.

## Task 7.1: Natural language processing (LUIS)

Flower\_shop (V0.1) ▾

DASHBOARDBUILDMANAGETrainPublishTest

^ App Assets

Intents

Entities

Prebuilt Domains

^ Improve app performance

Review endpoint utterances

Features

Patterns

orderflower

Machine learning features

+ Add feature

Examples

✓ Confirm all entities Move to Delete

View options

Example Utterance	Score	Nearest intent	Difference
Type an example of what a user might say and hit Enter.			
good morning can u get me some daisies	0.917	0.04 Greetings	0.88
i want to order rose	0.943	0.04 cancelor...	0.90
order rose from martha	0.918	0.03 cancelor...	0.89
can i get some rose send it to my mom 's place for mother 's day	0.969	0.03 informat...	0.94

Get Started

Flower\_shop (V0.1) ▾

DASHBOARDBUILDMANAGETrainPublishTest

^ App Assets

Intents

Entities

Prebuilt Domains

^ Improve app performance

Review endpoint utterances

Features

Patterns

cancelorder

Machine learning features

+ Add feature

Examples

✓ Confirm all entities Move to Delete

View options

Example Utterance	Score	Nearest intent	Difference
Type an example of what a user might say and hit Enter.			
remove roses from martha 's i ordered for christmas	0.868	0.09 orderflo...	0.78
i dont want to buy roses	0.932	0.05 orderflo...	0.88
cancel my order	0.837	0.10 orderflo...	0.74
i dont want it	0.906	0.05 Greetings	0.86

Get Started

Predictions loaded 12:15 AM

# Task 7.1: Natural language processing (LUIS)

Flower\_shop (V0.1)

DASHBOARDBUILDMANAGETrainPublishTest

App Assets

Intents

Entities

Prebuilt Domains

Improve app performance

informationrequest

Machine learning features

Examples

Confirm all entitiesMove toDelete

View options

Example Utterance

Score

Nearest intent

Difference

type an example of what a user might say and hit Enter.

0.891

0.06 Greetings

0.83

what is lilly

0.042

0.03 orderflo...

0.91

which flower should i buy for valentine

0.950

0.02 Greetings

0.93

show me some winter flower types ?

0.938

0.02 orderflo...

0.92

Get Started

Flower\_shop (V0.1)

DASHBOARDBUILDMANAGETrain

App Assets

Intents

Entities

Prebuilt Domains

Improve app performance

flower type

List

List items

Roles

List entities represent a fixed, closed set of related words along with their synonyms. List entities are extracted by an exact text match and can be resolved to a normalized value. Learn more about List entities.

Import valuesDelete

Normalized Value ↑

Synonyms

Type in a list item ...

daisies

daisy

Type in value ...

iris

flowers

Type in value ...

lilies

Type in value ...

roses

rose

Type in value ...

tulips

Type in value ...

# Task 7.1: Natural language processing (LUIS)

Flower\_shop (v0.1) ▾


DASHBOARDBUILDMANAGETrainPublish

^ App Assets

- Intents
- Entities
- Prebuilt Domains

^ Improve app performance



- Review endpoint utterances
- Features
- Patterns

occasion 


List

List itemsRoles

List entities represent a fixed, closed set of related words along with their synonyms. List entities are extracted by an exact text match and can be resolved to a normalized value. [Learn more about List entities.](#)

 Import values  Delete

Normalized Value ↑	Synonyms
Type in a list item ...	
anniversary	Type in value ...
birthday	Type in value ...
get well	Type in value ...
sympathy	Type in value ...

 Get Started

Flower\_shop (v0.1) ▾


DASHBOARDBUILDMANAGETrainPublishTest






^ App Assets


- Intents
- Entities
- Prebuilt Domains

^ Improve app performance


- Review endpoint utterances
- Features
- Patterns

Entities 

 Create  Add prebuilt entity  Add prebuilt domain entity  Rename  Delete



Name ↑	Type
address	Machine learned
cancel	Machine learned
flower type	List
holiday	List
occasion	List
order	Machine learned
place name	Machine learned
question	Machine learned
season	List

 Get Started

<https://www.luis.ai/conversations/applications/f72f5ea4-c766-43d4-989c-d0c08ac4aac5/versions/0.1/build/entities>

## Task 7.1: Natural language processing (LUIS)

Flower\_shop (v0.1) ▾

DASHBOARDBUILDMANAGETrainPublishTest

^ App Assets

Intents

Entities

Prebuilt Domains

^ Improve app performance

Review endpoint utterances

Features

Patterns

Intents ?

+ Create + Add prebuilt domain intent Rename Delete

Search intents ...

Name 1	Examples	Features
cancelorder	4	+ Add feature
Greetings	13	+ Add feature
informationrequest	6	+ Add feature
None	0	+ Add feature
orderflower	11	+ Add feature

Get Started

luis.ai/conversations/applications/9f2f5ea4-c766-43d4-98fc-d0308ac4aac6/versions/0.1/\_/int...

## Task 7.1: Natural language processing (LUIS)

```
{
  "query": "order rose from martha",
  "topScoringIntent": {
    "intent": "orderflower",
    "score": 0.8997452
  },
  "intents": [
    {
      "intent": "orderflower",
      "score": 0.8997452
    },
    {
      "intent": "cancelorder",
      "score": 0.0503666177
    },
    {
      "intent": "Greetings",
      "score": 0.0228476878
    },
    {
      "intent": "informationrequest",
      "score": 0.00656237965
    },
    {
      "intent": "None",
      "score": 0.003881172
    }
  ],
  "entities": [
    {
      "entity": "order",
      "type": "order",
      "startIndex": 0,
      "endIndex": 4,
      "score": 0.981375158
    },
    {
      "entity": "martha",
      "type": "place name",
      "startIndex": 16,
      "endIndex": 21,
      "score": 0.9830794
    },
    {
      "entity": "rose",
      "type": "flower type",
      "startIndex": 6,
      "endIndex": 10
    }
  ]
}
```

The utterances used:

## Task 7.1: Natural language processing (LUIS)

1. I want daisy for thanksgiving from my bouquet send to friend's place
2. Order spring flowers
3. buy flowers for my anniversary on valentine
4. Send some summer flowers from ben ' s to home for Easter
5. Book me roses for birthday
6. I would like to order some lilies for valentine from Martha
7. Please order flowers
8. can I get some rose send it to my mom's place for mother ' s day?
9. I don't want to buy roses
10. cancel my order
11. I don't want it
12. Remove roses from Martha's I ordered for Christmas
13. Which flower is best for fall?
14. show me some winter flower types?
15. Is rose a summer flower?
16. What type of flowers should I buy for spring?
17. I want to buy rose.
18. Hello, I came to buy some lilies.
19. What kind of flowers do you sell?
20. Can u send some rose flowers for birthday?
21. I would like to buy some flowers.
22. I need flowers for Christmas
23. I want to send some rose for my anniversary.
24. Hello how are you.
25. Hi, I want to buy flowers from Martha
26. Cancel the order I want to send to home.
27. Do u have summer flowers?
28. I want to order lilies for my friend.
29. I don't want to order anymore.
30. Get me some roses and lilies for home.

Intents:

1. Cancelorder
2. Greetings
3. Informationrequest
4. Orderflower

Entities:

1. Address



## Task 7.1: Natural language processing (LUIS)

2. Cancel
3. Flower type
4. Holiday
5. Occasion
6. Order
7. Place name
8. Question
9. season

Example query: [https://westus.api.cognitive.microsoft.com/luis/v2.0/apps/ff2f5ea4-c766-43d4-98fcd0c08ac4aac6?staging=true&spellCheck=true&bing-spell-checksubscriptionkey=YOUR\\_BING\\_KEY\\_HERE&verbose=true&timezoneOffset=360&subscriptionkey=537fbb24049b40358c7fbc922e1c7172&q=](https://westus.api.cognitive.microsoft.com/luis/v2.0/apps/ff2f5ea4-c766-43d4-98fcd0c08ac4aac6?staging=true&spellCheck=true&bing-spell-checksubscriptionkey=YOUR_BING_KEY_HERE&verbose=true&timezoneOffset=360&subscriptionkey=537fbb24049b40358c7fbc922e1c7172&q=)

The intent of the system is to greet, order, cancel, request information of flowers from the flower shop. The entities shown above include all the different instances of a user with respect to the flower shop. The utterances given are simple sentences that a user might make use of in his conversation with respect to the flower shop.