

Engage **Cortana** in Conversation using the Cortana Skills Kit

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Philly.NET

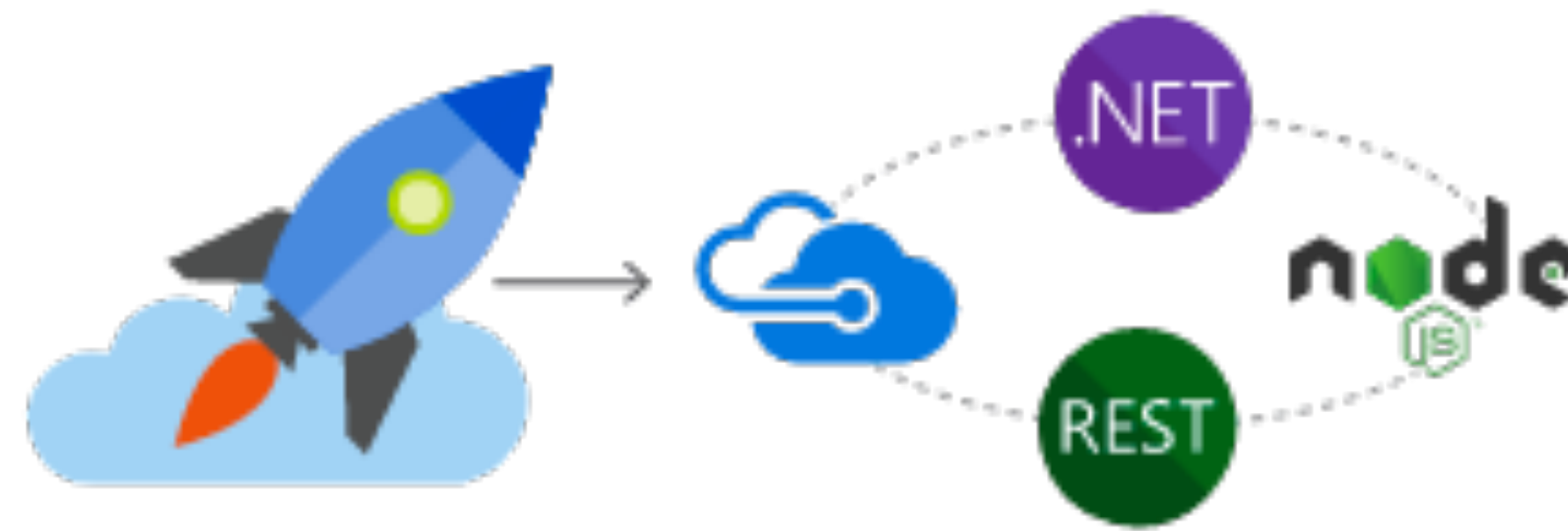




LUIS.ai



Hey Cortana



Microsoft Bot Framework



Chat

Give me a random number

You

61

Random Number

between 1 and 10

You

The range is now between 1 and 10.

Random Number

5

Random Number

set the lower limit to 0

You

The range is now between 0 and 10.

Random Number

set the max to 31

You

number

You

6

Random Number at 9:06:32 PM



Type your message...

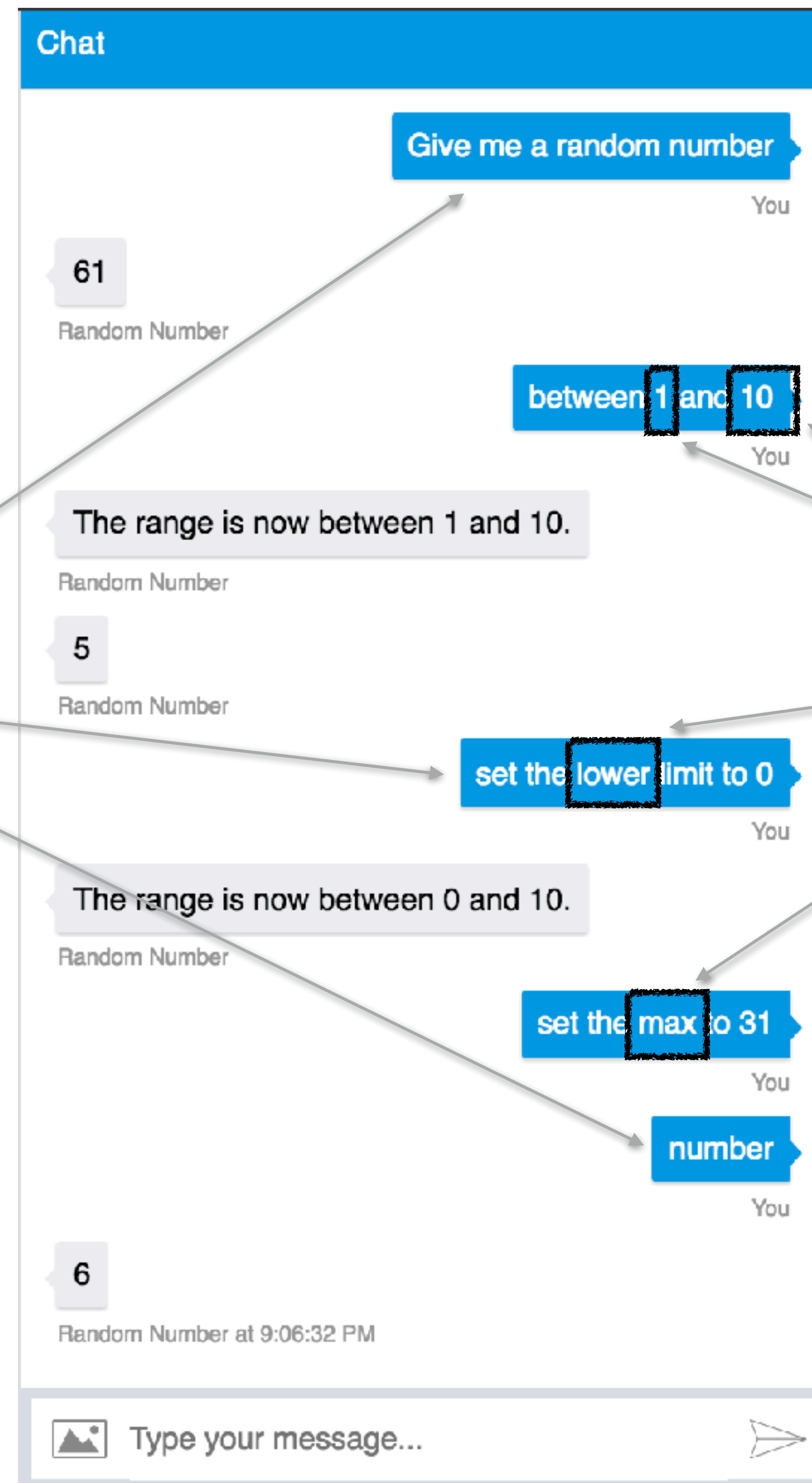


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Utterances

Intents

1. Generate a Random Number
2. Set the Range Limits
3. Get the Range Limits
4. *Get Help*



Entities

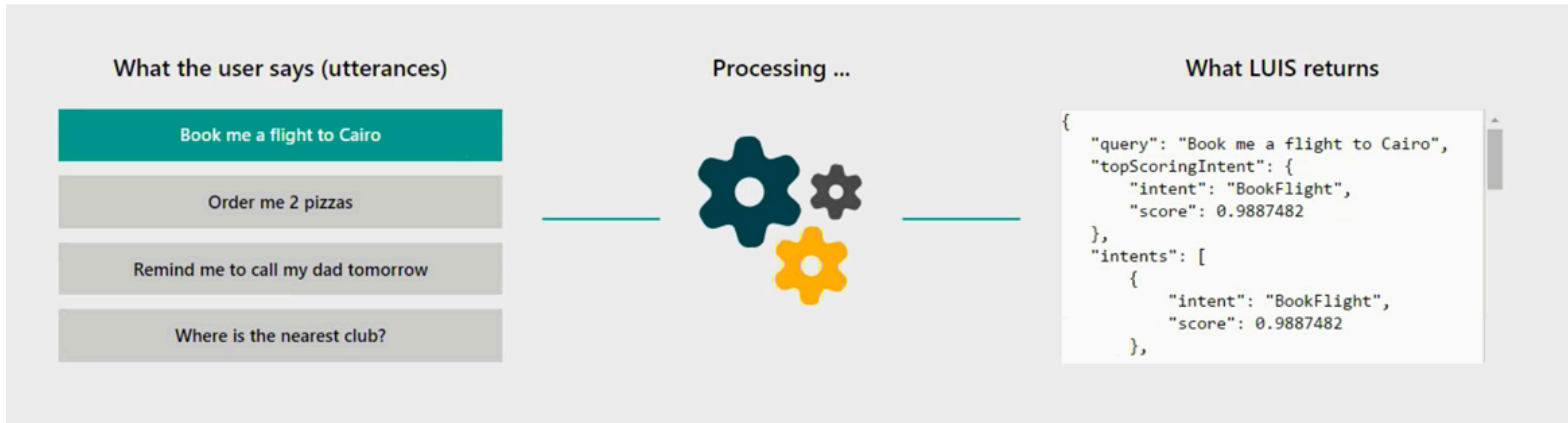


Build and Train a LUIS App

1. Add entities
2. Add intents
3. Add utterances
4. Improve performance using features
5. Train and test
6. Use active learning
7. Publish



Let's Build a Language Model



<https://docs.microsoft.com/en-us/azure/cognitive-services/luis/home>



Entities

- Key data in the application's domain
- Represents a class including a collection of similar objects (places, things, people, events or concepts)
- We'll build two entities for our app - who knows what they are?
 - ✓ boundary (simple)
 - ✓ number (builtin.number)





Phrases

Features

Use these advanced features to improve performance and avoid mistakes in identifying and interpreting utterances ...
[Learn more](#)

Phrase list features (2/10) Pattern features (0/10)

Add phrase list

Active	Phrase list ↓	Mode	
<input checked="" type="checkbox"/>	lower: [lower,bottom,min,minimum,smallest]	Exchangeable	
<input checked="" type="checkbox"/>	upper: [upper,top,max,maximum,largest,biggest]	Exchangeable	

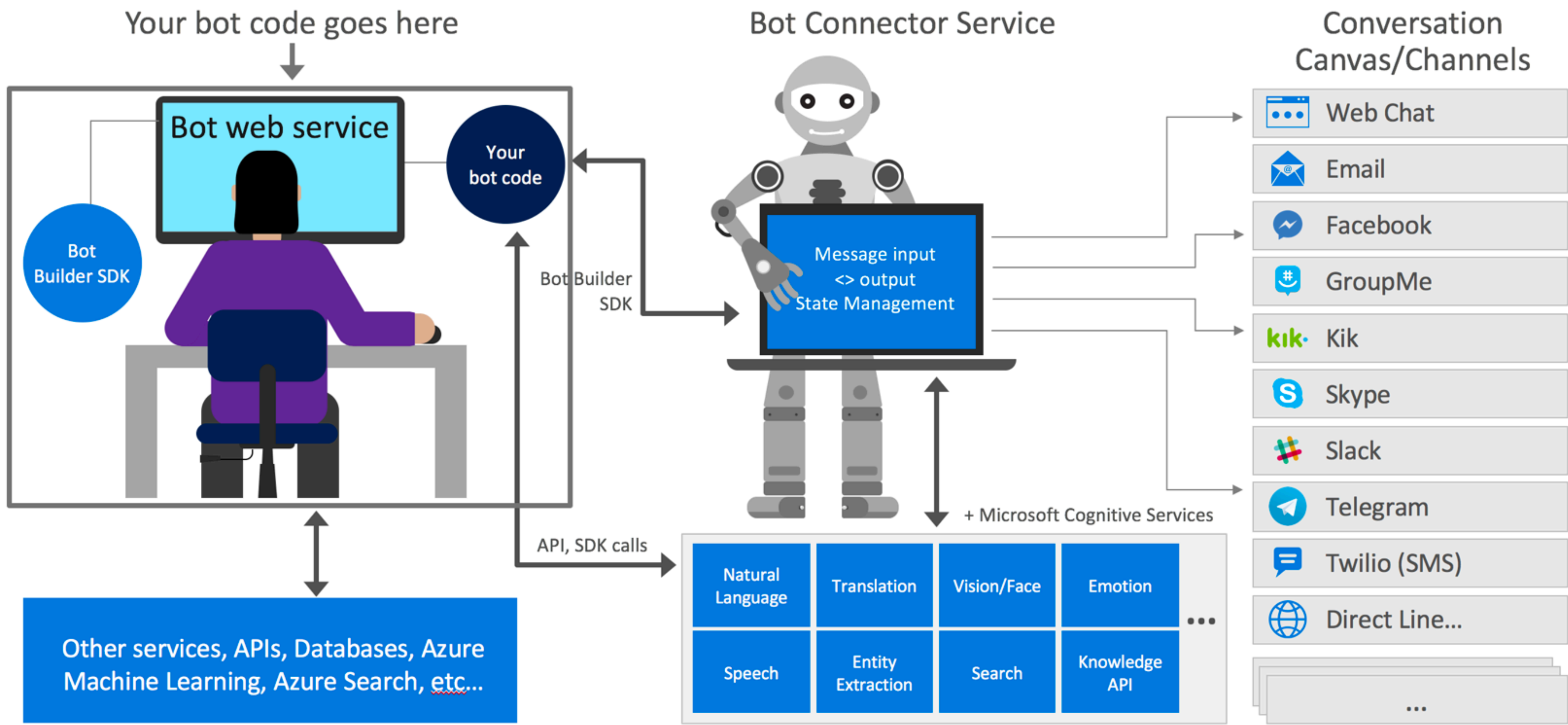


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Intents & Utterances

- Understand requests and respond to them
- One free one out of the box - None Intent
- What are the Intents we imagine in the model?
 - ✓ RandomNumber - give me a random number
 - ✓ SetRange - set the range between 1 and 6
 - ✓ RangeQuery - what is the upper limit?





<https://docs.microsoft.com/en-us/bot-framework/overview-how-bot-framework-works>

○ Cortana



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Build-a-bot

- Log in to <https://portal.azure.com>
- Create a new Data + Analytics —> Bot Service
- Test It Out!
- Use your favorite editor to debug, make a change
 - Ensure to set “NODE_ENV=development” if needed
 - Use the [botframework-emulator](#) if running locally



Configure Continuous Integration

- It takes a while to create download (node_modules). Be patient.
- It is not zipped with top-level directory so need to create it first!
- May want to roll your own .gitignore - very limited
- Create github.com repo
- Sync the code:

```
$ git clone https://github.com/rickwargo/random-number-bot <repo-name>  
$ cd <repo-name>  
$ unzip ~/Downloads/<repo-name>.zip  
$ git add .  
$ git commit -m "Initial commit"  
$ git remote add origin https://github.com/<your-acct>/<repo-name>  
$ git push -u origin master
```
- Set up integration source (Choose Github and repo name)



Integrate LUIS into Bot

- Update code
- Set Run/Debug environment in GUI
- Run/Debug Bot locally
- Update Bot Settings Environment
 - Add LuisAppId, LuisAPIKey (unless selected LUIS template)



Add to Cortana

- Add a Cortana Channel
- Wait for it to get configured
- Manage it in the Cortana dashboard
 - Enable debug mode



It's a Brand New World

- 53 Published Cortana Skills as of 5/16/17
- Many of the skills are relatively simple
- Let me know if you need help or publish a skill!



Contact Me



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