Developing Chatbots for Mycroft and his Virtual Friends

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Meet Mycroft
Our new robot overlord
Origin Story
Origin Story
Let’s define some terms....
Wake Word

Hey Mycroft,
Utterance

...who is going to win the game between the St. Louis Cardinals and the Chicago Cubs?
Intent

Utterance

Code
- Chatbots

- Web service
Tools for building Mycroft Skills
Linux Demo
Mark I Deployment

- SSH
- GIT
- Some files and dirs in different spots
- All text interface
- Test how utterances are heard
- Test how responses sound
So that was native development as intended…

But what if want to implement the same skill… for a different tech?
Bot Framework Chatbot

Utterance

Response
Microsoft Bot Framework Chatbot

- Define Intents with Language Understanding portal
- Implement intent handler in code
- What does that code look like?
What changes in our Mycroft code?

- Use a Fallback skill
- Fallback skill uses request library to make REST calls to chatbot web service
- What does that code look like?
Mycroft’s friend Alexa

- **Native development**
  - Define invocation name in Alexa Console
  - Define intents in Alexa Console
  - Code AWS Lambda function
Wake Word

Alexa,
Skill invocation

ask the decider
Intent

to decide
Utterance

...who is going to win the game between the St. Louis Cardinals and the Chicago Cubs?
Bot Framework Chatbot

Utterance

Response
What’s that code look like?

- Alexa4Azure
  - Plus Microsoft Bot Framework Direct Line API

- Calls exact same bot framework code as we saw a few slides ago

- What does that code look like?
A Demo of Virtual Friends
Bot Framework Chatbot

Utterance

Response
How will you get involved?

- Support Mark II Kickstarter

- Invest in Mycroft AI company
  - [https://www.startengine.com/mycroft-ai](https://www.startengine.com/mycroft-ai)

- Develop Mycroft skills
  - [https://github.com/MycroftAI/mycroft-skills](https://github.com/MycroftAI/mycroft-skills)
Or maybe you’d prefer…

- Develop Alexa skills: [https://developer.amazon.com/alexa-skills-kit](https://developer.amazon.com/alexa-skills-kit)


- Write a webservice around a different bot tech
Resources

- Mycroft.ai: [https://mycroft.ai/](https://mycroft.ai/)
- Azure4Alexa code: [https://github.com/tamhinsf/Azure4Alexa](https://github.com/tamhinsf/Azure4Alexa)
- My code:
  - Mycroft native skill: [https://github.com/lhannon/sftsrc-decide](https://github.com/lhannon/sftsrc-decide)
  - Mycroft fallback skill: [https://github.com/lhannon/mycroftfallbackdecideskill](https://github.com/lhannon/mycroftfallbackdecideskill)
  - Chatbot web service: [https://github.com/lhannon/OSCONDirectLineBot](https://github.com/lhannon/OSCONDirectLineBot)
  - Azure4Alexa modified: [https://github.com/lhannon/OSCONAzure4Alexa](https://github.com/lhannon/OSCONAzure4Alexa)
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