developer summit

Going Serverless in your Watson Assistant-Powered Chatbot

Anam Mahmood
Developer Advocate, UAE

Khalil Faraj
Developer Advocate, UAE

Powered by IBM

Get Started

- Sign up/Log in to your IBM Cloud Account: https://ibm.biz/DeveloperSummit
- Follow along for the hands-on: ibm.biz/Serverless-Watson-Assistant
- Survey: https://docs.google.com/forms/d/e/1FAIpQLSc72c2ABrF1uiB0OLWYwt_sbDNeA9YEBAxEknJl-L6ik7cfQQ/viewform

What is Call for Code?

Call for Code invites developers and problem solvers around the world to **build and contribute to sustainable Open-Source software solutions, that address social and humanitarian issues**, while ensuring solutions are deployed to make a **real difference**.

DCC DAVID CLARK CAUSE
Call for Code Creator

IBM
Call for Code Founding Partner

UNITED NATIONS HUMAN RIGHTS OFFICE OF THE HIGH COMMISSIONER
Call for Code Charitable Partner

THE LINUX FOUNDATION
Call for Code Program Affiliate

Call for Code has become the only global, **always-on** tech for good Open-Source platform to deploy & scale top projects through a host of offerings:

Why join?

- Skill Building
- Social Good
- Ideas to Action
- Community (400K+ developers, 179 nations, 15K+ applications)

Sponsors

ARROW
INGRAM MICRO

Awards

200K USD for Global Challenge winner
10K USD for University Challenge winner
5K USD for Middle East and Africa region winner

Get Started Here:
https://ibm.biz/DeveloperSummit

Agenda

Serverless Computing? 04
Serverless Handles DevOps 05
Serverless Use Cases 06
IBM Cloud Functions 07

IBM Watson Assistant? 08
Webhook 09

Hands-On 10

Useful Links 11

Serverless Computing

- Does not mean no servers!
- Servers are managed by cloud provider
- Pricing is calculated based on Pay-as-you-go

Get Started Here:
https://ibm.biz/DeveloperSummit

https://www.flaticon.com/free-icon/cloud-computing_291553

Serverless handles OPS

Serverless takes out ops and provides:

- Scaling
- Low latency
- High availability
- Multi-region
- Monitoring
- Logging
- Security

Get Started Here: **https://ibm.biz/DeveloperSummit**

Serverless Use Cases

Here are some of use cases for serverless but not limited to:

- Batch jobs
- Mobile backends (Rest APIs)
- Chat bots
- IoT Sensors
- Multimedia processing
- Database changes

Get Started Here:
https://ibm.biz/DeveloperSummit

https://mydata2018.org/programme/cases/

IBM Cloud Functions

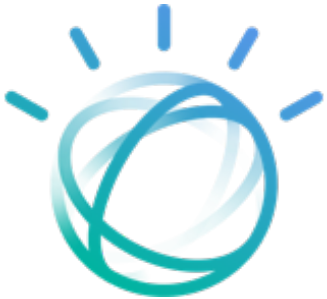
- FaaS programming platform
- Accelerate development
- Code reuse, simplifying migration
- Leverage the benefits of cognitive services
- Some supported languages are: Node.js, Python, Ruby, PHP, Ruby, Swift

Get Started Here:
https://ibm.biz/DeveloperSummit

IBM Watson Assistant?

- Build a solution that understands natural-language input
- Uses machine learning to respond to customers
- Simulates a conversation between humans.

Get Started Here:
https://ibm.biz/DeveloperSummit



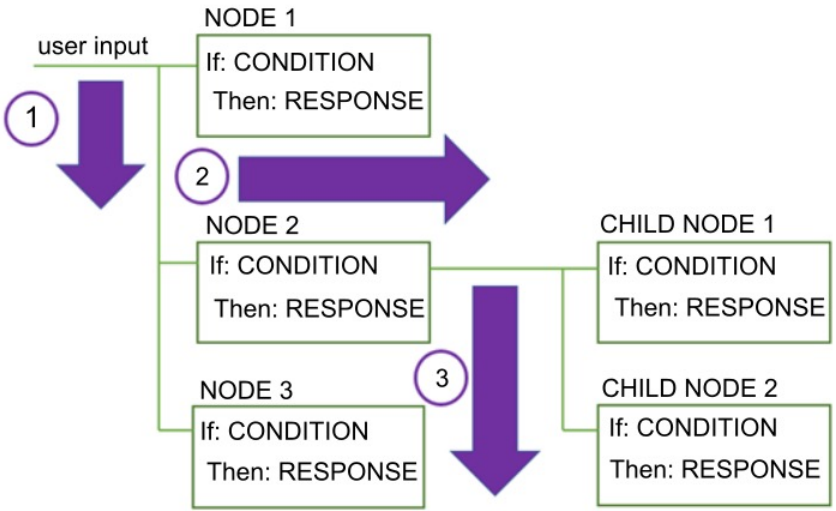
Watson Assistant Main Components

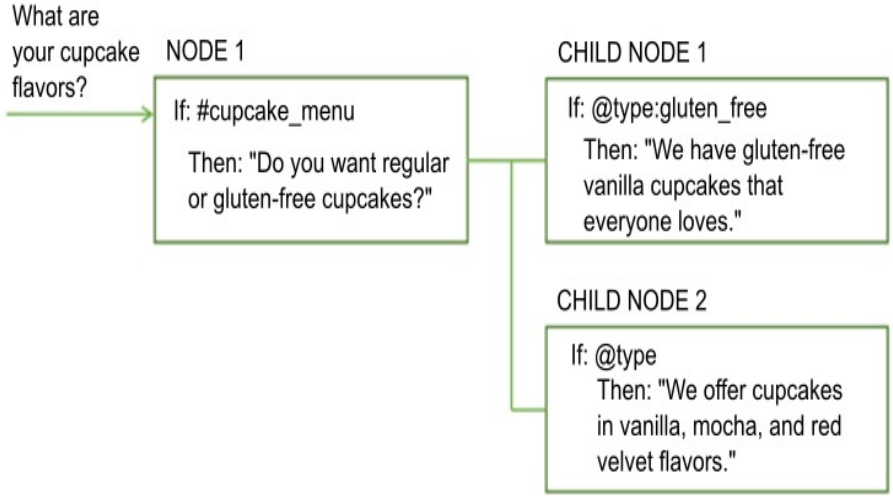
Get Started Here:
https://ibm.biz/DeveloperSummit

- **Intents**: What the user intends to communicate
- **Entity**: Words & objects that give more context to the user's questions
- **Dialog**: Conversation flow based on the intents & entities detected
- **Slots**: Allow you to collect several pieces of information in one node
- **Context Variables**: Values to define context across nodes
- **Jump**: Skipping to different nodes

Watson Assistant Example

Get Started Here:
https://ibm.biz/DeveloperSummit



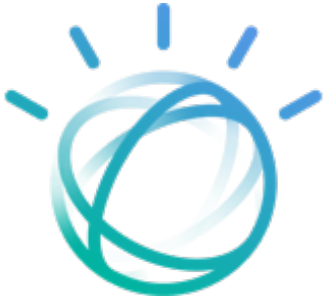


 © 2021 IBM Corporation

Watson Assistant Webhook

- Allows you to call out to an external program (in our case a function)
- Triggered when the assistant processes a node that has a webhook enabled

Get Started Here:
https://ibm.biz/DeveloperSummit



+

Workshop

Get Started Here:
https://ibm.biz/DeveloperSummit

- Build a virtual assistant for a telecom industry
- Use Cloud Functions to read different mobile plans stored in COS as a CSV file
- Integrate the assistant with cloud functions through a webhook

Hands On

- Sign up/Log in to your IBM Cloud Account: https://ibm.biz/DeveloperSummit

- Follow along for the hands-on: ibm.biz/Serverless-Watson-Assistant

Useful Links

Learn – develop – connect

Get Started Here (https://ibm.biz/DeveloperSummit)
Hands-On Lab (ibm.biz/Serverless-Watson-Assistant)
IBM Developer (https://developer.ibm.com/)
Meetup (https://www.meetup.com/IBM-Cloud-MEA/)

Thank You

Khalil Faraj

Developer Advocate

—

khalil.faraj@ibm.com

Anam Mahmood

Developer Advocate

—

anam.mahmood@ibm.com