

IBM Watson Assistant

and some real world applications of AI

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~~Chatbots~~ *Virtual Assistants* were
built to answer **frequently asked**
questions

Hello bot, **where is** the
nearest place that I can
order a pizza from?

More complicated use cases
involve interacting with users
through some **direct**
messaging channels



1. **Scan** the QR code or **go to** <https://ibm.biz/tweetmidas>
2. **Reply to the tweet** and wait for Midas to answer back.
3. When answered, **click** link to **Direct Message** with Midy.
4. **Answer** survey questions about the '**My Data**' approach.



Open Tech **AI**
Workshop
Helsinki

 + IBM Innovation Exchange

 MIDAS EU Project Finland
@MIDASProject_FI


Meaningful Integration of Data, Analytics and Services



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Typically, it's:

- Hello bot, can I order a pizza?

What if we did it in reverse?

Hi, I would like to order
a pizza for my human.



Hello this is pizza

with Watson Assistant



You said: *hello how can I help you*

Bot replied: *Hi Peter, I'd like to get some pizza.*

Conversation Basics

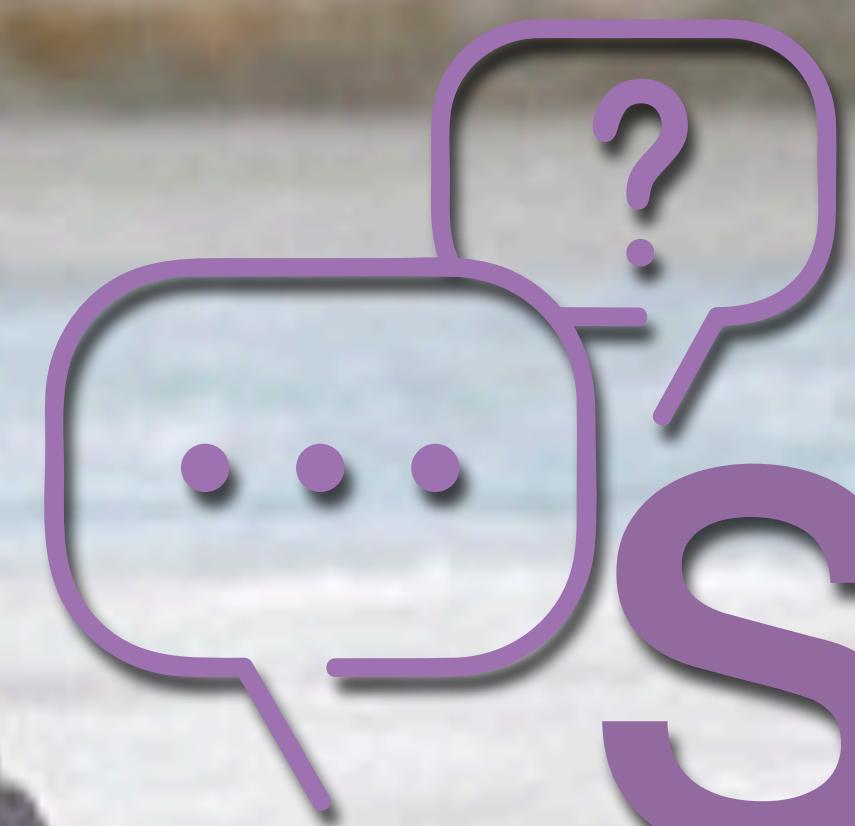
"PERSONAL ASSISTANT"



**I CONTROL EVERYONE
AND EVERYTHING**

Assistant

- Assistant is the workspace container. It has skills that you can use to do things.
- It has integrations with 3rd-party systems, like Fb Messenger or Slack
- You can share it with others through a link.

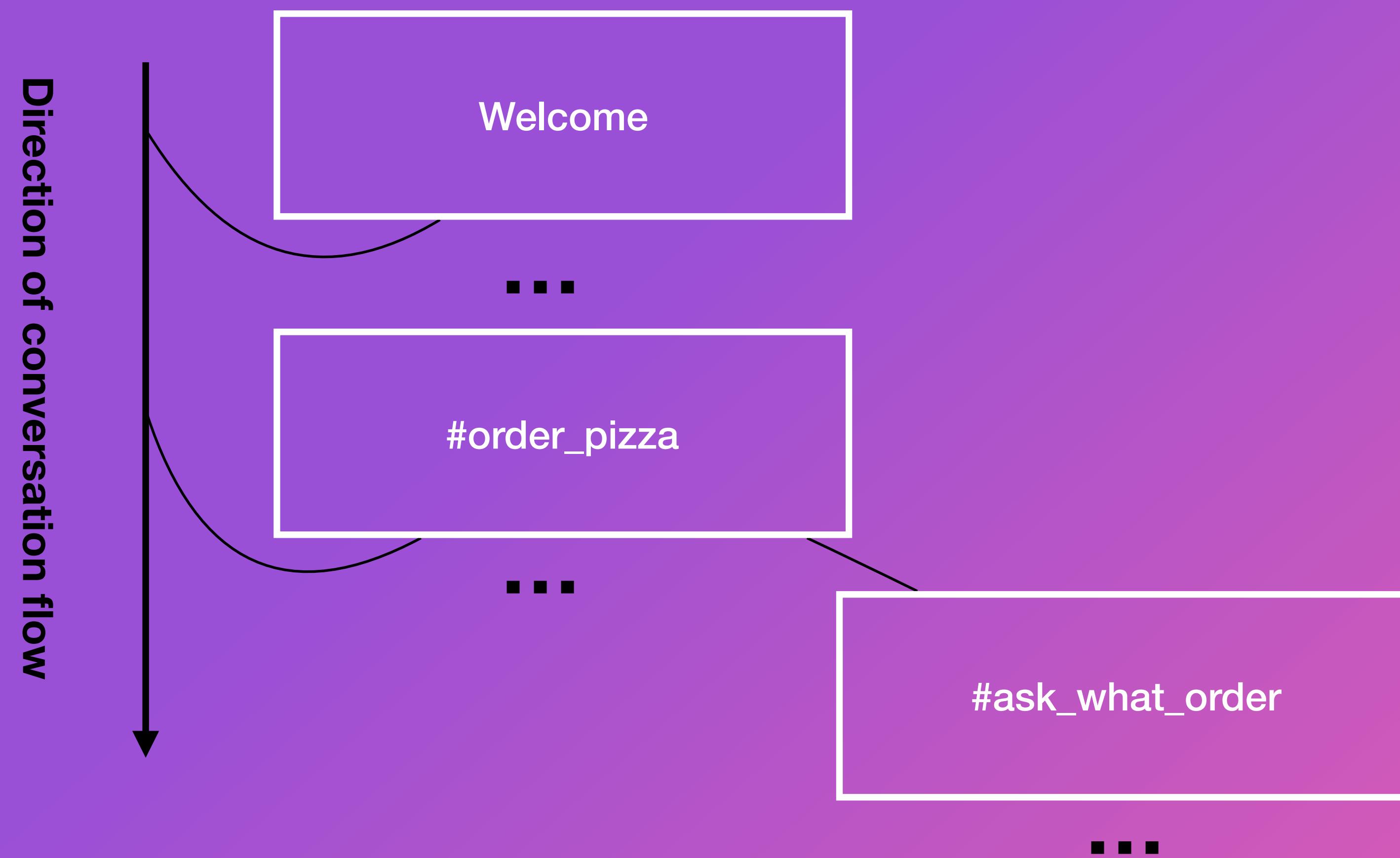


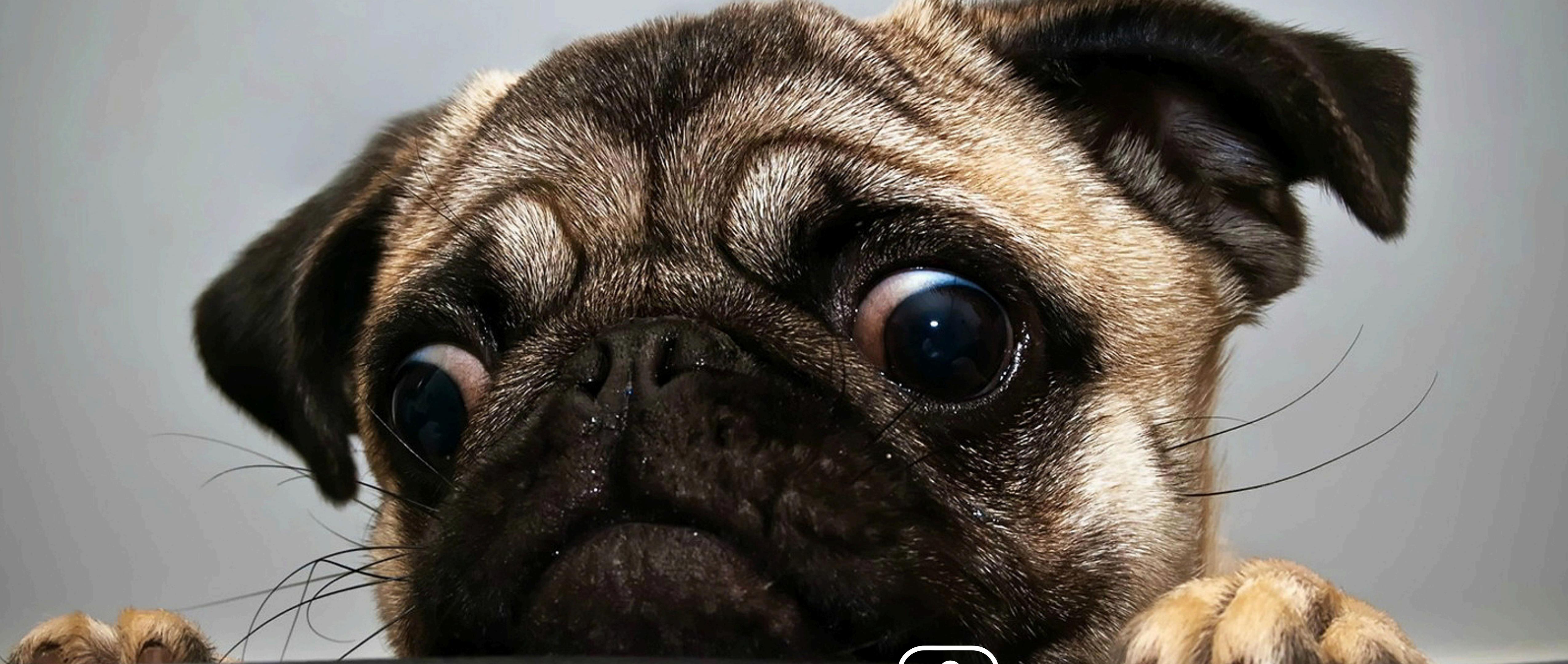
Skills

Skills

- “A *dialog skill* is a container for the artefacts that define the flow of a conversation that your assistant can have with your customers”
- This is where you put your dialogs and all the logical parts

Dialog flow





#Intents

#Intents

- What do you want to do? - **#Order_pizza**
- Fundamental building blocks of chatbot conversations
- Options available at the current scope
- System Intents **#Welcome**, **#anything_else**,
#General_Greetings, **#General_Ending**, etc.

Content Catalog

- **Pre-trained existing intents.** These intents are trained on common questions that users may ask.
- This is where you can get your **#General_Greetings**, **#Store_locations**, **#thank-you**, eCommerce questions about payment, billing, jokes, etc.

Add intent



Intent (10) ▼

#General_About_You

#General_Agent_Capabilities

#General_Connect_to_Agent

#General_Ending

#General_Greetings

#General_Human_or_Bot

#General_Jokes

#General_Negative_Feedback

#General_Positive_Feedback

#General_Security_Assurance

[Intents](#)[Entities](#)[Dialog](#)[Content Catalog](#)

Get started more quickly by adding existing intents from the content catalog. These intents are trained on common questions that users may ask.

Category	Description	Intents	
Banking	Basic transactions for a banking use case.	13	 Add to skill
Bot Control	Functions that allow navigation within a conversation.	9	 Add to skill
Customer Care	Understand and assist customers with information about themselves and your business.	18	 Add to skill
eCommerce	Payment, billing, and basic management tasks for orders.	14	 Add to skill
General	General conversation topics most users ask.	10	 Add to skill
Insurance	Issues related to insurance policies and claims.	12	 Add to skill
Mortgage	Get access to an entire mortgage AI system--including search integration, speech models, and more--for free: ibm.biz/mortgage	20	 Add to skill
Telco	Questions and issues related to a user's telephony service, device, and plan.	21	 Add to skill
Utilities	Help a user with utility emergencies and their utility service.	10	 Add to skill



@Entities

@Entities

- "Things that are"
- **User generated entities**
 - List of favourite animals, multiple choice answers, gender
- **System entities** (i.e. @sys-number)
 - Numbers, dates, currency, location (BETA), person (BETA)



WHAT IF IT TOLD YOU

I NEEDED SOME CONTEXT

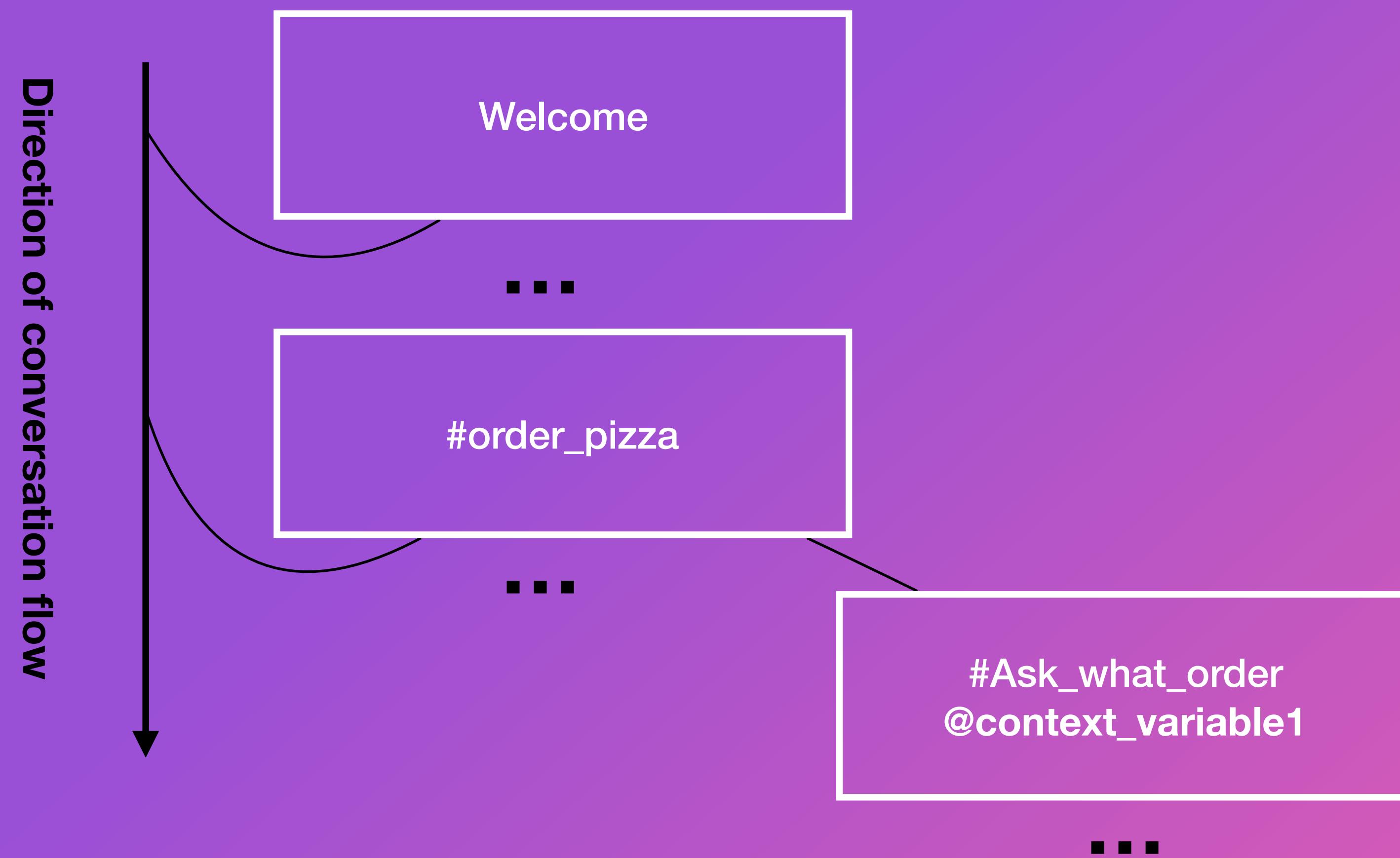
makeameme.org



Context

- **Context is important to direct the conversation**
 - Set through user's intents
 - **Context variables** (\$type_of_pizza)
 - Can be passed on deep into the conversation

Dialog flow



Let's build something!



Order a pizza bot



Slots

- If you need all the information in a single **NODE**.
- Sample restaurant **#reservation**:
 - **number of guests**
 - **what day**
 - **what time**
- Useful system entities:
 - @sys-number, @sys-date, @sys-time

Plug-ins & Integrations

- Available SDKs for:
Android / Java / Node.js / Python / Ruby / .NET /
OpenWhisk / Salesforce / Swift / Unity
- Facebook Messenger, Slack, etc.

Useful links

- **Conversation Street demo repo**
<https://github.com/piotrekmt/conversation-street>
- **Official Watson Github (node-sdk)**
<https://github.com/watson-developer-cloud/node-sdk>
- **Watson Assistant Documentation**
<https://cloud.ibm.com/docs/services/assistant/getting-started.html#getting-started>
- **Facebook Messenger integration**
<https://developer.ibm.com/videos/how-to-integrate-watson-assistant-with-facebook-messenger>



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