

ORACLE®

# Oracle Digital Assistant

## The Complete Training

### Conversation Designer

# Safe Harbor Statement

The following is intended to outline our general product direction. It is intended for information purposes only, and may not be incorporated into any contract. It is not a commitment to deliver any material, code, or functionality, and should not be relied upon in making purchasing decisions. The development, release, and timing of any features or functionality described for Oracle's products remains at the sole discretion of Oracle.

# Topic agenda

- 1 ➤ Challenge of conversation design
- 2 ➤ Getting familiar with the conversation designer
- 3 ➤ Things the bot can say
- 4 ➤ Things the user can say
- 5 ➤ What happens under the covers
- 6 ➤ Recommendations and best practices

# Topic agenda

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# Challenge of conversation design

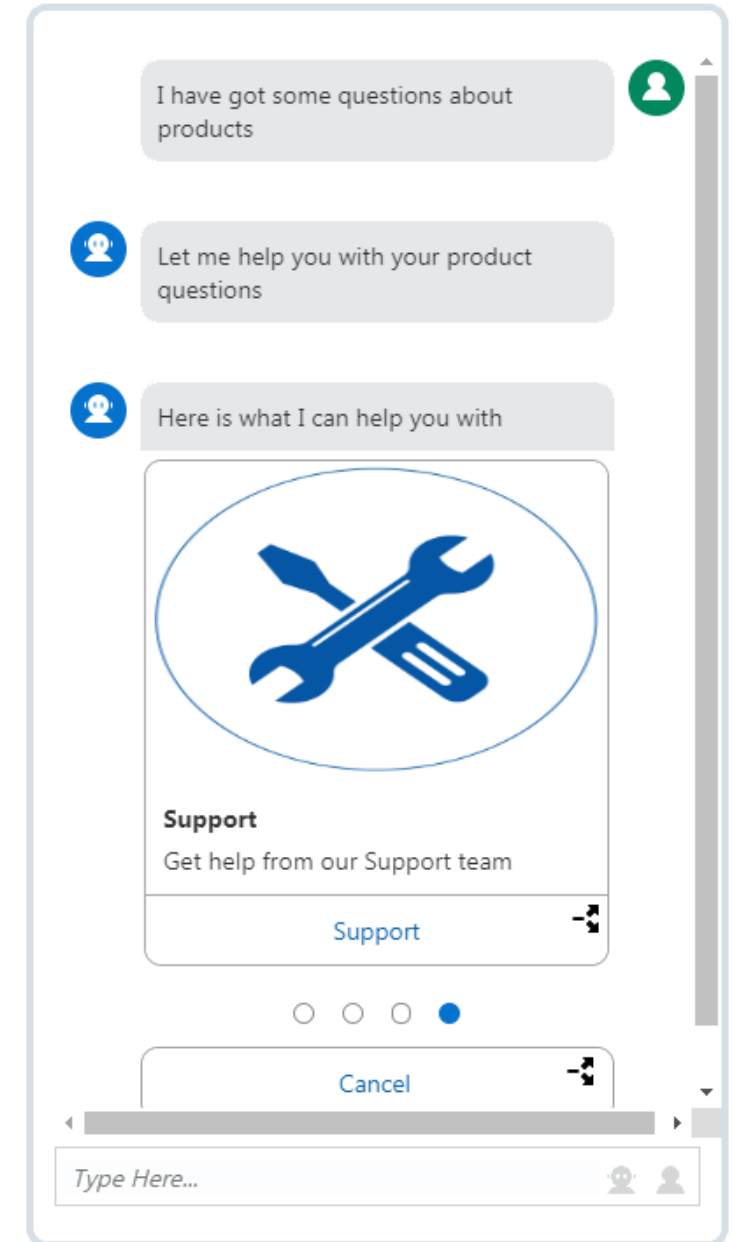
- Conversational interfaces are, for most, a new concept
  - Business needs to understand what it is buying in to
  - Visualise what a conversation might look like
  - Understand tone of voice
  - Understand visuals and branding
- We encourage visualizing conversation flow
  - Stakeholder sign off
  - Starting point for developers
- Various options used today
  - Whiteboard, Botmock, Visio, PPT etc



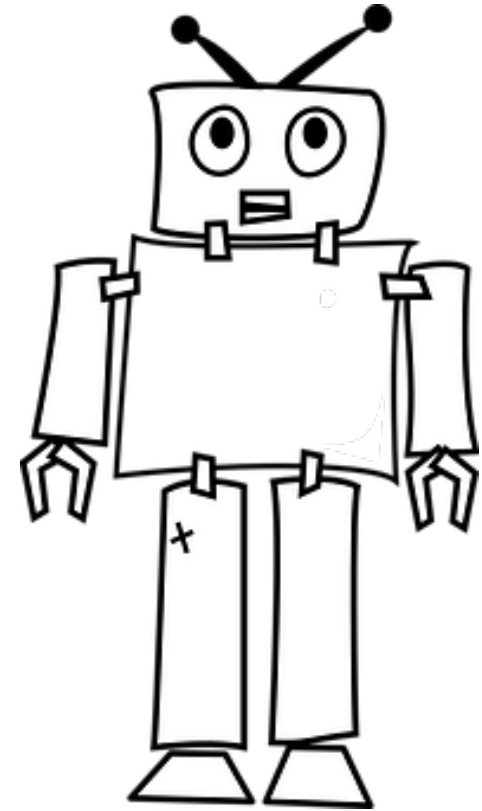


# Implementing conversation design

- Design a skill based on a sample conversation
- Allows user to mock up a conversation
  -  Define what the person says
  -  Define what the bot says
- Automatically detects intent and entities
- Conversation can be branched
- Generates a working skill



The **conversation designer** a great way for the business and stakeholders to get their hands on a something **real** and **representative**.



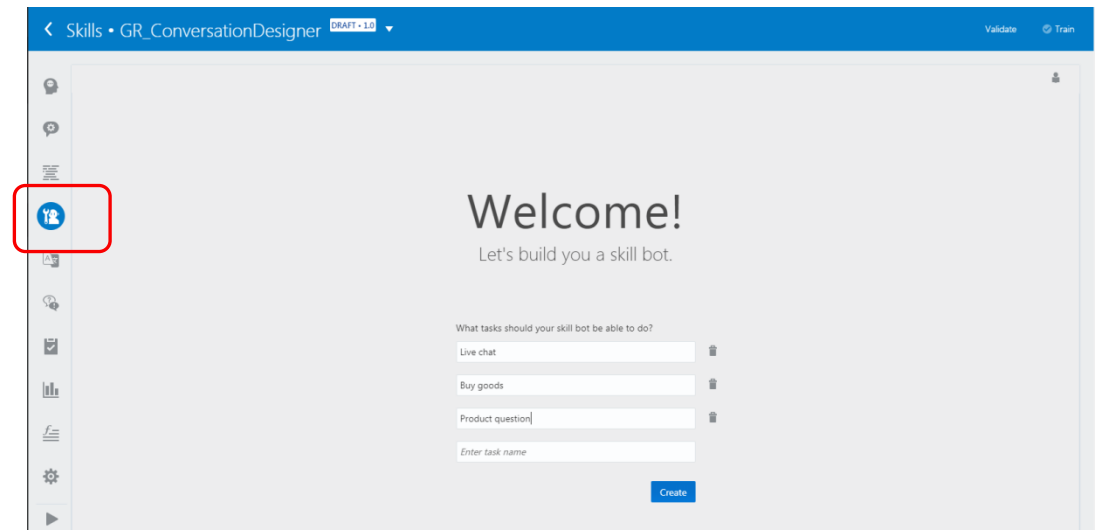
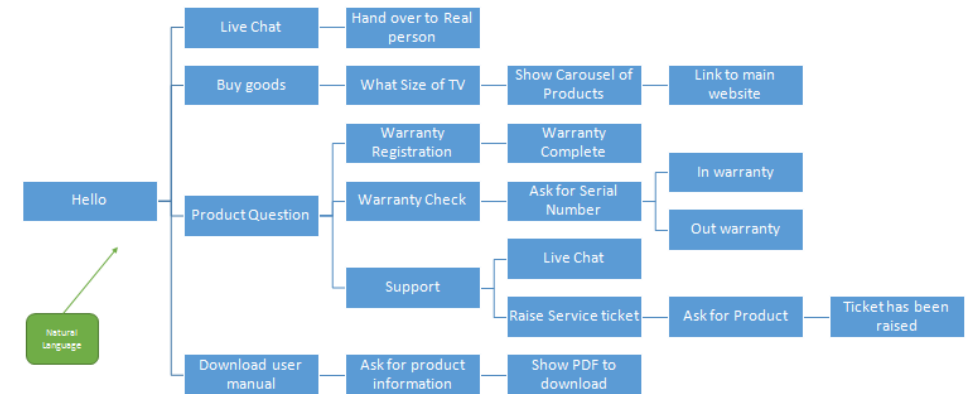


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# Getting familiar with the conversation designer

- Accessed within a skill
  - Live chat
  - Buy goods
  - Product question
  - Download user manual
- Additional tasks can be added later



# Getting familiar with the conversation designer

Click here to add another task or subtask.

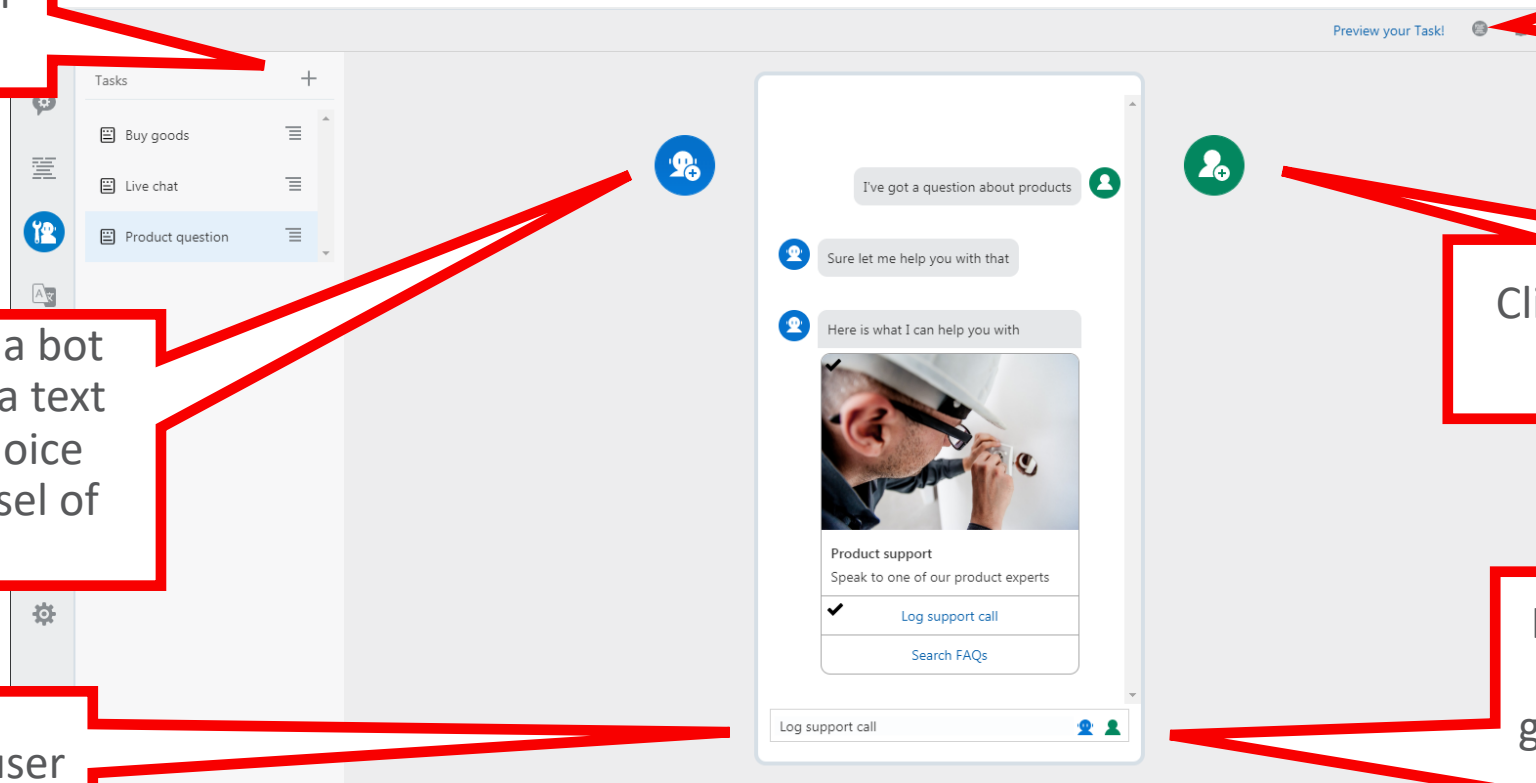
Click this button to auto-generate the starter skill.

Click here to add a bot message such as a text reply, a set of choice buttons or carousel of cards

Click here to add a user message

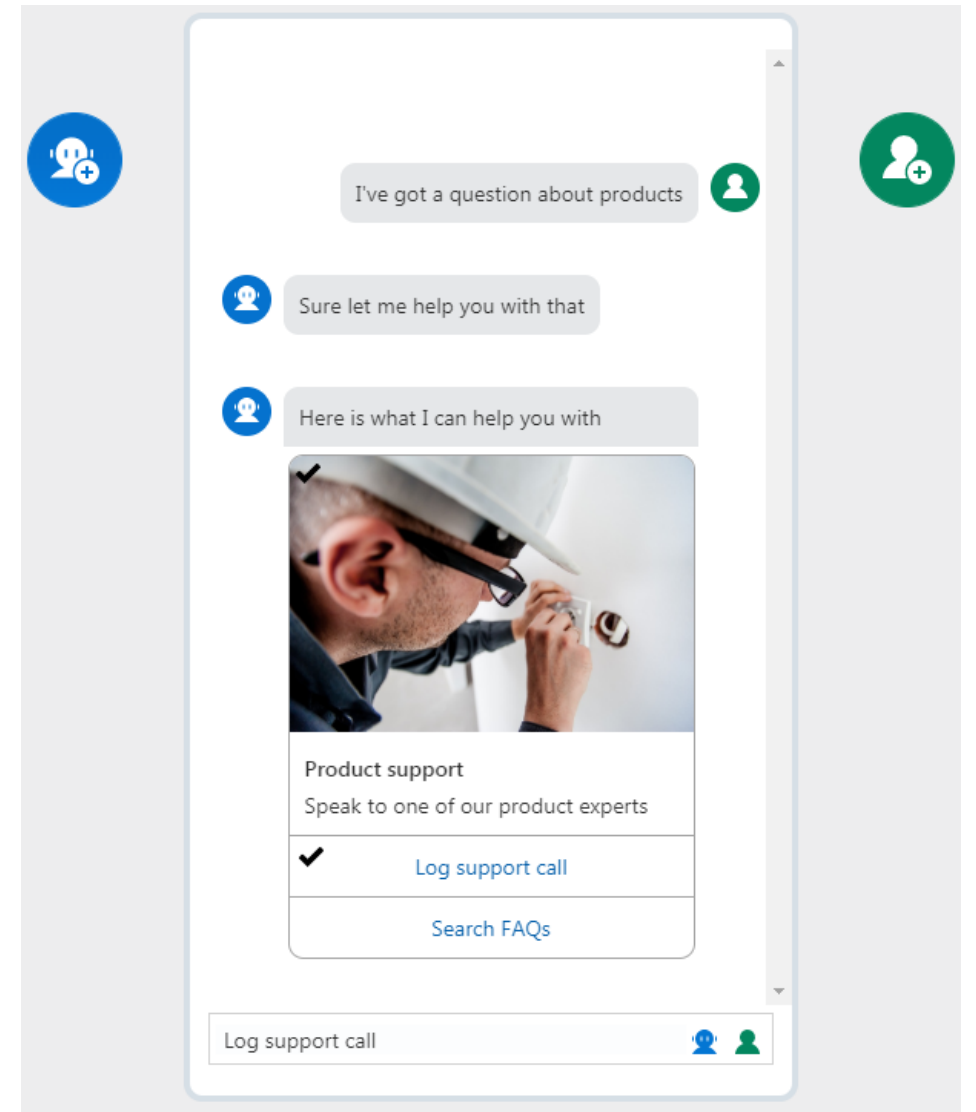
Alternatively, add user or bot messages here

If the statement is for the user click the green icon, if bot, then blue icon



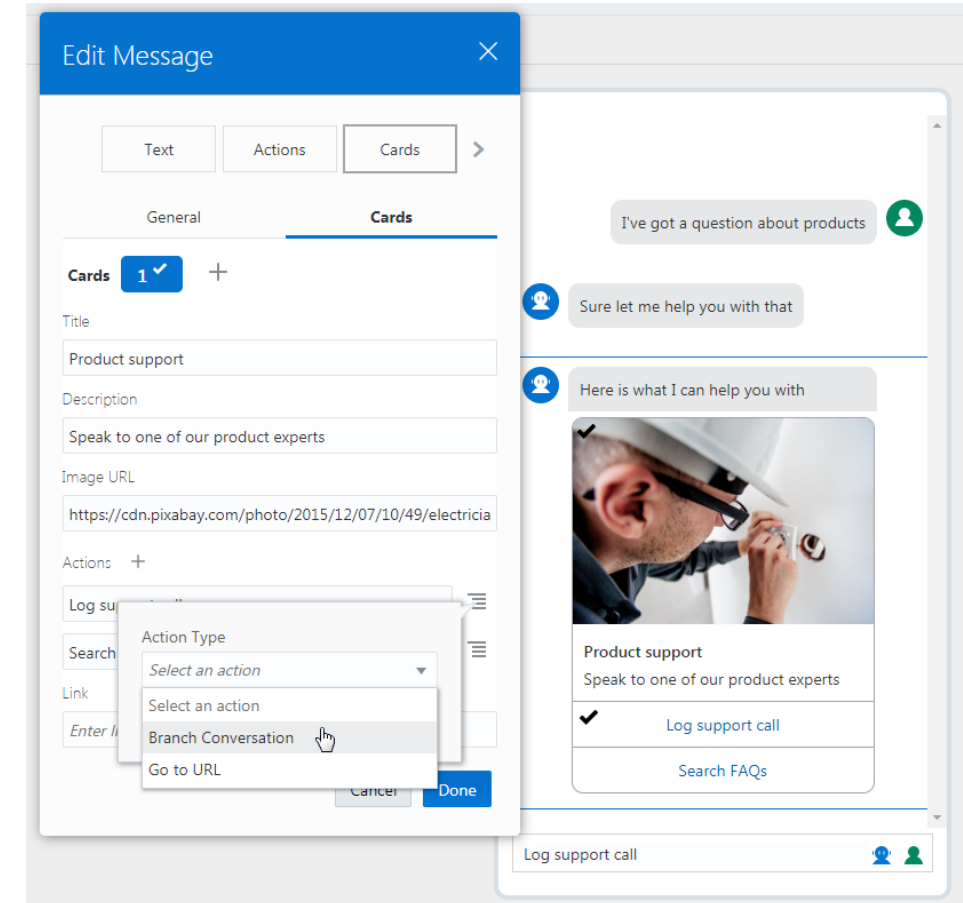
# Conversations have a pattern

- “Design by Example”
- The user makes a request
  - This is typically interpreted as an intent
  - The resolution of which will define which task to execute
- Bot then responds
  - A statement with information or data
  - A card or carousel of cards with info or data
  - A selection of buttons to further direct the dialog



# Conversations have a pattern

- Bot responses can define conversation branches
  - Would you like to speak to an agent?
- Branch to a sub task or URL
- Branch based on an action or entity value
  - Based on a value
    - E.g. If pizza size large offer stuffed crust
  - Based on action
    - E.g. Choose to speak to a support person

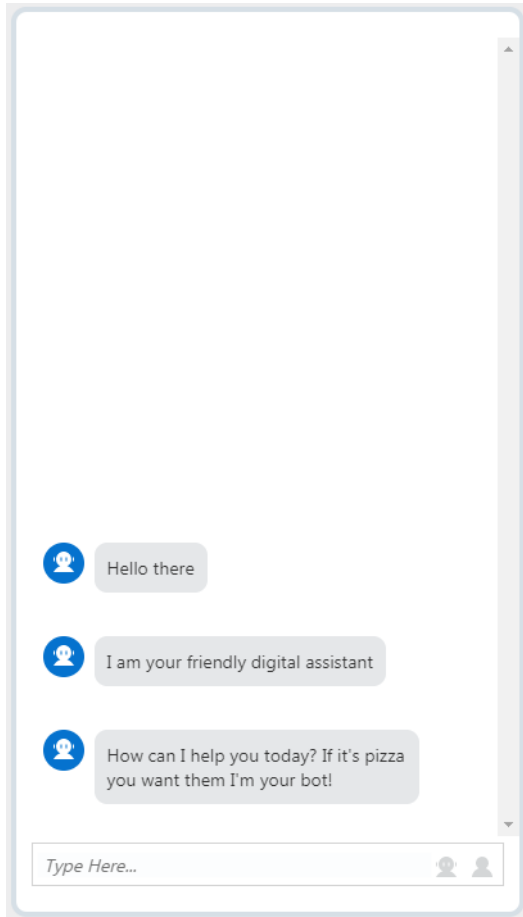


# Topic agenda

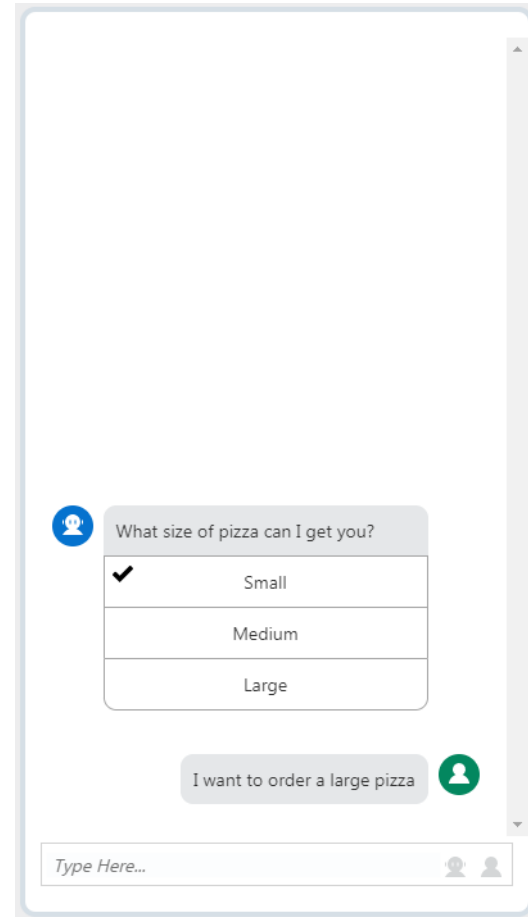
- 1 Challenge of conversation design
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# Things the bot can say

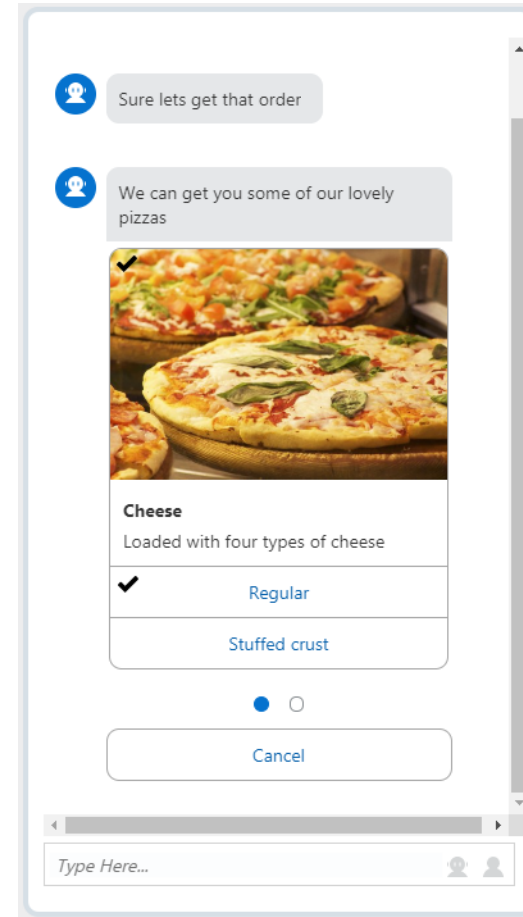
## Text



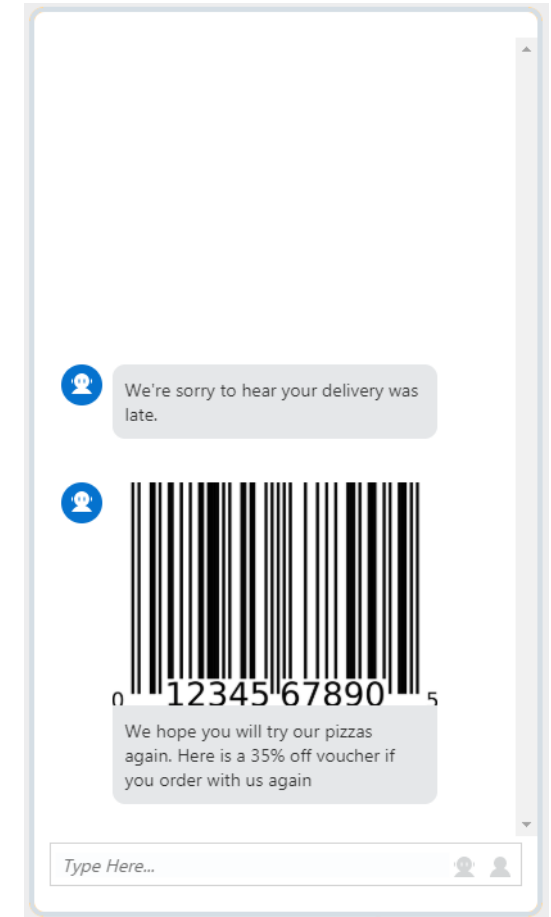
## Action



## Card



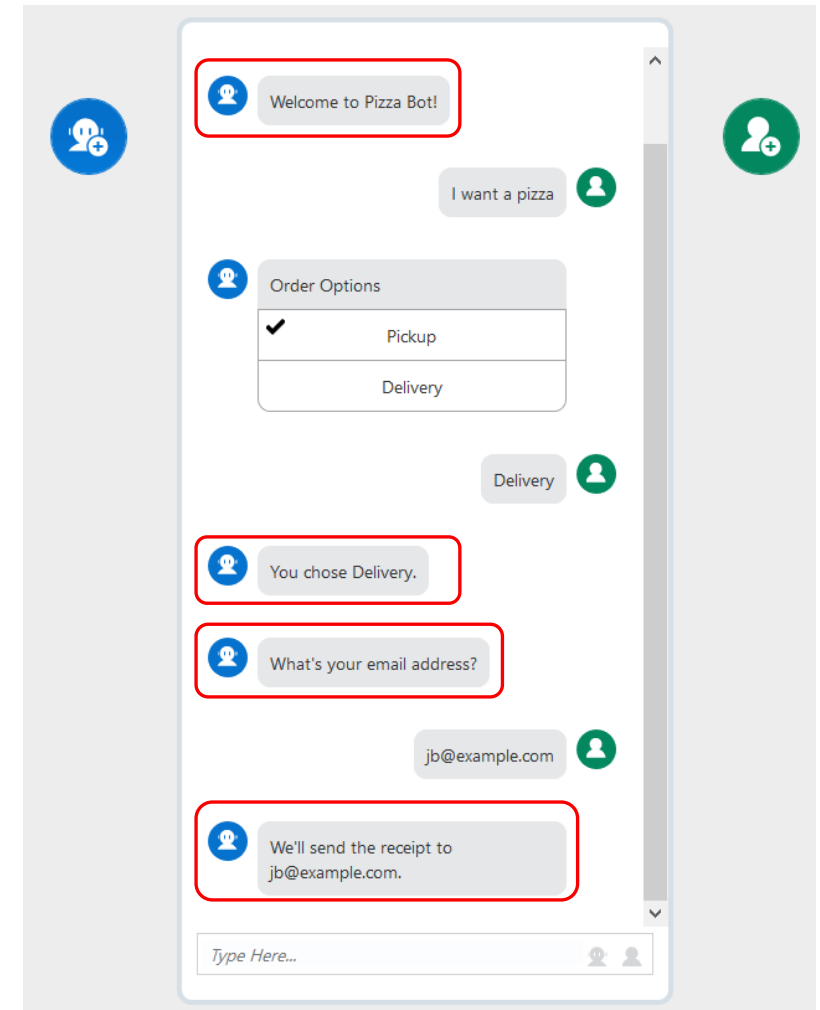
## Attachment





# Things the bot can say – Text

- Simple output to the user
  - Greetings
  - Acknowledgements
  - Prompts
  - Output Messages



# Things the bot can say- Action messages

- Presents a list of options
  - Pizza size: small, medium, large
  - Confirm order: yes, no
- List options are enumerated:
  - Thus an entity will be created and set
  - User input validated against the entity value
- List options can trigger actions
  - Branch the conversation to another task or subtask
  - Go to a URL

The screenshot shows a 'Add Message' dialog box with a blue header and a close button (X). Below the header are three tabs: 'Text', 'Actions', and 'Cards', with a right arrow. The 'Actions' tab is selected. Under the 'Bot's Message' section, there is a text input field containing 'What size of pizza can I get you?' and a character count '267 characters left' with a progress bar. Below this is an 'Actions' section with a list of options: 'Small', 'Medium', and 'Large'. A dropdown menu is open over the 'Actions' section, titled 'Action Type', with options: 'Select an action', 'Select an action', 'Branch Conversation' (highlighted with a mouse cursor), and 'Go to URL'. At the bottom right of the dialog are 'Cancel' and 'Done' buttons.

# Things the bot can say - Cards

- Presents a carousel that scrolls horizontally or vertically
- The card title defines the enumerated value
  - Thus an entity will be created and set
- Each card can have multiple actions
  - Branch to another task or subtask
  - Open a URL
- A carousel can also have a global action

The screenshot shows the 'Add Message' dialog with the 'Cards' tab selected. The dialog has a blue header with a close button. Below the header are three tabs: 'Text', 'Actions', and 'Cards'. The 'Cards' tab is active, showing a 'General' section and a 'Cards' section. The 'Cards' section has a header with 'Cards', a list of cards (1 and 2), and a plus sign. Card 2 is selected. The card configuration fields are: Title (Sausage), Description (Loads of spicy Italian sausage), Image URL (https://cdn.pixabay.com/photo/2017/05/31/09/30/pizza-23!), Actions (Regular, Stuffed crust), and Link (Enter link). The 'Cancel' and 'Done' buttons are at the bottom right.

Add Message

Text Actions Cards

General Cards

Cards 1 2 +

Title  
Sausage

Description  
Loads of spicy Italian sausage

Image URL  
https://cdn.pixabay.com/photo/2017/05/31/09/30/pizza-23!

Actions +

Regular

Stuffed crust

Link  
Enter link

Cancel Done

# Things the bot can say - Attachment

- Allows an attachment to be displayed to the user
  - Image
  - Video
  - Audio
  - File

Edit Message

< Attachment

Bot's Message

We hope you will try our pizzas again. Here is a 35% off voucher if you order with us again.

207 characters left

URL

<https://cdn.pixabay.com/photo/2012/04/01/19/23/bar-code>

Type

Image

Select type

Image

Video

Audio

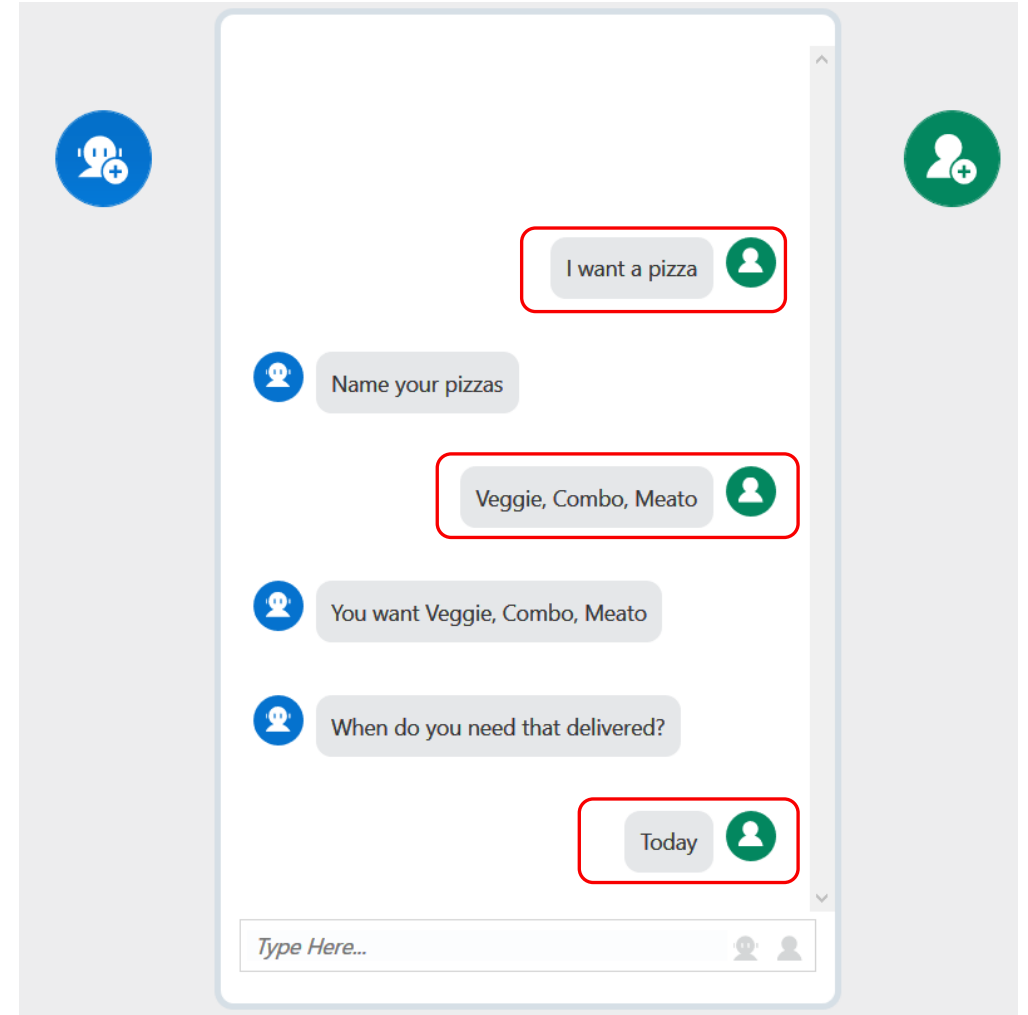
File

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# Things the user can say - Text

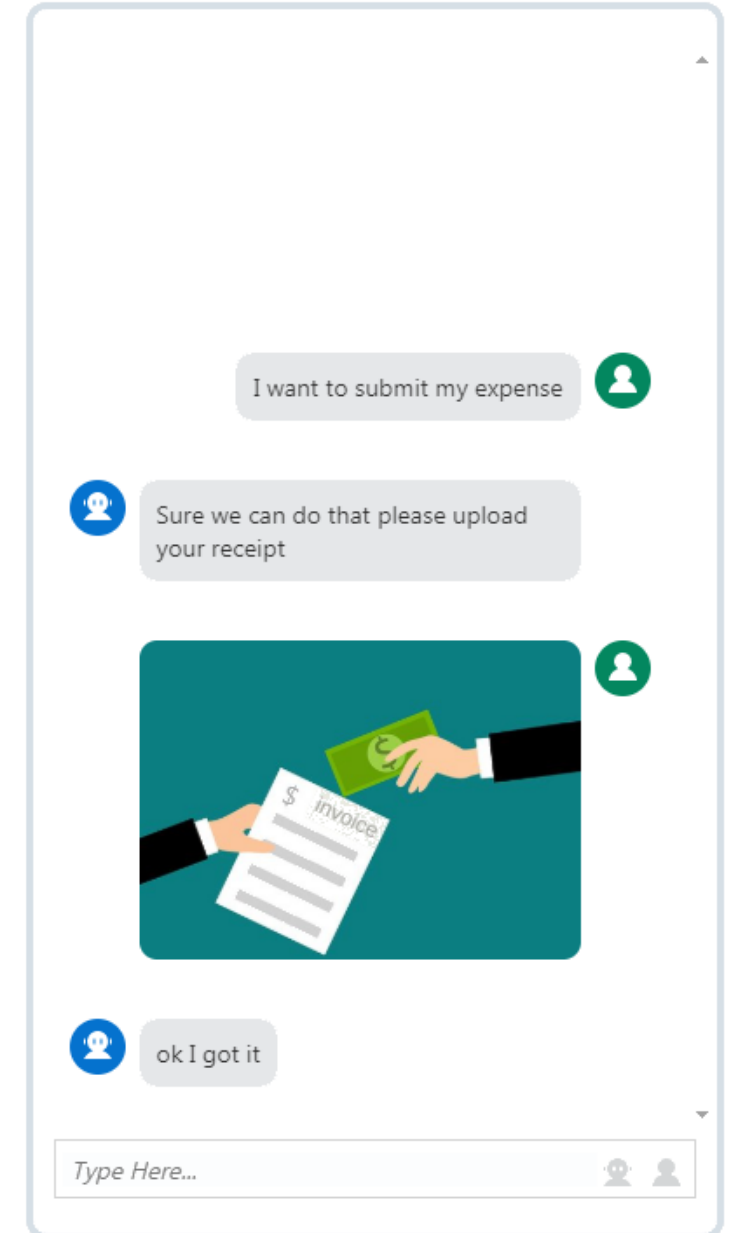
- Represents input from a user
- The Conversation Designer interprets as:
  - Intent Utterances
    - An imperative statement that ends with a noun
  - Custom entity values
  - Built-in entity values
    - Currency
    - Date
    - URL
    - Phone Number
    - Time
    - Email



# Things the user can say - Attachment

Allows a user to submit an attachment:

- Image
- Video
- Audio
- File





# Bot and user message classification

- Each message is classified depending on context
- This influences the way the bot behaves and the structures generated

Edit Message

Text

Actions

Cards

>

Bot's Message

What is your email address?

273 characters left

Classification

PROMPT

Cancel

Done

Add Message

Text

Attachment

User's Message

gr@example.com

286 characters left

Classification

EMAIL

Cancel

Done

Add Message

Text

Attachment

User's Message

I want a pizza

286 characters left

Classification

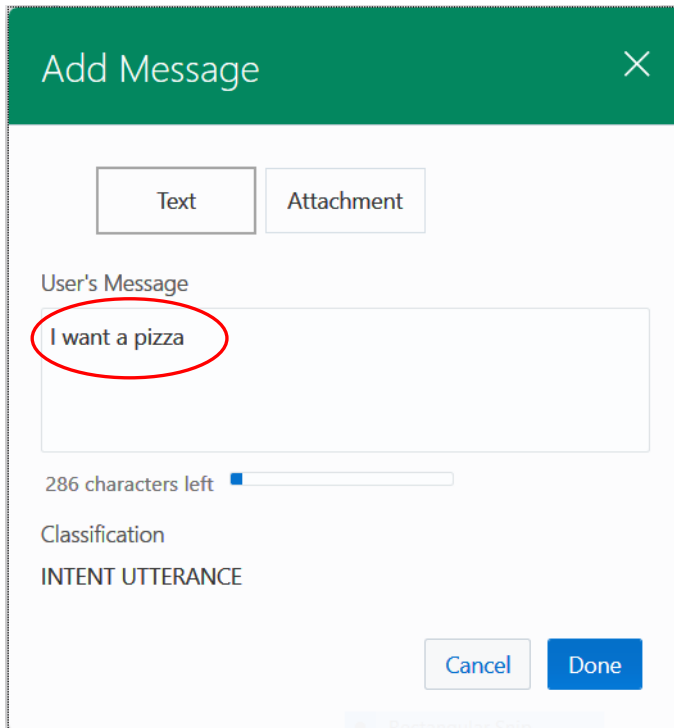
INTENT UTTERANCE

Cancel

Done

# Bot and user message classification

- User input classified as intent
  - At runtime, NLP is used to determine which task to execute



Add Message

Text Attachment

User's Message

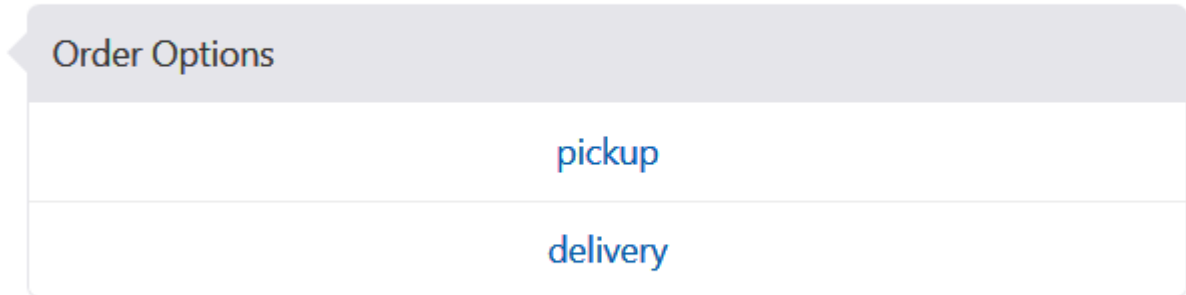
I want a pizza

286 characters left

Classification

INTENT UTTERANCE

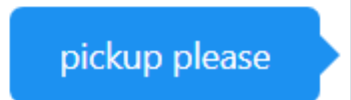
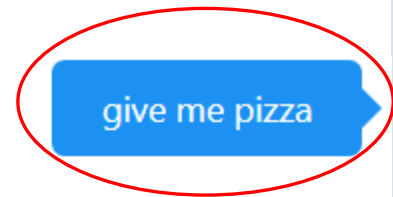
Cancel Done



Order Options

pickup

delivery



# Bot and user message classification

- By classifying we can impose entity validation
  - Entity values highlighted
- Depends on message position and context
  - User message interpreted as intent utterance
  - Bot message interpreted as prompt
  - User message interpreted as entity

The image illustrates message classification in a chatbot context. It shows a chatbot conversation and three overlays demonstrating how the same text is classified differently based on its position and context.

**Chatbot Conversation:**

- User: I want a pizza
- Bot: Order Options
  - ✓ Pickup
  - Delivery
- User: Delivery
- Bot: You chose **Delivery**
- Bot: What is your email address?
- User: gr@example.com
- Bot: We'll send the receipt to gr@example.com

**Message Classification Overlays:**

- Top Overlay (Add Message):** User's Message: "I want a pizza". Classification: INTENT UTTERANCE.
- Bottom Left Overlay (Edit Message):** Bot's Message: "What is your email address?". Classification: PROMPT.
- Bottom Right Overlay (Add Message):** User's Message: "gr@example.com". Classification: EMAIL.

# Bot and user message classification - example

- Creates an entity and incorporates the prompt message
- At runtime, the format of the user input is validated

Edit Message

Text

Actions

Cards

Bot's Message

What is your email address?

273 characters left

Classification

PROMPT

Cancel

Done



Add Message

Text

Attachment

User's Message

gr@example.com

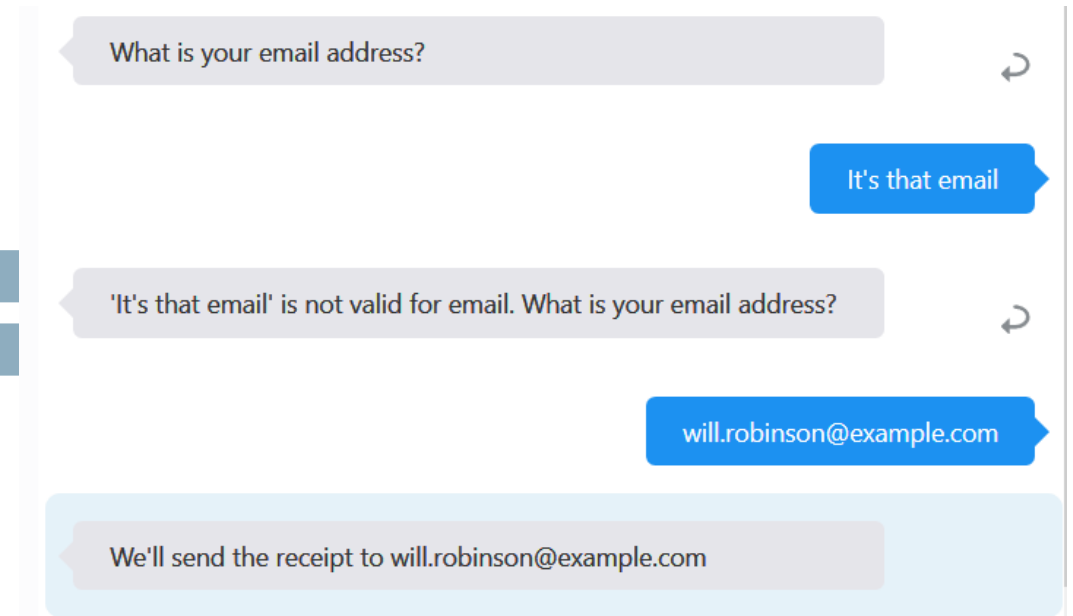
286 characters left

Classification

EMAIL

Cancel

Done



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# What happens under-the-covers?

- Generate and run in tester, or preview
- Design definition JSON in dialog flow
- When you generate:
  - The dialog (YAML) is generated
  - For each task, an intent is created along with some training utterances
  - For each task, a set of entities (templates for the request details) are generated
    - E.g. toppings = pepperoni, size = large, medium, small
- Bot generation is one-way
  - Hand editing is NOT reflected in design

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# Recommendations and best practices

- Give task names such as
  - Product Question, Live Human
  - Don't use “task” “subtask” as suffix.
- Start each task with a user input which indicates the “intent” of the flow
  - Use imperative voice
  - Ideally ends with noun
    - “I want to order pizza”, “Show me currently open orders”
- Cards need actions

# Integrated Cloud

## Applications & Platform Services

ORACLE®