

The non-disclosure agreements (NDAs) associated with this proof-of-concept (POC) project have long since expired, allowing me to finally share these designs. While they offer a glimpse into the complexity of the UI and technology, they represent only a small portion of the extensive research, documentation, and design work undertaken. Unfortunately, due to these NDAs and the nature of the project, I wasn't able to retain most of these assets after my departure.

Pact.AI Chatbot Creator: A UX Case Study in Rapid Prototyping

This project chronicles my design journey in crafting a Proof-of-Concept (POC) for Pact.AI's revolutionary Chatbot Builder tool. It's a testament to the power of design thinking process applied under tight deadlines and intense technical learning curves.

Mission: Disrupt the Chatbot Landscape

Our objective was audacious: secure funding for a tool that not only rivaled established players like IBM Watson, Amazon Lex, Google Dialogflow, and Microsoft Bot, but also offered an edge – the ability to leverage any AI Cloud service (including our own, Pact.AI) within a user-friendly interface. This POC would be presented to global leadership, influencing the company's direction for the coming year. With only six weeks, the pressure was on.

Understanding: Deep Dive into Chatbot Nirvana

The initial phase was a whirlwind of learning. Extensive discussions with the development team and product manager (PM) were coupled with a crash course in our competitors' offerings. I devoured everything about entities, intents, dialogues, actions, and utterances – the building blocks of chatbot conversations. It wasn't just understanding the mechanics; it was about envisioning a superior user experience that would set Pact.AI apart.

Exploration: Collaborative Prototyping in Warp Speed

Daily meetings and workshops became the norm. The PM and developers were my constant companions as we explored workflows, relentlessly iterating on wireframes. Time constraints demanded an in-house approach, and while the focus was firmly on feasibility, the seeds of a user-centric design were meticulously planted.

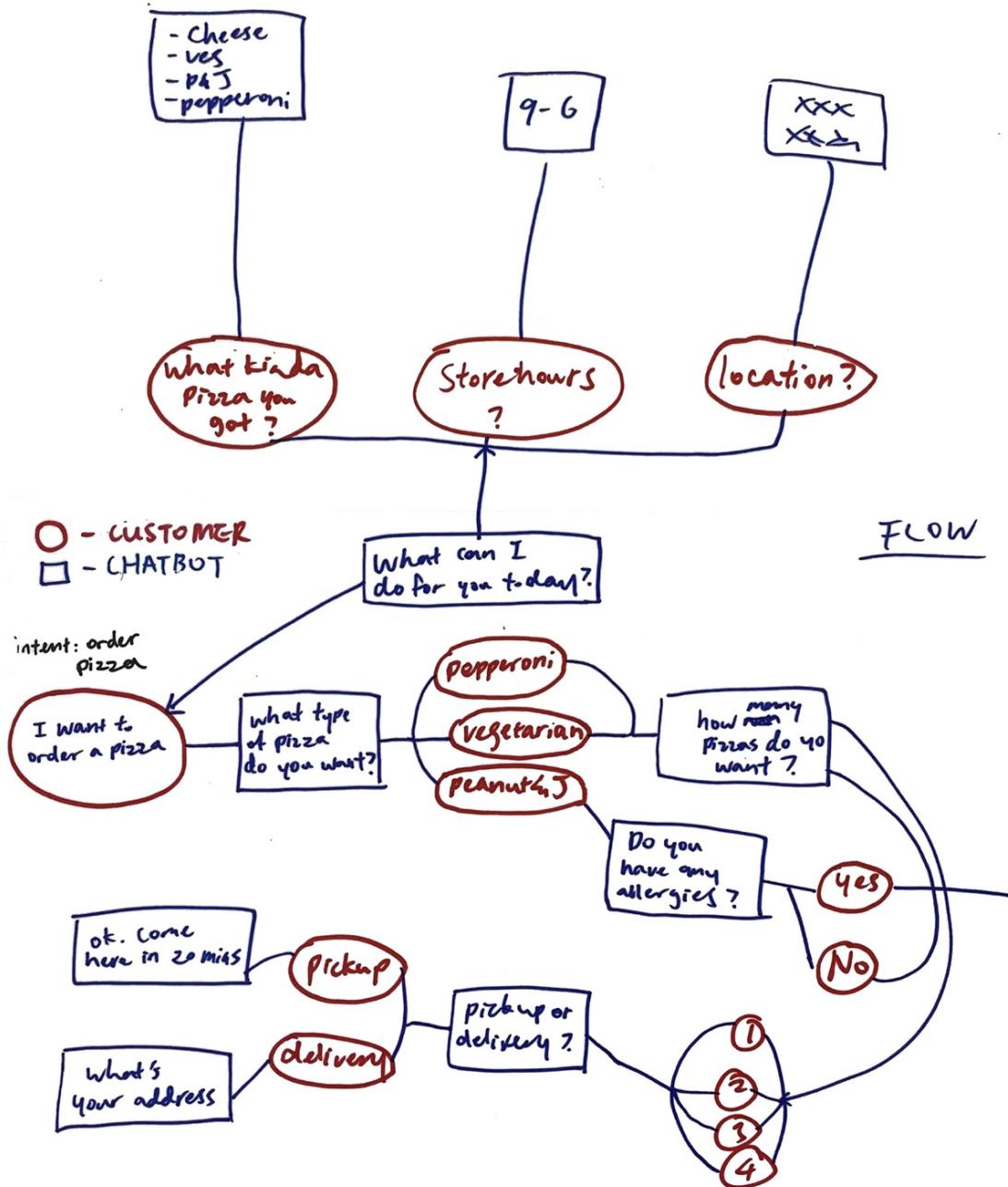
Materialization: Taking the Vision to the Finish Line

The culmination of this intense period was a fully functional wireframe prototype, meticulously crafted and jointly approved by the PM and development team. Together, we presented the POC to leadership, showcasing the potential of Pact.AI's Chatbot Builder.

Result: Funding Secured, But the Journey Continues

The presentation was a success! Funding was greenlit for the next design phase. However, new opportunities beckoned, and I made the difficult decision to pursue them shortly thereafter. While I wasn't there to witness the full realization of the project, the experience serves as a powerful testament to the transformative power of rapid prototyping and user-centered design.

QnA
AKA. Search 4 keywords



Mom & Pop Pizza Bot (Intents)

[Intents](#) [Entities](#) [Dialogs](#)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Example utterances that imply this intent:

Can I order a **pepperoni pizza**?
I would like to place an order.
I need a large pizza.
I want to get some pasta delivered.

Mom & Pop Pizza Bot (Entities)

[Intents](#) [Entities](#) [Dialogs](#)

Entities

Food
Pizza Type
Pasta Type

Values

pizza
pasta
salad

Mom & Pop Pizza Bot (Defining Entities Inside An Intent)

[Intents](#) [Entities](#) [Dialogs](#)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Example utterances that imply this intent:

Can I order a **pepperoni pizza**?
I would like to place an order.
I need a large pizza.
I want to get some pasta delivered.

Select an entity

Food
Food Type

Mom & Pop Pizza Bot (Intents)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Example utterances that imply this intent:

- Can I order a **pepperoni** pizza?
- I would like to place an order.
- I need a large pizza.
- I want to get some pasta delivered.

Mom & Pop Pizza Bot (Entities)

Intents

Food
Pizza Type
Pasta Type
Salad Type
Number

Values

pizza
pasta
salad

Mom & Pop Pizza Bot (Defining Entities Inside An Intent)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Example utterances that imply this intent:

- Can I order a **pepperoni** pizza?
- I would like to place an order.
- I need a large pizza.
- I want to get some pasta delivered.

Select an entity

Food
Food Type

Mom & Pop Pizza Bot (Dialogs)

Intents Entities Dialogs

Dialog Flows

If bot recognizes GREETING then

Action 1:

respond with the following text

Hello, I'm Bobo the Pizza Bot! I can do things like place orders, provide our location, and give you our store hours. What can I do for you?

Final Action:

Waiting for user input

Intents Entities Dialogs

Dialog Flows

Entities

Question

What would you like to add to your order?

Quantity How many would you like to order?

If bot recognizes ORDER

Action 1:

check utterance for entities

Entities If not present, ask

Food What food would you like to add to your order?

Quantity How many would you like to order?

Action 2:

if entity has a value of

Food = Pizza go to intent Order Pizza

Food = Pasta go to intent Order Pasta

Food = Salad go to intent Order Salad

Final Action:

Waiting for user input

Food = Pasta go to intent Add Pasta

Food = Salad go to intent Add Salad

Mom & Pop Pizza Bot (Intents)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Example utterances that imply this intent

Hello
Good day
Good evening
Good morning
Hey how are you doing?

Dialog Maker

Action 1:

respond with the following text

Hello, I'm Bobo the Pizza Bot! I can do things like place orders, provide our location, and give you our store hours. What can I do for you?

Final Action:

Waiting for user input

Mom & Pop Pizza Bot (Entities)

Intents

Food
Pizza Type
Pasta Type
Salad Type
Crust Type
Shape
Number

Values

pizza
pasta
salad

Mom & Pop Pizza Bot (Intents)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Example utterances that imply this intent

Can I order a **thin crust pepperoni pizza**?
I would like to place an order.
I need a large pizza.
I want to get some pasta delivered.

Dialog Maker

Action 1:

check utterance for entities

Entities if not present, ask

Food Quantity

Action 2:

if entity has a value of

Food = Pizza Order Pizza
Food = Pasta Order Pasta
Food = Salad Order Salad

Action 3:

respond with the following text

Can I order you anything else?

Final Action:

Waiting for user input

Mom & Pop Pizza Bot (Intents)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Example utterances that imply this intent

Can I order a **thin crust pepperoni pizza**?
I would like to place an order.
I need a large pizza.
I want to get some pasta delivered.

Dialog Maker

Action 1:

check utterance for entities

Entities if not present, ask

Food Quantity

Action 2:

if entity has a value of

Food = Pizza Order Pizza
Food = Pasta Order Pasta
Food = Salad Order Salad

Action 3:

respond with the following text

Can I order you anything else?

Final Action:

Waiting for user input

Mom & Pop Pizza Bot (Sub-Intent)

Intents

Greeting
Order Pizza
Order Pasta
Order Salad
Hours
Location

This intent is a child intent

Dialog Maker

Action 1:

check utterance for entities

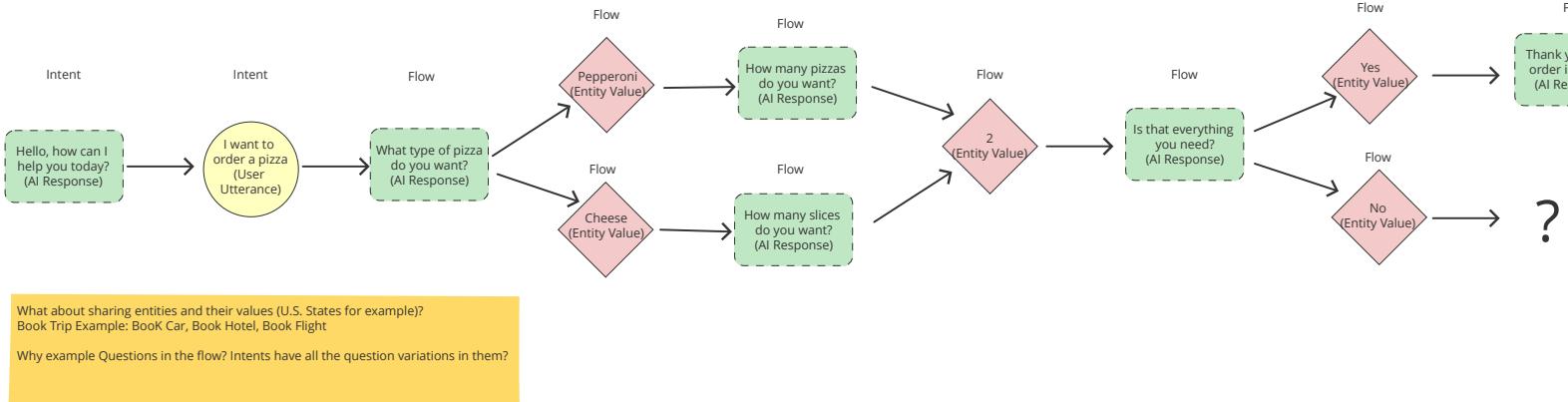
Entities if not present, ask

Crust Type Shape

Final Action:

Return to parent Intent

Dialog Flows



Mom & Pop Pizza Bot (Intents)

Intents	Entities	Dialogs
<p>Greeting</p> <p>Order</p> <p>Order Pizza</p> <p>Order Pasta</p> <p>Order Salad</p> <p>Hours</p> <p>Location</p>	<p>Example utterances that imply this intent:</p> <p>Can I order a pepperoni pizza? I would like to place an order. I need a large pizza. I want to get some pasta delivered.</p>	

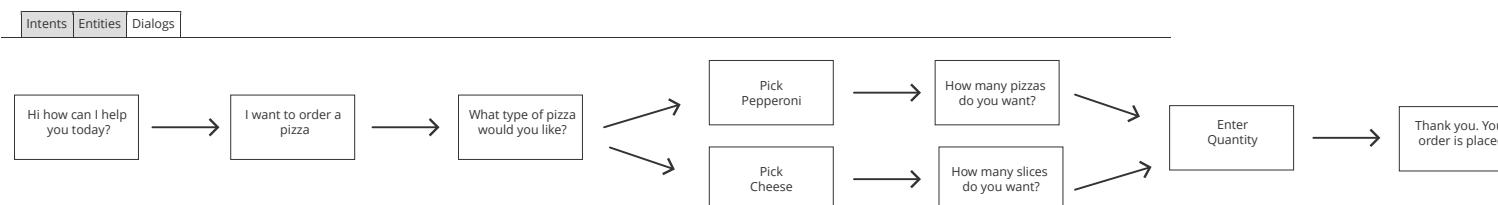
Mom & Pop Pizza Bot (Entities)

Entities	Values
Food	
Pizza Type	pizza
Pasta Type	pasta
Salad Type	salad
Number	

Mom & Pop Pizza Bot (Defining Entities Inside An Intent)

Intents	Entities	Dialogs
<p>Greeting</p> <p>Order</p> <p>Order Pizza</p> <p>Order Pasta</p> <p>Order Salad</p> <p>Hours</p> <p>Location</p>	<p>Example utterances that imply this intent:</p> <p>Can I order a pepperoni pizza? I would like to place an order. I need a large pizza. I want to get some pasta delivered.</p>	<p>Select an entity</p> <p>Food</p> <p>Food Type</p>

Mom & Pop Pizza Bot (Dialogs)



ID	Node	Intent	Entity	Entity Value
1	Hi how can I help you today?	hello		
2	I want to order a pizza	order		
3	What type of pizza would you like?	order		
4	Pick Pepperoni	order	Pizza Type	Pepperoni
5	Pick Cheese	order	Pizza Type	Cheese
6	How many pizzas do you want?	order	Pizza Type	Pepperoni
7	How many slices do you want	order	Pizza Type	Cheese
8	Is that everything you need?	order	Quantity	
9	Thank you. Your order is placed.	confirm		

1. Put Intents in a list
2. Add Utterances to Intents
3. Create Entities AND add values to them
4. Assign entities to intent Utterances
5. Dialog Flows shows Q/A
6. Flow is in order
7. If 'Entity Value' has a value, it flows to the next 'Entity Value' with the same value. If no value, it goes to the next node.

Mom & Pop Pizza Bot (Intents)

Intents	Entities	Dialogs
Intents		Example utterances that imply this intent:
Greeting		Can I order a pepperoni pizza?
Order		I would like to place an order.
Order Pizza		I need a large pizza.
Order Pasta		I want to get some pasta delivered.
Order Salad		
Hours		
Location		

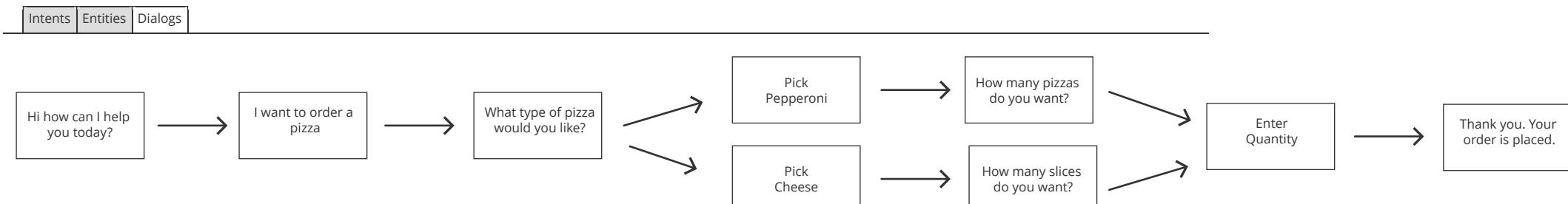
Mom & Pop Pizza Bot (Entities)

Intents	Entities	Dialogs
Entities		Values
Food		pizza
Pizza Type		pasta
Pasta Type		salad
Salad Type		
Number		

Mom & Pop Pizza Bot (Defining Entities Inside An Intent)

Intents	Entities	Dialogs
Intents		Example utterances that imply this intent:
Greeting		Can I order a pepperoni pizza?
Order		I would like to place an order.
Order Pizza		I need a large pizza.
Order Pasta		I want to get some pasta delivered.
Order Salad		
Hours		
Location		

Mom & Pop Pizza Bot (Dialogs)



ID	Node	Intent	Entity	Entity Value
1	Hi how can I help you today?	hello		
2	I want to order a pizza	order		
3	What type of pizza would you like?	order		
4	Pick Pepperoni	order	Pizza Type	Pepperoni
5	Pick Cheese	order	Pizza Type	Cheese
6	How many pizzas do you want?	order	Pizza Type	Pepperoni
7	How many slices do you want	order	Pizza Type	Cheese
8	Is that everything you need?	order	Quantity	
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Mom & Pop Pizza Bot (Intents)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Example utterances that imply this intent

Hello
Good day
Good evening
Good morning
Hey how are you doing?

Dialog Maker

Action 1:
respond with the following text

Hello, I'm Bobo the Pizza Bot! I can do things like place orders, provide our location, and give you our store hours. What can I do for you?

Final Action:
Waiting for user input

Mom & Pop Pizza Bot (Entities)

Intents

Food
Pizza Type
Pasta Type
Salad Type
Crust Type
Shape
Number

Values

pizza
pasta
salad

Mom & Pop Pizza Bot (Intents)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Example utterances that imply this intent

Can I order a **thin crust pepperoni pizza**?
I would like to place **Select an entity**
I need a large pizza.
I want to get some **Food**

Dialog Maker

Action 1:
check utterance for entities

Entities if not present, ask
Food: What food would you like to add to your order?
Quantity: How many would you like to order?

Action 2:
if entity has a value of

Food = Pizza go to intent Order Pizza
Food = Pasta go to intent Order Pasta
Food = Salad go to intent Order Salad

Action 3:
respond with the following text

Can I order you anything else?

Final Action:
Waiting for user input

Mom & Pop Pizza Bot (Sub-Intent)

Intents

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

This intent is a child intent

Dialog Maker

Action 1:
check utterance for entities

Entities if not present, ask
Crust Type: What crust would you like? Pan, Thin, or Regular?
Shape: What shape would you like? Square or Round?

Final Action:
Return to parent Intent

Mom & Pop Pizza Bot (Intents)

Intents Entities Dialogs

Example utterances that imply this intent:

Greeting
Order
Order Pizza
Order Pasta
Order Salad
Hours
Location

Can I order a **pepperoni** pizza?
I would like to place an order.
I need a large **pizza**.

Select an entity

Food Type
Pizza Type
Pizza Crust
Size
Quantity

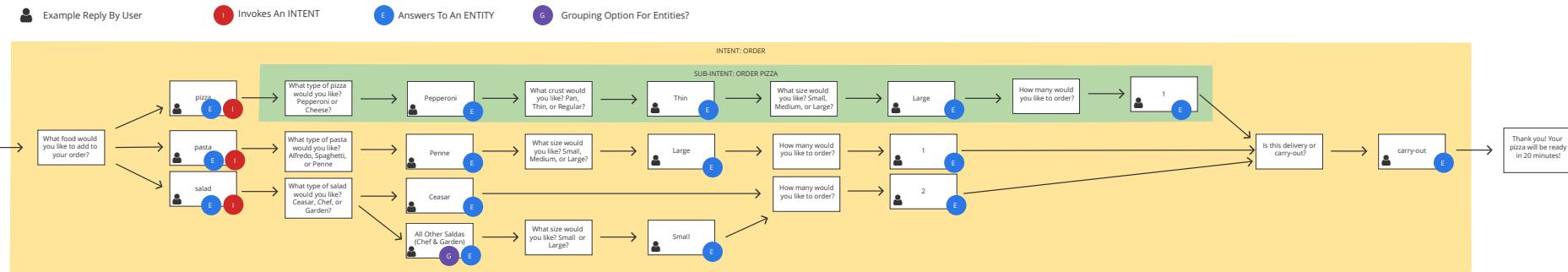
Mom & Pop Pizza Bot (Entities)

Intents Entities Dialogs

Entities Values

Food Type pizza
Pizza Type pasta
Pizza Crust salad
Size
Quantity

Mom & Pop Pizza Bot Dialog Flow



Dialog Maker Forms (Colors reflect which INTENT form will appear when a node above is clicked)

Dialog Maker: Greeting Intent Add Action

Action 1:

respond with the following text

Hello, I'm Bobo the Pizza Bot! I can do things like place orders, provide our location, and give you our store hours. What can I do for you?

Final Action:

Waiting for user input

Dialog Maker: Order Intent Add Action

Action 1:

check utterance for entities

Entities **if not present, ask**

Food **What food would you like to add to your order?**

Delivery **Is this delivery or carry-out?**

Action 2:

if entity has a value of

Food **Pizza** **go to intent** **Order Pizza**

Food **Pasta** **go to intent** **Order Pasta**

Food **Salad** **go to intent** **Order Salad**

Action 3:

respond with the following text

Can I order you anything else?

Final Action:

Waiting for user input

Dialog Maker: Order Pizza Intent Add Action

Action 1:

check utterance for entities

Entities **if not present, ask**

Pizza Type **What type of pizza would you like? Pepperoni or Cheese?**

Crust Type **What crust would you like? Pan, Thin, or Regular?**

Size **What size would you like? Small, Medium, or Large?**

Quantity **How many would you like to order?**

Final Action:

Return to parent Intent

Your Bots

Show 10  botsSearch:

Bot ID	Bot Name	Create Time	Last Modified	Type	Service	Status
2	Test Bot 1	4/2/2019 - 9:29 AM	4/16/2019 - 9:27 AM	Flow	MsLuis	Saved
3	Test bot	4/12/2019 - 5:39 AM	4/12/2019 - 5:39 AM	QnA	MsAzureSearch	Test
8	qna bot 3	4/22/2019 - 4:19 AM	4/22/2019 - 4:19 AM	QnA	MsAzureSearch	NotReady
9	Test bot	4/22/2019 - 8:10 AM	4/22/2019 - 8:10 AM	Flow	MsLuis	NotReady
11	test	4/23/2019 - 9:06 AM	4/23/2019 - 9:06 AM	Flow	MsLuis	NotReady
12	abc	4/23/2019 - 9:27 AM	4/23/2019 - 10:05 AM	Flow	MsLuis	NotReady
13	test1	4/23/2019 - 5:13 PM	4/23/2019 - 5:13 PM	Flow	MsLuis	NotReady
14	testb	4/23/2019 - 10:14 AM	4/23/2019 - 10:15 AM	Flow	MsLuis	NotReady
16	abcdefg	4/24/2019 - 4:33 AM	4/24/2019 - 4:33 AM	Flow	MsLuis	NotReady
17	abc	4/24/2019 - 11:41 AM	4/26/2019 - 10:14 AM	Flow	MsLuis	NotReady

Showing 1 to 10 of 21 bots

Previous  2 3 Next

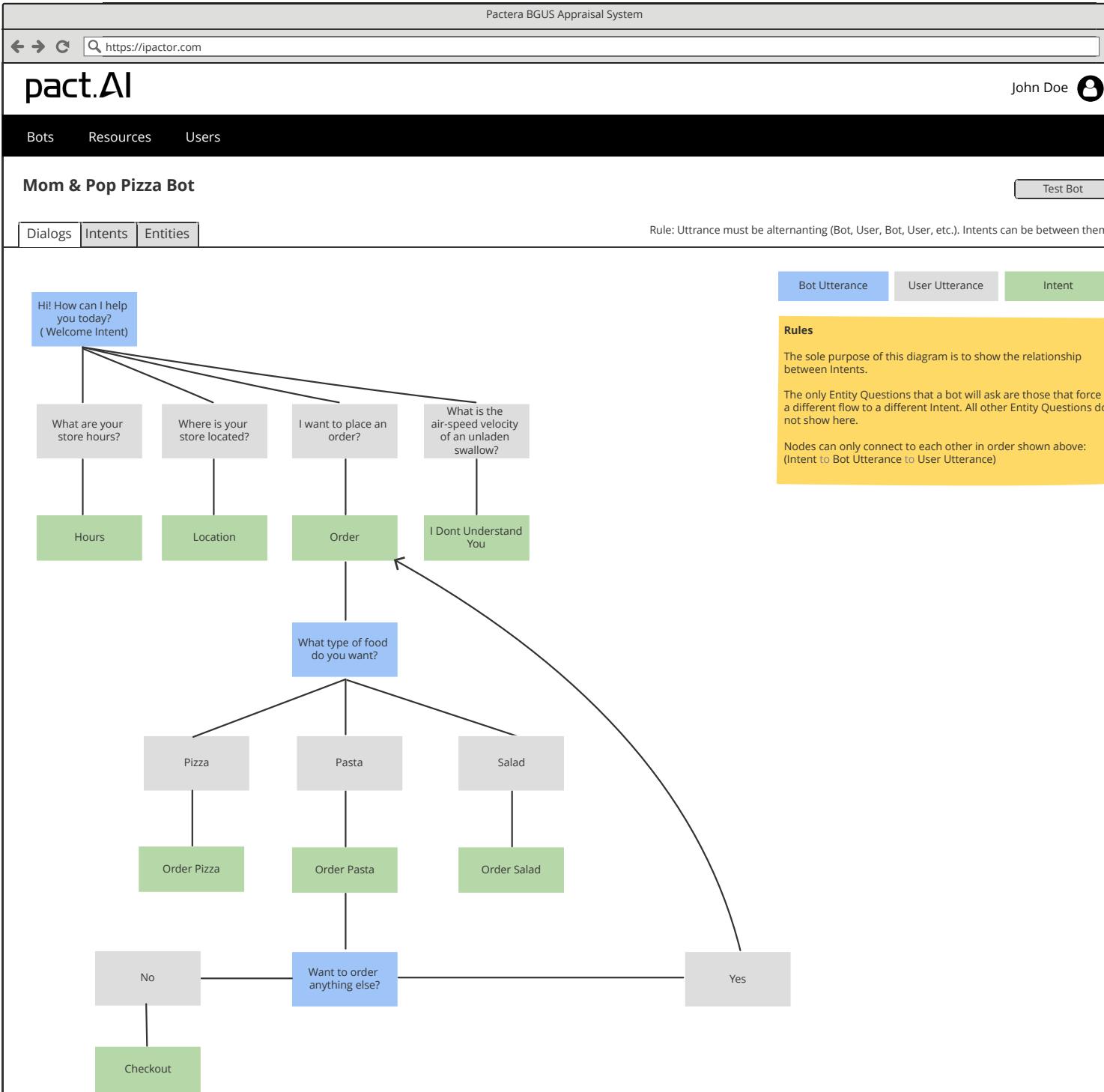
[Bots](#) [Resources](#) [Users](#)

Create your bot

pact.AI enables anyone to build conversational chatbots quickly and easily. With pact.AI, no technical background or deep learning expertise is required. You just map out the basic conversational flow directly from the flowchart, and then further specify the content of the conversation including the intents and entities. To get started, you can choose one of the template bots provided or build a new custom bot

[Create your own](#)[Build from template](#)[Custom bot](#)[OrderPizza](#)[WineShop](#)[CoffeeShop](#)[FlowerShop](#)**Bot name****Language** **Cloud service** [Cancel](#)[Create](#)

This screen shows an example of all the information you might see when selecting an Intent.



This screen shows an example of all the information you might see when selecting an Intent.

Pactera BGUS Appraisal System

https://ipactor.com

pact.AI

John Doe

Bots Resources Users

Mom & Pop Pizza Bot

Test Bot

Dialogs Intents Entities

Example utterances that imply this intent

Greeting Order Order Pizza Order Pasta Order Salad Hours Location

Can I order a **thin crust pepperoni pizza**?
I would like to place an **order**.
I need a **large pizza**.
I want to get some **pasta delivered**.

Add a question here...

Dialog Maker

Add Action

Action 1:

check utterance for entities

Entities If not present, ask

Food Type What food would you like to add to your order?
Delivery Is this delivery or carry-out?

Action 2:

if entity has a value of

Food Type = Pizza go to intent Order Pizza
Food Type = Pasta go to intent Order Pasta
Food Type = Salad go to intent Order Salad

Action 3:

respond with the following text

Can I order you anything else?

Final Action:

Waiting for user input

This screen shows how you would mark entities in Intent questions. The dropdown would appear when the user is done highlighting a word (or group of words) and disappear when focus is lost.

Pactera BGUS Appraisal System

https://ipactor.com

pact.AI

John Doe

Bots Resources Users

Mom & Pop Pizza Bot

Test Bot

Dialogs Intents Entities

Example utterances that imply this intent

Greeting Order Order Pizza Order Pasta Order Salad Hours Location

Can I order a **thin crust pepperoni pizza**?
I would like to place an **order**.
I need a **large pizza**.

Select an entity

Food Type Pizza Type Pizza Crust Size Quantity

Add Action

Action 1:

check utterance for entities

Entities If not present, ask

Food Type What food would you like to add to your order?
Delivery Is this delivery or carry-out?

Action 2:

if entity has a value of

Food Type = Pizza go to intent Order Pizza
Food Type = Pasta go to intent Order Pasta
Food Type = Salad go to intent Order Salad

Action 3:

respond with the following text

Can I order you anything else?

Final Action:

Waiting for user input

This screen shows an example of all the information you might see when selecting an Intent.

Pactera BGUS Appraisal System

https://ipactor.com

pact.AI

John Doe

Bots Resources Users

Mom & Pop Pizza Bot

Test Bot

Dialogs Intents Entities

Entities

Entities	Values
Food Type	@Pizza: piazzes, piazzas, pis, pies, pizzazz, huzza, piers, pious
Pizza Type	@Pasta: noodles, gnocchi, linguine
Pasta Type	@Salad:
Salad Type	
Crust Type	
Pizza Size	
Quantity	

Enter comma separated values. The first value will be the variable name *

This screen shows what happens when you click the TEST BOT button. This sidebar slides out from the left and is visible no matter what tab the user is on (Dialog, Intents, or Entities).

Pactera BGUS Appraisal System

https://ipactor.com

pact.AI

John Doe

Bots Resources Users

Mom & Pop Pizza Bot

Switch Cloud Service Channel Publish Test Bot

Example utterances that imply this intent

Greeting Order Order Pizza Order Pasta Order Salad Hours Location

Can I order a **thin crust pepperoni pizza**?
I would like to place an **order**.
I need a **large pizza**.
I want to get some **pasta delivered**.

Add a question here...

Dialog Maker

Action 1: check utterance for entities

Entities If not present, ask

Food Type What food would you like to add to your order?
Quantity How many would you like to order?

Action 2: if entity has a value of

Food Type = Pizza go to intent Order Pizza
Food Type = Pasta go to intent Order Pasta
Food Type = Salad go to intent Order Salad

Action 3: respond with the following text

Can I order you anything else?

Final Action: Waiting for user input

Try it out!

Hello, I'm BoBo the pizza bot. I can help with directions to my store, hours of operation and ordering food!

Enter something here to test your bot!

Matching Predicts:

Intent	Score
Order	26.1
Order Pizza	6.0
Order Pasta	5.3

Entity Score

Entity	Score
Food Type	58.1
Pizza Type	48.0

Context:

Entity	Value
Food Type	Pizza
Pizza Type	Pepperoni

