

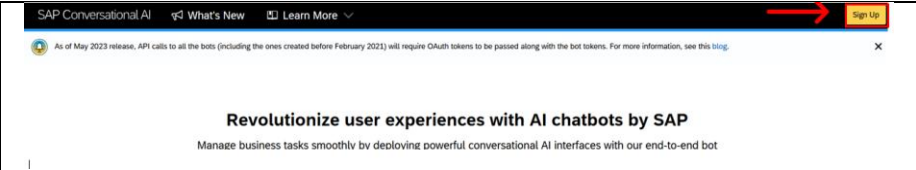
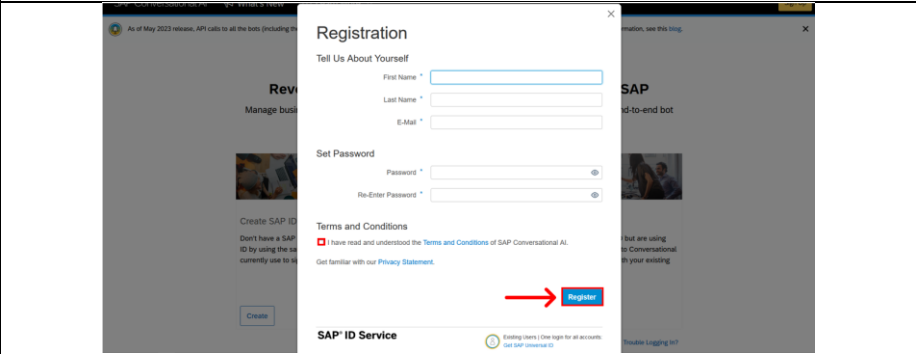
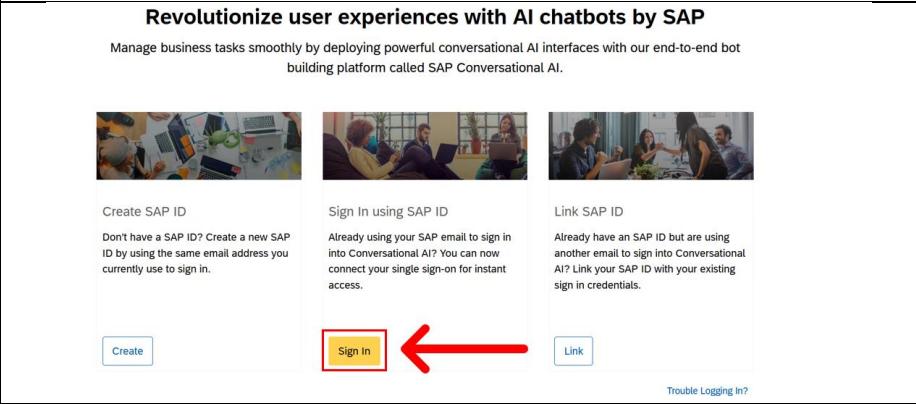
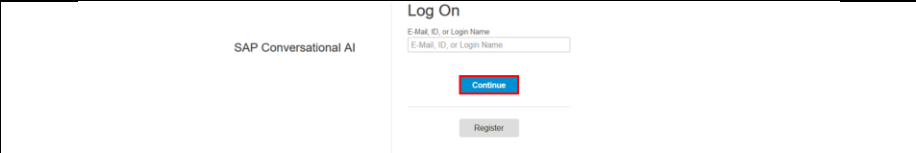
# Use Scripting to Design a Chatbot Message from an API Response

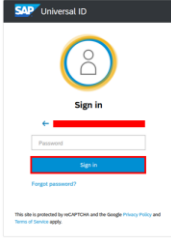

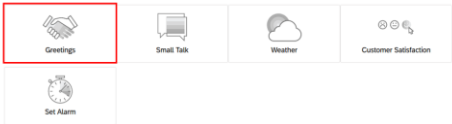

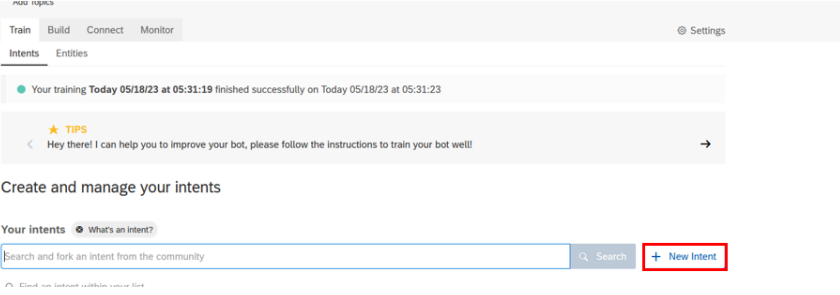
Create an SAP Conversational AI chatbot for customer ordering by calling an API and using scripting to create a custom message from the response.

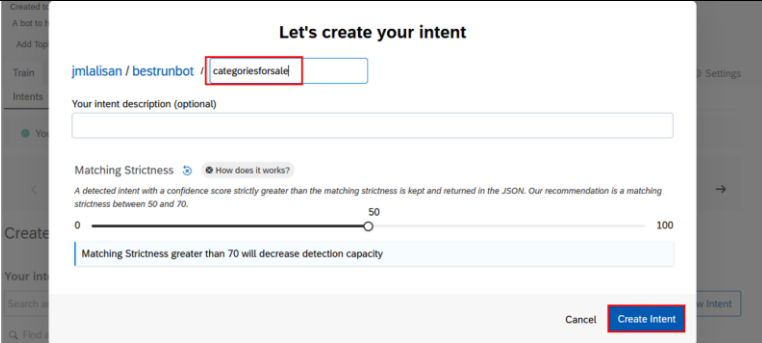
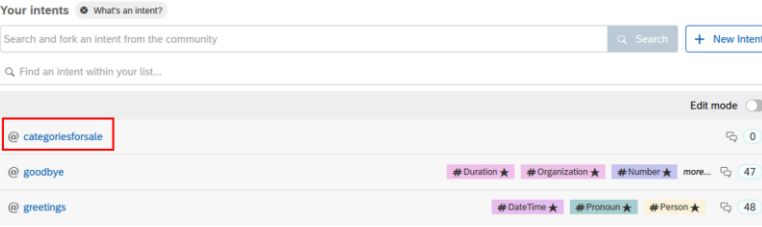
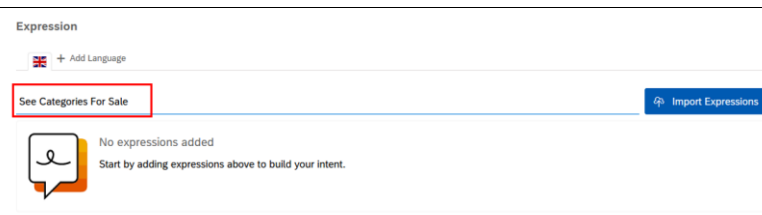
Prerequisites:

You'll need an SAP Conversational AI account

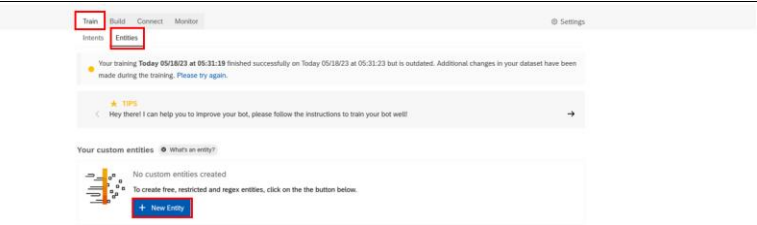
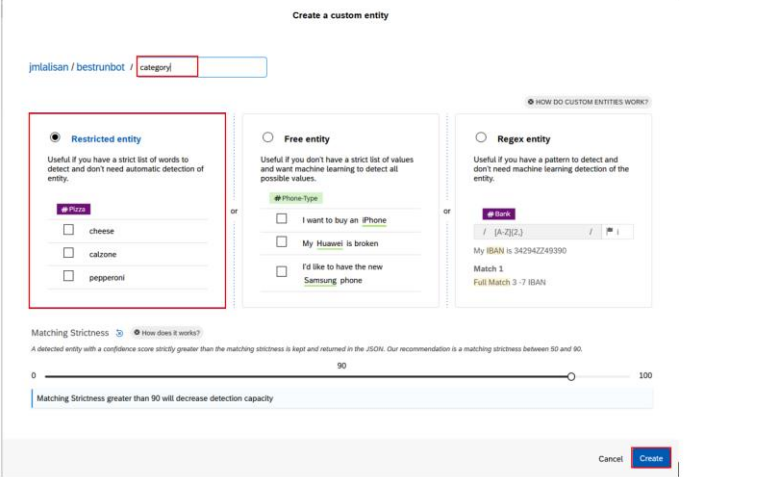
## Create New Bot and Intent

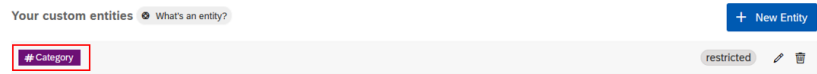
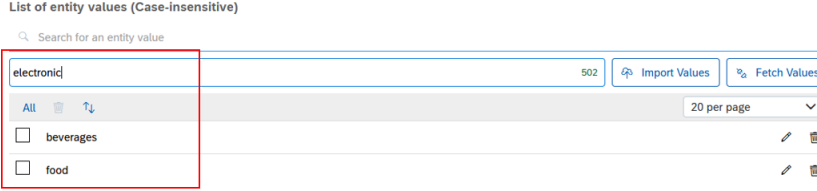
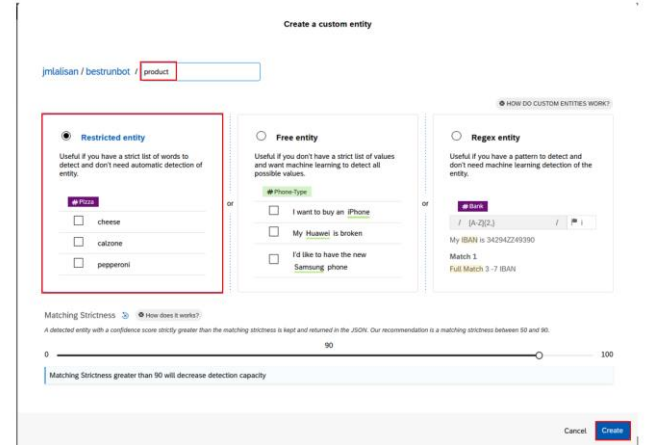
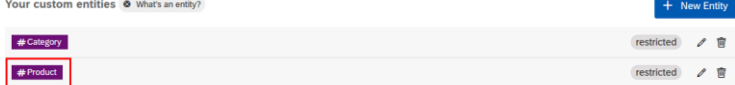
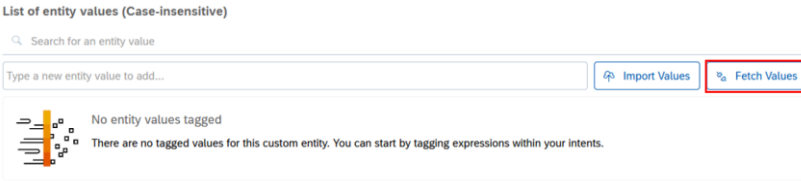
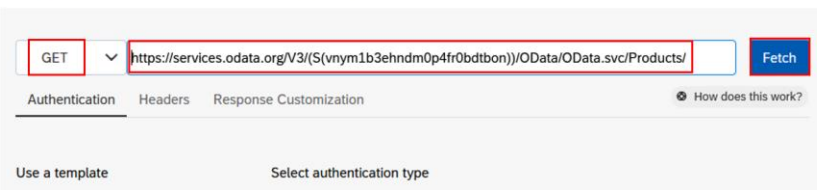
go to <a href="https://cai.tools.sap/">https://cai.tools.sap/</a>  Click on <b>Sign up</b>	
Fill up the information  Check the Terms and Condition  Click on <b>Register</b>  It will send email on your email to validated account	
Or you can use your SAP ID account to <b>Sign in</b>	
Fill up the Log on form  Click the <b>Continue</b>	

<p>Put your password</p> <p>Click <b>Sign in</b></p>	
<p>Select <b>Perform Actions</b></p>	<p>1 What do you want your chatbot to do?</p> 
<p>Select <b>Greetings</b></p>	<p>2 Select predefined skills for your bot</p> 
<p>Put the <b>name</b> and <b>description</b> of your bot</p>	<p>3 Create your bot</p> 
<p>in type of data Select <b>Non-Personal</b></p> <p>Select <b>Store</b> conversation data</p>	<p>4 Data Policy</p> <p>Type of data Select the most restrictive type of data used by your bot. Note that health-related data is not allowed.</p> <p><input checked="" type="radio"/> Non-personal <input type="radio"/> Personal <input type="radio"/> Sensitive Personal <input type="radio"/> Health</p> <p>Data retention: unlimited duration</p> <p>Store conversation data Select whether you want to store your user's conversations. Learn how this affects monitoring and connect.</p> <p><input checked="" type="radio"/> Store (recommended) Store your user's conversations to improve and monitor your bot. <input type="radio"/> Do not store Do not store your user's conversations. This will heavily impact monitoring and connect features.</p>
<p>Tick <b>Public</b> as Bot Visibility</p> <p>Click <b>Create</b></p>	<p>5 Bot visibility</p> <p><input checked="" type="radio"/> Public Your bot is open to everyone</p> <p><input type="radio"/> Private Your bot is private and accessible only by you and the developers you decide to share it with</p> <p><b>Create</b></p>
<p>Click <b>+New Intents</b></p>	

<p>Name the intent as <b>categoriesforsale</b></p> <p>Hit <b>Create Intent</b></p>	
<p>Open the intent we made</p> <p><b>@categoriesforsale</b></p>	
<p>Add expression</p> <p><b>See Categories For Sale</b></p> <p>Hit <b>Enter</b></p>	

## Create Entities

<p>Go to <b>Train &gt; Entities</b></p> <p>Click <b>New Entity</b></p>	
<p>Call the entity as <b>category</b></p> <p>Select <b>Restricted Entity</b></p> <p>Click <b>Create</b></p>	

Click on the entity <b>#Category</b>	
Add 3 value to the entity  Food Beverages Electronic	
Go back to <b>Train &gt; Entities</b>  Create another entity Named <b>product</b>  Select <b>Restricted</b>  Hit <b>Create</b>	
Click on the entity <b>#product</b>	
Click <b>Fetch Values</b>	
Select <b>GET</b> on the dropdown  Put <b>https://services.odata.org/V3/(S(vnym1b3ehndm0p4fr0bdtbon))/OData/OData.svc/Products/?\$format=json</b>  Click <b>Fetch</b>	<p><b>Remote entity values fetching</b></p> <p><b>1 Define your URL fetching</b> You are allowed to fetch 10,000 entity values at once</p> 

Once done fetching  
go to step 2 and put

```
{{{json (pluck  
api_service_resp  
onse.body.value  
'Name')}}}}
```

Click **Transform**

Keep the import  
option **Replace**

Click **Import**

**#product** entity  
should be populated

## 2 Transform your API service response to fit the format

Transform

How does this work?

```
1 {{{json (pluck api_service_response.body  
.value "Name"))}}}}
```

```
[  
  "Bread",  
  "Milk",  
  "Vint soda",  
  "Havina Cola",  
  "Fruit Punch",  
  "Cranberry Juice",  
  "Pink Lemonade",  
  "DVD Player",  
  "LCD HDTV",  
  "Lemonade",  
  "Coffee"  
]
```

## 2 Select your import option

☒ **Replace**

to replace with the fetched entity values

☐ **Merge**

to add fetched entity values to the bot's existing entity values

Cancel

Import

### List of entity values (Case-insensitive)

Search for an entity value

Type a new entity value to add...

Import Values

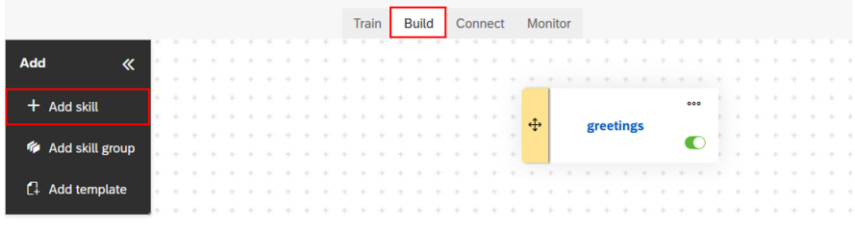
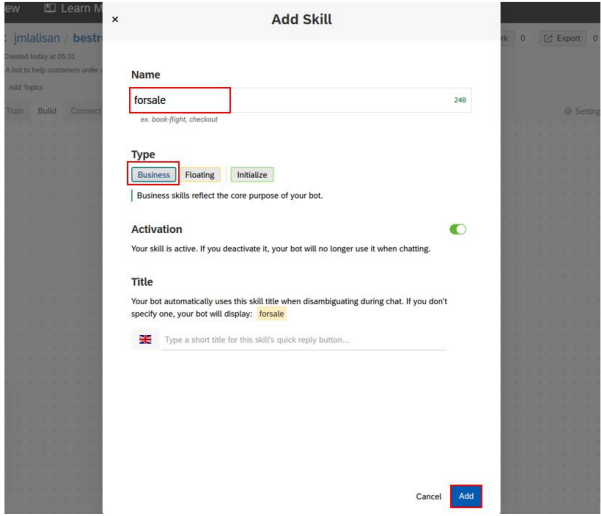

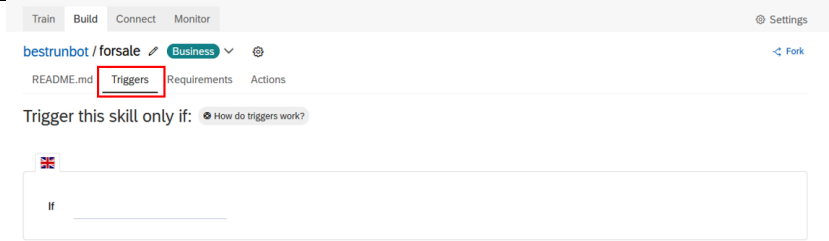
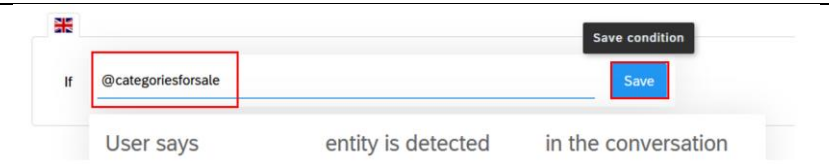
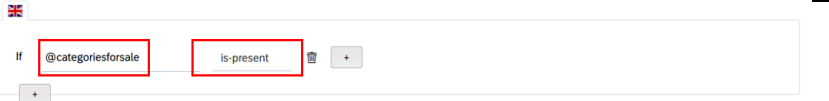
Fetch Values

All


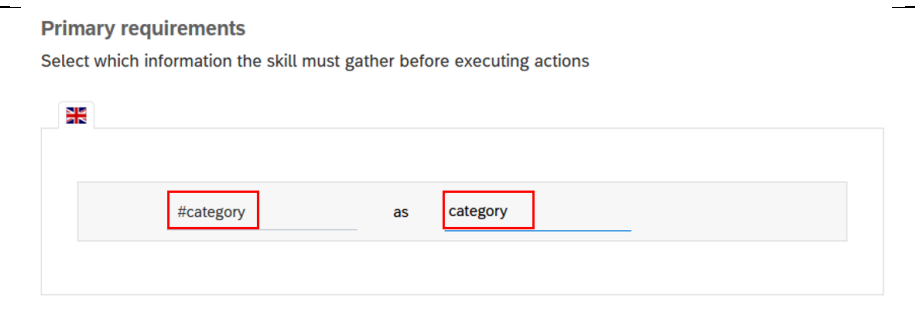
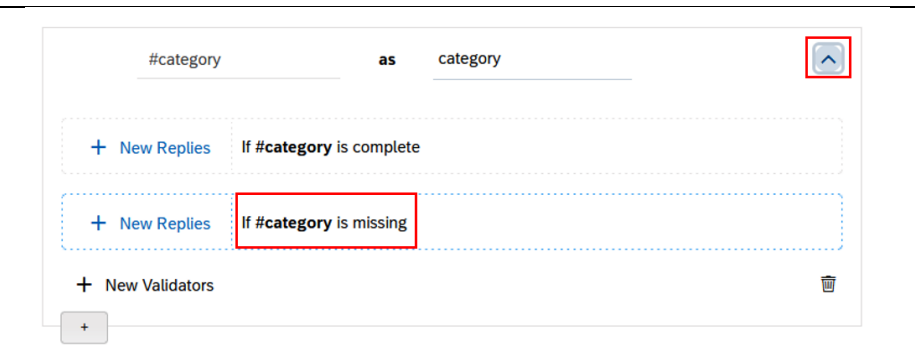
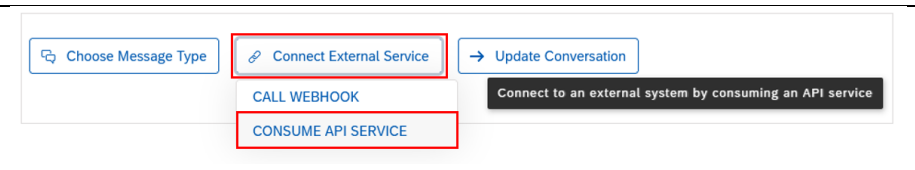
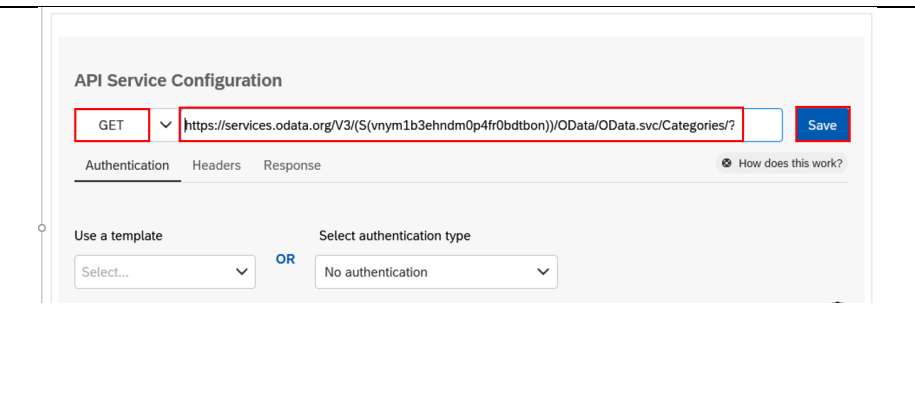
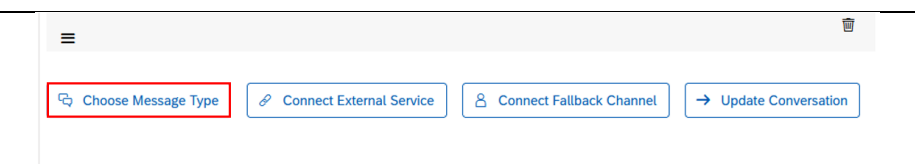
20 per page

<input type="checkbox"/>	bread		
<input type="checkbox"/>	coffee		
<input type="checkbox"/>	cranberry juice		
<input type="checkbox"/>	dvd player		
<input type="checkbox"/>	fruit punch		
<input type="checkbox"/>	havina cola		
<input type="checkbox"/>	lcd hdtv		
<input type="checkbox"/>	lemonade		
<input type="checkbox"/>	milk		
<input type="checkbox"/>	pink lemonade		
<input type="checkbox"/>	vint soda		

## Create Skill for Ordering

Go to <b>Build</b> tab,  Click <b>+Add Skill</b>	
Name the skill <b>forsale</b>  Click <b>Business</b> as type          Click <b>Add</b>	
Click on <b>forsale</b>	
Go to <b>Triggers</b> tab	
Add <b>@categoriesforsale</b>  Click <b>Save</b>	
Condition should look like this	

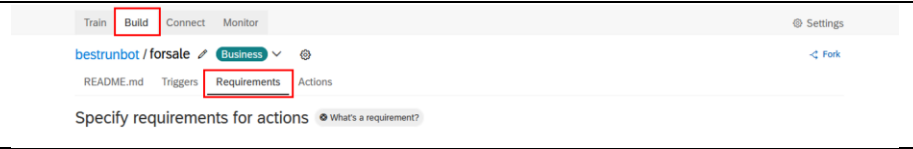
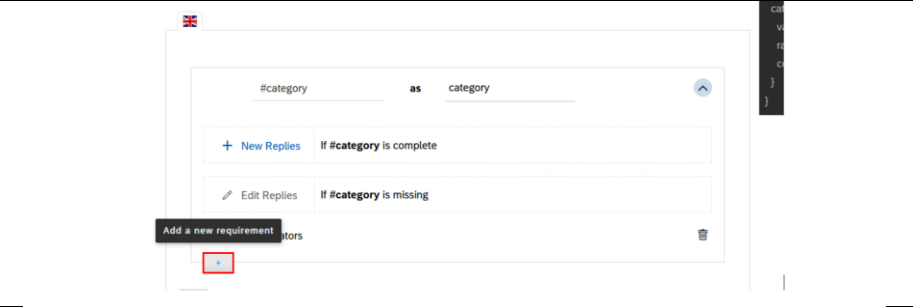
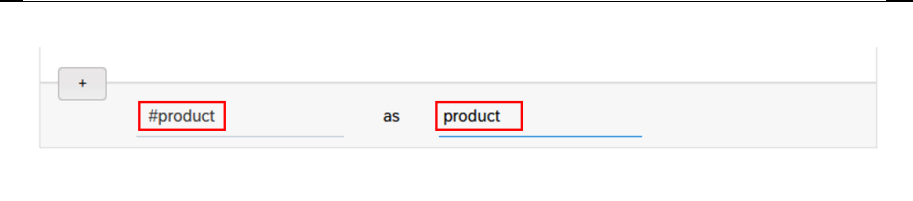
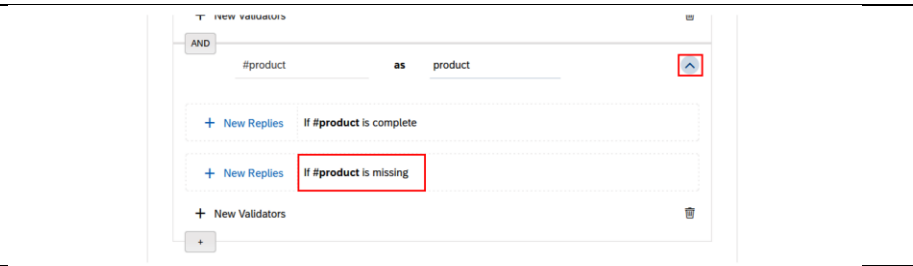
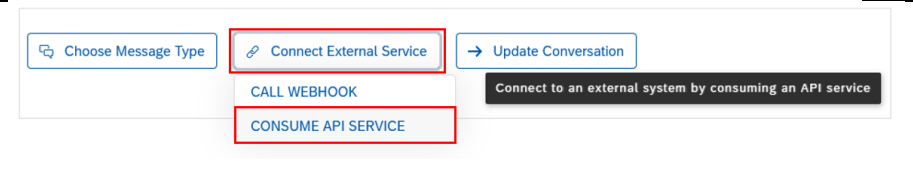
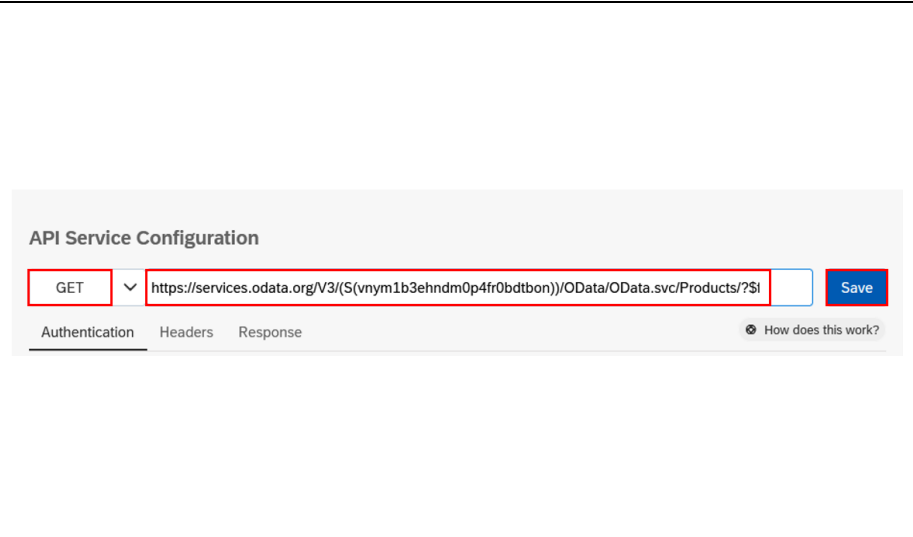
## Add Category Requirement for Skill

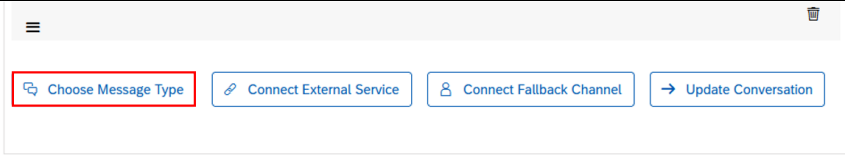
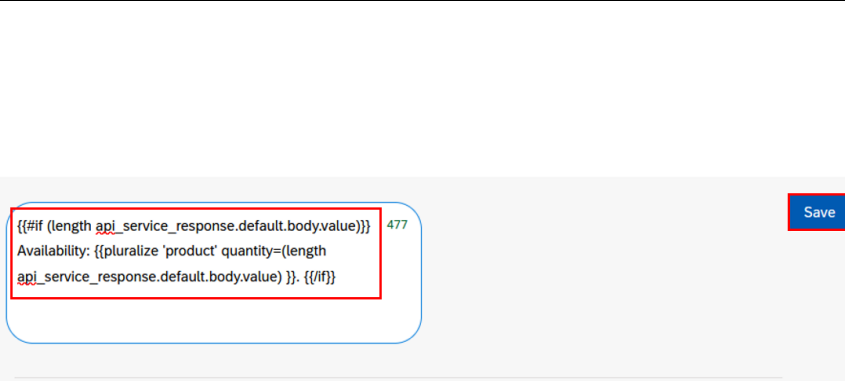
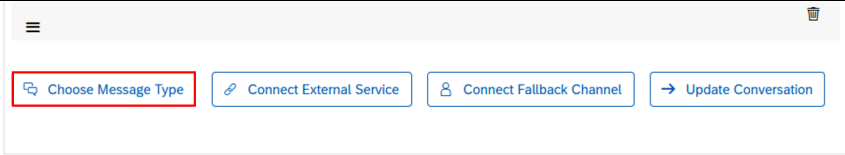

Go to <b>Requirements</b> tab	
Select <b>#category</b> as requirement  <b>category</b> as memory variable  Hit <b>Enter</b>	
Click on ^ <b>Dropdown Icon</b>  Click on <b>If #category is missing</b>	
Click on <b>Connect External Service</b>  Select <b>Consume API Service</b>	
Select <b>GET</b> on the Dropdown  Paste the endpoint API <a href="https://services.odata.org/V3/(S(vnym1b3ehndm0p4fr0bdtbon))/OData/OData.svc/Categories/?\$format=json">https://services.odata.org/V3/(S(vnym1b3ehndm0p4fr0bdtbon))/OData/OData.svc/Categories/?\$format=json</a>  Click <b>Save</b>	
Click <b>Choose Message Type</b>	

Click <b>Custom</b>	
<p>On the Message type Select <b>Buttons</b></p> <p>Paste the Code below</p> <p>Hit <b>Save</b></p>	
<pre>{   "type": "buttons",   "delay": "",   "content": {     "title": " Please select the category you are interested in!",     "buttons": [       {{#eachJoin api_service_response.default.body.value}}       {         "title": "{{Name}}",         "value": "{{Name}}",         "type": "postback"       }{{/eachJoin}}     ]   } }</pre>	
You should have the following	



## Add Product Requirement for Skill

Go back to <b>Requirements</b> tab	
Add new <b>requirement</b>  Click on <b>+</b>	
Put <b>#product</b> as requirement and <b>product</b> as memory variable  Hit <b>Enter</b>	
Click the <b>dropdown</b>  Click on <b>If #product is missing</b>	
Click on <b>Connect External Service</b>  Select <b>Consume API Service</b>	
Select <b>GET</b> , and copy and paste this API endpoint  <a href="https://services.odata.org/V3/(S(vnym1b3ehndm0p4fr0bdtbon))/OData/OData.svc/Products/?\$filter=%20Category/any(Category:Category/Name%20eq%20%27{{memory.category.raw}}%27)&amp;&amp;\$format=json">https://services.odata.org/V3/(S(vnym1b3ehndm0p4fr0bdtbon))/OData/OData.svc/Products/?\$filter=%20Category/any(Category:Category/Name%20eq%20%27{{memory.category.raw}}%27)&amp;&amp;\$format=json</a>  Click <b>Save</b>	

Click <b>Choose Message Type</b>	
Choose <b>Text</b>	
Enter  <pre>{{#if (length api_service_response.default.body.value) }} Availability: {{pluralize 'product' quantity=(length api_service_response.default.body.value) }}. {{/if}}</pre> Hit <b>Save</b>	
Add new Message  Click <b>Choose Message Type</b>	
Click <b>Custom</b>	

Select **List** as the message type

Enter the code below

Click **save**

Message Type

List × ▾

Response Script

```
1 [{"type": "list",
2   "content": {
3     "elements": [
4       {{#eachJoin api_service_response.default.body.value}}
5       {
6         "title": "{{Name}}",
7         "imageUrl": "",
8         "subtitle": "$ {{Price}}",
9         "buttons": [{
10          "title": "{{Name}}",
11          "value": "{{Name}}",
12          "type": "postback"
13        }]
14      } {{/eachJoin}}
15    ]
16  }
17 ]
```

How does this work?

Save

```
{
  "type": "list",
  "content": {
    "elements": [
      {{#eachJoin api_service_response.default.body.value}}
      {
        "title": "{{Name}}",
        "imageUrl": "",
        "subtitle": "$ {{Price}}",
        "buttons": [
          {
            "title": "{{Name}}",
            "value": "{{Name}}",
            "type": "postback"
          }
        ]
      } {{/eachJoin}}
    ]
  }
}
```

You should have two messages

```
+
{{#if (length api_service_response.default.body.value)}}
Availability: {{pluralize 'product' quantity=(length
api_service_response.default.body.value) }}. {{/if}}
```

Markdown syntax is disabled.


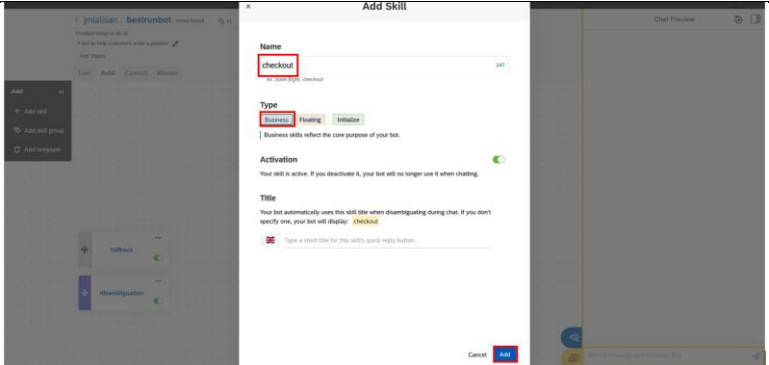
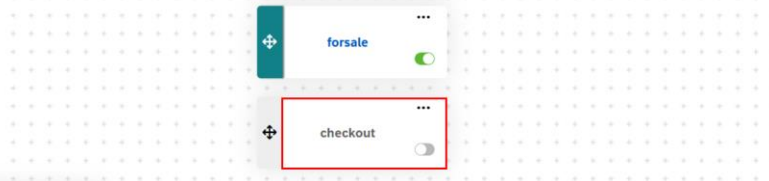
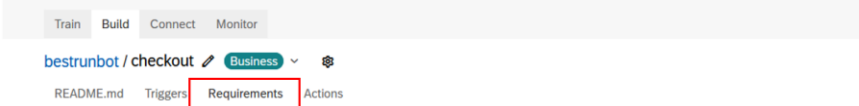

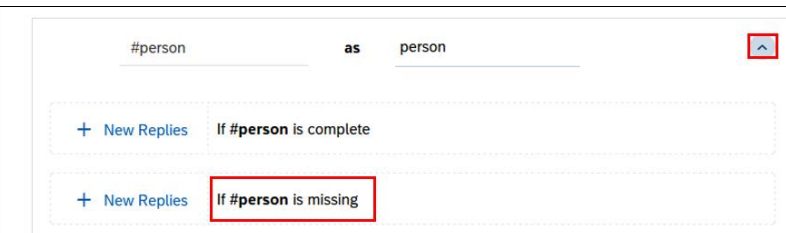
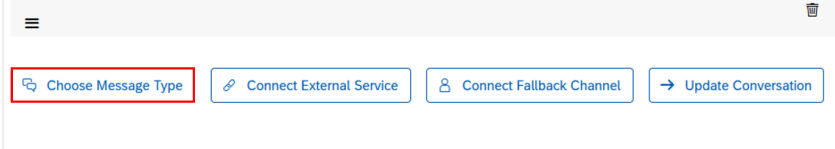


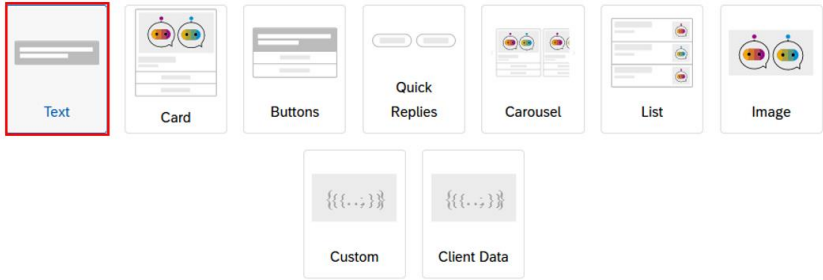
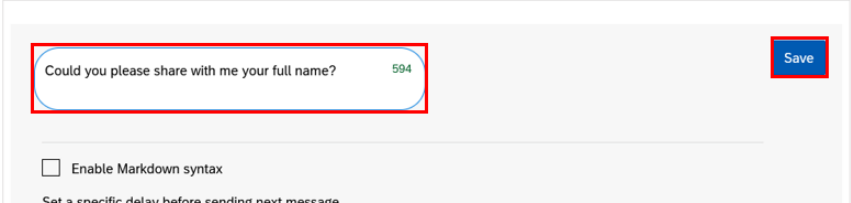
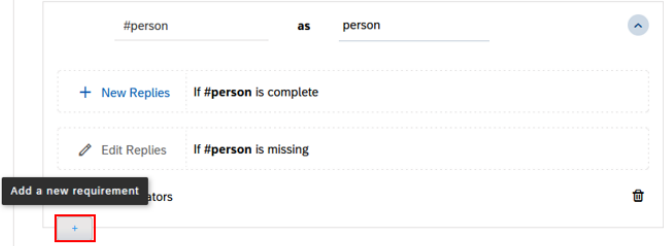
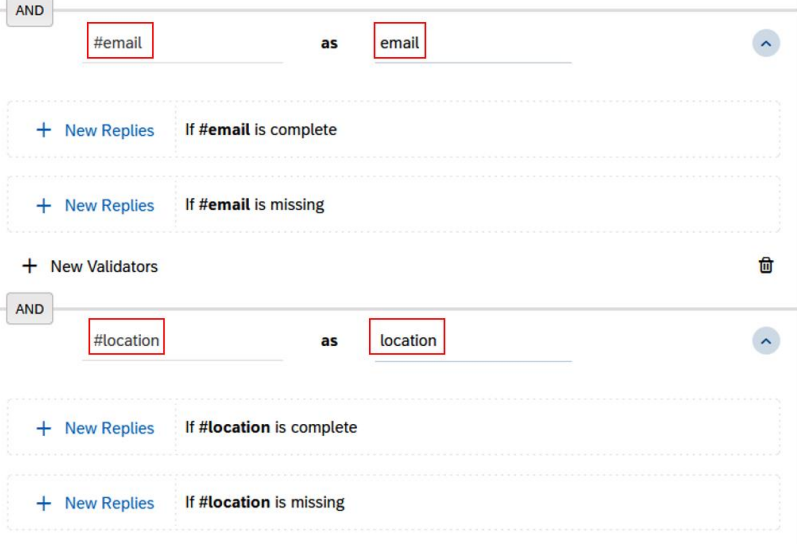

How does this work?


```
{
  "type": "list",
  "content": {
    "elements": [
      {{#eachJoin api_service_response.default.body.value}}
      {
        "title": "{{Name}}",
        "imageUrl": "",
        "subtitle": "$ {{Price}}",
        "buttons": [
          {
            "title": "{{Name}}",
            "value": "{{Name}}",
            "type": "postback"
          }
        ]
      } {{/eachJoin}}
    ]
  }
}
```

You can already check the preview in the **Preview Chat** tab on bottom right

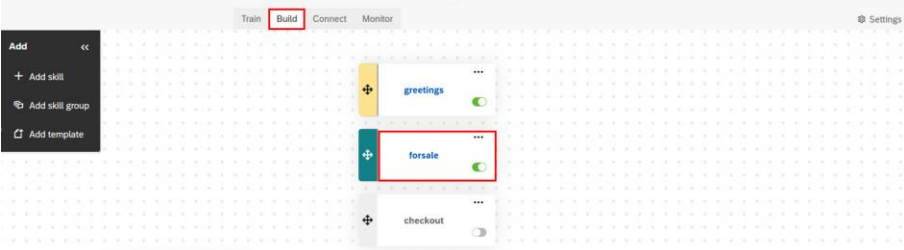
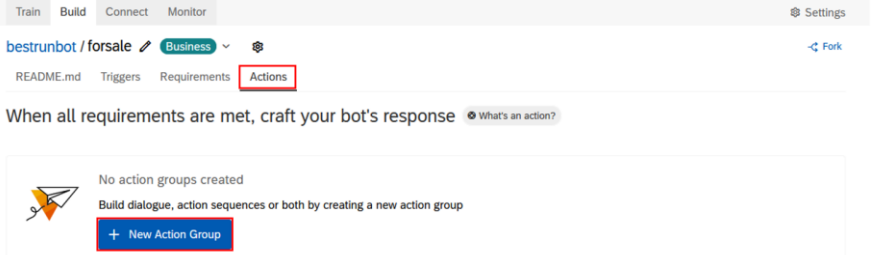
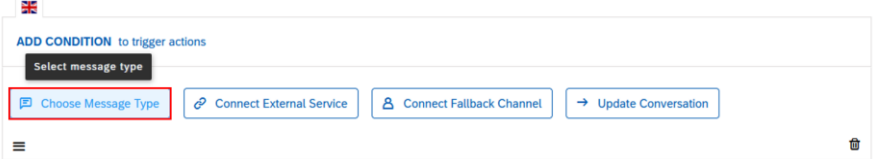
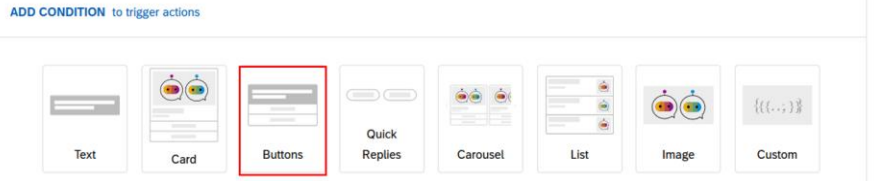
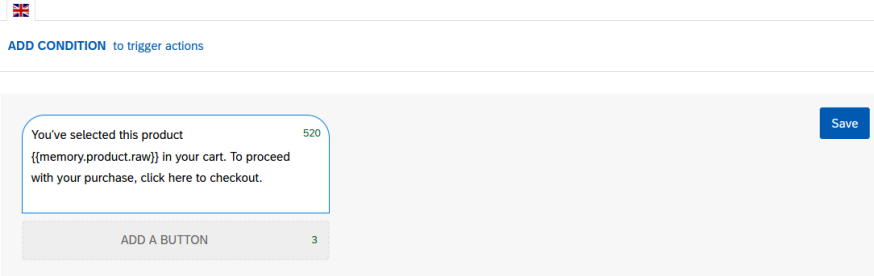
## Create Skill for Checkout

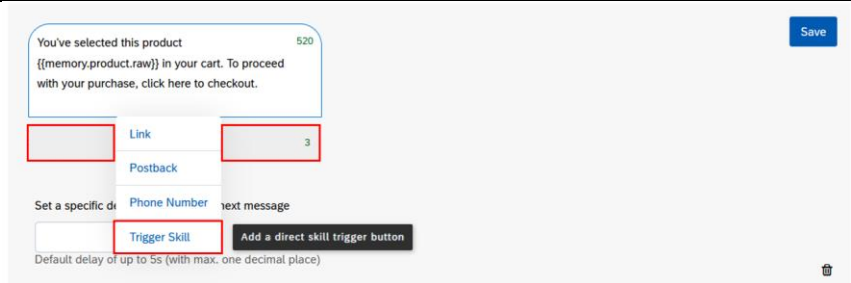
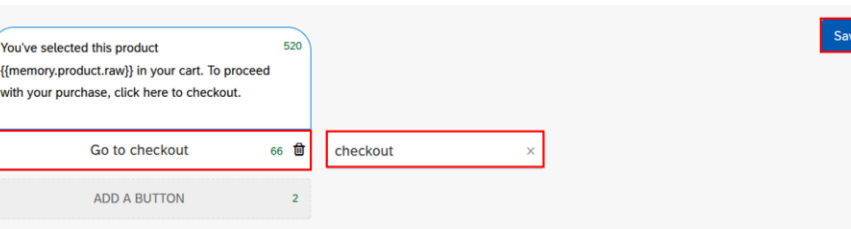
Go to <b>Build</b> tab	
Click on + <b>Add Skill</b>	
Name it <b>checkout</b>	
Select <b>Business</b> as type	
Click <b>Add</b>	
Click on <b>checkout</b>	
Go to <b>Requirements</b> tab	
Select <b>#person</b> as requirement and <b>person</b> as memory variable	
Hit <b>Enter</b>	
Click the ^ <b>dropdown icon</b>	
Click on <b>if #person is missing</b>	
Click <b>Choose Message Type</b>	

<p>Choose <b>Text</b></p>	
<p>Put <b>Could you please share with me your full name?</b></p> <p>Hit <b>Save</b></p>	
<p>Click on <b>+</b></p> <p>We will do the same for <b>#location</b> and <b>#email</b></p>	
<p>Put <b>#email</b> and <b>#location</b> as requirement</p> <p><b>email</b> and <b>location</b> as their memory variable respectively.</p>	
<p>Put question by clicking <b>If #email is missing &gt; Choose Message Type &gt; Text</b></p>	

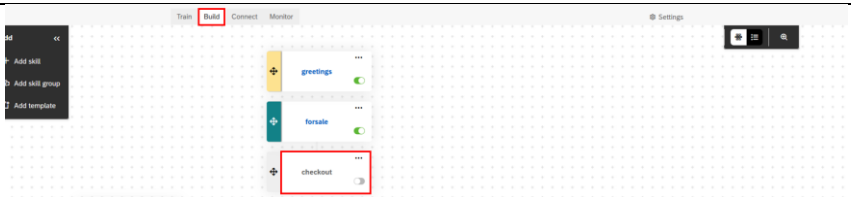
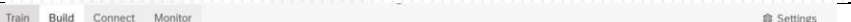


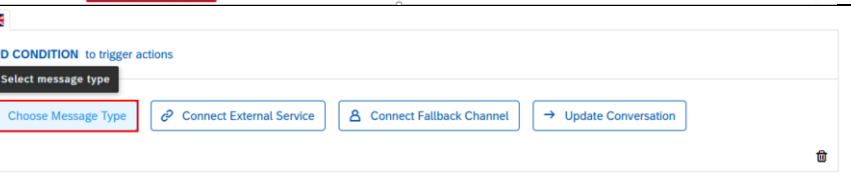
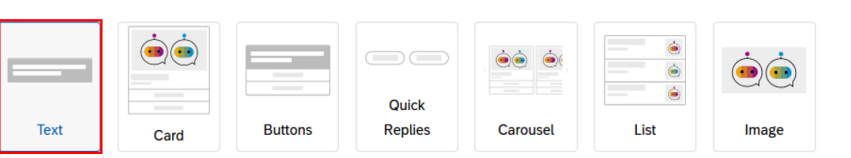
Repeat the steps for <b>location</b>	
--------------------------------------	--

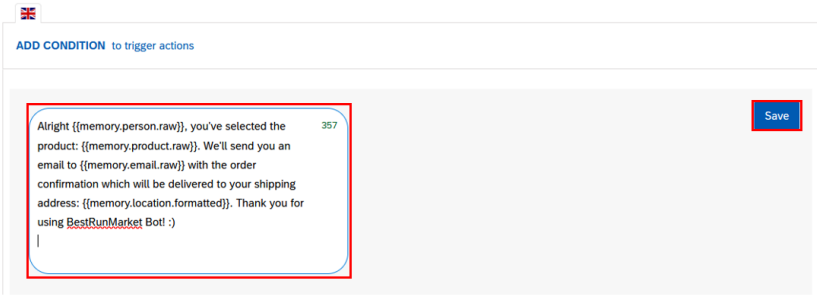
## Let User Trigger Checkout Skill

Go to <b>Build</b> tab	
Open <b>forsale</b> skill	
Click on <b>Actions</b> tab	
Click on <b>+ New Actions Group</b>	
Click on <b>Choose Message Type</b>	
Select <b>Buttons</b>	
Put on the message	

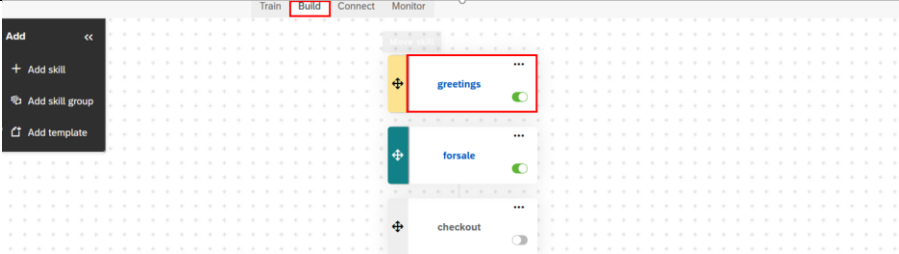
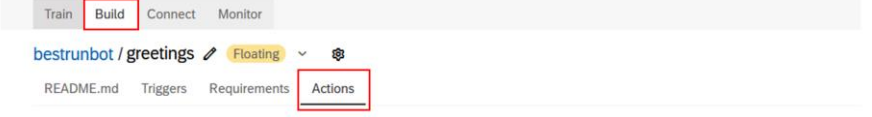
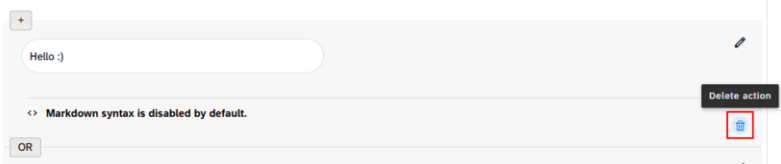
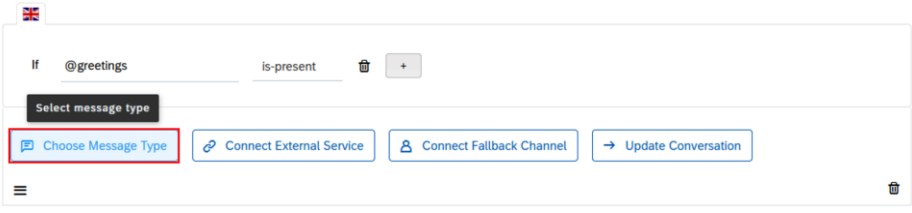
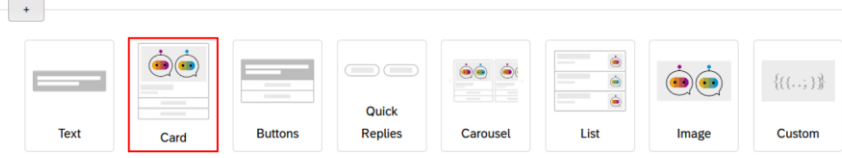
Click <b>ADD A BUTTON</b>	
Select <b>Trigger Skill</b>  Put <b>Go to checkout</b> as button title  <b>checkout</b> as skill  Click <b>Save</b>	

## Add Actions to Checkout Skill

Go to <b>Build</b> tab	
Open <b>checkout</b> skill	
Click on <b>Actions</b> tab	
Click on <b>+ New Actions Group</b>	
Click on <b>Choose Message Type</b>	
Select <b>Text</b>	

<p>Put the message below in the message box</p> <p>Click <b>Save</b></p>	
<p>Alright {{memory.person.raw}}, you've selected the product: {{memory.product.raw}}. We'll send you an email to {{memory.email.raw}} with the order confirmation which will be delivered to your shipping address: {{memory.location.formatted}}. Thank you for using BestRunMarket Bot! :)</p>	

## Modify Greeting Skill to Ask About Ordering


<p>Go to <b>Build</b> tab</p> <p>Open <b>greetings</b> skill</p>	
<p>Click on <b>Actions</b> tab</p>	
<p><b>Delete</b> all messages</p> <p>We will make our own</p>	
<p>Click <b>Choose Message Type</b></p>	
<p>Select <b>Card</b></p>	



Put **https://i.imgur.com/reQirgK.png** as image url

Hello! Welcome to the BestRunMarket Bot! as Title

How may I help you? as Subtitle



4061

lo! Welcome to the BestRunMarket Bot!  
How may I help you?

3

ADD A BUTTON

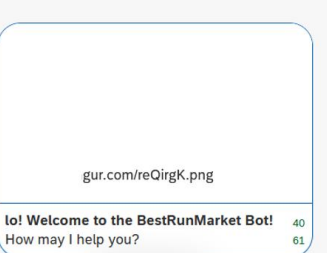
Set a specific delay before sending next message

Default delay of up to 5s (with max. one decimal place)

Save

Click **ADD A BUTTON**

Select **Postback**



4061

lo! Welcome to the BestRunMarket Bot!  
How may I help you?

3

ADD A BUTTON

Set a specific delay before sending next message

Default delay of up to 5s (with max. one decimal place)

Save

Link

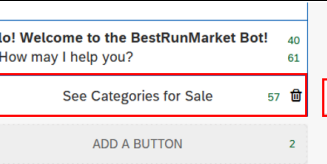
Postback

Phone Number

Trigger Skill

Add a postback to the button

Put **See Categories for Sale** for both Button Title and Postback values.



4061

lo! Welcome to the BestRunMarket Bot!  
How may I help you?

57

See Categories for Sale

2

ADD A BUTTON

Set a specific delay before sending next message

Default delay of up to 5s (with max. one decimal place)

Save

See Categories for Sale

Click **ADD A BUTTON**

Select **Postback** again



4061

lo! Welcome to the BestRunMarket Bot!  
How may I help you?

3

ADD A BUTTON

Set a specific delay before sending next message

Default delay of up to 5s (with max. one decimal place)

Save

Link

Postback

Phone Number

Trigger Skill

Add a postback to the button

Put **Ask for an Order Tracking** for both Button Title and Postback values.

Click **Save**

gur.com/reQirgK.png

lo! Welcome to the BestRunMarket Bot!  
How may I help you?

See Categories for Sale 57

Ask for an Order Tracking 54

ADD A BUTTON 1

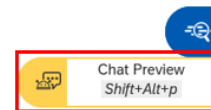
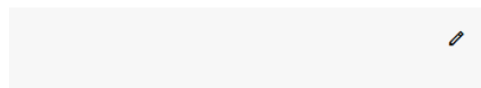
See Categories for Sale

Ask for an Order Tracking

Save

## Test Bot

Click **Chat Preview** at the bottom right Or **Shift + alt + p**



Chat Preview

Today 5:51 PM

hi

Hello! Welcome to the BestRunMarket Bot!  
How may I help you?

See Categories for Sale

Ask for an Order Tracking

See Categories for Sale

Please select the category you are interested in!

Food

Beverages

Electronics

Food

Availability: 2 products.

Bread \$ 2.5

Milk \$ 3.5

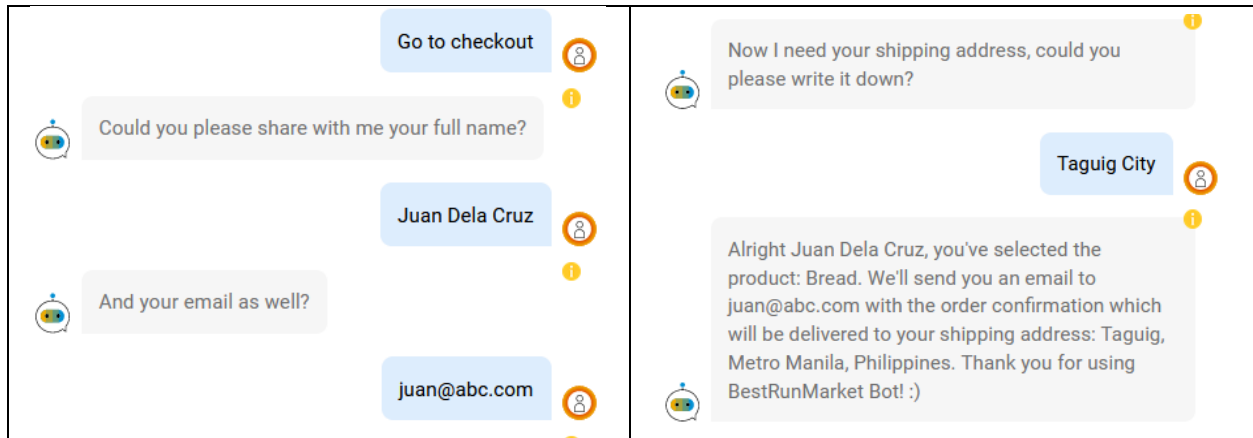
Bread

Milk

Bread

You've selected this product Bread in your cart. To proceed with your purchase, click here to checkout.

Go to checkout



-End of Demo-