

Creating Chatbot using Dialog Flow

Dialog Flow:

- It is basically defined as a Google service which operates on a Google Cloud Platform.
- It is also defined as an NLP (Natural Language Processing) platform, which is used to develop an application related to the conversations and experience for the customers of the company in different languages on numerous platforms.
- It is mainly used to build actions for most of the Google Assistant devices.
- By using Google-powered products developers can design text-based and voice-conversation interfaces in order to answer the queries of customers in various languages.
- **Ex:** Various companies use Dialog flow to make messaging bots that reply to the queries of the customers on different platforms such as Google Assistant, Facebook Messenger, Alexa Voice Search (AVS) etc.

Components of Dialog Flow:

Agent:

It is defined as a virtual agent whose task is to manage the end-user conversations.

Intent:

Intent comprises logic and elements to parse the information of the user. It helps to map what the users are saying with the responses. There are various components in the intent, such as events, response, the user says, contexts, and action.

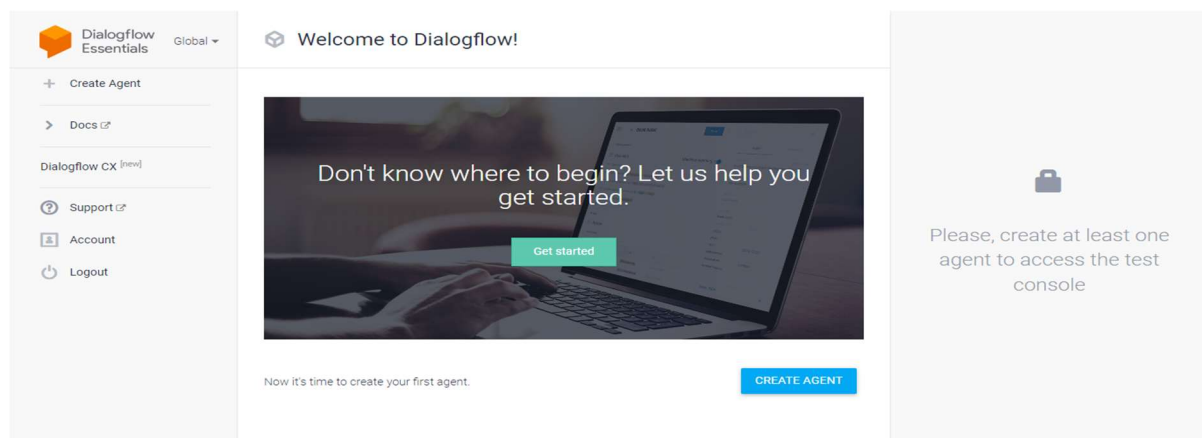
Entity:

Entity is defined as a knowledge repository that is used by the agent to answer the questions of the user. There are various types of system entities, such as weather, location, date, etc.

Create Chatbot using Dialog Flow:

1) First, we have to log in to the Dialogflow. We can log in to the Dialogflow by using the link <https://dialogflow.cloud.google.com/#/getStarted>

2) The interface looks like



3) Next, we have to click on the **create agent** to create a new agent. The interface looks like

The screenshot shows the 'Create Agent' page in the Dialogflow Essentials console. On the left is a sidebar with navigation links: 'Create Agent' (active), 'Docs', 'Dialogflow CX', 'Support', 'Account', and 'Logout'. The main area contains a form with the following fields: 'Agent name' (with a 'CREATE' button), 'DEFAULT LANGUAGE' (set to 'English - en'), 'DEFAULT TIME ZONE' (set to '(GMT+6:00) Asia/Almaty'), 'GOOGLE PROJECT' (with a note about automatic linking), and 'AGENT TYPE' (with a toggle for 'Set as Mega Agent'). A large grey box on the right contains a briefcase icon and the text: 'Please, create at least one agent to access the test console'.

4) Fill the details like language, the default time zone, and the name for your new bot. Click on create, now the agent is successfully created. This will redirect you to the new page

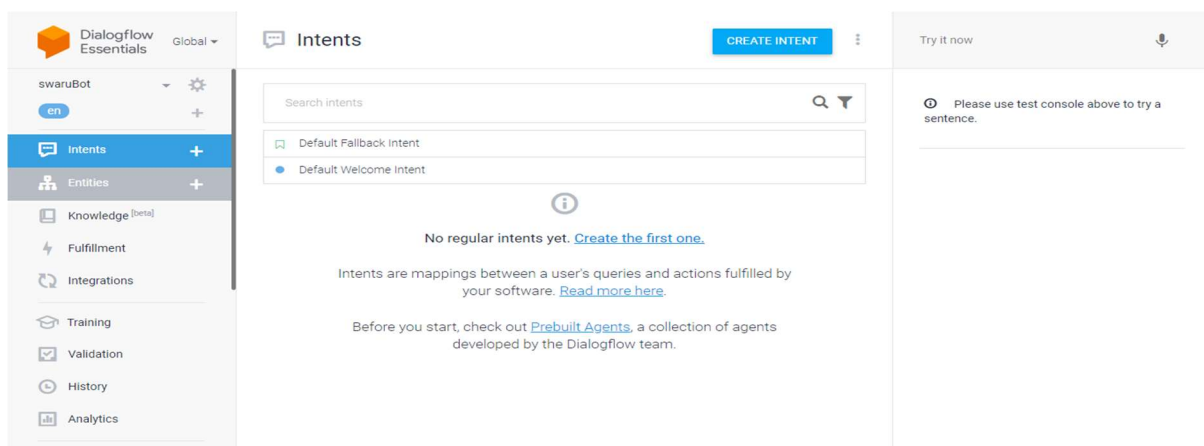
The screenshot shows the 'Intents' page in the Dialogflow Essentials console. The left sidebar now highlights 'Intents'. The main area has a 'CREATE INTENT' button, a search bar, and a list of existing intents: 'Default Fallback Intent' and 'Default Welcome Intent'. Below the list, an information icon is followed by the text: 'No regular intents yet. [Create the first one.](#)' and 'Intents are mappings between a user's queries and actions fulfilled by your software. [Read more here.](#)' and 'Before you start, check out [Prebuilt Agents](#), a collection of agents developed by the Dialogflow team.' On the right, there is a 'Try it now' input field with a microphone icon and a note: 'Please use test console above to try a sentence.'

SmallTalk Section:

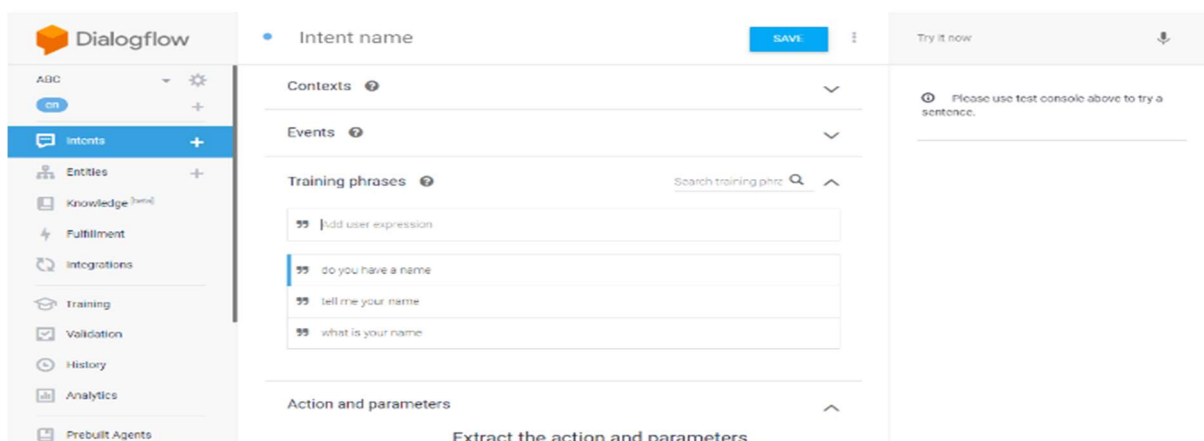
The screenshot shows the 'Small Talk' page in the Dialogflow Essentials console. The left sidebar highlights 'Small Talk'. The main area includes a 'SAVE' button, a text box for customizing responses (with a sample conversation), an 'Enable' toggle, and a 'Small Talk Customization Progress' section with three categories: 'About agent', 'Courtesy', and 'Emotions', each with a progress bar at 0%. On the right, there is a 'Try it now' input field with a microphone icon and a section titled 'Agent' showing a sample interaction: 'USER SAYS: hello' and 'DEFAULT RESPONSE: Good day! What can I do for you today?'. Below this, it shows the 'INTENT' as 'Default Welcome Intent', the 'ACTION' as 'input.welcome', and the 'SENTIMENT' as 'Query Score: 0.2'. At the bottom, there is a 'DIAGNOSTIC INFO' section.

Fill up the questions which are asked in each part with your own answers.

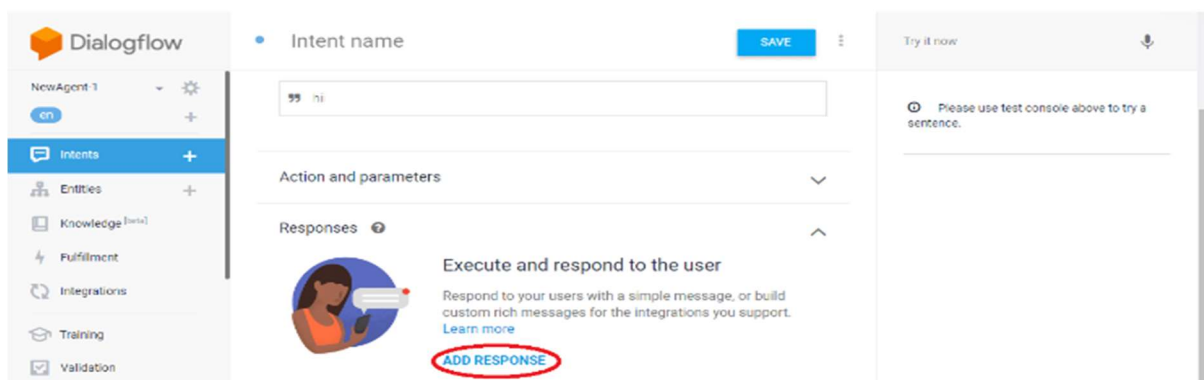
5) The next step is creating an intent. The intent page looks like



Next, we have to add some content to training phrases, and these will be in the text form and then click on the enter button.



6) Next, we have to go down on the option named **Responses** and remove or delete the existing ones. Click on save button



7) Then, click on the **ADD RESPONSES**, and then we have to click on the **Text response** Then type the response which you want.

The screenshot shows the Dialogflow console for a bot named 'fashionBot'. The left sidebar contains navigation options: Intents, Entities, Knowledge, Fulfillment, Integrations, Training, Validation, History, and Analytics. The main area is titled 'Responses' and shows a list of three text response variants. The 'ADD RESPONSES' button is located below the list. The right sidebar shows the 'Agent' configuration, including a default response and a table of parameters.

PARAMETER	VALUE
email	
given-name	Priya
phone-number	

8) In the **Action and parameters** table, the Dialogflow creates a row, which is present below the **Training phrases**.

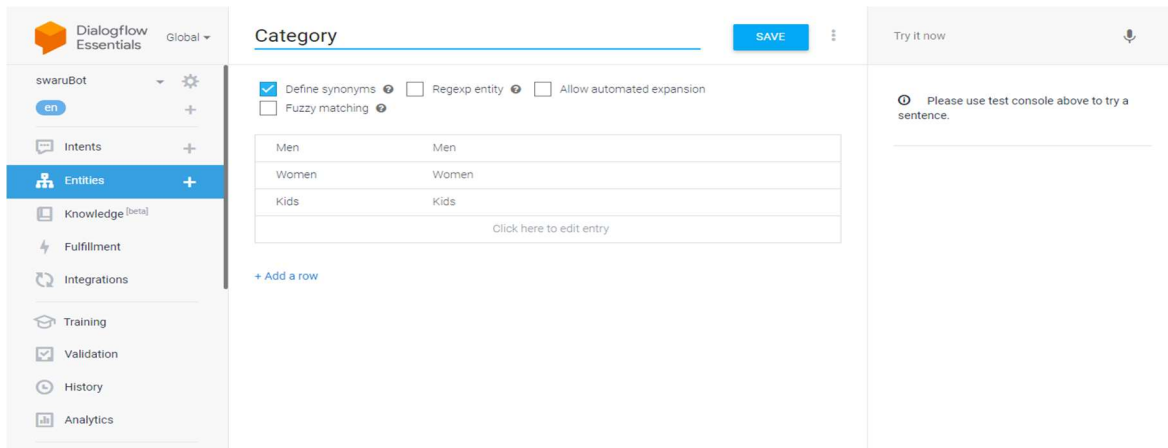
The screenshot shows the Dialogflow console for 'fashionBot' with the 'Action and parameters' section expanded. It displays a table with columns: REQUIRED, PARAMETER NAME, ENTITY, VALUE, IS LIST, and PROMPTS. The table contains three rows for parameters: email, phone-number, and given-name. The right sidebar shows the 'Agent' configuration, including a default response and a table of parameters.

REQUIRED	PARAMETER NAME	ENTITY	VALUE	IS LIST	PROMPTS
<input checked="" type="checkbox"/>	email	@sys.email	Semail	<input type="checkbox"/>	Please tell me ...
<input checked="" type="checkbox"/>	phone-number	@sys.phone-number	Sphone-number	<input type="checkbox"/>	May I know your...
<input checked="" type="checkbox"/>	given-name	@sys.given-name	Sgiven-name	<input type="checkbox"/>	May I know your...

9) Other than this, we will be having a list of questions. So, to handle this, you can create a **custom entity**.

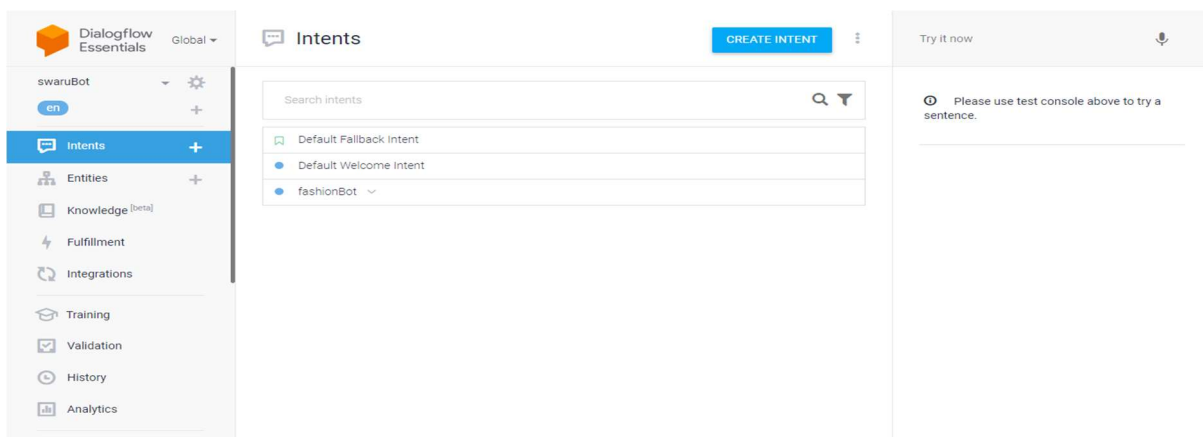
10) We have to click on the button add entity +, on the left sidebar menu to the **Entities**. Click on create, now the entity is successfully created.

11) Then you need to give entity name. Now add the entities in the below edit section. Click on save button.



12) Now, if you want to make the use of the new entity, then you have to add the training phrases to the entity which is created.

13) Click on the option named 'Intents', which is present on the left sidebar menu. Then, click on the intent **fashionBot**.

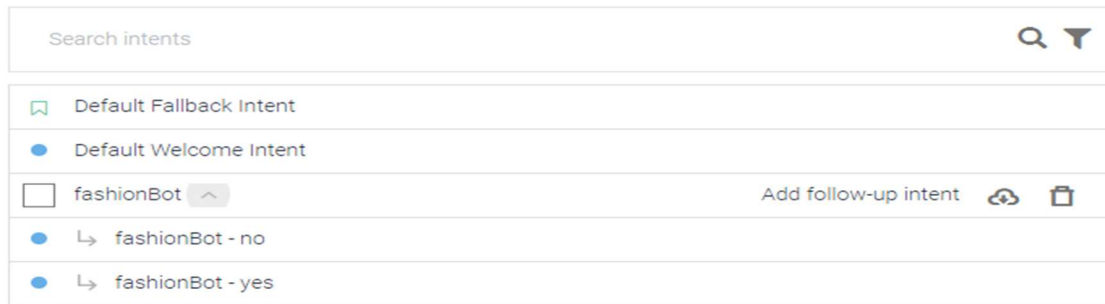


14) Next, you have to add the various training phrases and follow the same process which we followed in intent step.

15) After completion of process, click on **Add follow-up intent** which is over the intent.



16)Then from the list appeared select what you wish to add.



17)Edit the responses for yes and no.

18)In the training section, it contains the data which we used for training.

19)In the validation section, we can create our own custom data for validation. We can fix the errors here.

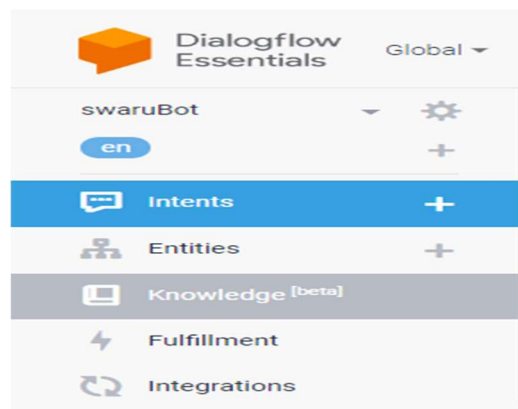
20)In the history section, it will record our data.

21)In the analytics section, it will tell us what is used, from where it is used.

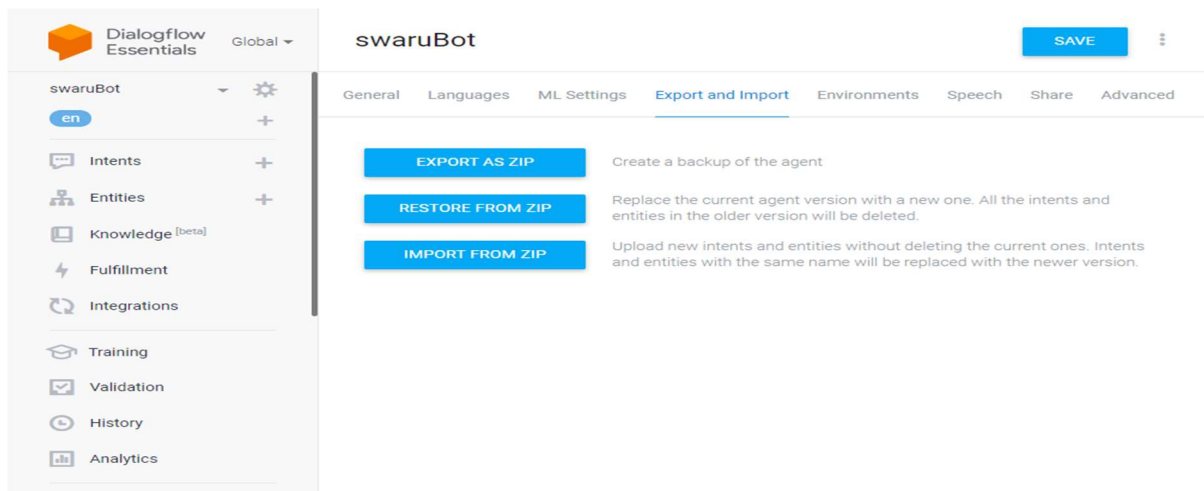
22)In the pre-built agents, it contains the operations or agents which are pre-built they are already trained with different variety of responses.

23)In the bot settings, we can also import the example file to our agent.

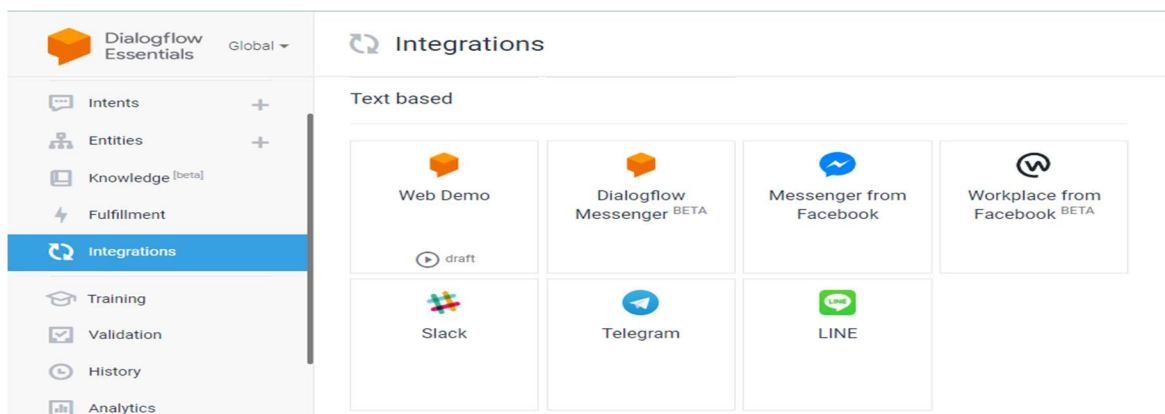
24) click on the setting icon, which is present next to the agent name.



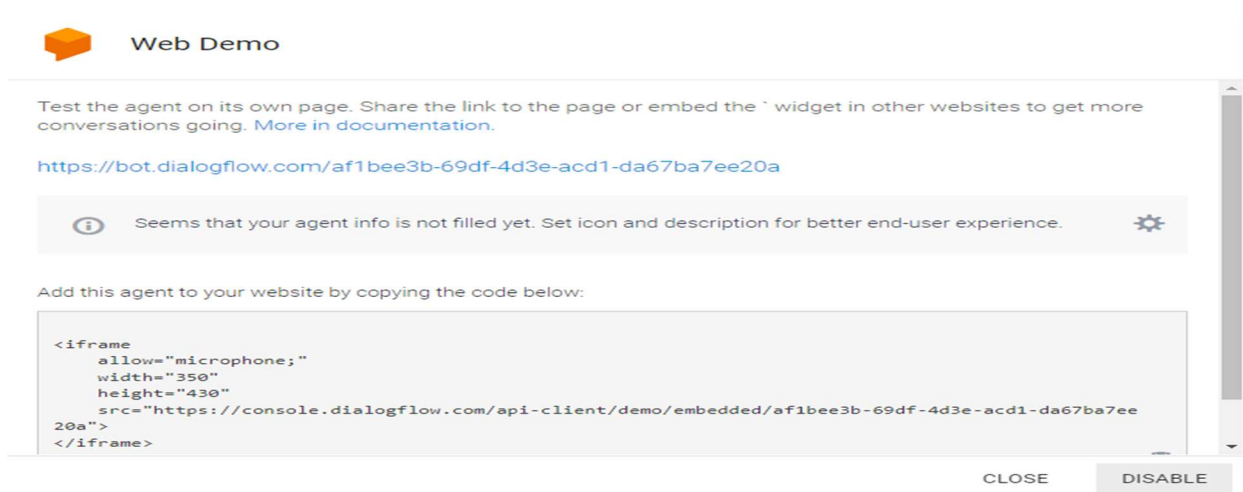
25) Choose the Export and Import. Select an option from export as zip,restore from zip,import from zip.



26) Go to Integration section , click webdemo from text-based part



27)Click on web demo .Click on the link given.You will redirect to new tab.



28)Using Web Server:

swaruBot

Use following code to integrate this agent into your site:

```
<iframe width="350" height="430" allow="microphone;" src="https://console.dialogflow.com/api-client/demo/embedded/af1bee3b-69df-4d3e-acd1-da67ba7ee20a"></iframe>
```

swaruBot

POWERED BY Dialogflow

Hi

Hello, May I know your name please?

Swaru

Hello Swaru ! Welcome to the Fashion-World .I'm a bot here. How can I help you?

Could you please order me an outfit?

Ask something...

swaruBot

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Sure, May I know your mail id ?

swarujrhdgw@gmail.com

Tell me your Phone Number

6900000000

Hello, May I know your name please?

Ask something...

swaruBot

POWERED BY Dialogflow

Swaru

In which category do you like to shop ;
Men Women Kids ?

Women

How would you describe your style?

Western

Ask something...

swaruBot

POWERED BY Dialogflow

May I know your address please ?

69,GandhiNagar,Gujarat

Pick a colour of your outfit?

Red

red colour Western wear outfit of Women category is successfully ordered to Swaru to the 69 GandhiNagar,Gujarat.

Ask something...