How google assistant action works?

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What is Google Assistant?

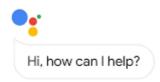


Figure: 1.1 Google Assistant.

Google assistant is an Al(artificial intelligence) virtual assistant. It was developed by google. It is available to a various range of operating systems like Android, Chrome, iOS, Linux, etc and also to different types of platforms like Android TV, Google speakers, Headphones, Smart Displays, etc.

Initially, Google Assistant was exclusively available only for Pixel and Pixel XL phones i.e. these phones are designed, developed and marketed completely by google. In February 2017, google assistant was available to android phones which were running on Android Marshmallow or Nougat and currently on almost all platforms.

Uses:

- Open apps with your voice.
- Screen your phone calls.
- Have web pages read aloud.
- Get advice on where is the nearest restaurant, park, shops and more.
- Book your favourite movie tickets, play music,et

How it works?

Google assistant works by receiving requests actions from clients.

What is an action?

Action is an entry point into an interaction that you would have built to an assistant. Users can request your action by speaking or typing to the assistant.

How action works?



Figure: 1.2 working of action.

In the above example, we can see that the user invokes an action through the assistant. User says " OK google let's take to Google IO." So, this tells the assistant to name of the action to talk to. And this conversation continues, until the user's intent is fulfilled.

Behind the scenes

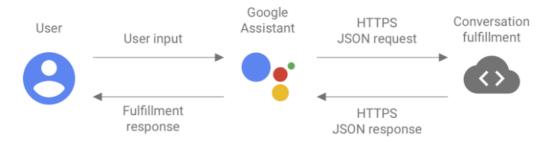


Figure: 1.3 conversation fulfilment using JSON.

Conversational actions when invoked by the user and exit when the user chooses to. So, during a conversation, user inputs are transformed from speech to text by the assistant and converted into JSON request and sent to your conversation fulfilment. And at conversation fulfillment, it parses the user's query into structured data, process that data and returns it to the assistant through JSON response. It is then send to the user through the assistant.