

**A PROJECT REPORT ON**

# **MOVIE TICKETING BOT**

USING IBM WATSON ASSISTANT

**FOR THE CHALLENGE TITLED:-PROJECT BUILD-A-THON**

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**IN PARTIAL FULFILMENT OF UNDER GRADUATE PROGRAM IN  
CAREER DEVELOPMENT**

***ST PIOUS X DEGREE & PG COLLEGE FOR WOMEN***

***HYDERABAD***

**(2019-2022)**

**Main section is continued in the next page.....**

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**PLEASE SCROLL DOWN TO THE MAIN SECTION.**

# **SUMMARY:**

## **1. INTRODUCTION TO CHATBOT**

## **2. NATURAL LANGUAGE PROCESSING**

## **3. CREATING A BOT FOR BOOKING MOVIE TICKETS**

THE FORMAT OF THE PROJECT IS AS FOLLOWS:-

- SERVICES USED FOR BUILDING THE BOT
- SKILL REQUIRED
- AIM AND OBJECTIVE
- DESCRIPTION
- METHODS IMPLEMENTED AND THE PREVIEW IF THE BOT WITH SNAPSHOTS

## **4. SCOPE**

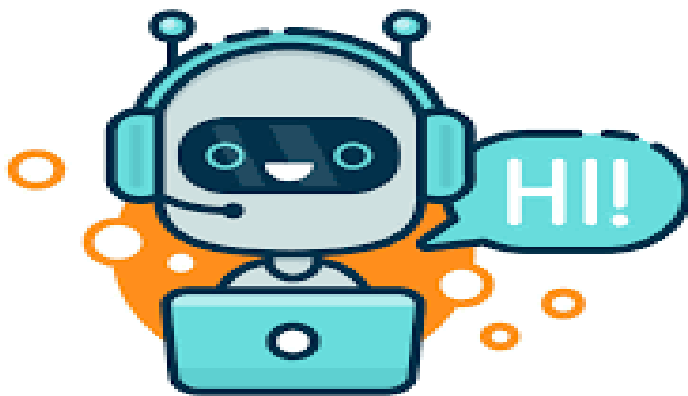
## **5.CONCLUSIONS**

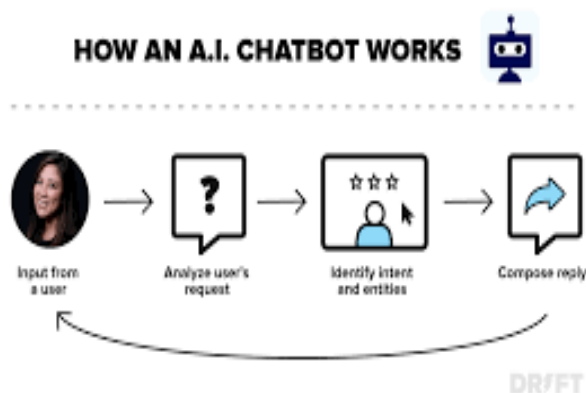
## INTRODUCTION TO CHATBOT:

CHATBOT, a computer program that stimulates human conversation, or chat through artificial intelligence. Typically a chatbot will communicate with a real person.

## WHAT IS A CHATBOT?

- Virtual Assistant
- Virtual agent
- Service Assistant
- Virtual Customer service Agent and much more....





## WHY CHATBOT?

- Bots are lot easier to install than mobile apps.
- Bots are easily distributed.
- Moving complexity to the cloud reduces a user's cognitive load

## NATURAL LANGUAGE PROCESSING:

- Natural Language Processing(NLP) is the ability of a computer program to understand human speech as it is spoken.NLP is a component of artificial intelligence.

- It makes computer to perform useful tasks with natural languages human use.
- Current approaches to NLP are based on machine learning
- The input and output of an NLP system can be--
  1. Speech
  2. Written Text.

## **CREATING BOT FOR BOOKING MOVIE TICKETS USING IBM WATSON ASSISTANT:-**

***PROJECT KIND : An IBM Cloud Application.***

### **Services used:-**

- IBM WATSON ASSISTANT
- NODE-RED

### **Aim and Objective:-**

In this project we will build a,we will build a chatbot using WATSON ASSISTANT to book movie tickets at ease.

- The main purpose of our ticketing bot is to provide another way for the customer to buy cinema ticket.It is an automatic system.
- The bot will be able to do the tasks that are mentioned in the description part.

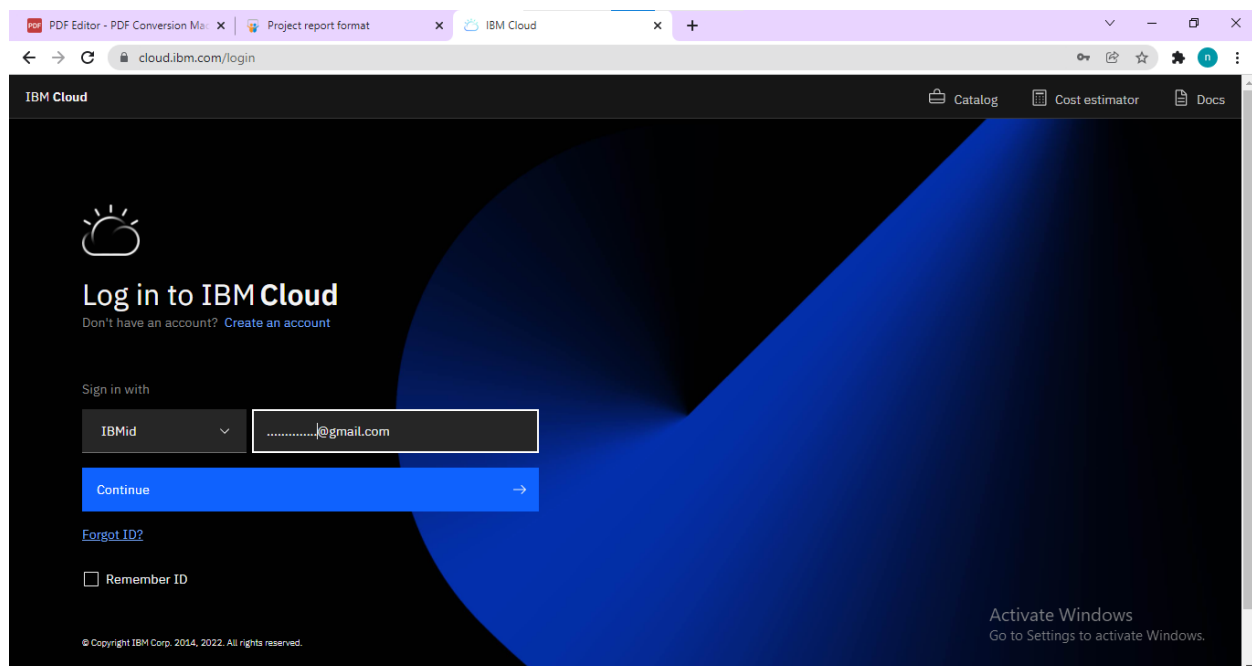
### **Description of the project:-**

1. Provides a list of movies available in the theatres mentioned that are available for booking.
2. On selecting the movie from the list,the bot will be able to shows the name of the theatres,dates and days,different timings available for booking.
3. The bot will be able to show the availability of seats for booking.

4. It shows the types of tickets available and their respective prices and inclusions associated.
5. The bot will cross check the booking of the tickets by verifying their mobile number that is used during the booking process.
6. On successful verification, the amount will be deducted from their bank account linked to the mobile number provided. Hence booking is considered as completed.
7. The link to download the tickets is sent to the customer's messages inbox (not to email id).
8. The customer can take a printout of the tickets if required.

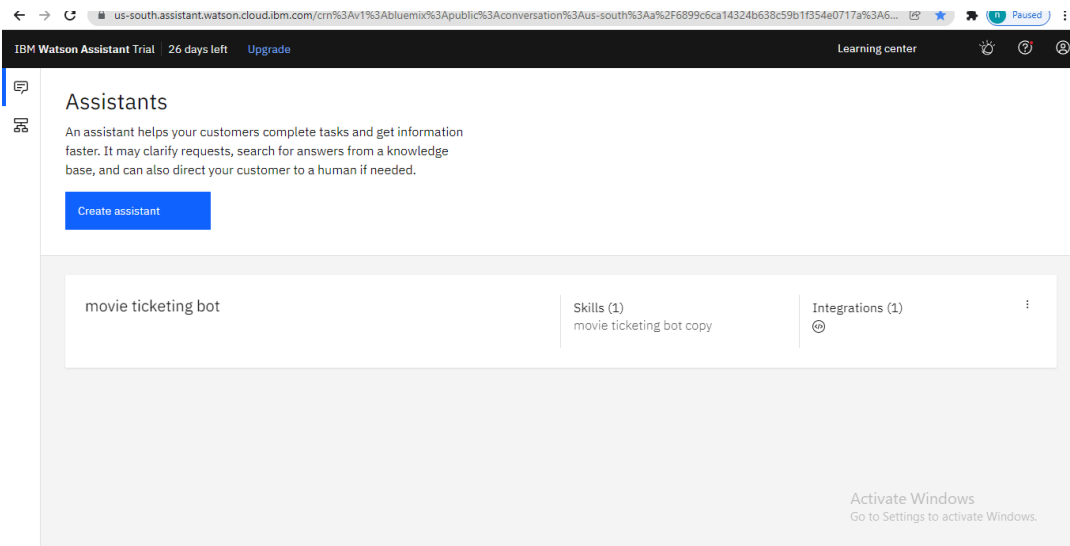
## Methods implemented with snapshots:-

*step 1: login to your ibm cloud account*



*step 2: once you get logged in, search for watson assistant. click on launch watson*

***assistant.after the launch,click on to create assistant.***



***step 3:Now you will be getting started with building your own chatbot using three paramters.***

- intents: Intentions of users. Questions from the customers or their needs.
- Entities: values that should be detected from the intent.
- Dialog: Responses from the chatbot to the user.

**INTENTS USED IN THIS PROJECT:**

**The snapshots are displayed in the next page.**



The screenshot shows the IBM Watson Assistant interface for a project named 'movie ticketing bot copy'. The left sidebar contains a navigation menu with categories: Intents, Entities, Dialog, Options, Webhooks, Disambiguation, Autocorrection, Intent Detection, Analytics, Versions, and Content Catalog. The 'Intents' section is currently selected, displaying a table of 7 intents.

Intents (7) ↑	Description	Modified ↑↓	Conflicts ↑↓	Examples ↑↓
<input type="checkbox"/> #goodbye		a day ago		2
<input type="checkbox"/> #greetings		a day ago		3
<input type="checkbox"/> #help		a day ago		3
<input type="checkbox"/> #mobile_number		a day ago		4
<input type="checkbox"/> #Movies_2022		a day ago		6
<input type="checkbox"/> #OTP		a day ago		4
<input type="checkbox"/> #payment_mode		a day ago		3

Showing 1–7 of 7 intents

NOTE: There are a list of user examples for each intent specified.

example:-intent named #movies\_2022 contains list of movies that are available for booking.

### ENTITIES USED:-

The screenshot shows the IBM Watson Assistant interface for the same project, but with the 'Entities' section selected. The left sidebar is the same, but 'Entities' is highlighted. The main area displays a table of 12 entities.

Entity (12) ↑	Values	Modified ↑↓
<input type="checkbox"/> @date_and_day	27th jan,thursday, 23rd jan,sundy, 22nd jan,saturday, 26th jan,wednesday, 25th jan,...	a day ago
<input type="checkbox"/> @greetings	thankyou!, hello!, good morning!, bye!	a day ago
<input type="checkbox"/> @location	Asian Cinesquare Multiplex:Uppal, PVR Forum Sujana Mall:kukatpally, Cinepolis Man...	a day ago
<input type="checkbox"/> @movie_images		a day ago
<input type="checkbox"/> @movies_list	Bramhasthra, Gangubai kathiawadi, K.G.F chapter 2, Valimai, RRR, Maaran	a day ago
<input type="checkbox"/> @seats	2, 1, 4, 5, 6, 7, 8, 3	a day ago
<input type="checkbox"/> @thankyou	thanks!, thankyou for helping out	a day ago
<input type="checkbox"/> @ticket_prices	Lounger:- Rs 250/- (includes eats and drinks), Gold:-Rs 150/-	a day ago

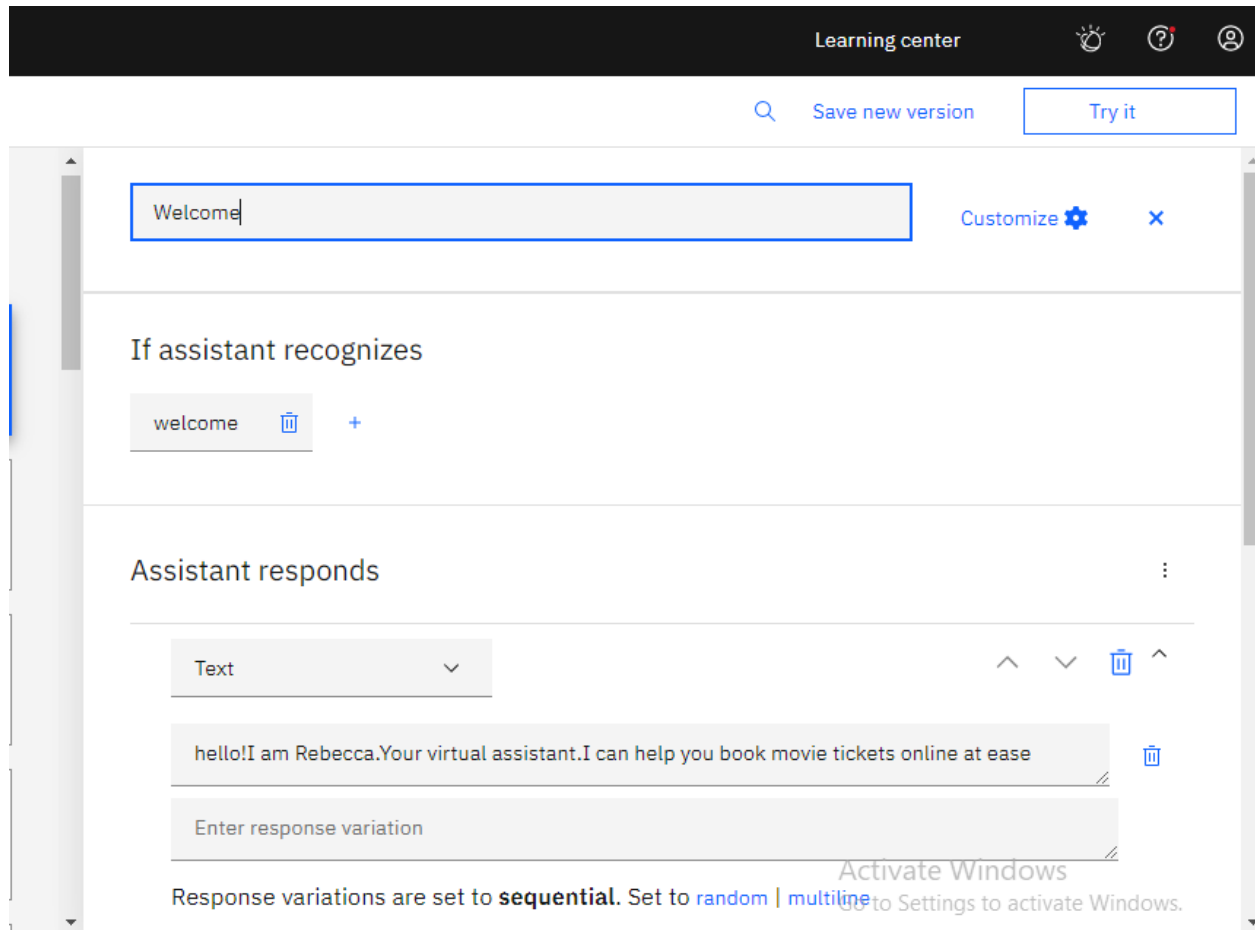
Showing 1–12 of 12 entities

NOTE: There are various values that are embedded in each entity with respect to the type under which a value falls

example:- under entity titled @greetings we can embedd the following:-

- hello!
- GOOD MORNING!
- HEY THERE! and many more...

DIALOGUE NODES :



NOTE:- Each dialog node contains the texts that are shown as the responses from the chatbot to the user depending on the type of intent provided by the user.

FLOW OF CONTROL :-

**The snapshots are displayed in the next page.**

IBM Watson Assistant Trial | 26 days left | Upgrade

Learning center

movie ticketing bot copy | Version: Development

Intents

Entities

Dialog

Options

Analytics

Versions

Content Catalog

Add node

Add child node

Add folder

Welcome

welcome

1 Responses / 0 Context Set / Does not return

greeting

#greetings

1 Responses / 0 Context Set / Does not return

help

#help

1 Responses / 0 Context Set / Does not return

movie : RRR

@movies\_list:RRR

1 Responses / 0 Context Set / Jump to / Does not return

Activate Windows  
Go to Settings to activate Windows.

IBM Watson Assistant Trial | 26 days left | Upgrade

Learning center

movie ticketing bot copy | Version: Development

Intents

Entities

Dialog

Options

Analytics

Versions

Content Catalog

Add node

Add child node

Add folder

movie : RRR

@movies\_list:RRR

1 Responses / 0 Context Set / Jump to / Does not return

Jump to location

(Evaluate condition)

movie : Gangubai Kathiawadi

@movies\_list:(Gangubai kathiawadi)

1 Responses / 0 Context Set / Jump to / Does not return

Jump to location

(Evaluate condition)

movie: K.G.f Chapter 2

@movies\_list:(K.G.F chapter 2)

1 Responses / 0 Context Set / Jump to / Does not return

movie : RRR

Assistant responds

Image

Title (optional)

Description (optional)

Action drama

Add image descrip

Image source

Alternative text

https://www.google.com/imgres?imgurl=https%:

Add alternate text

Text

Enter response text

Activate Windows  
Go to Settings to activate Windows.

us-south.assistant.watson.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Aconversation%3Aus-south%3Aa%2F6899c6ca14324b638c59b1f354e0717a%3A6... Paused

IBM Watson Assistant Trial 26 days left Upgrade Learning center

movie ticketing bot copy Version: Development Save new version Try it

Intents Add node Add child node Add folder

Entities My Entities System Entities

Dialog

Options Webhooks Disambiguation Autocorrection Intent Detection

Analytics Overview Autolearning User conversations

Versions Content Catalog

movie: K.G.f Chapter 2  
@movies\_list:(K.G.F chapter 2)  
1 Responses / 0 Context Set / Jump to / Does not return

Jump to location (Evaluate condition)

movie: maaran  
@movies\_list:Maaran  
1 Responses / 0 Context Set / Jump to / Does not return

Jump to location (Evaluate condition)

movie: valimai  
@movies\_list:Valimai  
1 Responses / 0 Context Set / Jump to / Does not return

Assistant responses

Image

Title (optional) Description (optional)

action thriller Add image descriptio

Image source Alternative text

https://www.google.com/imgres?imgurl=https% Add alternate text fo

Add response type +

Activate Windows  
Go to Settings to activate Windows.

us-south.assistant.watson.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Aconversation%3Aus-south%3Aa%2F6899c6ca14324b638c59b1f354e0717a%3A6... Paused

IBM Watson Assistant Trial 26 days left Upgrade Learning center

movie ticketing bot copy Version: Development Save new version Try it

Intents Add node Add child node Add folder

Entities My Entities System Entities

Dialog

Options Webhooks Disambiguation Autocorrection Intent Detection

Analytics Overview Autolearning User conversations

Versions Content Catalog

movie: valimai  
@movies\_list:Valimai  
1 Responses / 0 Context Set / Jump to / Does not return

Jump to location (Evaluate condition)

movie: Bramhasthra  
@movies\_list:Bramhasthra  
1 Responses / 0 Context Set / Jump to / Does not return

Jump to location (Evaluate condition)

location  
@movies\_list  
1 Responses / 0 Context Set / Does not return

Assistant responses

movie: valimai

Image

Title (optional) Description (optional)

Action thriller Add image descriptio

Image source Alternative text

https://www.google.com/url?sa=i&url=https%3A Add alternate text fo

Add response type +

Activate Windows  
Go to Settings to activate Windows.

The screenshot shows the IBM Watson Assistant interface for a project named 'movie ticketing bot copy'. The left sidebar contains a navigation menu with sections: Intents, Entities, Dialog, Options, Webhooks, Disambiguation, Autocorrection, Intent Detection, Analytics, Versions, and Content Catalog. The 'Dialog' section is selected, and the 'location' node is highlighted in the dialog flow. The node configuration shows a list of options for the 'location' entity, including 'select your theatre location', 'PVR Forum Sujana Mall:kukatpally', 'Asian Cinesquare Multiplex:Uppal', and 'Cinepolis Manthra Mall:Attapur'. The right pane displays the 'Option' dropdown and the 'List label' and 'Value' table.

List label	Value
1	PVR Forum Sujana Mall:kukatpally
2	Asian Cinesquare Multiplex:Uppal
3	Cinepolis Manthra Mall:Attapur

The screenshot shows the IBM Watson Assistant interface for the same project. The 'Booking Completed' node is highlighted in the dialog flow. The node configuration shows a list of options for the 'Booking Completed' entity, including 'Your booking is completed. Kindly check your phone messages inbox. You can tickets by clicking on the link provided. HAPPY WATCHING!'. The right pane displays the 'Text' dropdown and the 'Response variations' section.

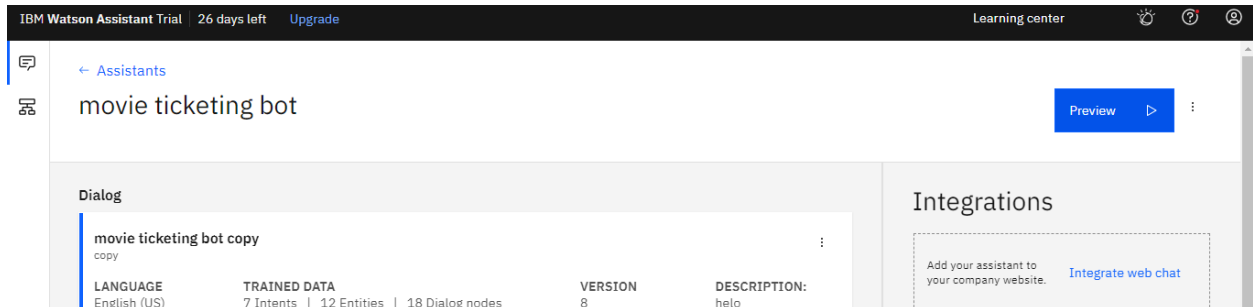
Response variations are set to **sequential**. Set to [random](#) | [multiline](#) | [Learn more](#)

Thus is the flow of control for this project, from the starting node named **WELCOME** to the ending node named **BOOKING COMPLETED**.

NOTE:-There are jump condtions applied that refers to jumping from one node to another for the flow of execution of the program.

**step 4. Once you are done with the implementation part, make sure you assign the updated version to your assistant by clicking on to the assign option of the version to be assigned.**

Now your chatbot is ready to be deployed. Click on to the preview button on the top right corner to see the demo.



## THE RESULTS OF THE CHABOT:-

**The snapshots are displayed in the below pages.**

6 days left Upgrade

## Preview

Test your assistant, see what your customers

Try it right here

[Restart conversation](#)

### Assistant preview

hello! I am Rebecca. Your virtual assistant. I can help you book movie tickets online at ease

ays left Upgrade

help you book movie tickets online at ease

hi

Hello! welcome to MOVie tiME

i need help in booking tickets

Yes, for sure. We have list of movies to offer you. Select a movie of your choice.

Select an option ^

RRR: English, Telugu, Hindi, Tamil, K...

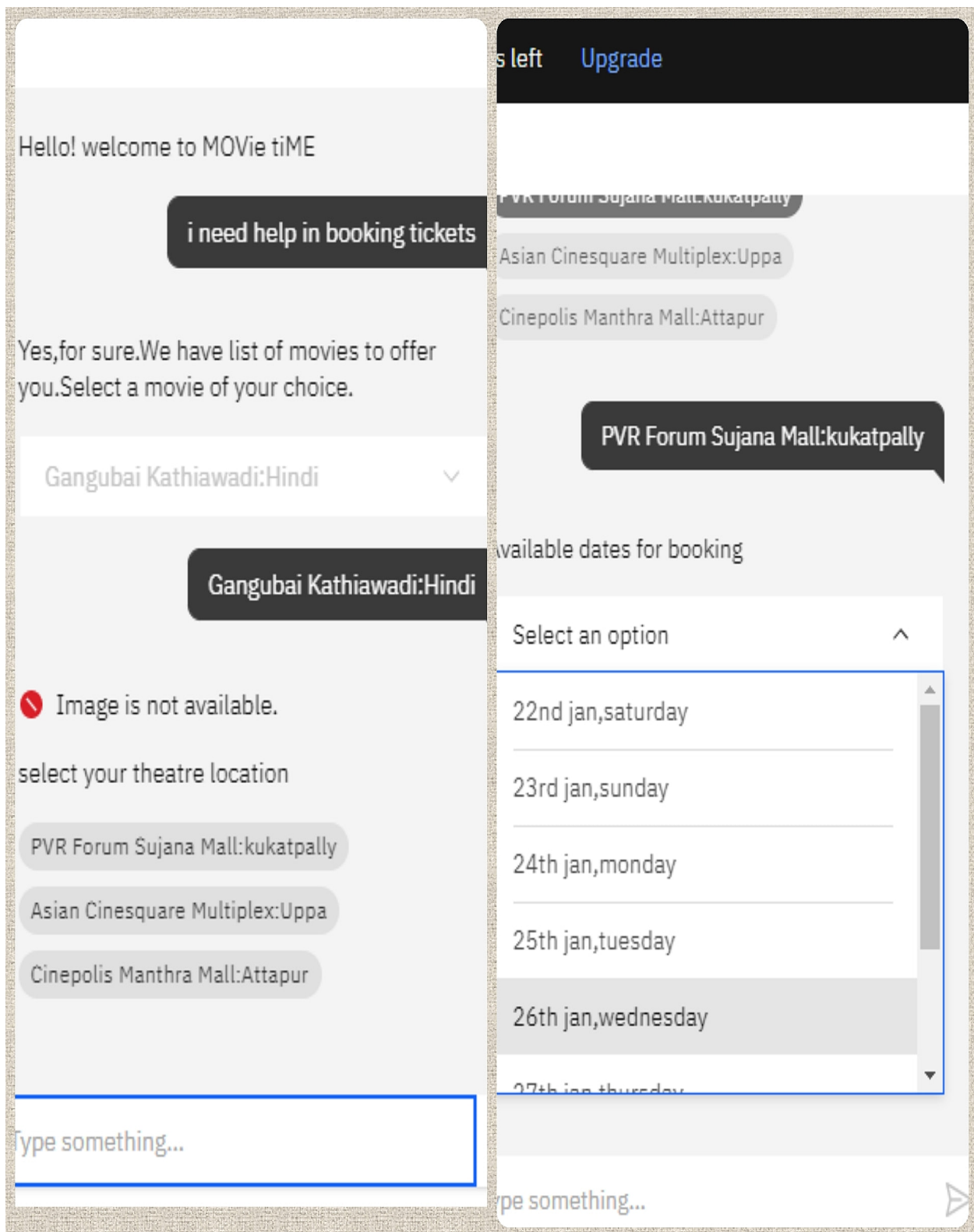
K.G.F Chapter-2: Kannada, Tamil, T...

Gangubai Kathiawadi: Hindi

Valimai: Tamil

Maaran: Tamil

Brahmastra: Hindi



**NOTE:-The image of the movie selected is not available to display due to some operating**



system issues.

The image displays two versions of a chatbot interface for booking tickets, side-by-side.

**Left Panel (Initial State):**

- Header: "days left" and "Upgrade".
- Message: "select your booking slot."
- Section: "Booking Slots"
- Options: "10:00 AM", "2:00 PM", "5:00 PM", and "8:00 PM" (selected).
- Message: "8:00 PM" (confirmation bubble).
- Section: "ticket prices:-"
- Options: "Gold:- Rs 150/-" (selected) and "Lounge:- Rs 250/- (includes eats and drinks)".
- Message: "Gold:- Rs 150/-" (confirmation bubble).
- Message: "Enter the total number of seats to be booked(max:8) -"
- Input: "3" (entered).
- Footer: "Type something..."

**Right Panel (Final State):**

- Header: "days left" and "Upgrade".
- Message: "Enter the total number of seats to be booked(max:8) -"
- Input: "3" (entered).
- Message: "Enter the mobile number that is linked to your bank account to receive an otp to confirm your booking."
- Input: "9346453138" (entered).
- Message: "Enter the One Time Password(OTP) received."
- Input: "1345" (entered).
- Message: "Your booking is completed. Kindly check your phone messages inbox. You can download the tickets by clicking on the link provided. HAPPY WATCHING!"
- Footer: "Type something..."

Thus, building a chatbot for booking tickets is completed.

### scope:-

- It will provide anytime anyplace service for the customer.(already in the processing state)

- It can be used to purchase eatables and drinks comfortably.
- Home delivery of tickets maybe provided.
- It will increase the profit rate.

## **conclusions:-**

- The project of movie ticketing bot is flexible enough to meet the requirements of the customers from distant places.
- The use of chatbots are increasing everyday and it will only go up in the coming days because of the various benefits it can provide.