

SmartInternz - Build - a - thon

Movie Ticketing Bot

Project Report

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1 INTRODUCTION

1.1 Overview

We have developed an intelligent and automatic chatbot that makes the process of booking ticket simple and quick. The chatbot is developed on IBM cloud with the help of Watson Assistant. This bot will show list of movies, which can be filtered based on language. User can select a film based on his/her interest and book tickets for that film by provided the details asked by the bot.

We also made a web application where the user will be able to book movie tickets online in the traditional way.

Our main motive was to show the advantage and comfort of using chatbot over the traditional method for booking movie tickets.

1.2 Purpose

The main purpose of this project is to make the movie ticket book process more fast and efficient. Even a user who has limited knowledge on web applications, will be able to book tickets for a movie of his choice by just chatting with the bot.

2 LITERATURE SURVEY

2.1 Existing problem

The present system for booking movies tickets, is done with the help of a web application. User has to enter his/her in the exact slots to proceed further. For this, user should have proper knowledge on how to use the website. There are a couple of websites for booking movie tickets, and the flow is different each one of them. User may have many confusions in using the the website.

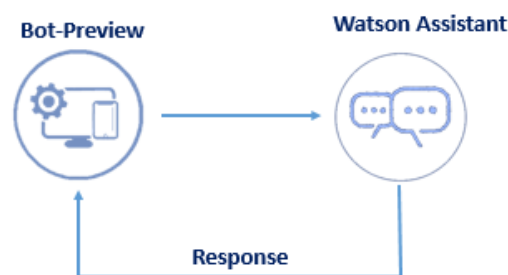
2.2 Proposed solution

Through this project we made chatbot with which can be used to book tickets for a film. The flow is quite film. It is as simple as chatting with a friend. Even if user enters some wrong value or statement, unlike the other websites, chatbot will be able to correct it on it's own and interpret the right value. With the help of this chatbot, a movie ticket can be

booked a couple of minutes with single hand. The process is very quick, simple and more efficient.

3 THEORITICAL ANALYSIS

3.1 Block diagram



3.2 Hardware / Software designing

Software(For the Chatbot)

IBM Cloud: IBM Cloud is a set of cloud computing services for business offered by the information technology company IBM.

IBM Watson Assistant: Watson Assistant provides customers with fast, consistent and accurate answers across any application, device or channel. Using AI, Watson Assistant learns from customer conversations, improving its ability to resolve issues the first time while removing the frustration of long wait times, tedious searches and unhelpful chatbots.

Software(For the Frontend)

Adobe Dreamweaver: Adobe Dreamweaver is a web design and an Integrated Development Environment (IDE) application that is used to develop and design websites.

HTML: HTML is the standard markup language for documents designed to be displayed in a web browser.

CSS: Cascading Style Sheets is a style sheet language used for describing the presentation of a document written in a markup language such as HTML.

Javascript: JavaScript is high-level, often just-in-time compiled, and multi-paradigm. JavaScript, the scripting language used to create dynamic functionality on the web.

jQuery: jQuery is a fast, small, and feature-rich JavaScript library. It makes things like HTML document traversal and manipulation, event handling, animation.

Bootstrap: Bootstrap contains CSS and JavaScript-based design templates for typography, forms, buttons, navigation, other interface components.

Hardware

RAM: 8GB

Graphics: Intel 5500

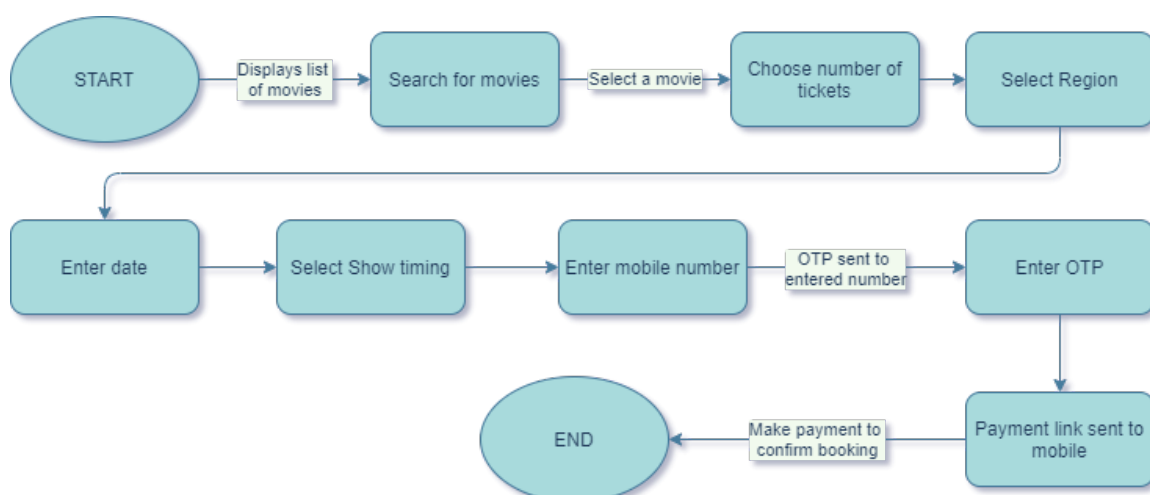
Core: Intel i5 1.6GHz

4 EXPERIMENTAL INVESTIGATIONS

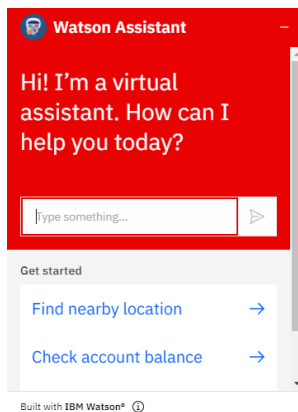
Certain phases of development came up with conclusions that the chatbot when integrated with any website activates by self and on declaring any function encapsulating the entire embedded code can be connected to any kind of button which would prompt the bot to show on screen only when that button has been clicked on.

Manual booking is tedious and time consuming while the chatbot only requires simple text commands to confirm your booking and payment in one quick session.

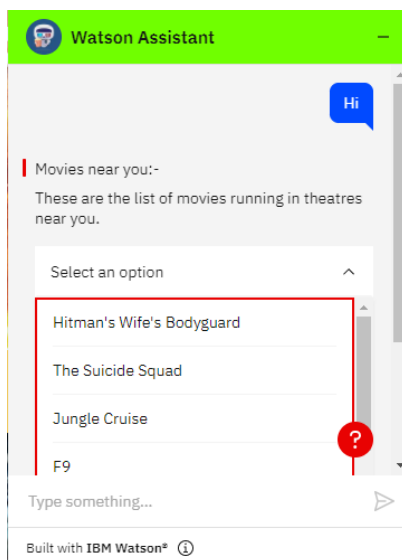
5 FLOWCHART



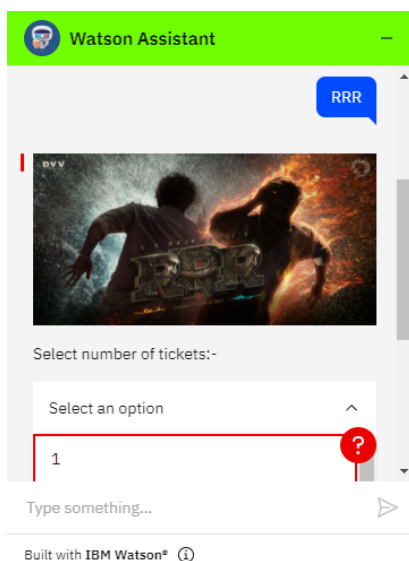
6 RESULT



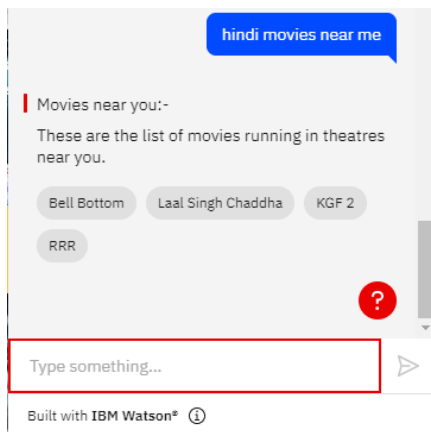
The chatbot



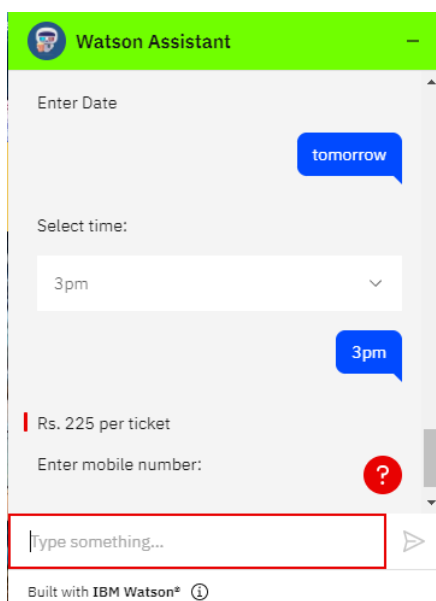
Showing the list of available films



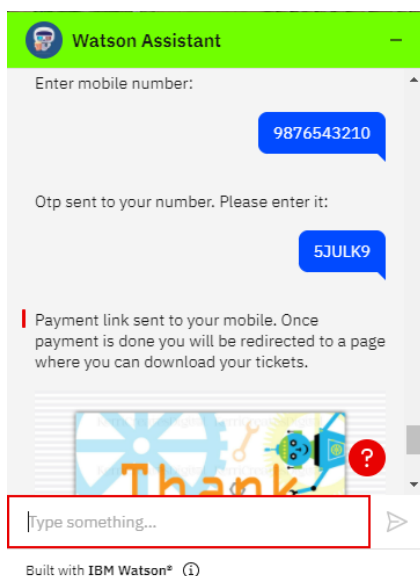
Movie name can also be given directly and no. of tickets should be selected



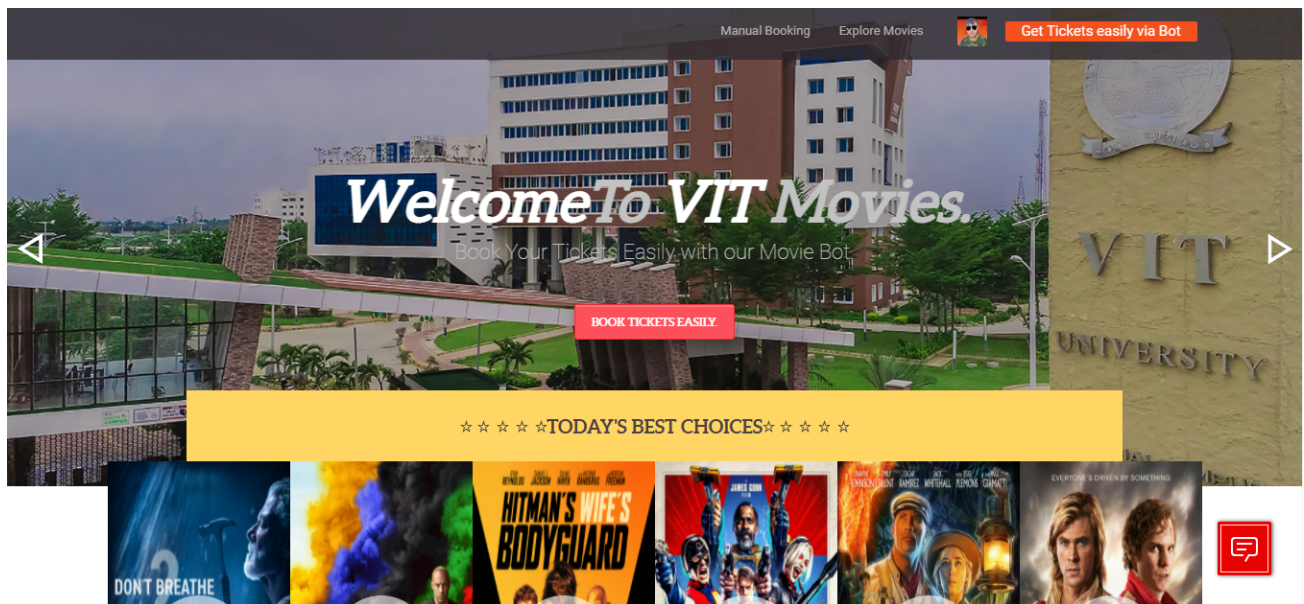
Filtering movies based on language can be done with a single statement.



Asks for date and time slot. Unlike websites, date can be given in an informal way like today, tomorrow, next sunday, etc. It asks for mobile number to send the ticket and OTP.

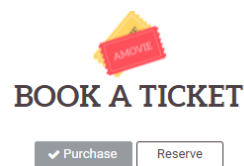


Upon entering mobile number OTP will be send to the mobile. On entering the correct OTP, payment link will be created and sent to mobile.



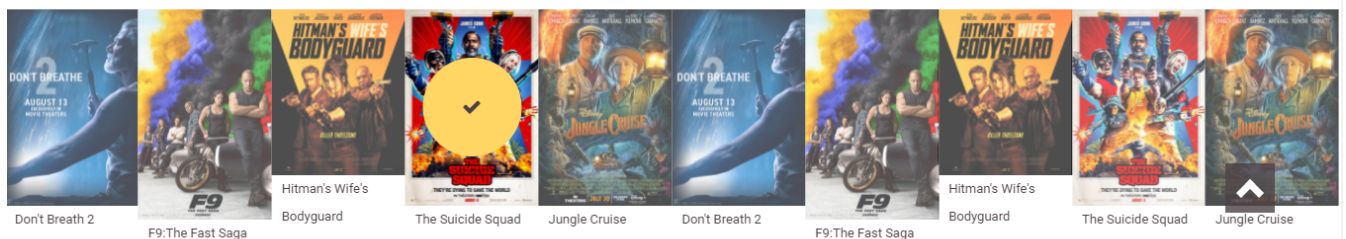
This is the frontend with has the chatbot integrated in it. Chatbot will open on clicking the red button in the right bottom corner.

Manual Booking Process



1. What & Where & When

CHOOSE A MOVIE

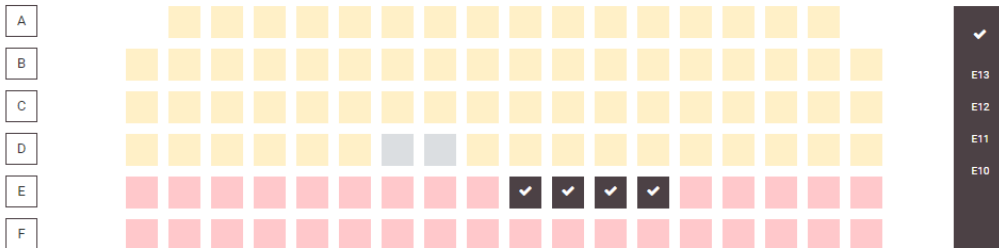


1. What & Where & When

2. Choose a sit

Price ₹200 ₹250 ₹320 | Not available Your choice

screen



1. What & Where & When

2. Choose a sit

3. Check out

PRICE

Tickets: 5 One item price: ₹250 Total: ₹1250

CHOOSE PAYMENT METHOD



CONTACT INFORMATION

PURCHASE

THANK YOU

you have successfully purchased tickets

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7 ADVANTAGES & DISADVANTAGES

Advantages

- Bots are a lot easier to install than mobile apps and they can save users the much needed storage space on their smart phones
- Mobile app can be expensive to build, maintain, and display, but it is not the case of a chatbot
- Bots interact with customers in natural conversational language.
- Context Awareness
- Free of cost

Disadvantages

- Supports only one language(json)
- In some cases, it fails to understand some phrases or abbreviations.

8 APPLICATIONS

This chatbot can be used for booking tickets for a firm very easily and quickly. Thisbot can be integrated in a website evry easily(as shown). Not only movies, it can be converted as an tickting bot to book slots for some stage shows, concerts, etc based on the need.

9 CONCLUSION

Chatbot in apps are basically an upgrade to a mobile user interface, as they bring the most basic type of human interaction into the digital environment. A simpler, faster and more intuitive user interface results in an overall better user experience, which is one of the key factors for mobile growth.

10 FUTURE SCOPE

The future scope is limitless. First there was traditional ticket booking i.e. Window Booking then came a Smart Application i.e. BOOK MY SHOW now came an Automated Way i.e. CHATBOT. This movie ticket booking chatbot gives exact time date and location of movie the user wants to watch.

11 BIBILOGRAPHY

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https://cloud.ibm.com/docs/assistant?topic=assistant-getting-started&_ga=2.21935803.1272816929.1603116070-718699761.1602794626#getting-started
- [5] A model of social chatbot, Author: Manuel Gentile, Lucas Weideveld, Frank Dignum, June 2016.

APPENDIX

A. Source Code

skill.json - This is the json code for the chatbot.

(Link:

https://github.com/smartinternz02/SPS-11407-Movie-Ticketing-Bot/blob/main/skill-Movie_Ticketing_Bot.json)

index.html - This is the html code for the frontend.

(Link:

<https://github.com/smartinternz02/SPS-11407-Movie-Ticketing-Bot/blob/main/index.html>)

Integration of chatbot in the frontend -

```
function chat(){  
  window.watsonAssistantChatOptions = {  
    integrationID: "fcb4d34d-ead4-45b0-9a72-2b66d28443ce", // The ID of this integration.  
    region: "eu-gb", // The region your integration is hosted in.  
    serviceInstanceID: "4c4d1fb1-a5bc-4903-8a16-0093c28a50dd", // The ID of your service instance.  
    onLoad: function(instance) { instance.render(); }  
  };  
};
```