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EASYBOOKS4U CHATBOT

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ABSTRACT

Artificial intelligence is the theory and development of computer systems to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages. A chatbot is a computer program or an artificial intelligence which conducts a conversation via auditory or textual methods. This paper introduces a chatbot which facilitates the book reader to suggest books. It also provides the user to buy a book, watch trailers of the book (if present).The chatbots are trained in such a way that it understands the user requirement and interest and provides with the best book. User can ask questions related to books. The main moto of this project is to give the user required genre in less time making his work easy.

Keywords: Chatbot, Artificial intelligence..

1. INTRODUCTION

The communication has evolved in various ways in business sector. For years, in-person meetings and phone calls were the dominant means of communication. Then, with the rise of the internet, a multitude of new options became available, from email, to social media, to mobile apps, to filling out a form on a website and waiting for a follow-up. More recently, the rise of real-time messaging has led to a fundamental shift in how people prefer to connect with businesses. The tendencies in the communication technologies indicates that the text communication became the socially acceptable form of personal interaction.

People increasingly prefer chatting rather than personal contacts or even making phone calls. This caused a need for providing online communication which is traditionally done by humans. But a human is inefficient and takes a long time to process a single request such as booking tickets, ordering food, getting beauty-services etc. This reduces the output and business performance drastically. Therefore, there is an increase in the demand of chat automation because:

- It removes the human factor.
- It can give a 24 hour service which will have a multiplicative effect on the revenue generation.

In this period of time, artificial intelligence came into plane providing intelligence to the computer such that it can think like humans. However, with an increasing number of real-world applications, the interest in AI has been increased rapidly. AI play a vital role in designing machines which mimic human activities such as feelings, decision making using past experiences, solve complexity of problems etc. AI can also be termed as Machine intelligence, as its main aim is to create intelligence in machines to fulfill the growing needs of the current scenario.

Therefore AI chatbots were introduced. A chatbot is a service that people interact with via a chat interface. One can ask questions using your voice or by typing as one would ask a person. The chatbot will usually respond in a conversational style, and it may carry out actions in response to your conversation.(or)A chat bot (also known as a talk bot, chatter bot, Bot, IM bot, interactive agent, or Artificial Conversational Entity) is a computer program which conducts a conversation in natural language via auditory or textual methods, understands the intent of the user, and sends a response based on business rules and data of the organisation. It often runs inside any popular messaging application, such as Facebook Messenger, Slack, or SMS. It answers your question, rather than directing you to a website.

The idea of chat bots appeared first in the 1960s. But only after more than half a century passed we can confess that the world is ready for their implementation into the real life, being a result of the rapid progress in natural language processing, AI, and the global presence of text messaging application.

The chatbot, easybooks4u was born to assist people and find a best book for themselves. As we know, a good book can be equal to 100 good friends. In this growing world, there are many upcoming writers with new and innovative ideas. There are many thousands of books written. Each person has different thoughts, interests.

1.1 IDEA:

In this paper, we are going to introduce a chatbot called easybooks4u to assist people and find a best book for them. As we know, a good book can be equal to 100 good friends. In this growing world, there are many upcoming writers with new and innovative ideas and books.

This leads to confusion for the user to decide a book for himself as each person has different thoughts and interests. This chat bot analyses the user's interest by the answers given by the users to the questions posed by the bot features:

- 1.1.1. It finds the interests of the user by communicating with him and shows the books which match his interests.
- 1.1.2. It also learns from its past experiences. i.e., the previous searches of the user influence the upcoming searches.
- 1.1.3. It also learns from various activities of the user. For instance, if a user chooses a story book and leaves it unread, then it asks for the reason of leaving the book unread. These activities of the user are remembered and help the user in finding a better option in his further searches.

1.2 SCOPE:

This chat bot can be used in various websites related to book selling. There are many websites or applications which sell or provide books. These applications can use easybooks4u bot in order to increase the sale of books through the website. This facilitates their user to select books from the vast series of books in no time.

1.3 ADVANTAGES:

- 1.3.1 It decreases the time; the user takes to select the books.
- 1.3.2 It suggests the preferable genre of books to the user.
- 1.3.3 It also gives the updates about the most read book of the week.
- 1.3.4 It provides with the trailers of the famous books(if present)

2. LITERATURE SURVEY

As a part of literature survey some survey papers, reports, research papers are studied.

Robert Williams's survey states that more than three-fourths of people who interacted with chat bot commented that their experience was positive. As for accuracy of chat bot, 36% of consumers commented that chatbots need to be improved and another 43% said that technology must be improved as the chat bot is not responding accurately for user queries. Accuracy of a chatbot is a significant concern for consumers that reflects developers need to improve their AI and Natural language processing technologies to provide accurate answers for users. In order to increase the accuracy of chat bot in displaying the particular information about the book the technology should be advanced so that the chat bot can attract the most of the users.

According to Brian Holak survey on customer service chatbots aren't crowd-pleasers—yet states that many of the users responded saying that their biggest pain point with customer service chatbots was having a repeat information display and chatbots are getting stucked and not knowing what to do next. In his paper he says that chat bot should understand user intents and needs so that it can respond effectively. His paper states that chat bots should be advanced with new technologies and should have capacity to understand intents of users.

- Then, create a skill name. After creating, you will be on a page where you can see intents, entities, dialogue, catalogue etc.,
- Intents are the user inputs, where we give inputs to the bot.
- Entities are the group of the user inputs
- In dialogues we find the conversation the bot has to run.
- @ is the symbol for entities.
- # is the symbol for intents.
- \$ is the symbol for context variables.
- In intents we give input name as greetings and then click on add, we can add synonyms for greetings here.
- Now go to the dialogue and write the response the bot has to give.
- Go back click on the three dots on the greetings page and click add a node below.
- Next you can find a new node added.

4. RESULTS AND DISCUSSION

In Figure 1 chatbot introduces itself giving brief idea to the user how it can help the user.

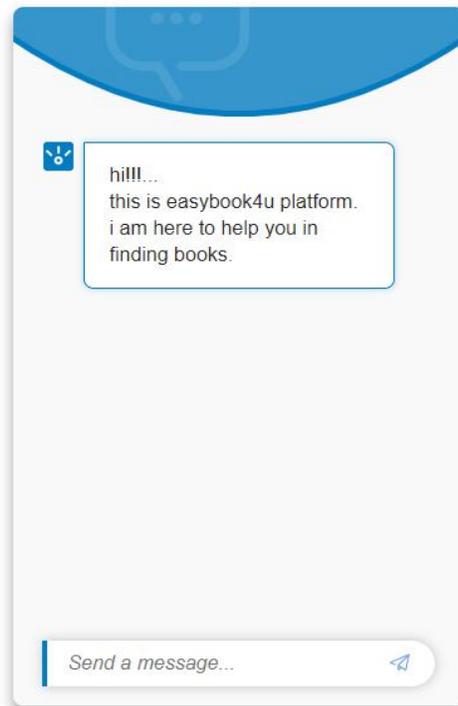


Fig 1: chatbot description

In figure 2 it responds to user and asks him/her if he is interested in buying a book.

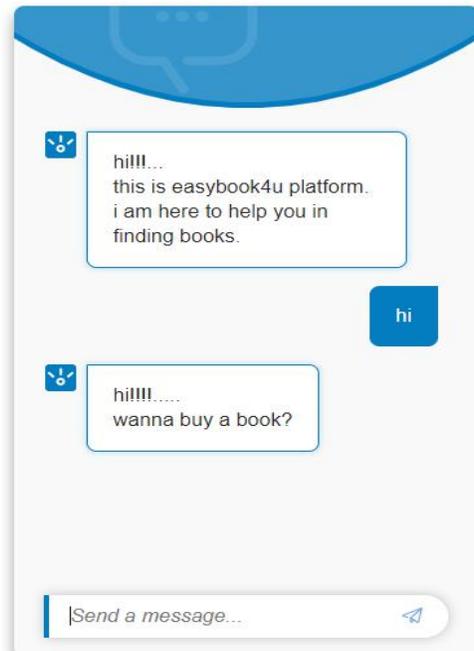


Fig 2: user responds to chatbot

In figure 3 users responds to chatbot and chatbot takes the user input and ask the user if he is interested in reading fiction or non-fiction stories.

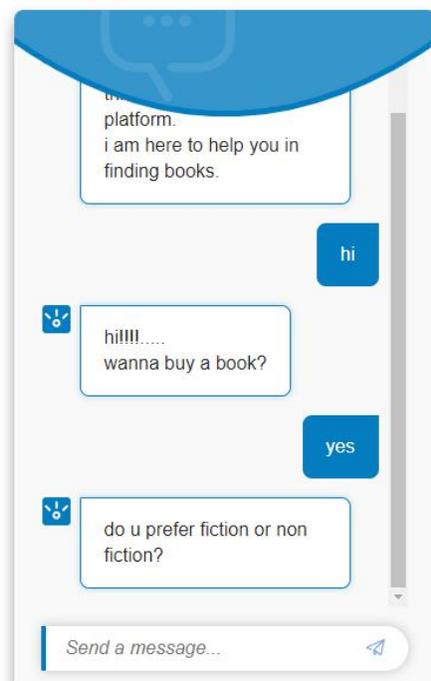


Fig 3: chatbot ask users choice

In Figure 4 user selects his preference and chatbot lists the genres available in fiction section.

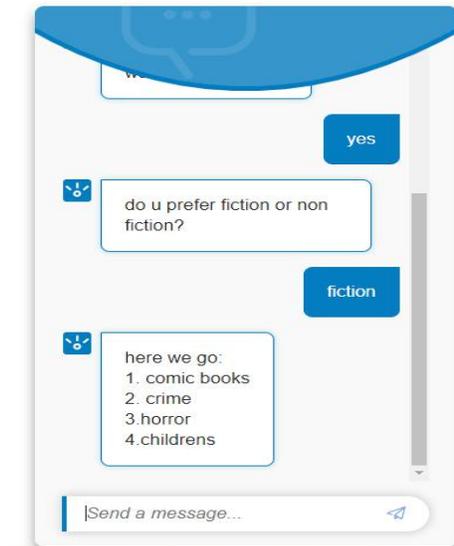


Fig 4: chatbot finds user intents

In figure 5 users selects his interest and chatbot provides the books related to crime section and gives user the description and link of the book so that user can easily purchase a book.

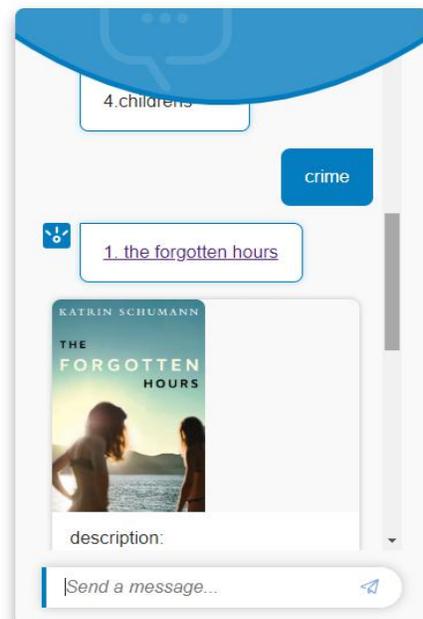


Fig 5: chatbot provides required information to the user

5. CONCLUSION

In this easybooks4u bot the user can get best collection of books. This bot helps user by providing information regarding books and helps him in purchasing book. This bot shows weekly wise best trending books from the market to the user so that user can select the best book. As soon as user types his choice bot shows the book with some trial videos of the book and also customer reviews and ratings so that user gets to know the quality and type of book. It

makes online book purchase easy and helps user from searching from best books. So no worry about the best book collections.

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