CHATBOTS

In the history of humanity the conversation through sign, spoken languages and written are the greatest instruments not only for survival but also for the future exploration as a human species. But when it comes to communication between machines (Robots) and humans it is hard for machines to express the same emotions in conversations (Chat). Here comes a very special program or software application built to automatically engage and respond with the communicator (Humans) named *CHATBOTS.*

Chatbots can be used in SMS text, Social media Messaging *(like: Facebook, Whatsapp and Twitter),* Voice massaging, FAQs, Shopping assistance, Order and Billing, Gossiping, Legal adviser, Customer support, Customer behavior analyser and Educational assistant, etc. There is no limit to how you can use it for human betterment. Using chatbots not only can save your time, money and resources but also you can engage, support, and provide better outcomes in unique ways and this will help you to generate revenues, leads and understand user or customers behaviors.

There are lots of renowned companies like: *Amazon, Twitter, Meta, Domino's, Google, etc.* using these chatbots to improve the consumer experience and now the medium and small businesses are eager to use them. So here is the opportunity for building the innovative chatbots to help the consumers according to their problem.

★ If you are a legal issues export you can make a "Legal Bots" to help the clients and advise them of a good approach to lead their cases.
★ If you are a retailer you can think of "Shopping Bots" to help customers in their shopping of desired products.
★ If you belong to the social media domain you think of different types of bots as your requirements *like: Lead generation, FAQs, Customer supports, and Recommendations.*

But the point is you should be very clear of your Bots goal. For me as I am a student of mathematics, I'm thinking of "MathBots". So, as the name suggests it will solve your math problem in a very convincing way as we see in our day to day life. It's like you are your math teacher but I would say your math assistant. Here is a Sample of how it works:

Math Bot: Hi, How may I help you?
   User: Can you tell me what is the relation between differentiation and integration?
Math Bots: why not, let me show you something:

Math Bots: As a definition, Differentiation is used to study the small change of a quantity with respect to unit change of another. On the other hand, integration is used to add small and discrete data, which cannot be added singularly and represented in a single value.

User: Oh! Wow, thank you.

Math Bots: It is my pleasure. Have you any other doubts?

User: No.

Math Bots: Okay.

So, once you are clear about the goals all the features of chatbots comes around this for my MathBots it is important to add the different domains of math with more interactive, updated, and user friendly explanations. Additionally we can add some funny emoji, memes, graphs, pictures and tables, etc.

Using NLP and ML we can train our Math Bots to learn from users and also analyze the user's difficulty level or domains and help him with different online resources to improve their math's skill.

This is the basic layout but conclusion is to first identify the goal of your chatbots then work accordingly to help and engage the user.

Thank You!

(Hariom)