Chatbot

A chatbot also known as a chatterbot, bot, artificial agent, etc is basically a software program driven by [artificial intelligence](https://www.edureka.co/blog/artificial-intelligence-with-python/) which serves the purpose of making a conversation with the user by texts or by speech.

These chatbots are inclined towards performing a specific task for the user. Chatbots often perform tasks like making a transaction, booking a hotel, form submissions, etc. The possibilities with a chatbot are endless with the technological advancements in the domain of artificial intelligence.

We can define the chatbots into two categories, following are the two categories of chatbots:

1. Rule-Based Approach – In this approach, a bot is trained according to rules. Based on this a bot can answer simple queries but sometimes fails to answer complex queries.
2. Self-Learning Approach – These bots follow the machine learning approach which is rather more efficient and is further divided into two more categories.
   * Retrieval-Based Models – In this approach, the bot retrieves the best response from a list of responses according to the user input.
   * Generative Models – These models often come up with answers rather than searching from a set of answers which makes them intelligent bots as well.

ChatterBot is a library in python which generates responses to user input. It uses a number of [machine learning algorithms](https://www.edureka.co/blog/machine-learning-algorithms/) to produce a variety of responses. It becomes easier for the users to make chatbots using the ChatterBot library with more accurate responses.