# PHASE 1: CREATE A CHATBOT IN PYTHON

## **Problem Statement:**

When using an app or website, customers except outstanding service. They can become disinterested in the app if they can't locate the solution to a question they have. To avoid losing customers and having an adverse effect on your bottom line, you must provide the highest quality service possible while developing a website or application.

### **Problem Definition:**

The objective is to prompt an high-calibre, engaging, and intelligent chatbot that raise the customer satisfaction. This will utilize the Python programming language to create and implement an intelligent chatbot. The chatbot will be able to converse with users in natural language, comprehend their questions, and respond appropriately. By assisting with a variety of tasks and issues and boosting the user experience through engaging and relevant interactions, the chatbot will behave as a virtual assistant.

## **Design Thinking:**

#### 1) Empathize:

Recognize the users' requirements. To learn what people anticipate from the chatbot, conduct user interviews or surveys. Determine their objectives and areas of discomfort.

#### 2) Define:

Based on user insights, define the issue. Explicitly state the purpose of the chatbot. Set up clear objectives and goals for the chatbot. For instance, is it for information retrieval, customer service, or something else?

#### 3) Test:

Run a real-world user test on the prototype. Obtain opinions on the chatbot's usability, precision, and efficiency. Analyze customer feedback to find areas for improvement. Iterate on the chatbot's design and functioning in response to user feedback.

#### 4) Iterate:

Keep refining the chatbot based on user input and use metrics. Update the chatbot frequently keep it relevant to users' demands and to add new features and improve existing ones.