# **Problem Statement:**

Create a chatbot and train it with provided dataset.

Here is the stepwise problem description:

1. Dataset contains 12 folders.
2. Each folder has two files rawData.txt and response.txt.
3. Folder name represents different categories of questions/user input.
4. rawData.txt in each folder/category has question/input that user type into chatbot.
5. Response.txt in each folder/category has response that chatbot gives.
6. When user input a text/question, trained chatbot should classify that text to one of the categories and select any answer from response.txt.
7. Chatbot should handle incorrect/random input gracefully that does not fall into any of the defined category.
8. Try to suggest write question to user, in case there is spelling mistake/ambiguity in user input.
9. Provide way for user to enter different user input in notebook.

Optional (Carry weightage):

1. Auto correct spelling mistake.
2. Sentiment analysis.
3. Context understanding.

**Solution Evaluation Criteria:**

1. Runtime testing with different user input that is like training data but not same.
2. Reasoning behind algorithm selection, feature selection, feature engineering and data treatments.
3. Notebook legibility
4. Originality of the solution

**Deliverables:**

1. Notebook in native and html format.
2. A report describing steps of implementations, reasoning behind algorithm selection, feature selection, feature engineering and data treatments.
3. Examples of different scenarios (user input).
4. Presentation will be asked if selected for final round.