**ASSIGNMENT 2**

**Ritesh and his data team are working on a customer service chatbot. The chatbot is a computer program that uses data science to answer basic customer questions via a messenger. The team will use transcripts from over 300,000 customer service interactions to train a chatbot to answer customer questions. Place each action that Ritesh's team will take in the appropriate step of the data science workflow.**

**1)Gather customer information for each conversation**

**2)Create a bar chart of the number of conversation**

**3) Create an algorithm that classifies the initial customer question**

**4) Plot the number of conversation vs. the time of the day**

**5) Collect the timestamps for each transcript**

**6) Use a machine learning model to predict possible responses for each question**

**7) Load the transcripts into the data team’s database (Source: DATA CAMP)**

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| **DATA COLLECTION AND STORAGE** | **EXPLORATION AND VISUALIZATION** | **EXPERIMENTATION AND PREDICTION** |
| **Gather customer information for each conversation.** |  |  |
|  | Create a bar chart of the number of conversation. |  |
|  | Create an algorithm that classifies the initial customer question. |  |
|  | Plot the number of conversation vs. the time of the day. |  |
| **Collect the timestamps for each transcript.** |  |  |
|  |  | Use machine learning model to predict  Possible response for each question. |
| **Load the transcripts into the data team’s database.** |  |  |