Phase 5: Documentation

# Problem definition:

The challenge is to create a chatbot in python to provide exceptional customer service,

answering user queries on a website or application.

The objective is to deliver high-quality support to users, ensuring a positive user experience

and customer satisfaction.

# Design Thinking:

### 1. Functionality:

\* The chatbot will be capable of understanding and responding to a wide array

of common questions.

### 2. User interface:

\*This chatbot will be integrated in website with the user-friendly interface for

interactions.

### 3. Natural Language Processing:

\*Natural Language Processing (NLP) technique is implemented in this chatbot to

comprehend and interpret user input in a human-like manner.

### 4. Responses:

\*It will greet users upon starting a conversation:”Hello! How can I assist you

today”.

### 5. Integration:

\*It is integrated by implementing necessary APIs and endpoints to connect

the chatbot’s backend with the website’s frontend.

### 6. Testing and Improvement:

\*The chatbot will be continuously tested and updated it’s performance based on user interactions.

# Libraries used:

\*Here we have used five libraries.

1. Tensorflow

2. Flask

3. nlkt

4. Pickle

5. Keras

# Integration of NLP techniques:

\* We have collecte data,preprocessed it and loaded into a dataset.

# Chatbot interaction:

\*This chatbot interacts with users in web application.This chatbot is based upon texting the questions and giving them answers in a text format.

# Innovative approaches:

\*Many of the chatbots doesn’t has a picture representation for the questions given by the users.Our future chatbot will be able to give text as well as picture representation.