PPR-1

1. We have identified the problem statement and have done a discussion with the guide regarding the feasibility. We have read relevant research/review papers and have identified the architecture used for the problem statement.
2. Creating a chatbot that can efficiently and effectively answer the queries of the user is difficult because each person can have different syntax for a question with the same semantics.
3. We need support to deploy our project using Cloud to analyze user queries so that we can increase the efficiency of the user query response.
4. We have referred several research papers namely "Chatbot for University Related FAQs" by Bhavika R. Ranoliya, Nidhi Raghuwanshi, and Sanjay Singh,

"A Deep Reinforcement Learning Chatbot" by Iulian V. Serban, Chinnadhurai Sankar, Mathieu Germain, Saizheng Zhang, Zhouhan Lin, Sandeep Subramanian,

Taesup Kim, Michael Pieper, Sarath Chandar, Nan Rosemary Ke, Sai Rajeshwar, Alexandre de Brebisson, Jose M. R. Sotelo, Dendi Suhubdy, Vincent Michalski, Alexandre Nguyen, Joelle Pineau, and Yoshua Bengio, "Survey on Chatbot Design Techniques in Speech Conversation Systems" by Sameera A. Abdul-Kader and Dr. John Woods.

PPR-2

1. Based on our problem statement, we have done a discussion with our guide. We have read relevant research/review papers and identified the architecture in which one is suitable for our problem statement.

2. Creating a chatbot that can efficiently and effectively answer the queries of the user is difficult because each user can have different query syntax for the same question.

3. We need support to deploy our project using Cloud to analyze user queries so that we can increase the efficiency of the user query response.

4. We have referred several research papers namely

“Extracting Chatbot Knowledge from Online Discussion Forums” by Jizhou Huang1, Ming Zhou2, Dan Yang1

“Sequence to Sequence Learning with Neural Networks” by Ilya Sutskever, Oriol Vinyals, Quoc V. Le

“A Survey on Chatbot Implementation in Customer Service Industry through Deep Neural Networks” by Mohammad Nuruzzaman, Omar Khadeer Hussain

PPR-3

1. After reading different research/review papers we started our project by doing practical in NLP using some inbuilt libraries like NLTK. We analyze the user query and split the words by operating like stop keywords and then performed stemming and lemmatization.

2. Creating a chatbot that can efficiently and effectively answer the queries of the user is difficult because each person can have different syntax for a question with the same semantics.

3. We need support to deploy our project using Cloud to analyze user queries so that we can increase the efficiency of the user query response.

4. We have referred several research papers namely

“A Survey Paper on Chatbots” by Aafiya Shaikh1, Dipti More2, Ruchika Puttoo3, Sayli Shrivastav4, Swati Shinde4

“Evolution of Chatbots for Smart Assistance” by Vishal Aggarwal, Anjali Jain, Harsh Khatter, Kanika Gupta

PPR-4

1. After removing unnecessary words from the user query using the stop words method, we performed different techniques on a query like a bag of words, TF-IDF, and analyzed its output so that we can increase the efficiency of our user query responses.

2. In this project, the main challenge is how we can increase the efficiency of our chatbot so it can respond to different user queries very effectively and accurately.

3. We need financial support to use AWS credits to host our application.

4. We have referred several research papers namely

“Seq2Seq AI Chatbot with Attention Mechanism” by Abonia Sojasingarayar

"Survey on Chatbot Design Techniques in Speech Conversation Systems" by Sameera A. Abdul-Kader and Dr. John Woods.