

DATA-606 (Capstone project):

Team-A :

- 01) Mounika Atmakuri
- 02) Sridhar Reddy Maram
- 03) Tauseef Taufiq K
- 04) Surya Teja Avvaru

Project Idea-1: Chatbot creation(First Preference)

Choosing chatbot creation as a capstone project allows us to apply interdisciplinary skills of Python programming language, Natural Language Processing(NLP), AI and ML, and user experience design to solve real-world problems.

By working on chatbot creation, we would like to develop a practical solution that could be applied in real-world scenarios, making the project more impactful and valuable.

According to market trends, AI-powered chatbots are expected to grow rapidly, which means the skills we acquire through this project will be highly marketable.

There are various platforms or frameworks such as Dialogflow (Google), Rasa, Fast API, Microsoft Bot Framework etc.

After exploring all aspects of chatbot development, we are concerned about the ethical issues associated with chatbots and would appreciate suggestions on this area.

Project Idea-2: Sentiment Analysis

We are interested in selecting sentiment analysis on social media content for the capstone project because it allows us to apply machine learning, and natural language processing techniques to extract valuable insights from large volumes of unstructured data.

It provides real-world applications in areas such as marketing, customer feedback, and public opinion analysis, while addressing current industry trends.

Problem type- Classification(Positive, Negative, Neutral, Irrelevant)

Kaggle dataset link-

<https://www.kaggle.com/code/pythonafroz/predicting-sentiment-with-traditional-ml-technique/input>

Performance Evaluation Metrics- Confusion Matrix, Accuracy, Precision and Recall, F1_score