# Final Report: Named Entity Recognition (NER) Project

### **Problem Statement:**

The objective of this project is to develop a Named Entity Recognition (NER) system capable of identifying and masking entities such as phone numbers, emails, user IDs, and URLs from text data. This is to ensure privacy protection and sensitive data masking.

## **Objective:**

The goal is to use Pre-trained Models like BERT, Huggingface, or SpaCy to build a NER model that can detect and mask sensitive entities in the dataset provided.

### **Tools and Libraries Used:**

- 1. Python
- 2. Huggingface Transformers
- 3. BERT Model
- 4. SpaCy
- 5. Flask
- 6. Pandas
- 7. Matplotlib
- 8. Sklearn
- 9. Google Colab
- 10. GitHub

#### **Results and Evaluation:**

The model's performance was evaluated using the classification report and confusion matrix. The accuracy of the model in detecting and masking sensitive entities was high.

## **GitHub Repository Link:**

https://github.com/Nayanika2808/NER1\_Project