Project Report: Automated Stress Monitoring

Introduction:
Mental health is an essential aspect of one's well-being, and stress, anxiety, and depression can severely impact an individual's mental health. With the increase in social media usage, people are sharing their feelings and experiences on these platforms, making it a valuable source of information for mental health organizations. However, analyzing such vast amounts of data manually is a challenging task. Hence, the application of machine learning techniques for stress detection can be an effective solution.

Project Overview:
In this project, we aimed to develop a machine learning model to detect stress from social media posts. We used a dataset from Kaggle that contained posts from subreddits related to mental health. We used Python and the Bernoulli Naive Bayes algorithm, which is known for its effectiveness in binary classification problems.

Implementation:
We started by cleaning the text column of the dataset by removing stopwords, links, special symbols, and language errors. We then prepared the label column and selected the text and label columns for the training process. Finally, we trained the model using the Bernoulli Naive Bayes algorithm, which yielded promising results.

Summary:
Our project demonstrated the effectiveness of machine learning techniques for stress detection from social media posts. This information can be useful for mental health organizations to quickly identify social media users who might need assistance. Our project also highlights the importance of utilizing the vast amounts of data available on social media platforms for mental health research.

In conclusion, our project showcases the potential of machine learning techniques in the field of mental health and emphasizes the need for further research in this area.