

Project Title: "Spam Email Classification using Machine Learning"

- **Project Description:**

In this project, you will develop a machine learning model to classify emails as either spam or legitimate (non-spam). You will use techniques such as text preprocessing, and supervised learning algorithms to train a model that can effectively differentiate between spam and non-spam emails.

- **Steps:**

1) Dataset Exploration: use the data in the "spam.csv" file.

“This is a CSV file containing related information for 5172 randomly picked email files, and there are labels for some of this data for spam or not-spam classification. In the CSV file, each row is for each email. There are 3002 columns. The first column indicates the email name. The name has been set with numbers, not recipients', to protect privacy.

The last column has the labels for prediction: 1 for spam, 0 for not spam. The remaining 3000 columns are the 3000 most common words in all the emails, after excluding the non-alphabetical characters and words. “

2) Model Training: Split the dataset into training and testing sets. Choose a suitable supervised learning algorithm, and train the model using the training data.

3) Prediction: use your training model to predict the label of the remaining data in the dataset file. [Split these samples into a new csv file.]

NOTES:

- Each team contains at most two members.
- Send your model to the doctor's mailbox “ muahann@gmail.com “
and put this mail “ samarmahmoud.fci98@outlook.com ”in the CC.
- deadline: May 24, 2023