Project Proposal

# Project Title:

Fake News Detection using NLP

# Student Name:

Baryhan Rami Alwohoosh (202310220)

# Course Title:

Programming for Data Science

# Instructor Name:

Dr. Hossam Mustafa

# Date:

2025-05-02

# Project Abstract:

# In this project, I will develop an intelligent system capable of detecting fake news by analyzing news texts using machine learning algorithms. I relied on an open dataset from Kaggle containing real and fake news. I used the Pandas library to analyze the data and applied natural language processing (NLP) techniques to prepare the texts and convert them into learnable numerical features. I then added a classification model using the Scikit-learn library to distinguish whether a news item is real or fake. To enhance the application of the program, I added a web scraping feature to collect real news from sites like CNN and BBC. I also used external APIs to obtain additional information such as source credibility in JSON format and applied multithreading techniques to speed up the data collection process. I will perform all of these steps within the project...

# Dataset Source (Kaggle):

https://www.kaggle.com/datasets/clmentbisaillon/fake-and-real-news-dataset