WELCOME

ARTIFICIAL INTELLIGENCE (AI)

FAKE NEWS DETECTION USING NLP

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INTRODUCTION OF AI:

Intelligence:” The capacity to learn and solve problems”.

Artificial intelligence:

Artificial intelligence is the simulation of humans intelligence by machines.

1.The ability to solve problems.

2.The ability to act rationally.

3.The ability to act like humans.

PROBLEM DEFINITION:

Phase 1: Problem Definition,

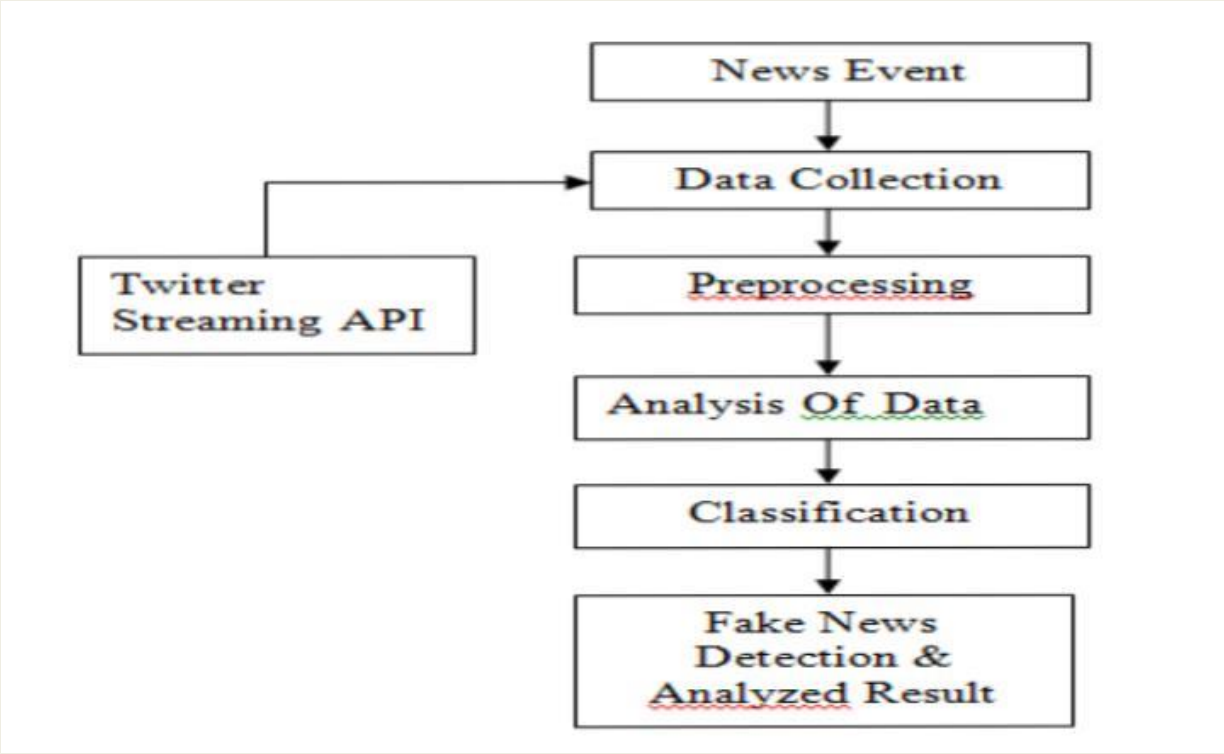
The problem is to develop a fake news detection model using a kaggle dataset.The goal is to distinguish between genuine and fake news articles based on their titles and text. This project involves using natural language processing (NLP) techniques to preprocess the text data , building a machine learning model for classification,and evaluating the model's performance.

DESIGN THINKING:

phase 1:Design Thinking,

1. Data source: choose the fake news dataset available on kaggle,containing articles tittles and text, along with their labels (genuine or fake).
2. Data processing: clean and preprocess the textual data to prepare it for analysis.
3. Feature extraction: Utilize techniques like TF-IDF(term Frequency- inverse document frequency) or word embeddings to convert text into numerical features.
4. Model selection: select a suitable classification algorithm (e.g., logistic regression, Random forest,or neural networks) for the fake news detection task.
5. Model training: Train the selected model using the preprocessed data.
6. Evaluation:Evaluate the model’s performance using metrics like accuracy, precision, recall,F1-score,and ROC-A

BLOCK DIAGRAM:



COMPONENTS:

- Python web frame work.

REFERENCE:

- Artificial Intelligence for Humans by Jeff Heaton
- https://youtu.be/f7ckMaEJvh4?si=0EYjBfRCUjoKahgf

THANKING YOU