📰 FAKE NEWS DETECTION USING MACHINE LEARNING

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1. Introduction

Fake news is spreading rapidly through social media and online platforms.
It creates confusion and misinformation in society.
The aim of this project is to detect whether a news article is Fake or Real using Machine Learning.

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2. Problem Statement

Nowadays, fake news spreads quickly on social media platforms.
It becomes difficult for people to identify real and fake news manually.
There is a need for an automated AI system to classify news as Fake or Real.

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3. Proposed Solution

This system uses Machine Learning techniques to classify news articles.
The model analyzes text patterns and predicts whether the news is Fake or Real.

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4. Technologies Used

- Python
- Pandas
- Scikit-learn
- TF-IDF Vectorizer
- Logistic Regression
- Streamlit

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5. Algorithm Used

Logistic Regression algorithm is used for classification.
TF-IDF is used to convert text data into numerical form.

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6. System Architecture

Input News Text → Text Preprocessing → TF-IDF → Logistic Regression Model → Prediction (Real/Fake)

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7. Result

The system successfully predicts whether a news article is Real or Fake.
The model gives accurate classification results.

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8. Conclusion

The Fake News Detection system helps society by reducing misinformation.
It can be further improved by using advanced deep learning models.

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9. Future Scope

- Add multilingual support
- Improve accuracy using deep learning
- Deploy on cloud platform

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10. References

- Kaggle Fake News Dataset
- Scikit-learn Documentation