

Innovation partner **H2S**

Media partner **YOURSTORY**

AI for Bharat Hackathon

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Team Name : Think Titan

Team Leader Name :Vishwajith P L

Problem Statement :Fake news spreads misinformation online and needs automated detection.

Brief about the Idea:

It is an AI-powered Fake News Detection System that analyzes news articles, headlines, and social media posts to classify them as **Real or Fake** using Natural Language Processing (NLP) and Machine Learning.

The system uses text preprocessing, feature extraction, and classification models to identify patterns commonly found in fake news content.

It can be integrated into:

- Social media platforms
- News websites
- Mobile applications
- Browser extensions

Your solution should be able to explain the following:

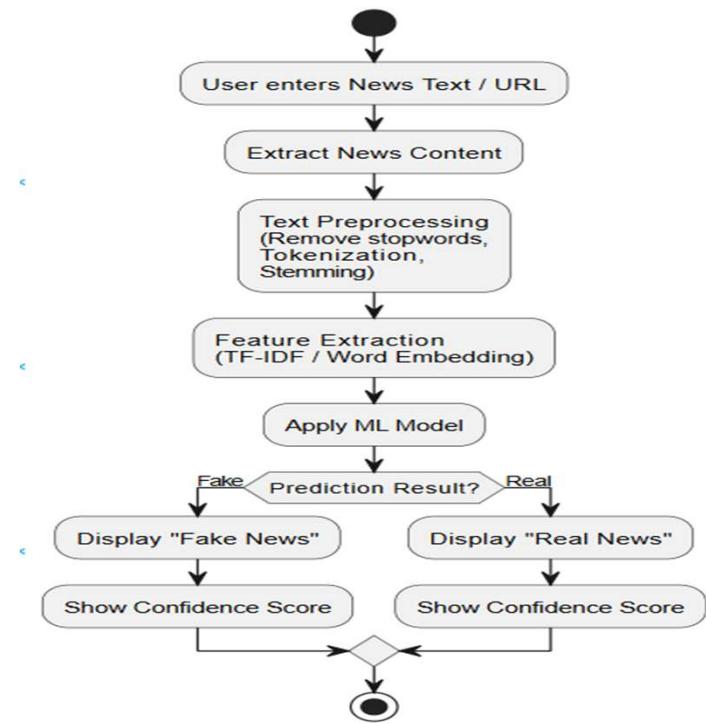
Unlike basic fake news detectors that only use keyword matching:

- Uses NLP-based contextual understanding
- Can detect emotional manipulation and clickbait patterns
- Supports regional language news (Indian languages support)
- Provides explanation for prediction (Explainable AI)
- Can be deployed as API + Web App

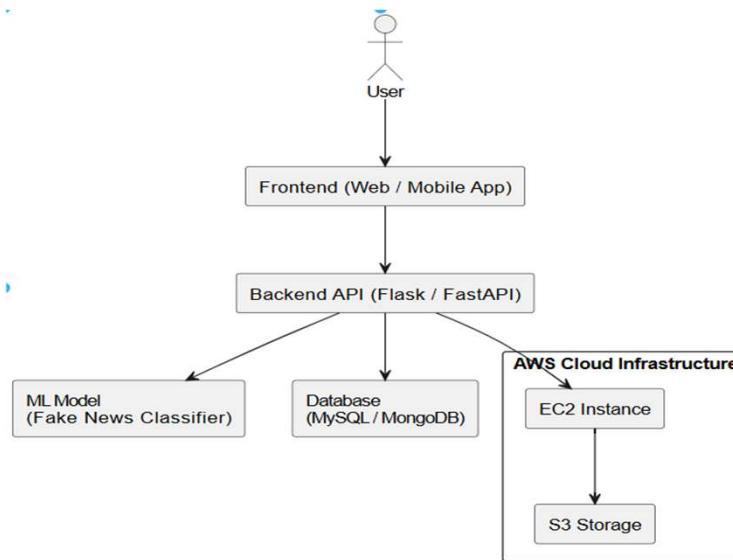
List of features offered by the solution:

- User submits news text or URL
- System extracts content
- Text preprocessing (stopword removal, stemming, cleaning)
- Feature extraction using TF-IDF / Word Embeddings
- ML model predicts Real or Fake
- Confidence score displayed
- Explanation of prediction shown

Process flow diagram:



Architecture diagram of the proposed solution:



Technologies to be used in the solution:

- Python
- Scikit-learn
- NLP (NLTK / SpaCy)
- Pandas & NumPy
- Flask / FastAPI
- React.js (Frontend)
- AWS EC2 / AWS S3
- GitHub
- Kaggle Dataset (Fake News Dataset)

Estimated implementation cost (optional):

- AWS Hosting: ₹2000 – ₹5000 per month
- Domain & Maintenance: ₹1000
- Development Cost: Student Project (Low Cost)
- Total Estimated Cost: ₹5000 – ₹8000 (Prototype level)

Add as per the requirements for the hackathon:

- Scalable Cloud-based Solution
- AI-driven Model
- Bharat-focused multilingual approach
- Real-world impact
- Social awareness solution

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Thank You

