NewsBot Intelligence System

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Core Features

- Classifies news (Politics, Sports, Tech, Business, etc.)
- Topic modeling — finds key themes across articles
- Summarizes long articles into short overviews
- Semantic search — find relevant articles by meaning
- Multilingual support & translation
- Conversational querying — "find me X"

System Architecture

- Input: raw news articles (any language)
- Preprocessing & Translation → Clean English text
- NLP Modules: Classification : TF (Category) , Topic Model: LDA (Hidden themes), Summarizer, Embeddings + semantic , NER & Sentiment.
- Output: Structured insights (category, summary, sentiment, entities) or search results