

The background of the page features a dark blue circuit board pattern with various blue and green lines and small circular pads.

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[Solution](#)

[Apporach Details](#)



TEAM - 5

TEAM AND PROBLEM STATEMENT

Team Name : Team 5

Problem Statement : The project addresses the need for a 360-degree feedback software for monitoring Government of India-related news stories in regional media using Artificial Intelligence and Machine Learning.

Team Lead: ATLA HARSHA VARDHAN

Team Member 1 : BADUGU AJAY

Team Member 2 : ARETI HIMA PADMAVATHI

Team Membef 3 : CHIPPALA HARI KUMAR



ABSTRACT:

In today's fast-paced digital landscape, real-time media monitoring is essential for effective governance and public communication. This project introduces an AI-driven 360-degree feedback system that automates the tracking of Government of India-related news across regional media. Using Artificial Intelligence (AI) and Machine Learning (ML), the system scrapes news articles, scans e-papers using Optical Character Recognition (OCR), and processes YouTube news bulletins to extract relevant content. By employing Natural Language Processing (NLP), the extracted news is classified based on government departments and analyzed for sentiment—Positive, Neutral, or Negative.

To ensure timely action, real-time alerts are sent to officials when negative news is detected. A user-friendly dashboard with multilingual support allows officials to filter and analyze media reports efficiently. By automating news tracking, classification, and sentiment analysis, this system enhances government decision-making, public perception management, and policy communication.

SOLUTION :

01

Automated Data Collection:

- Develops a system to scrape news articles and videos from multiple sources, including websites, e-newspapers, and YouTube channels.
- Extracted data is processed to identify key details like headline, content, publication date, and source URL.

02

Categorization and Sentiment Analysis:

- Classifies articles based on the ministry's jurisdiction using an accurate machine learning model.
- Performs sentiment analysis (Positive, Neutral, or Negative) for actionable insights.

03

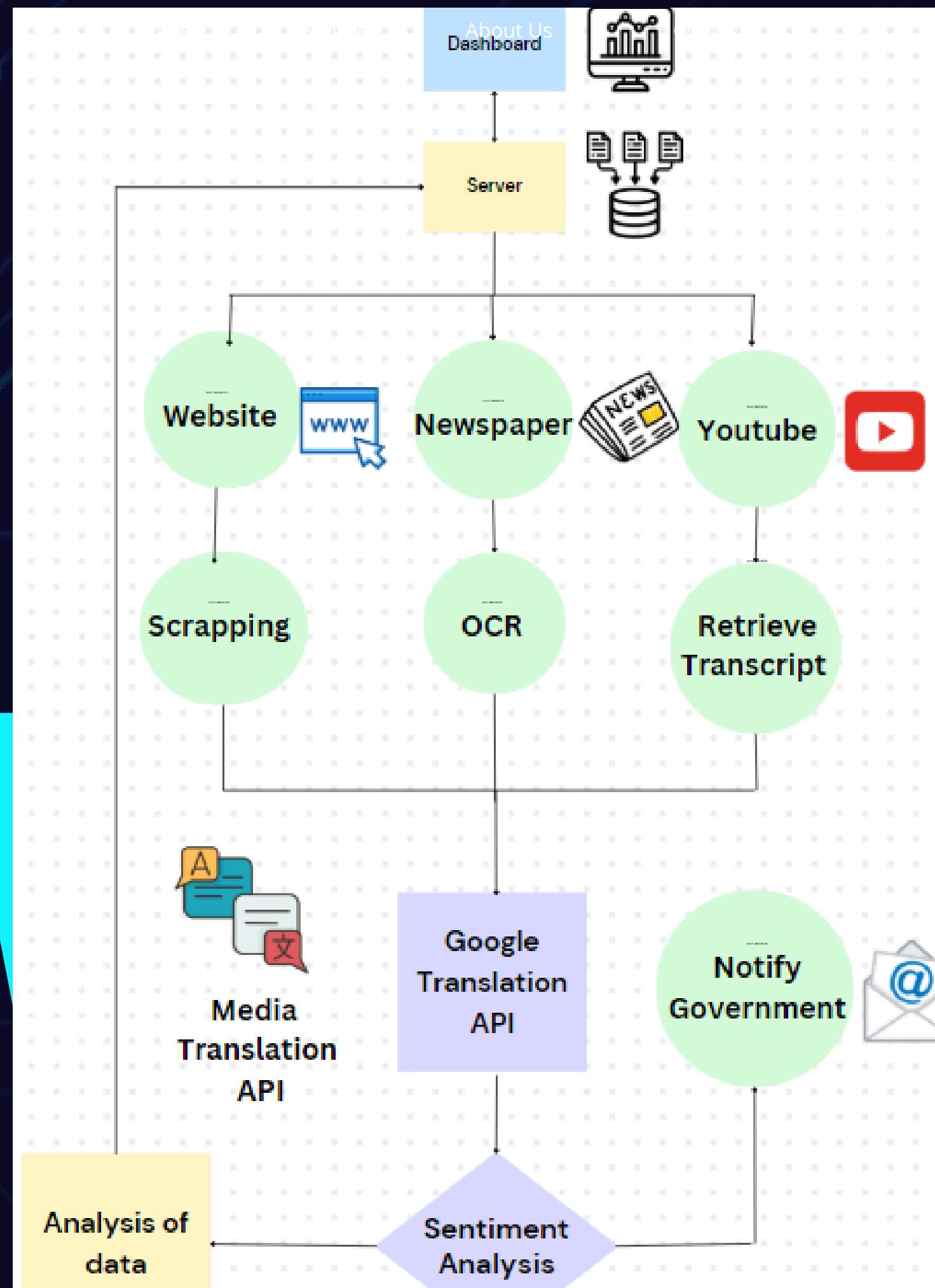
Real-Time Alerts and Notifications:

- Sends alerts for negative news articles to respective government departments via email for immediate response.
- Provides timely updates on critical news events.

04

User-Friendly Interface:

- Displays news on a simple and intuitive dashboard that supports multiple languages (English, Hindi, and regional languages).
- Offers features like manual refresh, automatic hourly updates, and easy filtering by sentiment and ministry.





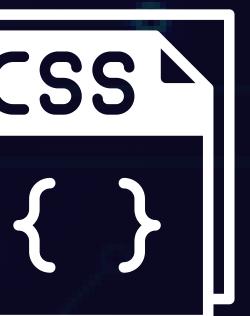
Approach details :

- Crawled 12000+ news articles and videos using Python Beautiful Soup and Selenium Library.
- Applied clustering on these articles to label them into different categories to prepare labeled dataset.
- Trained this dataset of articles using BERT model to generate department predictions.
- Implemented sentiment analysis on news articles.
- Sending mail of Negative News to respective departments using NodeMailer and Gmail - SMTP
- Integrated this model and crawling functionality with a Django backend and wrote APIs for generating predictions and sentiments.
- Merged this backend with a simple and attractive UI where user can give triggers to load latest news articles with their analysis.

- Implemented video news analysis using Selenium library by first extracting audio and converting it into text. Then applied classification and sentiment analysis on the extracted text.
- Developed the same functionalities for news in Telugu, Hindi and others languages as well using Google Translate API.

Technology Stack :

- **AI:** PyTorch, TensorFlow, and BERT libraries for creating ML models.
- **Crawling:** BeautifulSoup, Selenium
- **Server:** Django backend.
- **Frontend:** HTML , CSS, JavaScript .



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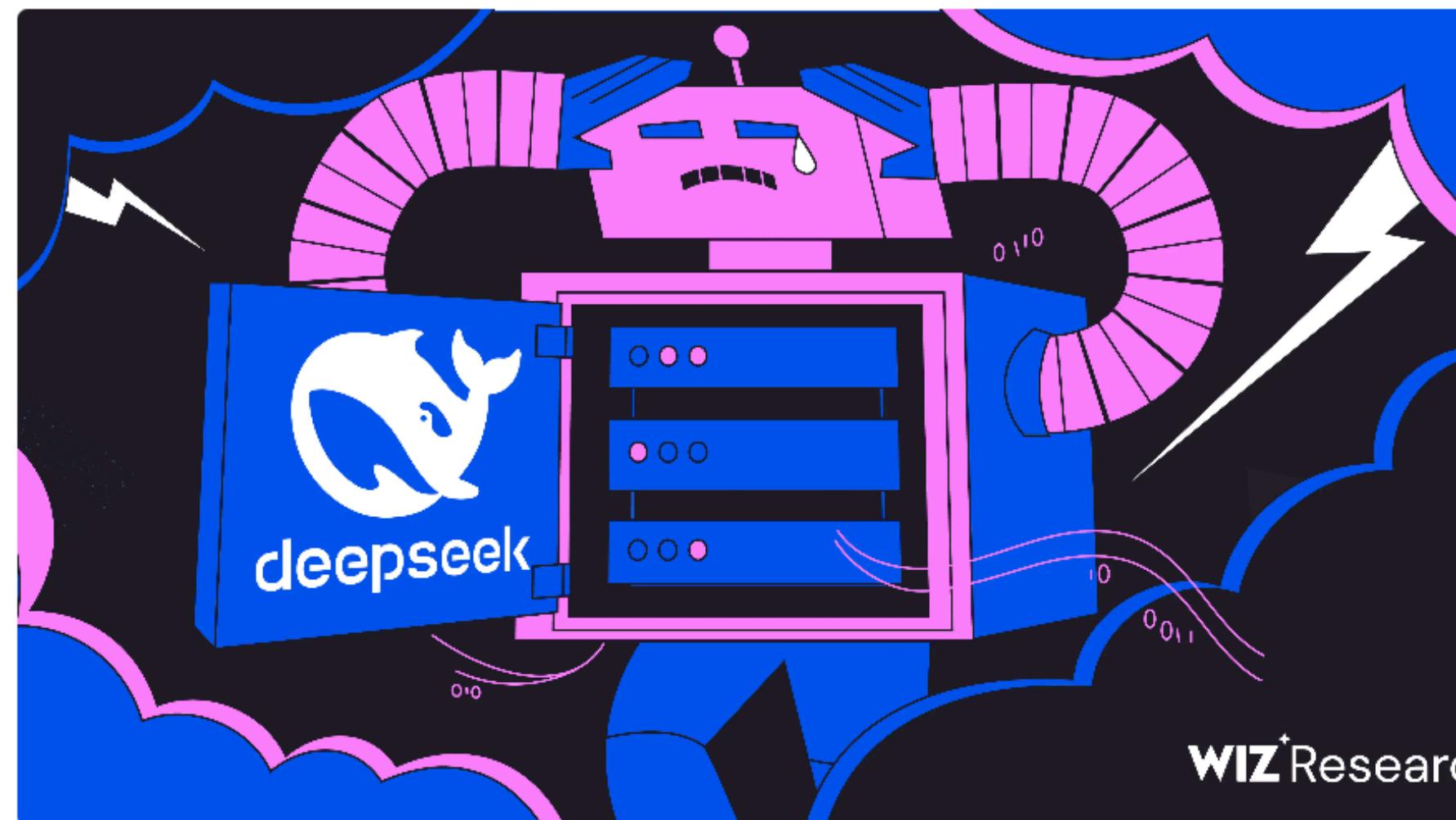
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Trump Says US Is 'In Mourning' After No Survivors From Plane Crash



Nothing Phone 3a Series

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Exposed DeepSeek Database Revealed Chat Prompts

China-based DeepSeek has exploded in popularity, drawing greater scrutiny. Case in point: Security researchers found more than 1 million records, including user data and API keys, in an open database.

MOST RECENT



Maha Kumbh stampede: Judicial commission to finish probe in a month



Harish Kumar and panel members



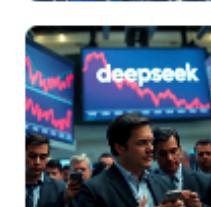
IT minister Hari Kumar

Privacy issue with china's DeepSeek



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China's AI DeepSeek

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SENTIMENT ANALYSIS

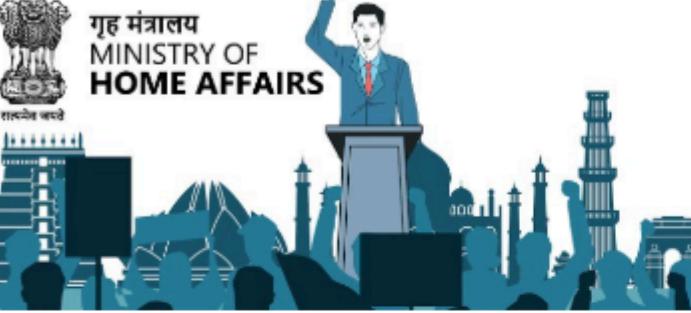
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POSITIVE: 85% NEUTRAL: 10% NEGATIVE: 5%

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LATEST ARTICLES IN TELUGU



गृह मंत्रालय
MINISTRY OF HOME AFFAIRS
सरकारी चालौ



టెబి నిర్మాలన కోసం 100 రోజుల
సుదీర్ఘ ప్రచారాన్ని
ప్రారంభించిన హైసం
వ్యవహారాల మంత్రిత్వ శాఖ
హైసం వ్యవహారాల మంత్రిత్వ శాఖ

About: Focus on health programs

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MINISTRY OF FINANCE
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విడుదల చేసిన ఆర్థిక మంత్రిత్వ శాఖ
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About: Focus on financial stability

POSITIVE: 72%	NEUTRAL: 23%	NEGATIVE: 5%
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DEPARTMENT OF INTERNAL SECURITY



BNSS నిబంధనల అమలుకు
మార్గదర్శకాలను జారీ చేసిన
హైసం వ్యవహారాల మంత్రిత్వ శాఖ
అంతర్గత భద్రతా విభాగం

About: Improving internal security measures

POSITIVE: 80%	NEUTRAL: 15%	NEGATIVE: 5%
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संस्कृతि मंत्रालय
MINISTRY OF CULTURE
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2024 సంవత్సరానికి సాహిత్య
అకాడమీ వార్షిక పురస్కారాలను
ప్రకటించింది

About: Promoting literature and arts

POSITIVE: 78%	NEUTRAL: 18%	NEGATIVE: 4%
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సూచనా శాఖ
ప్రసాధన మంత్రాలయ
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సరకారీ చాలौ



హోకీ ఇండియా లీగ్ 2024-25 కోసం
అధికారిక ప్రసార భాగస్వామిగా
దూరదర్శన ప్రకటించబడింది

About: Expanding sports broadcasting

POSITIVE: 81%	NEUTRAL: 14%	NEGATIVE: 5%
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MINISTRY OF EXTERNAL AFFAIRS
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సంబంధాలను బల్చేతం
చేసిన భారతదేశం



विधి ఔరి మంత్రాలయ
MINISTRY OF LAW & JUSTICE



ఏక ఆధారిత ఇ-ఫ్లైటింగ్
వ్యవస్థను ప్రారంభించిన సుప్రీం
కోర్టు



विज్ఞాన ఏర్పాత్మకమైన మంత్రాలయ
MINISTRY OF SCIENCE AND TECHNOLOGY
సరకారీ చాలौ



తిరిగి ఉపయోగించగల స్పేస్
వాహనాన్ని విజయవంతంగా
పరీక్షించిన భారతదేశం



యువా కార్యక్రమ
ఏర్పాత్మక మంత్రాలయ
MINISTRY OF YOUTH AFFAIRS AND SPORTS
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ఆండర్-19 ప్రపంచ క్వోల్ గలిచిన
భారత క్రికెట్ జట్టు
యువవ్యవహారాలు మరియు క్రీడల



ఇంజనీరింగ్ శాఖ
సూచనా శాఖ
ప్రసాధన మంత్రాలయ
MINISTRY OF ELECTRONICS AND INFORMATION TECHNOLOGY
సరకారీ చాలौ



జాతీయ సైబర్ భద్రతా
వ్యాహాన్ని ప్రవేశపెట్టిన
భారతదేశం

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Negative:
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