Placement Empowerment Program

Cloud Computing and DevOps Centre

HACK - A - CLOUD 3.0

| Team Name	Cloud Cruisers
Project Title	Cloud Based Fake News Detection & Preventiom
Team Members Name	Yasvanth Rajan.E
	Rohith.S

PROBLEM STATEMENT

The rapid spread of misinformation on digital platforms has become a significant societal issue. Detecting fake news manually is inefficient and inaccurate. This project leverages fact-checking APIs, and AWS cloud services to provide an automated and scalable solution for identifying fake news. By analyzing the content using machine learning and comparing it with trusted sources, the system aims to deliver reliable results in real time.

FLOW OF THE PROJECT
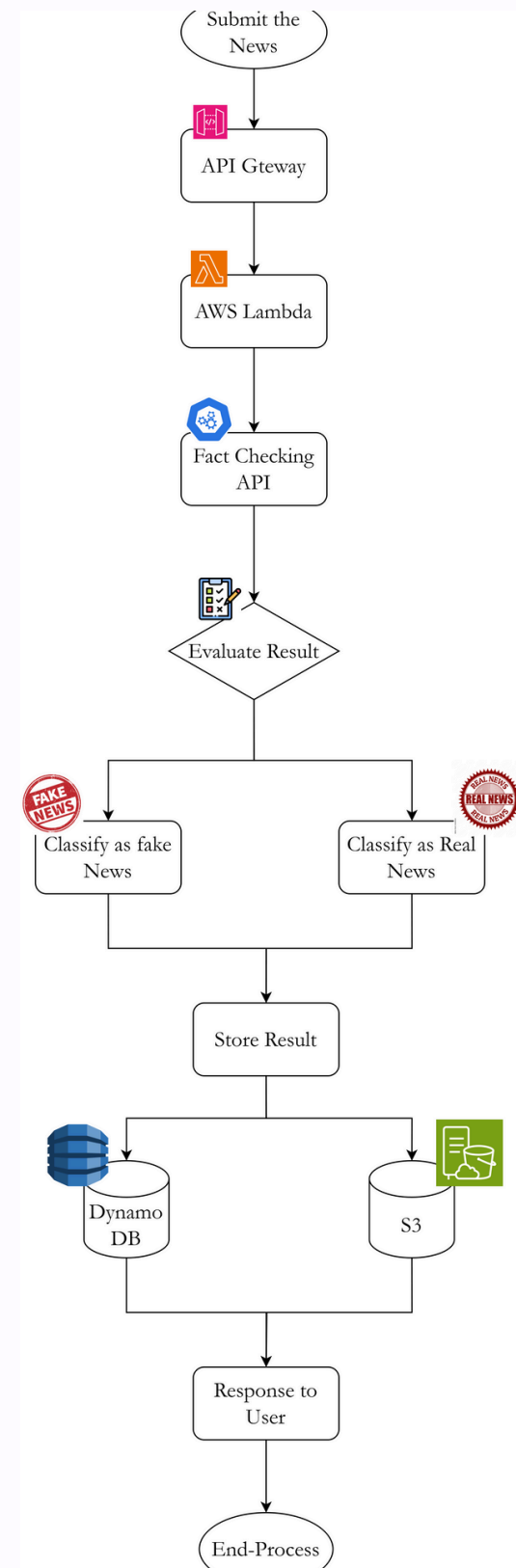
ARCHITECTURE DIAGRAM
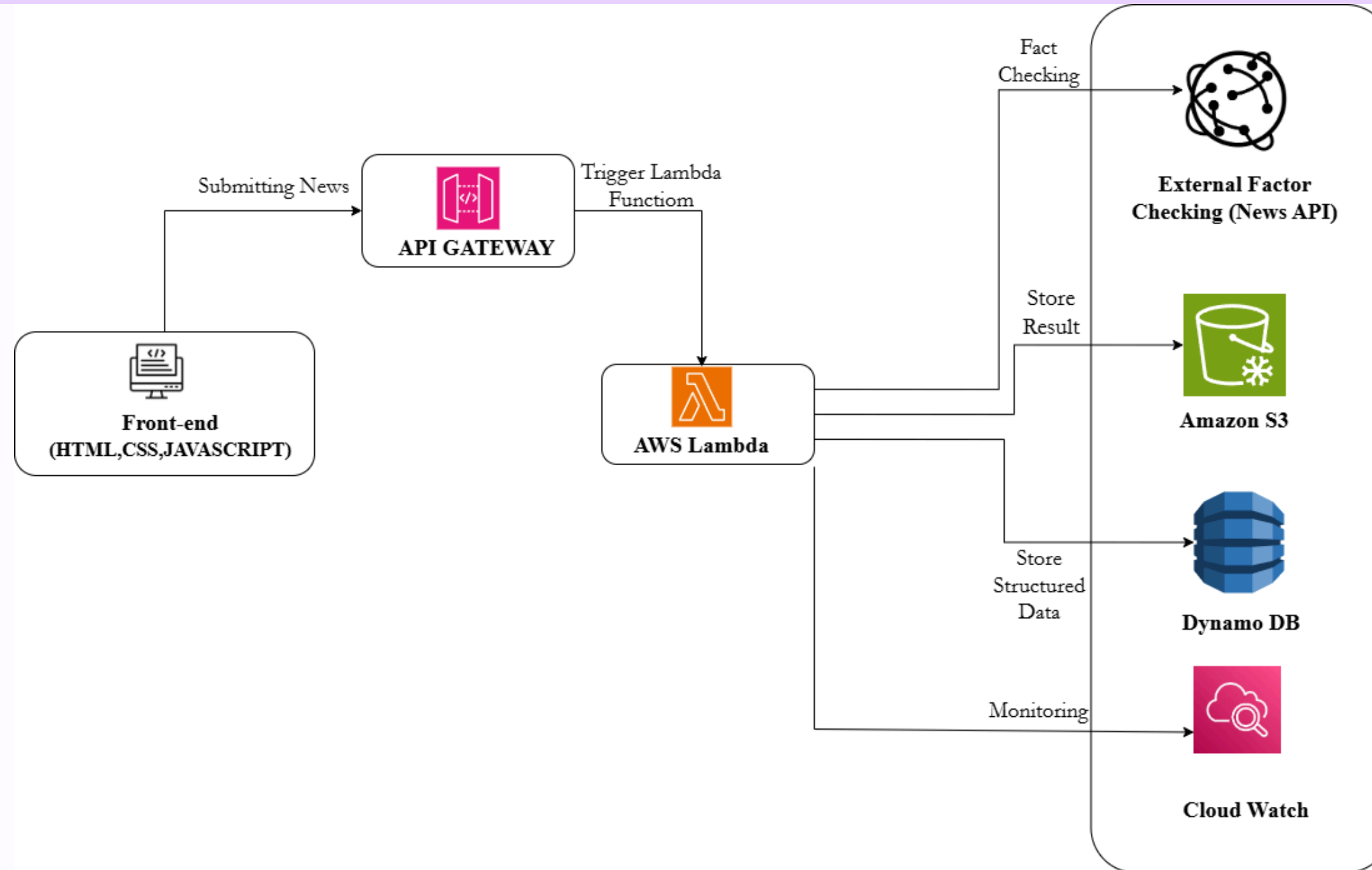
USE CASES & TECH STACK

UseCases	TechStack
Ensure accurate and credible reporting by verifying news articles before publishing.	HTML, CSS, JavaScript for user interface development. (Front-end)
Prevent misinformation from spreading by monitoring and flagging fake news in real-time.	API Gateway CROS(Host The Website)
Improve efficiency and accuracy by automating the verification process.	AWS Lambda, Amazon Comprehend, and API Gateway for processing.
Detect and counter misinformation campaigns to ensure public safety and security.	Amazon DynamoDB for storing analysis results and logs.

SWOT

Strengths: Accurate and real-time detection using AI and fact-checking APIs, ensuring reliable verification.

Weaknesses: Dependency on external APIs may lead to delays and reduced accuracy for complex news.

Opportunities: Expand language support, collaborate with media platforms, and enhance AI accuracy.

Threats: Sophisticated misinformation tactics and manipulation of fact-checking sources may impact results.

FUTURE ENHANCEMENTS

In the future, the fake news detection system can be enhanced by incorporating multilingual support, enabling it to analyze and identify misinformation across various languages. The integration of advanced AI models with continuous learning capabilities will further improve the system's accuracy and reliability.

Additionally, implementing real-time monitoring features will allow the system to track emerging news topics and issue instant alerts for potential misinformation. A browser extension can also be developed to empower users to verify the credibility of news articles directly from websites and social media platforms.

To refine detection accuracy further, a user feedback loop can be established, enabling users to report false positives or negatives. This valuable feedback will contribute to the continuous optimization of the AI model, enhancing its effectiveness in identifying fake news over time.

CONCLUSION

The fake news detection system provides an effective solution to combat the spread of misinformation using an external fact-checking APIs. By leveraging cloud services like AWS Lambda, Amazon Comprehend, and DynamoDB, the system ensures accurate, scalable, and real-time analysis of news.

With its ability to deliver reliable results and actionable insights, the system supports media platforms, fact-checking organizations, and government agencies in making informed decisions. As it continues to evolve through future enhancements like multilingual support, improved AI models, and real-time monitoring, the system will further contribute to creating a safer and more informed digital environment.

THANK YOU