



FactCheckr.AI

Guarding your financial decisions
with verified facts.

Submitted for CWB Hackathon 2025



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01. Background

Misinformation and disinformation spread rapidly across digital platforms, influencing public opinion, policy decisions, and trust in institutions. AI-powered solutions can help combat false narratives by verifying content, detecting manipulation, and promoting reliable sources.

[Link to details on CWB Hackathon website](#)





02. Problem Statement

01

1. Is the Information Trustworthy?

How can users quickly and confidently determine the **credibility** and potential bias of news sources in an overwhelming digital environment?

02


2. Battling Online Misinformation

In a world saturated with online content, how can individuals **easily identify** and **flag** specific factual claims that contradict known facts or exhibit characteristics of **disinformation**?

03

3. Decoding Sentiment

How can readers efficiently ascertain the overall **sentiment** or underlying tone of a news article, image, or social media post without a deep, time-consuming analysis?






03. Objectives

To offer businesses or individuals a reliable to assess the news source and the factual claims within text and images

01

1. Is the Information Trustworthy?

To provide users with **rapid**, data-driven insights into the credibility of news sources and the objectivity of their content, by generating a justified **credibility score (1-5)** for any given **text** or **image** input



02

2. Battling Online Misinformation

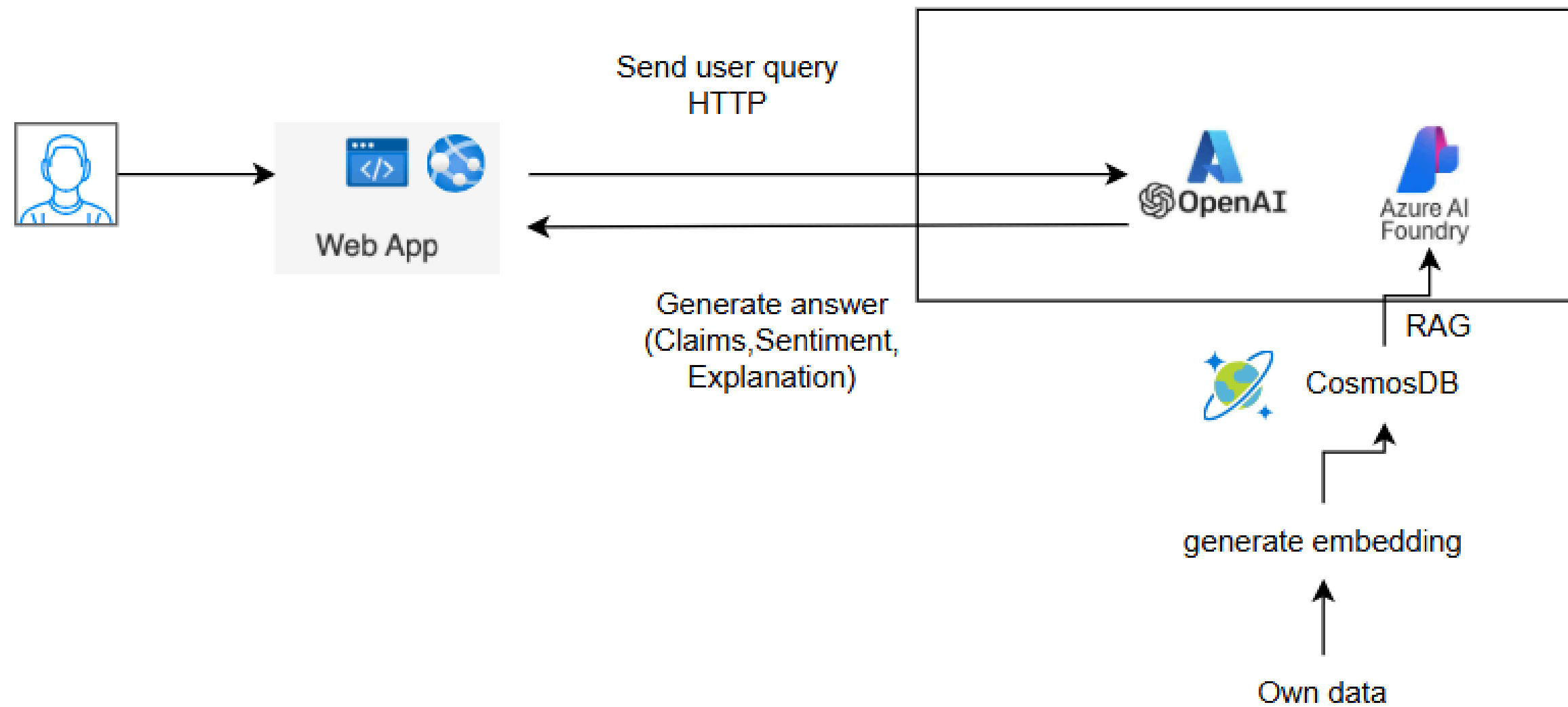
To empower users to proactively identify and understand potential misinformation, by **effectively highlighting factual claims** that **contradict** known **facts** and **flagging** characteristics indicative of **disinformation**.

03

3. Decoding Sentiment

To offer users a **quick and accurate** understanding of the emotional tone and potential biases embedded within news content, by **providing an overall sentiment assessment** (e.g., very positive, neutral, likely negative) for any given input.

04. Technical Architecture





INTRODUCTION

- gpt-4.1 series is the latest iteration of the gpt-4o family.
- Has the context token limit up to 1M input tokens
- Likely train on Public + licensed internet data (books, websites, code, etc.) until 2024
- Comes with Azure Content Safety API

WHY THIS MODEL?

- Latest GPT-4 model - better performance in language understanding, summarization, reasoning and conversation
- Enterprise-Grade Infrastructure - hosted on Azure
- Fine-tuning & embedding support

THINGS TO TAKE NOTE

- Cost for API usage
- Limited customization compared to other open-source models

MODEL SELECTION

gpt-4.1



- To overcome the limitations of large language models (like GPT-4.1) regarding real-time or custom data, we can extend or simulate training using methods like RAG, embeddings, or APIs.
- The embedding & docs can be stored in CosmosDB
- Sample data used: Fin-Fact
- Retrieval Augmented Generation (RAG) can be used to leverage CosmosDB embedding with GPT-4.1. RAG works by
 - Retrieving relevant info
 - Vector search in Cosmos DB
 - Contextual prompting
 - Gen AI responses: GPT4.1 uses its general knowledge and the provided context to create an answer.

INCLUDE MORE DATA

In addition to general knowledge of GPT-4.1

05. Proposed Solutions

On local machine

Factcheckr.AI

127.0.0.1:8000

Factcheckr.AI

Guarding your financial decisions with verified facts.

\$@ 100% Guaranteed SAFE!

@ "Knocking off Credit Card Debts or Other Loan Debts withthe lowest interest rate

\$B Loan amount up to 300k

BB HIGH COMMITMENT, LACK OF INCOME DOCUMENTS, LOW SALARY, CRIS, CROS AND CREDIT AGENCY

Submit

Upload file (txt, pdf, images)

Analysis Result

improve the result?

Credibility Score (1 – 5):

- 1 out of 5

Misinformation Flags:

- The message contains exaggerated claims such as "100% Guaranteed SAFE!" and "Fast APPROVAL," which are typical of scam or predatory lending advertisements.
- The offer of loans with "very small service fee" and approval for individuals with "HIGH COMMITMENT, LACK OF INCOME DOCUMENTS, LOW SALARY, CRIS, CROS AND CREDIT AGENCY" is highly unrealistic and not aligned with standard banking practices.
- The communication lacks any verifiable company information or regulatory disclosures, and the language is unprofessional, further reducing credibility.

Sentiment:

- Likely Positive (the message is designed to appear positive and enticing toward the loan offer)

Proposed Solutions

Deployed on Azure Web App

factcheckr-bzfgbpcfg8dve7ht.eastus2-01.azurewebsites.net

Factcheckr.AI

Guarding your financial decisions with verified facts.

Kuala Lumpur, May 2, 2024 – Today, Microsoft announced it will invest US\$2.2 billion over the next four years to support Malaysia's digital transformation – the single largest investment in its 32-year history in the country.

Microsoft's investment includes:

building cloud and AI infrastructure in Malaysia

creating AI skilling opportunities for an additional 200,000 people in Malaysia

strengthening its partnership with the Government of Malaysia to establish a national AI Centre of Excellence and enhance the nation's cybersecurity capabilities

supporting the growth of Malaysia's developer community.

Submit

Upload file (txt, pdf, images)

Analysis Result

improve the result?

Credibility Score (1 – 5):

• 5 out of 5

Misinformation Flags:

• None identified. The announcement aligns with official press releases from Microsoft and reputable news outlets as of May 2024.

Sentiment:

• Very Positive

Summary:



Future Improvements



1. MORE UP-TO-DATE & ACCURATE DATA

- Improve the results with more up-to-date & accurate labeled data




2. FEATURES TO ALLOW MORE USER INTERACTIONS

- Allow users to label and tag data for model improvement
- Support ongoing conversational interaction with the user



3. PRIORITIZE HIGH-RISK FINANCIAL MISINFORMATION



- Given the overwhelming volume of financial information published daily, I recommend prioritizing improvements in categories most prone to fraud – such as investment opportunities, market manipulation, and loan-related misinformation
- 

06. LINKS & APPENDICES

1. GitHub repository.

The screenshot shows the GitHub repository page for 'factcheckr' by user 'yshinyong'. The repository is public and has 1 branch and 0 tags. The main branch is selected. The repository contains several files and folders, including .github/workflows, data, src, static/css, templates, .gitignore, README.md, app.py, and requirements.txt. The README.md file is open, showing the title 'Factcheckr AI' and a description of the web-based app. The app allows users to input financial news or text, either by pasting text or uploading an image. The backend AI model analyzes the content and returns:

- ✓ Credibility Score (1–5)
- 🚩 Misinformation Flags
- 😊 Sentiment Classification

The right sidebar shows the repository's statistics: 0 stars, 0 watching, and 0 forks. It also includes sections for Releases, Packages, Deployments (17), and Languages (Python 57.1%, CSS 27.1%, HTML 15.8%).

06. LINKS & APPENDICES









Services used on Azure Portal

Tags (edit) : [Add tags](#)

Resources Recommendations (1)

Filter for any field... Type equals **all** X Location equals **all** X + Add filter

Showing 1 to 10 of 10 records. ☐ Show hidden types ⓘ No grouping List view

<input type="checkbox"/> Name ↑↓	Type ↑↓	Location ↑↓	
<input type="checkbox"/>  asp-testapp0606	App Service plan	East US 2	...
<input type="checkbox"/>  cosmosdb-mongodb-cluster-0603	Azure Cosmos DB for MongoDB (vCore)	East US 2	...
<input type="checkbox"/>  cosmosdb-postgresql-0603	Azure Cosmos DB for PostgreSQL Cluster	East US 2	...
<input type="checkbox"/>  db-testapp0606	Azure Cosmos DB account	East US 2	...
<input type="checkbox"/>  factcheckr	App Service	East US 2	...
<input type="checkbox"/>  factcheckr-id-98cf	Managed Identity	East US 2	...
<input type="checkbox"/>  openai-foundry-resource-0603	Azure AI Foundry	East US 2	...
<input type="checkbox"/>  firstProject (openai-foundry-resource-0603/firstProject)	Azure AI Foundry project	East US 2	...

06. LINKS & APPENDICES

Models Deployed

Model deployments

Model deployments

Service endpoints

+ Deploy model

Refresh

Edit

Open in playground

Reset view

Name	Model name	Model version	State	Model retirement date	Content filter	Deployment type
^ This resource						
gpt-4.1	gpt-4.1	2025-04-14	Succeeded	Apr 11, 2026 8:00 AM	DefaultV2 ⓘ	Global Standard
text-embedding-3-small	text-embedding-3-small	1	Succeeded	Apr 30, 2026 8:00 AM	DefaultV2 ⓘ	Global Standard

THANK YOU