#### THE PHI GENERATION

Securing Trust, Unmasking Deceit: Your Shield
Against Financial Fraud!





01 Problem

O2 Solution

03 Team Members

04 Technologies

O5 Demo

06 Market Analysis

07 Competitor Analysis

#### The Problem

- The impact of fraud on the insurance industry and banking sector in the United States is staggering. Reaching \$308 billion each year in the United States, and this figure has been steadily increasing in recent years.
- Likewise, U.S. banks lose tens of billions of dollars every year to first-party fraud. The cost of fighting fraud is rising for U.S. banks, with every \$1 lost to fraud now costing \$4.36 in related expenses.

#### Solution

- Meet our App Your Graph Detective! The game-changing solution to combat sophisticated fraud in the insurance, banking, and ecommerce sectors.
- Using cutting-edge Agent and Phi-2 technology, our app unveils hidden connections, identifies patterns, and empowers investigators to detect and prevent fraud with unprecedented precision.



11 Michael Lively (Team Leader)

Mat Ritchey

03 Asad Ali

**04** Rumaisa

Mahnoor Malik

16 Muhammad Faisal

### TWO Ground-Breaking Questions!

- Can we throw out the middle-man and go directly to data?
- Can we use an agent to do our analysis simply my telling it what to do, as opposed to writing complex code or doing manual analysis?

Yes & Yes!

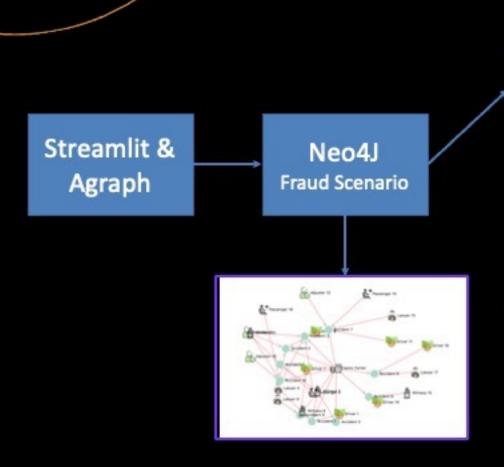
# Tools and Technologies

01 Streamlit Agraph

02 CrewAI & Gemini

03 Phi-2 By Microsoft

#### Architecture



By analyzing the accident network and researching the connections between nodes in relationship with the number of accidents they are part of, I have identified a fraudulent ring that includes

with the number of accidents they are part of, I have identified a fraudulent ring that includes Person 4 (Lawyer) and Person 6 (Adjuster). Person 4 is connected to 4 out of 30 accidents and Person 6 is connected to 5 out of 10 accidents. Furthermore, Person 4 is connected to both Accident. 2 and Accident 4 where Person 6 is also present. As a result, I don't recommend processing any claims related to these individuals. This is the summary of your work so far: Begin! This is VERY important to you, your job depends on it!

Phi-2

Phi-2 Tool

CrewAl

(Agent Sam)

Phi-2 Fraud Analysis

#### Phi-2 vs Gemini

- Phi-2 a factor of 4 faster
- Required less tuning of our agent to get consistent answers
- Didn't hallucinate on our simple data set
- Easy to implement as a tool in CrewAl

## Time For a Quick Demo!

## Market Analysis

- The insurance industry is projected to grow at 9% annually, hitting \$8.4 trillion by 2026.
- The global banking sector manages \$370 trillion, experiencing rapid growth. Where the e-commerce market is expected to hit \$27.15 trillion by 2027.
- Charting the realms of insurance, e-commerce, and banking, our app ensures security and resilience for these critical industries.

## Competitor Analysis

As the industry continues to expand, our innovative solution stands ready to meet the evolving needs of professionals engaged in fraud detection and prevention in Financial Sectors.

What sets us Apart? Utilizing Phi-2 and Agents, Our App uniquely identify hidden connections and patterns, providing an unmatched solution (10,000% Efficiency) in the market.

## Thank You!