REBELS021

Problem Statement Id: KVH-007
Problem Statement Title: Spam alert system
Team Name: Rebels021
Team Leader: Aamir Raja
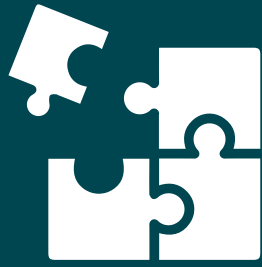**Institute Code (AISHE): U - 0865**
Institute Name: Techno India University
No. of Team Members: 06

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PROBLEM DESCRIPTION

- Design and develop a crowd-sourcing based solution
- Analyse and verify the source of incoming calls, SMS, and Emails
- Classify whether the source is genuine or spam
- Generate a risk score for incoming calls, SMS, and Emails
- Crowd-sourced input from end-users as the basis for analysis
- Utilise crowd-sourcing to gather data on spam sources
- Develop algorithms to classify and verify the authenticity of incoming communications
- Incorporate risk scoring system to assess the level of potential risk associated with incoming calls, SMS, and Emails.

Solution Details

- ML-based spam detection: Build a machine learning model for spam detection analyzing phone numbers, SMS, and emails.
- Real-time data ingestion: Collect and ingest incoming call, SMS, and email data in real-time for continuous model updates.
- Multimodal analysis: Incorporate voice, text, and image analysis for improved spam detection accuracy.
- User feedback loop: Allow users to provide feedback on suspected spam to update and train the model.
- Privacy-preserving techniques: Implement data anonymization, encryption, or tokenization to protect user data and ensure compliance.
- User customization: Provide options for users to customize spam detection rules or settings.
- Collaborative spam detection: Involve users through crowdsourcing or community-based approaches for diverse data collection.

Technology stack
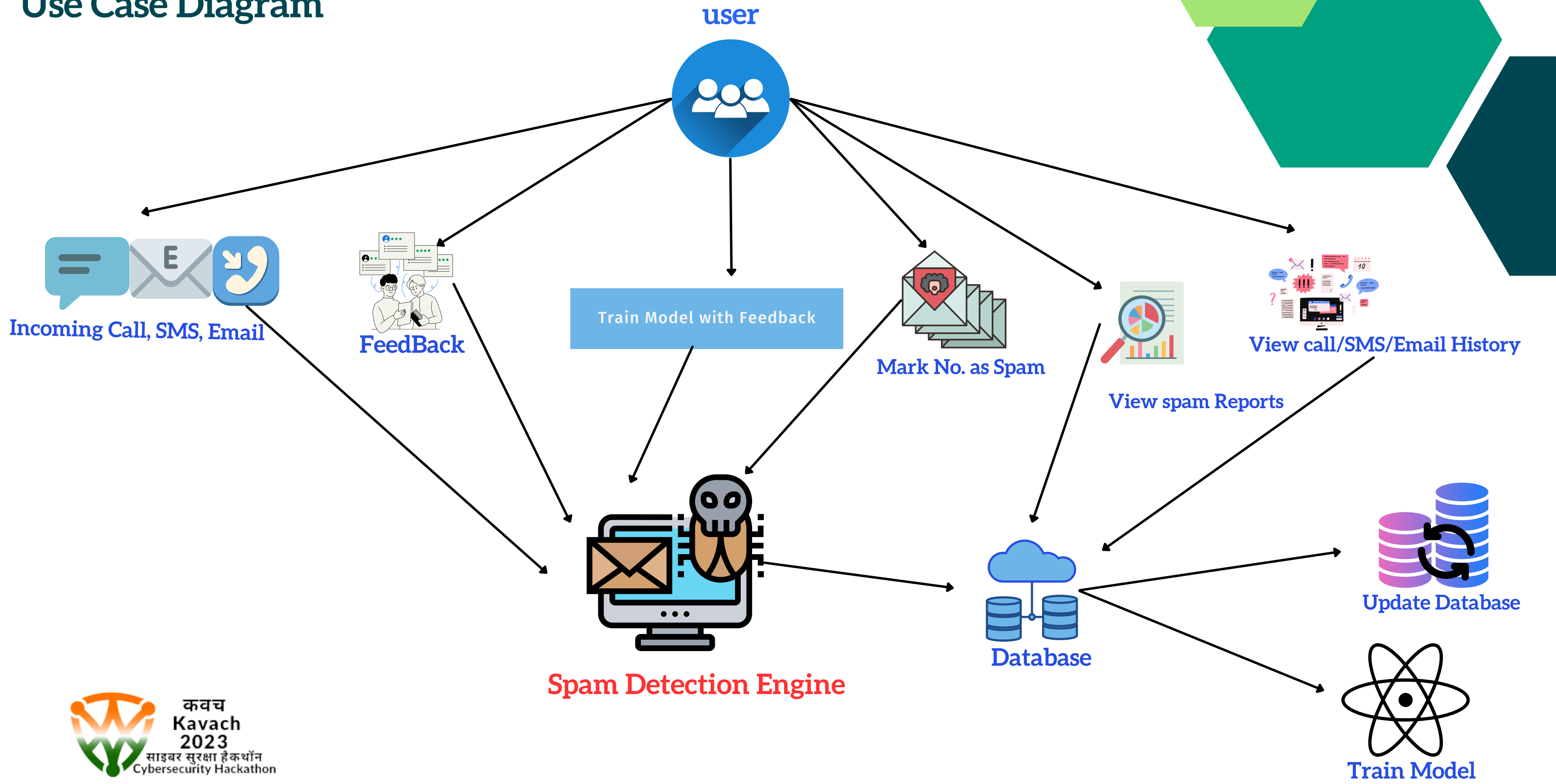
- **Backend :**
  Python, Django, Tensorflow, NLP

- **Frontend :** Html, CSS, Javascript (react-js)

- **Database :** MySQL

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Use Case Diagram

user

Incoming Call, SMS, Email

FeedBack

Train Model with Feedback

Mark No. as Spam

View spam Reports

View call/SMS/Email History

Spam Detection Engine

Database

Update Database

Train Model

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Team Members

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