

## Team Details

**TEAM NAME-** SeemaRekha

**COLLEGE NAME-** Amity University, Mumbai

**CITY-** Panvel

**STATE-** Maharashtra

# PROBLEM STATEMENT

## Track- AI ML

Modern digital infrastructures rely on static, rule-based security mechanisms that are incapable of adapting to evolving cyber threats such as insider attacks, zero-day exploits, and behavioral anomalies.

These systems operate reactively, detecting threats only after damage has occurred, while overwhelming security teams with non-explainable alerts and delayed responses.

There is a critical need for an intelligent, adaptive cyber boundary that continuously evaluates behavior, predicts threats in real time, and enforces autonomous defense actions before breaches occur.

**“Today’s cybersecurity reacts after breaches occur; there is no intelligent boundary that can anticipate, evaluate, and stop threats before damage is done.”**



# PROPOSED SOLUTION

## SEEMAREKHA : An AI-Driven Cyber Boundary That Thinks, Detects, and Defends.

It is a living AI-powered cyber range where attackers and defenders continuously evolve, enabling proactive, autonomous cybersecurity defense in real time.”

It simulates real-world cyber environments where AI-driven attackers, real user behavior, and AI-powered defenders interact continuously, enabling proactive threat detection, dynamic trust scoring, and automated defense responses in real time.

### SEEMAREKHA builds a boundary.

It Will not just detecting attacks — It will::

- defining a dynamic cyber border
- deciding who crosses it
- enforcing autonomous response

“In cybersecurity, we often realize an attack only after we say ‘**the damage has been done**’ — SEEMAREKHA exists to act before that moment.”



# INNOVATION & SOCIAL/MARKET IMPACT

## Innovation

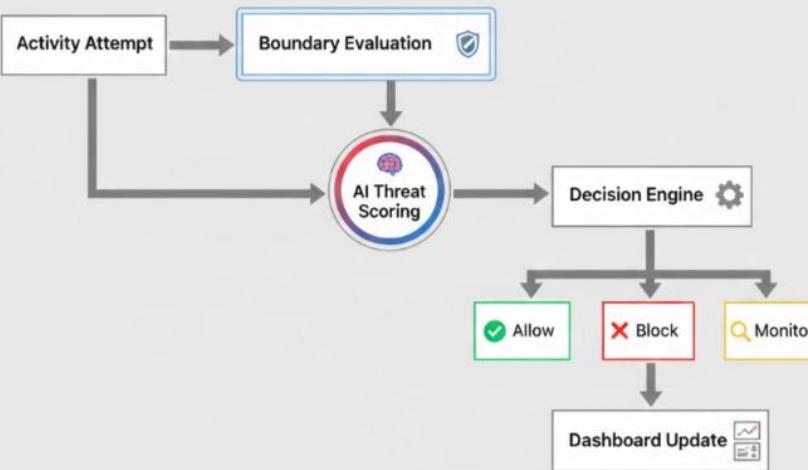
- Reimagines cybersecurity as a living, self-evolving digital boundary
- Predicts and neutralizes threats before system compromise
- Strengthens defenses through continuous AI-vs-AI cyber interaction
- Implements continuous trust scoring with explainable autonomous decisions

## Social / Market Impact

- Enhances cyber readiness for enterprises and institutions
- Reduces response time to cyber incidents
- Applicable to defence, banking, healthcare, and government systems
- Can be used as a training cyber range for SOC teams and students

# ARCHITECTURE

## FLOWCHART

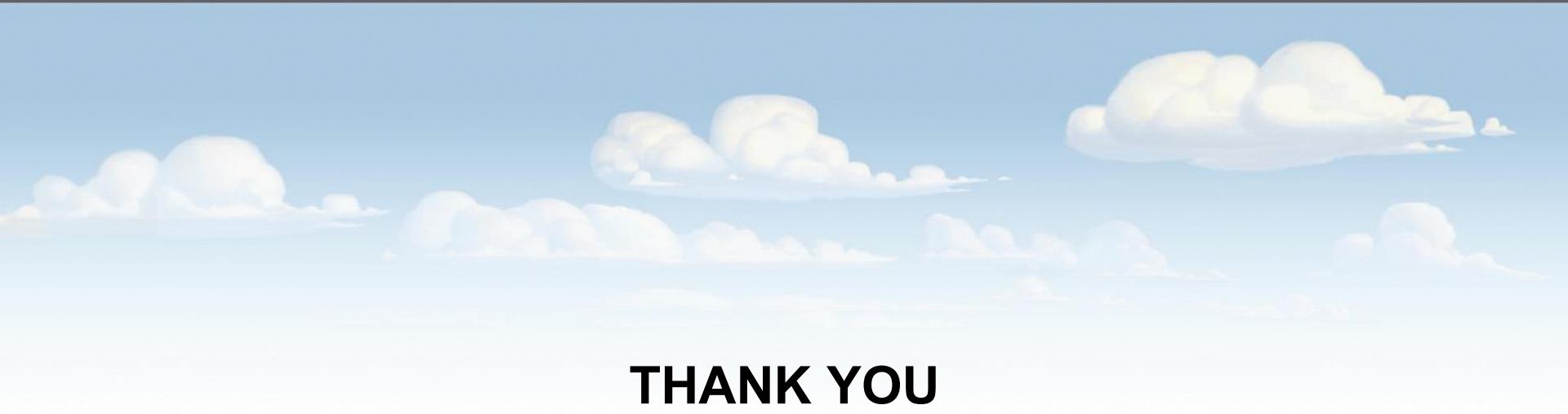


## TECH STACK



## PROTOTYPE



The background features a clear blue sky filled with various white, fluffy clouds of different sizes and shapes, creating a serene and open atmosphere.

**THANK YOU**