



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

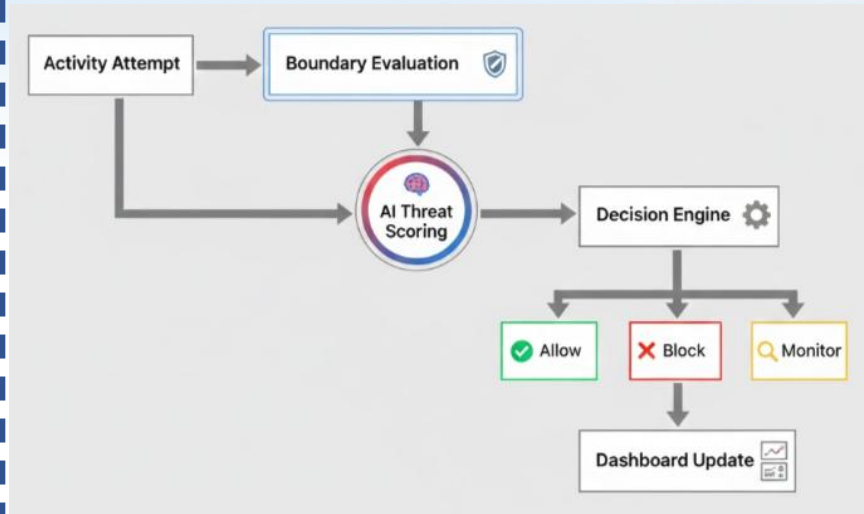
- Reimagines cybersecurity as a living, self-evolving digital boundary
- Predicts and neutralizes threats before system compromise
- Strengthens defenses through continuous AI-vs-AI cyber interaction
- Implements continuous trust scoring with explainable autonomous decisions

Social / Market Impact

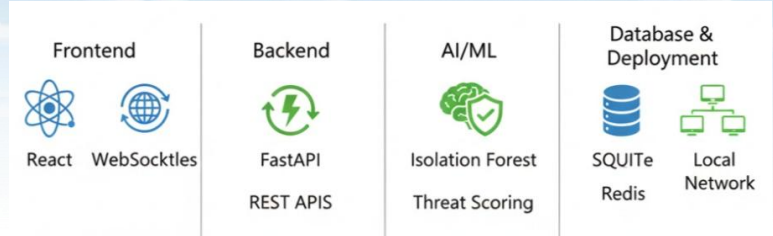
- Enhances cyber readiness for enterprises and institutions
- Reduces response time to cyber incidents
- Applicable to defence, banking, healthcare, and government systems
- Can be used as a training cyber range for SOC teams and students

ARCHITECTURE

FLOWCHART



TECH STACK



PROTOTYPE





THANK YOU