



# BYTECAMP'24

#NAVI MUMBAI 'S BIGGEST HACKATHON

## ROUND 1 PROBLEM STATEMENTS:

**!!NOTE:** YOU CAN ONLY SELECT ONE PROBLEM STATEMENT FOR ABSTRACT SUBMISSION ROUND.!!

## THEME: FUTURE-FORCE MUMBAI

### TRACK 1: BLOCKCHAIN.

#### PROBLEM STATEMENT-1: SMART EVIDENCE MANAGEMENT WITH BLOCKCHAIN.

**DESCRIPTION:** Enhance evidence management with blockchain technology, ensuring the integrity and traceability of evidence from collection to presentation in court.

#### PROBLEM STATEMENT-2: SMART WITNESS: DECENTRALIZED INCIDENT REPORTING.

**DESCRIPTION:** Develop a decentralized, blockchain-based system that allows citizens to securely and anonymously report incidents, ensuring the protection of witnesses and enhancing the reliability of information. The reports should be confidential and only visible to the higher authorities.

### TRACK 2: ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING.

#### PROBLEM STATEMENT-3: NEXT-GENERATION INTELLIGENT HEALTH RECORD ECOSYSTEM.

**DESCRIPTION:** In the dynamic and populous landscape of Mumbai, a city known for its vibrancy and diversity, there exists a critical need to revolutionize the healthcare infrastructure. This hackathon challenge seeks innovative solutions to develop an Intelligent Health Record System (IHRS) specifically tailored to address the unique healthcare challenges faced by Mumbai City. The envisioned system should harness advanced technologies to streamline healthcare processes, improve patient outcomes, and contribute.

#### PROBLEM STATEMENT-4: DEVELOPMENT OF SOFTWARE FOR STREAMLINING THE LISTING OF CASES THROUGH DIFFERENTIATED CASE FLOW MANAGEMENT.

**DESCRIPTION:** The current challenge in the judicial system is the uniform treatment of cases despite their varying demands on resources and processing time. The concept of Differentiated Case Flow Management (DCM) was introduced by the Supreme Court of India, proposing model rules and timelines for case types. Despite computerization, the case scheduling process remains inefficient. The objective is to implement a DCM system leveraging technology to prioritize cases, recognizing the need for different pathways.

## **TRACK 3: IMMERSIVE TECHNOLOGIES.**

### **PROBLEM STATEMENT-5: DE-ESCALATION AND CRISIS INTERVENTION.**

**DESCRIPTION:** Develop VR tests that put officers in realistic high-pressure scenarios involving disastrous situations, domestic violence, mental health crises, or hostage situations. Train officers on effective de-escalation techniques, cultural sensitivity, and crisis communication skills in a safe and controlled environment. Track participant performance and provide personalized feedback for continuous improvement.

### **PROBLEM STATEMENT-6: IMMERSIVE TRAINING SIMULATIONS FOR MUMBAI POLICE.**

**DESCRIPTION:** Develop an Augmented Reality (AR) or Virtual Reality (VR) system for the live training of troops. AR/VR system for the live training of troops requires expertise in hardware, software development, content creation, and user experience design. Collaboration with domain experts, instructional designers, and technology specialists can help ensure the system meets the specific needs of the military training environment.

## **TRACK 4: CYBERSECURITY.**

### **PROBLEM STATEMENT-7: NEXT-GENERATION WOMEN'S SAFETY APPLICATION.**

**DESCRIPTION:** Create an innovative women's safety application designed to autonomously detect potential threats to mobile users. The app should automatically initiate an SOS alert, providing precise location details. This functionality is achieved through the analysis of multimodal data from the user's mobile device, including audio, video, images, and motion detection. This ensures that even in situations where the user is unable to manually operate their mobile device, the app can proactively identify risks and trigger a timely emergency response.

### **PROBLEM STATEMENT-8: EXPLORATION TOOL FOR NATIVE CRYPTOCURRENCIES.**

**DESCRIPTION:** The problem statement seeks innovative solutions from participants to address challenges related to the investigation and analysis of indigenous or community-specific cryptocurrencies. As the cryptocurrency landscape continues to evolve, there is a growing need for tools that can assist law enforcement agencies, regulatory bodies, and cybersecurity experts in understanding and mitigating potential risks associated with unique or locally developed digital currencies.