NMIMS TECH FIESTA
CELEBRATION OF TECHNOLOGY 2025

PROBLEM STATEMENTS

HACKATHON FOR 24 HOURS

14-15 FEBRUARY, 2025

A signature event of NMIMS Tech Fiesta 2025, designed to challenge the brightest minds in development, design, and problem-solving.

Over an intense 24-hour competition, participants will work in teams to create innovative solutions based on predefined problem statements. The event offers a dynamic environment fostering creativity, collaboration, and practical learning while bridging the gap between academia and industry.

FITNESS TRACKER FOR POSTURE IMPROVEMENT (NMTFH001)

A solution to address the health risks associated with prolonged bad posture by monitoring users' posture in real-time. It must handle posture tracking across different positions and provide a system to log progress, offering reliable tracking and analysis through a mobile interface.

REAL-TIME SIGN LANGUAGE INTERPRETER (NMTFH002)

There is a need for a real-time tool to facilitate communication for individuals using sign language by converting signs into text or speech outputs. The system must support multiple sign languages with high precision and provide smooth, fast interactions.

DEEP LEARNING TOOL FOR CROP HEALTH MONITORING (NMTFH003)

An effective system is needed to analyse real-time crop data and provide early insights into crop diseases. The tool must utilize advanced analytics to offer actionable recommendations, including environmental and weather-based factors, to improve productivity.

PERSONALIZED HEALTHCARE REMINDER SYSTEM (NMTFH004)

A comprehensive system is needed to manage healthcare schedules for elderly individuals, with features to provide timely reminders, facilitate virtual consultations, and handle critical alerts. It should ensure seamless access to healthcare records and simplify daily health management.

AI-POWERED MOBILE APPLICATION FOR LOCAL EXPERIENCES AND TOURS (NMTFH005)

A platform is required to help users explore unique local experiences, featuring itinerary planning, booking functionality, and real-time updates. The application must offer personalized suggestions and tools for effective cost management during travel.

MOBILE APPLICATION FOR ACCESS TO MENTAL HEALTH RESOURCES (NMTFH006)

A virtual platform is needed to provide mental health support through teletherapy, access to resources, and ML based early symptom detection. It must ensure seamless interaction with professionals while integrating complementary health-related features to enhance user experience.

INTERACTIVE ENVIRONMENTAL INTERFACE (NMTFH007)

A system is required to provide real-time environmental data such as air quality, water levels, and biodiversity information. It must deliver timely updates and emergency alerts, ensuring readiness for natural disasters through accessible and actionable information.

SMALL BUSINESS DIGITAL GROWTH PLATFORM (NMTFH008)

A centralized solution is needed for small businesses to enhance their digital presence, analyse sales data, and optimize inventory. The platform must support growth through demand forecasts, sales insights, and efficient resource management.

CROWD DENSITY ESTIMATION FOR PUBLIC SAFETY AND TRAFFIC MANAGEMENT (NMTFH009)

A robust system is required to estimate crowd density and manage traffic in real-time using advanced image processing and AI tools. It must provide timely alerts and adapt dynamically to changing conditions for enhanced public safety and efficiency.

DIGITAL PLATFORM FOR INTERDEPARTMENTAL COOPERATION (NMTFH0010)

A collaborative platform is needed to streamline urban governance through efficient task management, data sharing, and project coordination. It must include features to enhance communication, resource allocation, and unified execution of multi-departmental projects.