# Tech Sageathon 2k26

## Problem Statements

## 1. AI-Powered Student Performance System

### Problem Statement

Most existing academic systems only capture and display basic information such as marks, grades, and attendance records, without providing any deeper analytical insight or predictive intelligence. They fail to identify patterns in student learning behavior, do not highlight potential risks early, and lack mechanisms to guide students toward improvement in a structured and personalized manner.

### What You Need to Build

Build a comprehensive AI-driven system that not only collects and analyzes student academic data continuously but also predicts future performance trends and provides actionable, personalized recommendations for improvement based on individual learning patterns.

## 2. AI-Powered Mock Interview System

### Problem Statement

Students often do not receive enough exposure to real interview environments and lack structured, actionable feedback on their performance, which leads to low confidence and poor preparation during actual placement or recruitment processes.

### What You Need to Build

Create an advanced AI-powered platform that simulates real interview scenarios, dynamically generates questions based on resumes or roles, evaluates responses, and provides detailed feedback to help students improve.

## 3. AI-Powered Attendance System

### Problem Statement

Traditional attendance systems are manual, time-consuming, and prone to errors such as proxy attendance, inaccurate entries, and lack of real-time tracking, making them inefficient for modern educational environments.

### What You Need to Build

Develop an intelligent attendance system that uses AI-based facial recognition and liveness detection techniques to automatically record attendance accurately and securely in real time.

## 4. AI-Powered Timetable Scheduler

### Problem Statement

Timetable creation in educational institutions is a highly complex and time-consuming task that involves multiple constraints such as faculty availability, classroom allocation, subject requirements, and scheduling conflicts, often resulting in inefficient and error-prone schedules.

### What You Need to Build

Design and develop an AI-based scheduling system that can automatically generate optimized, conflict-free timetables while considering all relevant constraints and dynamically adapting to changes.

## 5. AI-Based Academic Certificate Authenticity Validator

### Problem Statement

The increasing number of fake and manipulated academic certificates has become a major concern for educational institutions, employers, and government agencies, as there is no unified and reliable system to verify the authenticity of these documents efficiently.

### What You Need to Build

Build a robust AI-powered system that can verify the authenticity of academic certificates by extracting relevant information using OCR, validating it against official databases, and detecting any signs of tampering or forgery.

## 6. AI-Powered Internship Recommendation Engine

### Problem Statement

Students often face difficulty in identifying and securing internships that align with their skills, interests, and career goals due to lack of proper guidance and personalized recommendations.

### What You Need to Build

Develop an AI-driven recommendation engine that analyzes student profiles, skills, and preferences to suggest the most relevant internship opportunities and career paths.