Database Project
Student Activity Tracker

Adam Rizky (24/536885/PA/22777)
Panji Merah Balakosa (24/532826/PA/22541)
Zidni Dziaulhaq (24/536623/PA/22759)

CSA - Database

I. Problem Domain

In many schools and universities, student participation in extracurricular activities such as clubs, community service, competitions, or sports is still tracked manually. These are often recorded on paper-based lists or simple digital spreadsheets. This can lead to problems like incomplete records, lost data, and difficulty in monitoring each student's level of involvement. Advisors also face challenges in managing large numbers of participants and verifying who joined or completed certain activities. To solve these problems, the **Student Activity Tracker System** is designed to provide a structured, database-based solution. The system will allow advisors to register activities, record student participation, while students can view available activities, status of applications and their personal activity history.

II. System Users

The system involves two primary users: **Advisors** and **Students**.

- **Advisors** are staff responsible for managing extracurricular activities. They can create and update activity records, approve or reject student participation requests, and record results once an activity is completed. Advisors act as supervisors who manage multiple activities and ensure accurate reporting of student involvement.
- **Students** are the main participants in the activities. They can view available activities, apply to join, and track their personal participation history. Students can also view their achievements and activity status, which helps them keep track of their extracurricular activities records during their studies

III. System Objectives

The **Student Activity Tracker System** aims to achieve the following objectives:

1. Provide an easy way to record and manage student extracurricular activities.
2. Help advisors register activities and track student participation.
3. Allow students to view available activities and their own participation history.
4. Keep activity records accurate, complete, and easy to access.
5. Reduce mistakes and data loss from manual recording.
6. Recognize active students based on their verified participation.

IV. System Requirements

1. Core CRUD operations (Create, Read, Update, Delete)
2. At least one search or reporting feature
3. A well-designed relational database following normalization principles (up to Third Normal Form, 3NF).

V. Expected Outcomes

1. Complete working database application
2. Well-documented database schema and ERD
3. GitHub repository showing the full design and implementation process
4. Final report in PDF format