# TIMETABLE MANAGEMENT SYSTEM FOR AN ACADEMIC INSTITUTION

#### PRESENTED BY

#### **TEAM IRONY**

NIKHILESH-3122 21 5001 060 MANICKAM-3122 21 5001 049 JAANUS SRI K G-3122 21 5001 037



## PROBLEM STATEMENT

To formulate a simple and effective solution for academic institutions which ensures a systematic working of the institution by generating a timetable taking inputs from the user.

# <u>INPUT</u>

- ☐ Classrooms (counts and names)
- ☐ Lab rooms (counts and names)
- ☐ Department (counts and names)
- ☐ Faculties (names)
- ☐ Courses (counts, names, credits)

#### **OUTPUT**

Timetable for students and teachers: Obeying all constraints and facing challenges like course units, lecture rooms, practical sessions without any collisions in lectures.



### **ARCHITECTURE DIAGRAM**

Add room details

Add lab rooms details

Add faculty details

Add course details

Save the data

Set lunch periods

Set lunch

Set free periods

Allocate courses

Apply constraints

Room clashes
Faculty clashes
Faculty work load
Lab allotment
Lunch allotment

Generate timetable

Verification



# Approach

Brute Force Algorithms are exactly what they sound like – straightforward methods of solving a problem that rely on sheer computing power and trying every possibility rather than advanced techniques to improve efficiency.

- Definiteness: Each step in the process is precisely stated.
- Effective Computability: Each step in the process can be carried out by a computer.
- Finiteness: The program will eventually successfully terminate.

# ☐ References

- https://www.educba.com/project-scheduling-techniques/
- Timetable\_Management\_System\_Web\_Applicat.pdf
- https://www.timetabler.com/newtimetablers/
- J. J. Moreira, "A system for automatic construction of Exam Timetable using Genetic Algorithms," Rev. Estud. Politécnicos Polytech. Stud. Rev., vol. 6, no. 9, 2008.

