

IC Project Outline: Dynamic Game Arcade

Description

We have developed a dynamic game center platform that integrates three classic games:

- 2048
- Minesweeper
- Tic Tac Toe

Each game is crafted for a responsive gameplay.

Special features include:

- 2048: high score display to foster a competitive environment.
- Minesweeper: Interactive gameplay and clear win/loss conditions.
- Tic Tac Toe:
 - Single-player mode against a simple algorithm.
 - Two-player mode for human vs. human matches.

Team Members & Responsibilities

Name	Roll No.	Work Assigned
Aditya Rathod (Leader)	B24EE1062	2048 (half), login module, merging
Godiwala Arni	B24EE1021	1-player Tic Tac Toe, bug testing
Soumya Sethi	B24MT1036	2-player Tic Tac Toe, merging Tic Tac Toe modules
Niket Gupta	B24CH1025	2048 (half), implementing basic 2048 logic
Sangharsh Sonawane	B24ME1071	Complete Minesweeper implementation

Modules & Features

Login System

Simple login authentication to enter the game center.

Developed by: Aditya Rathod

2048

Grid-based number merging game.

Features: High-score display.

Developed by: Aditya Rathod (half, merging), Niket Gupta (half, basic logic)

Minesweeper

Interactive mine detection game.

Features: Safe click options, win/loss feedback.

Developed by: Sangharsh Sonawane

Tic Tac Toe

Two modes:

- 1-player vs. computer
- 2-player (human vs. human).

Developed by: Arni (1-player, bug finding), Soumya (2-player, merging)

Development Highlights

- Modular Approach: Each game's core functionalities (like input handling, game logic, win-checking) are implemented using independent functions.
- Error Handling: Focused on robust bug testing and debugging (assigned to Arni).