Roll no. B23CS1033

Name: Lokesh Motwani

Console Pong Game Project Report

Introduction:

The Console Pong project aimed to create a simple yet enjoyable rendition of the classic Pong game using C programming. By implementing core programming concepts, the project aimed to reinforce learning outcomes in a fun and interactive manner.

Implementation:

The game utilizes standard C libraries for basic input/output operations and platform-specific functions (e.g., Windows.h for console manipulation).

Various functions handle different aspects of the game, including drawing the game board, updating paddle positions, and managing ball movement.

Collision detection manipulation ensure accurate interaction between the ball, paddles, and game boundaries, contributing to smooth gameplay.

A user-friendly interface allows players to select starting conditions (ball position and difficulty level) and control paddle movement using keyboard inputs.

Challenges Faced:

Optimizing paddle movement responsiveness within the constraints of console input handling presented technical hurdles.

Debugging collision detection logic to handle edge cases and ensure fair gameplay required thorough testing and iterative refinement.

Future Enhancements:

Integration of GUI to enhance the overall gaming experience.

Implementation of multiplayer functionality to enable competitive gameplay between two players.

Refinement of difficulty levels and AI opponent behavior for more engaging single-player experiences.

Conclusion:

In conclusion, the Console Pong project successfully demonstrated the application of fundamental programming concepts in game development. While the current implementation provides a solid foundation, there is ample room for expansion and improvement to create a more immersive and enjoyable gaming experience.