

COURSE PROJECT DOCUMENTATION

PONG BALL

GROUP ID: 120

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1. Introduction:

Pong ball game is for the entertainment of the user which requires meticulous concentration which we feel is a sufficiently challenging project for an introductory computer science course. The objective of the game is to prevent the pong ball from hitting the wall on the side of player. The player has to master the skills of controlling his paddle in order to win the game.

2.Problem Statement:

Our goal reflects to make a replica of the basic “Ping Pong” game. It is an addictive game as it is played by two players earlier. But now-a-days the game is extended in its concept and user interface and made it more interesting to the players. Each player will have a paddle to

control with. The concept of the game is to make the ball not to cross from the paddle, if it is so the other player will get a point. The movement of the ball is made to obey “Laws of Reflection” at the boundaries and at the paddles. There will be three levels based on the speed of the ball moving.

3.Requirements:

As the game is played by using some keys, we adopt keyboard to play this role. We are able to do it in “.exe” file so it doesn’t require any specified software especially for it.

Any windows , linux, mac, Ubuntu etc operating systems can easily run the game.

4. Implementation:

This is a game played by two players . Firstly the ball is hit by one paddle(player 1) and reaches the other side which when hit follows “Laws of Reflection” and traces the path accordingly. If the paddle misses the ball and the ball hits the wall then the opponent scores a point.

There are three levels based upon the speed by which the ball moves. The player who first scores 5 points will win the game. The game only uses keyboard for input.

5. Discussion of System

As per plan

- A multiplayer game(2 players) has been made .
- Two paddles and ball obeying “Laws of Reflection”.
- A user friendly graphics using initCanvas cater the interest of players to play it.
- The points will be given to other player when the ball goes away from the paddle of the first player.
- The game ends when any player gets five points by declaring the “winner” of that game.

Added features

- We included a “pause game” option by pressing “P” key on the keyboard.
- And it will return to game after clicking anywhere on the game window.

6. Testing Strategy and Data:

The game opens with the page containing options “play game” , “Instructions” , “Exit”. These are our user interfaces.

Play Game

Instructions

Exit



Pong Ball



BEGINNER

INTERMEDIATE

EXPERT



Pong Ball

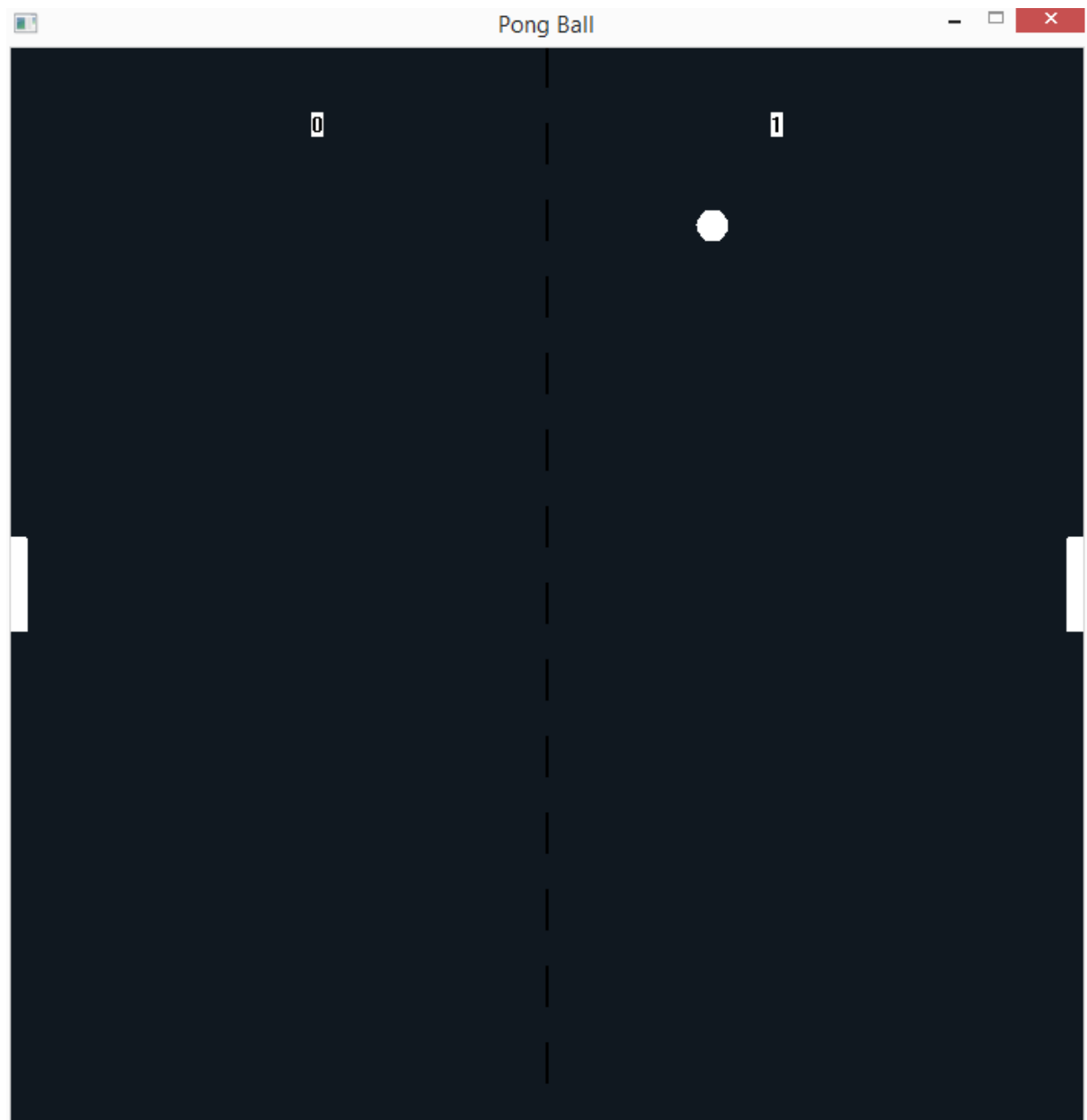


BACK

PLAYER 1:'A' for up and 'Z' for down

PLAYER 2:'K' for up and 'M' for down

Press key 'P' to pause the game



After the declaration of the winner again first window will open providing the user to play again or to quit the game.

7. Conclusions:

The goal of the project is to make a user-friendly Pong Ball game. We inspired by the game as it is earlier and very addictive game. The game is a user friendly game as it uses just a mouse for clicking and keyboard to play with, as these are a part of a system we have. The system can be capable of running in any version of Unix including Linux and Windows mac.

This project gave us a flavour of C++ language in real daily life. This makes us to understand how important it is. It makes us to apply our knowledge to create an interesting game and many tricks involved in it.

8. References :

An introduction to C++ programming by Abhiram G Ranade.

www.programmer2programmer.net.

Some tutorials on youtube

9. FUTURE WORK :

- Number of players can be increased (a four player game would be much more interesting).
- Can make 3-D pong game using this as the base code.
- Can increase number of balls for a more challenging game.

