Pong – Work in Progress

Basic Functionality

* Ball
* Paddles
* Score
* Timer
* Draw Ball
* Draw Paddles
* Move Ball
* Move Paddles
* Ball Bounce (Top, Bottom, Paddles)
* Reset Ball

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| --- |
| GameEngine |
| ball : Ball |
| paddleLeft : Paddle |
| paddleRight : Paddle |
|  |
| GameEngine() |
| Run() |
| CheckEdges() |
| CheckScore() |

|  |
| --- |
| Paddle |
| position : Point |
| width : int |
| height : int |
| colour : color |
|  |
| Paddle() |
| Move() |
| Draw() |

|  |
| --- |
| Ball |
| position : Point |
| width : int |
| colour : color |
|  |
| Ball() |
| Move() |
| Draw() |

Ball Variables

Private point position;

Private int width;

Private Brush brush;

Private Graphics graphics;

Private Point velocity;

Ball

This.position = position;

This.width = width;

This.graphics = graphics;

This.velocity = velocity;

Brush = new SolidBrush(color);

Move()

Position.X = Position.X + velocity.X;

Position.Y = Position.Y + velocity.Y;

Draw()

Graphics.FillEllipse(brush, new Rectangle(position.X, position.Y, width, width)

Paddle Variables

Private point position;

Private int width;

Private int height;

Private Brush brush;

Private Graphics graphics;

Paddle

This.position = position;

This.width = width;

This.height = height;

This.graphics = graphics;

Brush = new SolidBrush(color);

Move()

Position.X = Position.X +- input

Draw()

Graphics.FillRectangle(brush, new Rectangle(position.X, position.Y, width, height)

|  |
| --- |
| GameEngine |
| ball : Ball |
| paddleLeft : Paddle |
| paddleRight : Paddle |
|  |
| GameEngine() |
| Run() |
| CheckEdges() |
| CheckScore() |

GameEngine Variables

Private Ball[] ball

Private Paddle[] paddleLeft

Private Paddle[] paddleRight

(Still working on this part)

GameEngine

Ball = new Ball[1]

Ball[0] = new Ball(new Point (100, 100), 20, Color.Black, graphics, newPoint(20, 10)

paddleLeft = new Paddle[1]

Paddle[0] = new Paddle(new Point (something, something, height, width, Color.Grey, graphics)

paddleRight = new Paddle[1]

Paddle[0] = new Paddle(new Point(something, something, height, width, Color.Grey, graphics)

Run()

Balls[i].Move

Balls[i].Draw

CheckEdges()

If ball.position.Y < 0

Reload

Increase Player score (on screen)

Run()

If ball.position.Y + width > clientsize.Width

Reload

Increase Computer score (on screen)

Run()

If ball.position.X + width > clientsize.Height

Then velocity.X = velocity.X\* -1

If ball.position.X < 0

Then velocity.X = velocity.X \* -1

CheckScore()

If computer score = 10

Then Winner

If player score = 10

Then Winner

Form 1

InitializeComponents();

Graphics = CreateGraphics;

gameEngine = new GameEngine(Graphics, Clientsize)

timer1\_tick = true;

timer1\_tick

Refresh()

GameEngine.Run