Player -shape:Sprite; -playerTexture: Texture -name: string + Player(); + Player(int, int, string, string); + setPosition(int, int): void + settexture(string imagename): void + setsize(double, double): void + move(char, int** arr): void + rotatePlayer(char): void + drawPlayer(RenderWindow& window): void + drawPlayer(RenderWindow& window, Transform& trans): void + getRow(): int + getColumn(): int + getshape(): Sprite + getname(); + print_bounds(): void + getPlayerPosition(): Vector2f Ghost mode: char result: vector<vector<int>>> grapharr: int** gamearr: int** ghostindex: int pacindex: int position_to_index(Vector2f position): int - findthepath(vector<vector<int>>): vector<int> - index to position(int): Vector2f dijkpath(int startNode): vector<vector<int>>> - Fillarray(): void + Ghost(); + ~Ghost(); + test(): void + moveGhost(Vector2f pacpos): void + Ghost(int, int, string, string) + setMode(char): void

+ FrightMode(): void + getMode(): char + destruct(): void

Game window: RenderWindow score: int lives: int arr: int** board: RectangleShape** circboard: CircleShape** Pacrotation: Transform Gclock: Clock Gtime: Time setBoard(): void createWindow(int, int): void displayScore(): void displayLives():void gameover():void YouWonthegame():void increaseScore(Player pacman, Ghost Blinky, Ghost Pinky, Ghost Inky, Ghost Clyde, int):void createrandom():char moveRandomly(Ghost& Blinky, Ghost& Pinky, Ghost& Inky, Ghost& Clyde):void setInitialPositions(Player& player, Ghost& Blinky, Ghost& Pinky, Ghost& Inky, Ghost& Clyde):void setInitialPositions(Ghost&): void FrightMode(Ghost):void + Game(); + ~Game(); + setWindow(RenderWindow&):void + setScore(int):void + setlives(int):void + loop(Player, Ghost, Ghost, Ghost):void + startGame(string name):void + sendpos(Vector2f):Vector2f + getScore():int + getlives():int + getWindow(): RenderWindow