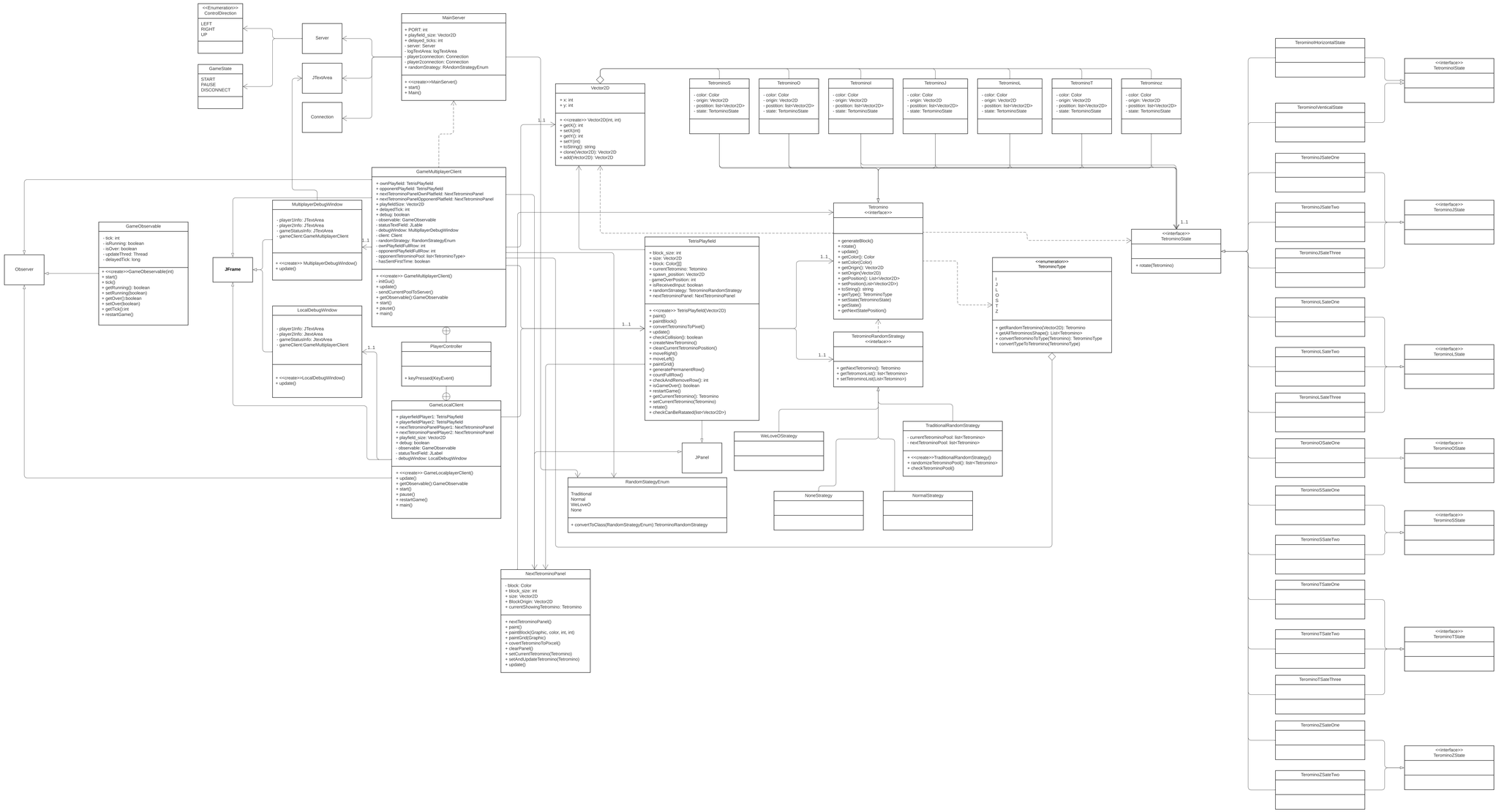
<<Enumeration>>
ControlDirection
LEFT
RIGHT
UP
GameState
START
PAUSE
DISCONNECT
Server
JTextArea
Connection
MainServer
+ PORT: int
+ playfield_size: Vector2D
+ delayed_ticks: int
- server: Server
- logTextArea: logTextArea
- player1connection: Connection
- player2connection: Connection
+ randomStrategy: RAndomStrategyEnum
+ <<create>>MainServer()
+ start()
+ Main()
Vector2D
+ x: int
+ y: int
+ <<create>> Vector2D(int, int)
+ getX(): int
+ setX(int)
+ getY(): int
+ setY(int)
+ toString(): string
+ clone(Vector2D): Vector2D
+ add(Vector2D): Vector2D
TetrominoS
- color: Color
- origin: Vector2D
- position: list<Vector2D>
- state: TetrominoState
TetrominoO
- color: Color
- origin: Vector2D
- position: list<Vector2D>
- state: TetrominoState
TetrominoI
- color: Color
- origin: Vector2D
- position: list<Vector2D>
- state: TetrominoState
TetrominoJ
- color: Color
- origin: Vector2D
- position: list<Vector2D>
- state: TetrominoState
TetrominoL
- color: Color
- origin: Vector2D
- position: list<Vector2D>
- state: TetrominoState
TetrominoT
- color: Color
- origin: Vector2D
- position: list<Vector2D>
- state: TetrominoState
TetrominoZ
- color: Color
- origin: Vector2D
- position: list<Vector2D>
- state: TetrominoState
GameMultiplayerClient
+ ownPlayfield: TetrisPlayfield
+ opponentPlayfield: TetrisPlayfield
+ nextTetrominoPanelOwnPlatfield: NextTetrominoPanel
+ nextTetrominoPanelOpponentPatfield: NextTetrominoPanel
+ playfieldSize: Vector2D
+ delayedTick: int
+ debug: boolean
- observable: GameObservable
- statusTexfField: JLabe
- debugWindow: MultiplayerDebugWindow
- client: Client
- randomStrategy: RandomStrategyEnum
- ownPlayfieldFullRow: int
- opponentPlayfieldFullRow: int
- opponentTetrominoPool: list<TetrominoType>
- hasSentFirstTime: boolean
+ <<create>> GameMultiplayerClient()
+ initGui()
+ update()
- sendCurrentPoiToServer()
+ getObservable():GameObservable
+ start()
+ pause()
+ main()
MultiplayerDebugWindow
- player1Info: JTextArea
- player2Info: JTextArea
- gameStatusInfo: JTextArea
- gameClient:GameMultiplayerClient
+ <<create>> MultiplayerDebugWindow()
+ update()
GameObservable
- tick: int
- isRunning: boolean
- isOver: boolean
- updateThred: Thread
- delayedTick: long
+ <<create>>GameObservable(int)
+ start()
+ tick()
+ getRunning(): boolean
+ setRunning(boolean)
+ getOver():boolean
+ setOver(boolean)
+ getTick():int
+ restartGame()
Observer
JFrame
LocalDebugWindow
- player1Info: JTextArea
- player2Info: JtextArea
- gameStatusInfo: JtextArea
- gameClient:GameMultiplayerClient
+ <<create>>LocalDebugWindow()
+ update()
PlayerController
+ keyPressed(KeyEvent)
GameLocalClient
+ playerfieldPlayer1: TetrisPlayfield
+ playerfieldPlayer2: TetrisPlayfield
+ nextTetrominoPanelPlayer1: NextTetrominoPanel
+ nextTetrominoPanelPlayer2: NextTetrominoPanel
+ playfield_size: Vector2D
+ debug: boolean
- observable: GameObservable
- statusTexfField: JLabel
- debugWindow: LocalDebugWindow
+ <<create>> GameLocalplayerClient()
+ update()
+ getObservable():GameObservable
+ start()
+ pause()
+ restartGame()
+ main()
Tetromino
<<interface>>
+ generateBlock()
+ rotate()
+ update()
+ getColor(): Color
+ setColor(Color)
+ getOrigin(): Vector2D
+ setOrigin(Vector2D)
+ getPosition(): List<Vector2D>
+ setPosition(List<Vector2D>)
+ toString(): string
+ getType(): TetrominoType
+ setState(TetrominoState)
+ getState()
+ getNextStatePosition()
<<interface>>
TetrominoState
+ rotate(Tetromino)
<<enumeration>>
TetrominoType
I
J
L
O
S
T
Z
+ getRandomTetromino(Vector2D): Tetromino
+ getAllTetrominoShape(): List<Tetromino>
+ convertTetrominoToType(Tetromino): TetrominoType
+ convertTypeToTetromino(TetrominoType)
TetrisPlayfield
+ block_size: int
+ size: Vector2D
+ block: Color[][]
+ currentTetromino: Tetromino
+ spawn_position: Vector2D
- gameOverPosition: int
+ isReceivedInput: boolean
+ randomStrategy: TetrominoRandomStratego
+ nextTetrominoPanel: NextTetrominoPanel
+ <<create>> TetrisPlayfield(Vector2D)
+ paint()
+ paintBlock()
+ convertTetrominoToPixel()
+ update()
+ checkCollision(): boolean
+ createNewTetromino()
+ cleanCurrentTetrominoPosition()
+ moveRight()
+ moveLeft()
+ paintGrid()
+ generatePermanentRow()
+ countFullRow()
+ checkAndRemoveRow(): int
+ isGameOver(): boolean
+ restartGame()
+ getCurrentTetromino(): Tetromino
+ setCurrentTetromino(Tetromino)
+ retate()
+ checkCanBeRatated(list<Vector2D>)
TetrominoRandomStrategy
<<interface>>
+ getNextTetromino(): Tetromino
+ getTetrominoList(): list<Tetromino>
+ setTetrominoList(List<Tetromino>)
JPanel
WeLoveOStrategy
TraditionalRandomStrategy
- currentTetrominoPool: list<Tetromino>
- nextTetrominoPool: list<Tetromino>
+ <<create>>TraditionalRandomStrategy()
+ randomizeTetrominoPool(): list<Tetromino>
+ checkTetrominoPool()
RandomStategyEnum
Traditional
Normal
WeLoveO
None
+ convertToClass(RandomStrategyEnum):TetrominoRandomStrategy
NoneStrategy
NormalStrategy
NextTetrominoPanel
- block: Color
+ block_size: int
+ size: Vector2D
+ BlockOrigin: Vector2D
+ currentShowingTetromino: Tetromino
+ nextTetrominoPanel()
+ paint()
+ paintBlock(Graphic, color, int, int)
+ paintGrid(Graphic)
+ covertTetrominoToPixcel()
+ clearPanel()
+ setCurrentTetromino(Tetromino)
+ setAndUpdateTetromino(Tetromino)
+ update()
TetrominoHorizontalState
TetrominoVenticalState
TetrominoJSateOne
TetrominoJSateTwo
TetrominoJSateThree
TetrominoLSateOne
TetrominoLSateTwo
TetrominoLSateThree
TetrominoOSateOne
TetrominoSSateOne
TetrominoSSateTwo
TetrominoTSateOne
TetrominoTSateTwo
TetrominoTSateThree
TetrominoZSateOne
TetrominoZSateTwo
<<interface>>
TetrominoIState
<<interface>>
TetrominoJState
<<interface>>
TetrominoLState
<<interface>>
TetrominoOState
<<interface>>
TetrominoSState
<<interface>>
TetrominoTState
<<interface>>
TetrominoZState
1..1