Command Interpreter

+parseInput(s: string) : CommandTyp
+getMultiplier(s: string): int

Subject

+attach(o: observer*)
+detach(o: observer*)

+notifyObservers()

Observer

+notify(whoFrom: Cell&)
+notify(whoFrom: Board&)
+modifyPreviewBlock(Block: Color)

Block

+cw()
+ccw()
+left()
+right()
+down()
+drop()
+clear()
+draw()
+undraw()
+isHeavy(): bool
+removeCell(cor: Coordinate
+isHeavy():Bool
+canMove(x,y:int): Bool
+findBestPos(b: Block*)

*+clone() : Block**
+init()

Cell

+setColor(c: Color)
+getColor(): Color
+getCoord():Coordinate
+notifyObserver()
+isFilled(): bool

boardState

-score:Score
-color: Color
-level: int
-over: bool
-playerName: string

Graphical Display

+notify(whoFrom: Cell&)
+notify(whoFrom: Board&)
+modifyPreviewBlock(Block:Color)

TextDisplay

+notify(whoFrom: Cell&)
+notify(whoFrom: Board&)
+modifyPreviewBlock(Block:Color

Coordinate

+x: size_t
+y: size_t

Board

+isOver(block: Block*): bool
+setObserver(o: Observer*)
+isFilled(cor: Coordinate)
+clear()
+resetScore()
+rowFilled(x: size_t): bool
+clearRow(x: size_t)
+dropBlock(block: Block*)
+setNext(nb: Block*)
+setColor(col: Color, cor: Coordinate
+getState(): boardState
+noGraphic()
+notifyObservers()

+setPlayerName(s: string)

XWindow

Score

+addCurrentScore(num: int)
+setHighScore(num: int)
+setCurrentScore(num: int)

IBlock

+init()
+clone() :
Block*

JBlock

+init()
+clone() :
Block*

ZBlock

+init()
+clone() :
Block*

TBlock

+init()
+clone() :
Block*

SBlock

+init()
+clone() :
Block*

OBlock

+init()
+clone() :
Block*

LBlock

+init()
+clone() :
Block*

centerBlock

+init()
+clone() :
Block*

Level

+generateBlock(): Block*
+generateCentreBlock(): Block*
+levelUp()
+levelDown()
+getRand(): double
+setRand()
+setNoRand()
+isHeavy(): bool
+hasBlockPenalty(): bool

Note: All occurrences of pointers are smart pointers