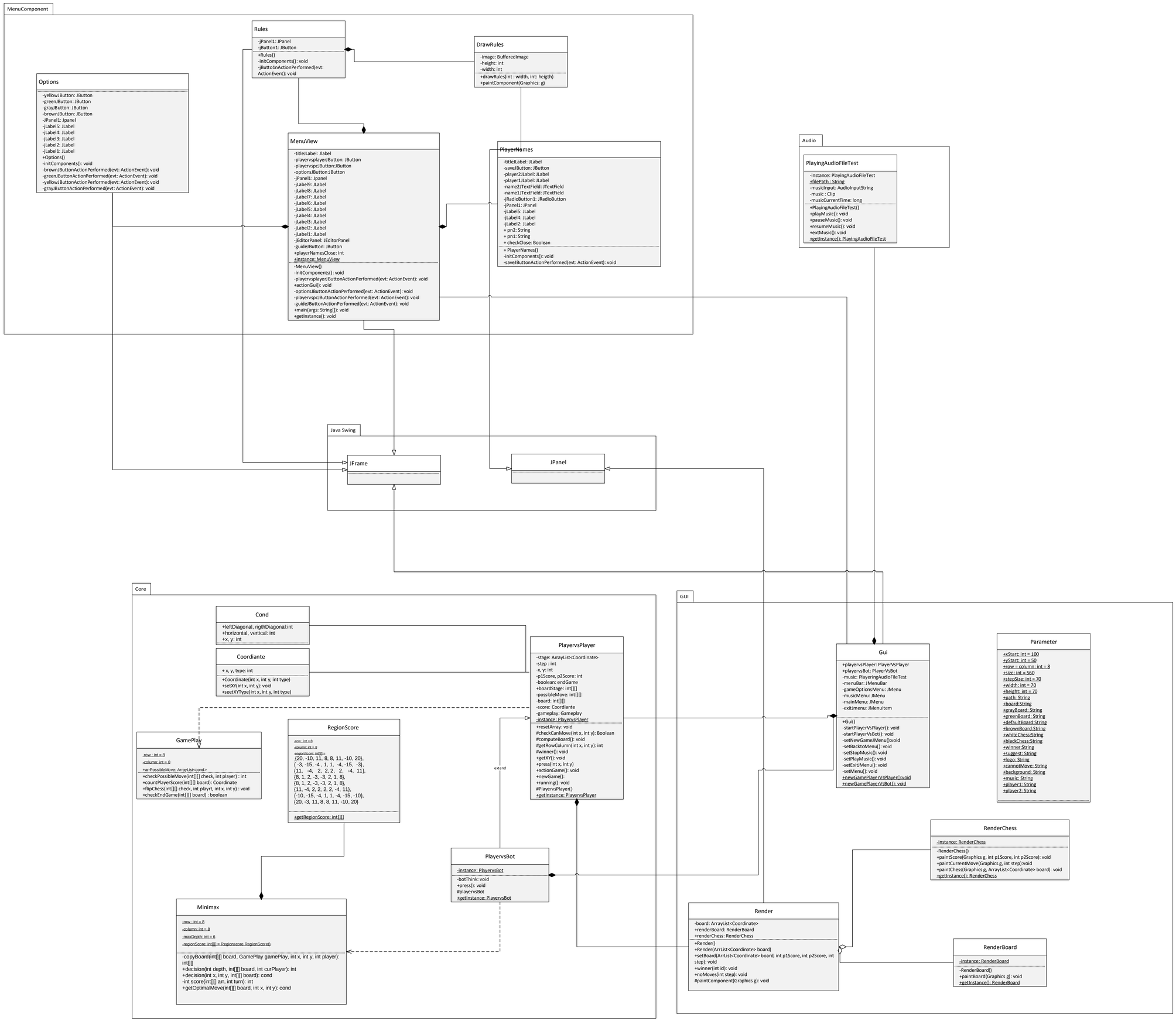
MenuComponent
Rules
-jPanel1: JPanel
-jButton1: JButton
+Rules()
-initComponents(): void
-jButto1nActionPerformed(evt: ActionEvent): void
DrawRules
-image: BufferedImage
-height: int
-width: int
+drawRules(int : width, int: heigth)
+paintComponent(Graphics: g)
Options
-yellowJButton: JButton
-greenJButton: JButton
-grayJButtON: JButton
-brownJButton: JButton
-JPanel1: Jpanel
-jLabel5: JLabel
-jLabel4: JLabel
-jLabel3: JLabel
-jLabel2: JLabel
-jLabel1: JLabel
+Options()
-initComponents(): void
-brownJButtonActionPerformed(evt: ActionEvent): void
-greenJButtonActionPerformed(evt: ActionEvent): void
-yellowJButtonActionPerformed(evt: ActionEvent): void
-grayJButtonActionPerformed(evt: ActionEvent): void
MenuView
-titleJLabel: JIabel
-playervsplayerJButtON: JButton
-playervspcJButtON:JButton
-optionsJButtON:JButton
-jPanel1: Jpanel
-jLabel9: JLabel
-jLabel8: JLabel
-jLabel7: JLabel
-jLabel6: JLabel
-jLabel5: JLabel
-jLabel4: JLabel
-jLabel3: JLabel
-jLabel2: JLabel
-jLabel1: JLabel
-jEditorPanel: JEditorPanel
-guideJButtON: JButtON
+playerNamesClose: int
+instance: MenuView
-MenuView()
-initComponents(): void
-playervsplayerJButtONActionPerformed(evt: ActionEvent): void
+actionGui(): void
-optionsJButtONActionPerformed(evt: ActionEvent): void
-playervspcJButtONActionPerformed(evt: ActionEvent): void
-guideJButtONActionPerformed(evt: ActionEvent): void
+main(args: String[]): void
+getInstance(): void
PlayerNames
-titleJLabel: JLabel
-saveJButtON: JButtON
-player2JLabel: JLabel
-player1JLabel: JLabel
-name2JTextField: JTextField
-name1JTextField: JTextField
-jRadioButtON1: JRadioButtON
-jPanel1: JPanel
-jLabel5: JLabel
-jLabel4: JLabel
-jLabel2: JLabel
+ pn2: String
+ pn1: String
+ checkClose: Boolean
+ PlayerNames()
-initComponents(): void
-saveJButtONActionPerformed(evt: ActionEvent): void
Audio
PlayingAudioFileTest
-instance: PlayingAudioFileTest
+filePath : String
-musicInput: AudioInputString
-music : Clip
-musicCurrentTime: long
+PlayingAudioFileTest()
+playMusic(): void
+pauseMusic(): void
+resumeMusic(): void
+extMusic(): void
+getInstance(): PlayingAudioFileTest
Java Swing
JFrame
JPanel
Core
Cond
+leftDiagonal, rigthDiagonal:int
+horizontal, vertical: int
+x, y: int
Coordiante
+ x, y, type: int
+Coordinate(int x, int y, int type)
+setXY(int x, int y): void
+seetXYType(int x, int y, int type)
PlayervsPlayer
-stage: ArrayList<Coordinate>
-step : int
-x, y: int
-p1Score, p2Score: int
-boolean: endGame
+boardStage: int[][]
-possibleMove: int[][]
-board: int[][]
-score: Coordiante
-gameplay: Gameplay
-instance: PlayervsPlayer
+resetArray: void
#checkCanMove(int x, int y): Boolean
#computeBoard(): void
#getRowColumn(int x, int y): int
#winner(): void
+getXY(): void
+press(int x, int y)
+actionGame(): void
+newGame():
+running(): void
#PlayervsPlayer()
+getInstance: PlayervsPlayer
GamePlay
-row : int = 8
-column: int = 8
+arrPossibleMove: ArrayList<cond>
+checkPossibleMove(int[][] check, int player) : int
+countPlayerScore(int[][] board): Coordinate
+flipChess(int[][] check, int playrt, int x, int y) : void
+checkEndGame(int[][] board) : boolean
RegionScore
-row : int = 8
-column: int = 8
-regionScore: int[][] =
{20, -10, 11, 8, 8, 11, -10, 20},
{ -3, -15, -4 , 1, 1, -4, -15, -3},
{11, -4, 2, 2, 2, 2, -4, 11},
{8, 1, 2, -3, -3, 2, 1, 8},
{8, 1, 2, -3, -3, 2, 1, 8},
{11, -4, 2, 2, 2, 2, -4, 11},
{-10, -15, -4, 1, 1, -4, -15, -10},
{20, -3, 11, 8, 8, 11, -10, 20}
+getRegionScore: int[][]
extend
PlayervsBot
-instance: PlayervsBot
-botThink: void
+press(): void
#playervsBot
+getInstance: PlayervsBot
Minimax
-row : int = 8
-column: int = 8
-maxDepth: int = 6
-regionScore: int[][] = Regionscore.RegionScore()
-copyBoard(int[][] board, GamePlay gamePlay, int x, int y, int player): int[][]
+decision(int depth, int[][] board, int curPlayer): int
+decision(int x, int y, int[][] board): cond
-int score(int[][] arr, int turn): int
+getOptimalMove(int[][] board, int x, int y): cond
GUI
Gui
+playervsPlayer: PlayerVsPlayer
+playervsBot: PlayerVsBot
-music: PlayeringAudioFileTest
-menuBar: JMenuBar
-gameOptionsMenu: JMenu
-musicMenu: JMenu
-mainMenu: JMenu
-exitJmenu: JMenuItem
+Gui()
-startPlayerVsPlayer(): void
-startPlayerVsBot(): void
-setNewGameJMenu():void
-setBacktoMenu() : void
-setStopMusic(): void
-setPlayMusic(): void
-setExitJMenu(): void
-setMenu(): void
+newGamePlayerVsPlayer():void
+newGamePlayerVsBot(): void
Parameter
+xStart: int = 100
+yStart: int = 50
+row = column: int = 8
+size: int = 560
+stepSize: int = 70
+width: int = 70
+height: int = 70
+path: String
+boardString
+grayBoard: String
+greenBoard: String
+defaultBoard:String
+brownBoard:String
+whiteChess:String
+blackChess:String
+winner:String
+suggest: String
+logo: String
+cannotMove: String
+background: String
+music: String
+player1: String
+player2: String
RenderChess
-instance: RenderChess
-RenderChess()
+paintScore(Graphics g, int p1Score, int p2Score): void
+paintCurrentMove(Graphics g, int step):void
+paintChess(Graphics g, ArrayList<Coordinate> board): void
+getInstance(): RenderChess
Render
-board: ArrayList<Coordinate>
+renderBoard: RenderBoard
+renderChess: RenderChess
+Render()
+Render(ArrList<Coordinate> board)
+setBoard(ArrList<Coordinate> board, int p1Score, int p2Score, int step): void
+winner(int id): void
+noMoves(int step): void
#paintComponent(Graphics g): void
RenderBoard
-instance: RenderBoard
-RenderBoard()
+paintBoard(Graphics g): void
+getInstance(): RenderBoard