

**pkg cli****Cli**

+ main(args : String[]) : void  
- getInput() : String  
~ isValidMove(consoleInput : String) : boolean  
- toConsole(game : Game) : void  
- generateAnswer(selectedPiece : Piece, finalSquare : Square, currentGame : Game) : void

**Simple**

+ main(args : String[]) : void  
+ getInput() : void

**pkg engine****Engine**+ nextBestMove(game : Game) : Move**EvaluatePieces**~ evaluateBoard(game : Game, AIColour : Colour) : int~ piecesValue(piece : Pieces) : int- evaluateEndgame(game : Game, AIColour : Colour) : boolean

pkg gui

Gui
<ul style="list-style-type: none"> <li>- <u>startScene : Scene</u></li> <li>- <u>chessScene : Scene</u></li> </ul>
<ul style="list-style-type: none"> <li>+ <u>main(args : String[]) : void</u></li> <li>+ <u>start(primaryStage : Stage) : void</u></li> <li>- <u>startWindow(primaryStage : Stage, guiGame : GuiGame) : void</u></li> <li>- <u>chessWindow(primaryStage : Stage, guiGame : GuiGame) : void</u></li> </ul>

ChessBoardView
<ul style="list-style-type: none"> <li>+ <u>guiGame : GuiGame</u></li> </ul>
<ul style="list-style-type: none"> <li>- <u>generateGrid() : GridPane</u></li> <li>- <u>generatePlayersMoveLabelBox() : HBox</u></li> <li>- <u>generateBeatenPieces() : HBox</u></li> <li>- <u>setButtons(grid : GridPane) : void</u></li> <li>- <u>setHighlightedButtons(grid : GridPane) : void</u></li> <li>- <u>setButtonAction() : void</u></li> </ul>

SetImages
<ul style="list-style-type: none"> <li>~ <u>chooseImage(square : Square) : ImageView</u></li> <li>~ <u>getBeatenPieces(type : Type, colour : Colour) : ImageView</u></li> </ul>

ImageHandler
<ul style="list-style-type: none"> <li>- <u>instance : ImageHandler</u></li> <li>- <u>imgs : Map&lt;String,Image&gt; = new HashMap&lt;&gt;</u></li> </ul>
<ul style="list-style-type: none"> <li>+ <u>getInstance() : ImageHandler</u></li> <li>- <u>loadImage(name : String) : void</u></li> <li>+ <u>getImage(key : String) : Image</u></li> </ul>

GuiGame
<ul style="list-style-type: none"> <li>+ <u>game : Game</u></li> <li>~ <u>squareStart : Square = null</u></li> <li>~ <u>squareFinal : Square = null</u></li> <li>~ <u>isRotatingBoard : boolean = true</u></li> <li>~ <u>highlightPossibleMoves : boolean = true</u></li> <li>~ <u>hintInCheck : boolean = true</u></li> <li>~ <u>allowedToChangeSelectedPiece : boolean = false</u></li> <li>~ <u>turnAI : boolean = false</u></li> </ul>
<ul style="list-style-type: none"> <li>+ <u>GuiGame()</u></li> <li>~ <u>setBothSquares(square : Square) : void</u></li> <li>~ <u>computePossibleSquares() : List&lt;Square&gt;</u></li> </ul>

AlertDialog
<ul style="list-style-type: none"> <li>+ <u>display(title : String, header : String, message : String) : void</u></li> </ul>

ConfirmationBox
<ul style="list-style-type: none"> <li>- <u>answer : boolean</u></li> </ul>
<ul style="list-style-type: none"> <li>+ <u>display(title : String, message : String) : boolean</u></li> </ul>

OptionPane
<ul style="list-style-type: none"> <li>+ <u>display(title : String, header : String, message : String, options : List&lt;ButtonType&gt;) : ButtonType</u></li> </ul>





