







-movesLabel: Label -nextLevelButton: Button -levelSelectButton: Button

+initData(setting: SystemSettings, prevBoard: GameBoard, mode; Mode, difficulty: Difficulty.

level: Integer, numMoves: Integer, minMoves: Integer, result: Integer): void

-initialize(): void

-drawMedals(result: Integer): void

-changeSceneControl(event: ActionEvent): void -navToNextLevel(event: ActionEvent): void -navToLevelSelect(event: ActionEvent): void -restartLevel(event: ActionEvent): void -navToMenu(event: ActionEvent): void

-performFadeOut(node: Node): FadeTransition -performFadeIn(node: Node): FadeTransition -buttonEnterAnimation(event: MouseEvent): void -buttonExitAnimation(event: MouseEvent): void

-playButtonPressSound(): void

-difficulty: Difficulty -level: Integer

-recNodeList: ArrayList<Node> -mgList: ArrayList<MouseGestures>

-solverThread: Service<Void>

-solverBlock: Block -wrapper: AnchorPane -modeLabel: Label -difficultyLabel: label -levelLabel: private -movesLabel: Label -minMovesLabel: Label -primaryField: AnchorPane

-boardField: Pane -nextButton: Button -goalArrow: Polygon -undoButton: Button -redoButton: Button -hintButton: Button -resetButton: Button -levelSelectButton: Button -quitButton: Button

+initData(settings: SystemSettings, oldBoard: GameBoard, mode: Mode, difficulty: Difficulty, level: Integer): void

-initialize(): void

-initBoard(oldBoard: GameBoard): void

-initSolver(): void -initNodeList(): void -initMouseGestures(): void -initAnimations(): void -updateBoard(): void

-setBlocks(b: Block, node: Node): void -setEffects(rec: Rectangle): void

-handleWin(): void

-animateWinSequence(): void -pulse(node: Node): FadeTransition

-changeSceneControl(event: ActionEvent): void -showGameWin(event: ActionEvent): void

-navToLevelSelect(event: ActionEvent): void -navToMenu(event: ActionEvent): void -undoMove(event: ActionEvent): void -redoMove(event: ActionEvent): void -showHint(event: ActionEvent): void -resetBoard(event: ActionEvent): void

-disableGameButtons(): void -enableGameButtons(): void

-disableAllButtons(): void

-performFadeOut(node: Node): FadeTransition -performFadeIn(node: Node): FadeTransition -buttonEnterAnimation(event: MouseEvent): void

-buttonExitAnimation(event:MouseEvent): void

-playButtonPressSound(): void -playVictorySound(): void

-levels: GridPane -animateWinSequence(): void -toggleLevel: ToggleGroup -animationSequence1(): SequentialTransition -modeLabel: Label -animationSequence2(): SequentialTransition -difficultyLabel: Label -animationSequence3(): SequentialTransition -animationSequence4(): SequentialTransition +initData(settings: SystemSettings, mode: Mode, difficulty: Difficulty): void -animationSequence5(): SequentialTransition -initialize(): void -getPlayerNode(): Node -applyLevelComplete(): void -getHorizontalNodes(): ArrayList<Node> -changeSceneControl(event: ActionEvent): void -getVerticalNodes(): ArrayList<Node> -navToPlaySettings(event: ActionEvent): void -pulse(node: Node): FadeTransition -navToGame(): void -changeSceneControl(event: ActionEvent): void -levelEnter(event: MouseEvent): void -showHelpWin(event: ActionEvent): void -levelExit(event: MouseEvent): void -navToMenu(event: ActionEvent): void -performFadeOut(node: Node): FadeTransition -undoMove(event: ActionEvent): void -performFadeIn(node: Node): FadeTransition -redoMove(event: ActionEvent): void -buttonEnterAnimation(event: MouseEvent): void -showHint(event: ActionEvent): void -buttonExitAnimation(event: MouseEvent): void -resetBoard(event: ActionEvent): void -playButtonPressSound(): void -continueAnimation(event: ActionEvent): void -disableGameButtons(): void -enableGameButtons: void -disableAllButtons(): void -fadeOut(node: Node): FadeTransition -fadeIn(node: Node): FadeTransition -buttonEnterAnimation(event: MouseEvent): void -buttonExitAnimation(event: MouseEvent): void -playButtonPressSound(): void -playVictorySound(): void

+initData(settings: SystemSettings, numMoves: Integer, minMoves: Integer, result: Integer): void

-initialize(): void

-drawMedals(result: Integer): void

-changeSceneControl(event: ActionEvent): void

-restartLevel(event: ActionEvent): void
-navToMenu(event: ActionEvent): void

-performFadeOut(node: Node): FadeTransition -performFadeIn(node: Node): FadeTransition -buttonEnterAnimation(event: MouseEvent): void -buttonExitAnimation(event: MouseEvent): void

-playButtonPressSound(): void