







+ Dice
implements Serializable

☐ fields —
- value:int
- color:DiceColor
☐ constructors —
+ Dice(color:DiceColor)
☐ methods —
+ setValue (value:int):void
+ getValue ():int
+ getColor():DiceColor
+ rollDice():void
+ oppositeValue ():int
+ increaseOrDecrease (increase: boolean):void

+ Cell
implements Serializable

= fields
- dice:Dice
- valueRestriction:int
- colorRestriction:DiceColor
= constructors
+ Cell ()
+ Cell (dice:Dice, valueRestriction:int, colorRestriction:DiceColor)
= methods
+ getValueRestriction ():int
+ getColorRestriction ():DiceColor
+ getDice ():Dice
+ setValueRestriction (valueRestriction:int):void
+ setColorRestriction (colorRestriction:DiceColor):void
+ setDice (dice:Dice):void
- colorRestrictionViolated (color:DiceColor):boolean
- valueRestrictionViolated (value:int):boolean
+ insertDice (newDice: Dice, checkColorRestriction: boolean, checkValueRestriction: boolean):void

nickname:String indexInGame:int favorToken:int points:int privateObject : ObjectivePrivateCard playerWindowPattern:WindowPatternCard the4WindowPattern :WindowPatternCard[] handDice:DiceStack - firstTurn:boolean hasDrawNewDice:boolean hasPlaceANewDice : boolean hasUsedToolCard:boolean Player (indexInGame:int, nickname:String) + getIndexInGame ():int getNickname():String + getFavorToken():int getPoints (): int getPrivateObject ():ObjectivePrivateCard ~ getThe4WindowPattern ():WindowPatternCard[] getPlayerWindowPattern ():WindowPatternCard + getHandDice():DiceStack + isFirstTurn():boolean + isHasDrawNewDice():boolean + isHasPlaceANewDice ():boolean + isHasUsedToolCard():boolean setIndexInGame (indexInGame:int):void setFavorToken(favorToken:int):void + setPlayerWindowPattern (playerWindowPattern: WindowPatternCard ):void + setPoints (points:int):void setPrivateObject (privateObject: ObjectivePrivateCard ):void choosePlayerWindowPattern (index:int):void setThe4WindowPattern (the4WindowPattern: WindowPatternCard[]):void + setFirstTurn(firstTurn:boolean):void setHasDrawNewDice (hasDrawNewDice: boolean):void + setHasPlaceANewDice (hasPlaceANewDice: boolean):void + setHasUsedToolCard(hasUsedToolCard:boolean):void addDiceToHand(dice:Dice, fromDicePool:boolean):void insertDice(line:int, column:int, adjacentR: boolean, colorR:boolean, valueR: boolean, firstInsert: boolean):void ~ useToolCard(cost:int):void ~ endTurn(nextTurnIsATypeFirstTurn:boolean):void ~ removeDiceFromWindowAndAddToHand(line:int, column:int):void + removeDiceFromHand():Dice rollDiceInHand():void oppositeFaceDice():void increaseOrDecrease (increase: boolean):void setValueDiceHand (value: int):void endSpecialFirstTurn():void

implements Serializable id:int name:String description:String numberTimeUsed:int - favorToken:int undoAble:boolean listEffect : LinkedList < EffectGame > firstEffect : int checkFirstTurn:boolean checkSecondTurn: boolean checkSomeDiceInHand:boolean checkDrawDice:boolean checkIfNotDicePlaced:boolean checkNumberDiceInWindow:int checkFirstRound: boolean onstructors — — ToolCard() + getId():int setId(id:int):void getName (): String + setName (name: String): void + getDescription():String setDescription(description:String):void + getNumberTimeUsed():int + getFavorToken():int + setFavorToken(favorToken:int):void setListEffect (listEffect: LinkedList < EffectGame > ):void + getCopyListEffect():LinkedList + isUndoAble():boolean + setCheck (checkDrawDice: boolean, checkSomeDiceInHand:boolean):void + setCheck (checkIfNotDicePlaced: boolean, checkNumberDiceInWindow:int):void + setCheck (checkDrawDice: boolean, checkSomeDiceInHand:boolean, checkFirstRound:boolean):void setCheck (checkDrawDice: boolean, checkSomeDiceInHand:boolean, checkFirstRound:boolean, trueFirstTurnFalseSecond:boolean):void checkUsabilityToolCard(roundGame:int, player:Player):void incrementUsage ():void

∃fields ----- father:NodePodium leftLessPoint : NodePodium rightMorePoint:NodePodium player:Player - publicCard:ObjectivePublicCard[] pointsPrivate:int - pointsPublic:int[] - tokenLeft:int voidCell:int totalPoints:int description:String[] privateColor:String NodePodium(player: Player, publicCard: ObjectivePublicCard[] ⊟ methods — + calculatePoint ():void ~ getPointsPrivate ():int getIndexPlayer (): int ~ getTokenLeft():int ~ getTotalPoints ():int setFather (father: NodePodium):void setLeftLessPoint (leftLessPoint: NodePodium):void setRightMorePoint (rightMorePoint: NodePodium):void ~ getFather():NodePodium ~ getLeftLessPoint ():NodePodium getRightMorePoint (): NodePodium + getDescription():String[] + getArrayIntInfo():int[] + getPrivateColor ():String

~ TreePodium

☐ fields

- root:NodePodium

- orderWinTies:int[]

- numberPlayer:int

- numberRound:int

☐ constructors

~ TreePodium(numberPlayer:int, numberRound:int)

☐ methods

+ getRoot():NodePodium

- buildLastRound():void

~ insertNodePlayer (newNodePlayer: NodePodium):void

- max(node:NodePodium):NodePodium

- predecessor(nodePlayer: NodePodium):NodePodium

~ getSortedPlayer ():int[][]

removeDice():Dice

+ final DiceColor
implements Serializable

implements Serializable

fields

+ final RED: DiceColor

+ final YELLOW: DiceColor

+ final GREEN: DiceColor

+ final BLUE: DiceColor

+ final PURPLE: DiceColor

- constructors

methods

+ getDiceColor(ordinal:int): DiceColor

+ getNumberOfDiceColors():int

currentRound:int currentTurn:int indexCurrentPlayer:int stopGame:boolean countSetWindow:int roundTrack:DiceStack[] player:Player[] toolCard:ToolCard[] objectivePublicCard: ObjectivePublicCard[] dicePool:DiceStack factoryDiceForThisGame:FactoryDice colorRestriction:DiceColor updaterView : UpdaterView onstructors——— GameBoard (names: String[]) startGame (updaterView: UpdaterView ):void getCurrentRound():int + getRoundTrack():DiceStack[] getRoundTrack(index:int):DiceStack getPlayer (): Player[] + getPlayer (index:int):Player + getToolCard():ToolCard[] + getToolCard(index:int):ToolCard getIdToolCard(index:int):int + getObjectivePublicCard():ObjectivePublicCard[] + getDicePool():DiceStack getIndexCurrentPlayer ():int getCurrentTurn():int isStopGame():boolean setUpFirstRound():void freeHandPlayer (indexPlayer: int):void - firstTurn(indexPlayerEnded:int):void secondTurn(indexPlayerEnded:int):void nextPlayer (indexPlayerEnded:int):void calculatePoint (indexPlayer: int): NodePodium - calculateAllPoint ():void setWindowOfPlayer (indexPlayer: int, indexOfTheWindow: int):void addNewDiceToHandFromDicePool(indexPlayer: int, indexDicePool:int):void setStopGame(stopGame:boolean):void insertDice(indexPlayer: int, row:int, column:int, firstTurnDie:boolean):void useToolCard(indexPlayer:int, indexOfToolInGame:int):void imposeColorRestriction(indexPlayer: int, round:int, index:int):void moveDiceFromWindowPatternToHand(indexPlayer: int, row:int, column:int, checkRestriction: boolean):void changeDiceBetweenHandAndFactory (indexPlayer: int):void changeDiceBetweenHandAndRoundTrack(indexPlayer: int, round:int, indexStack: int):void rollDicePool(indexPlayer: int):void insertDice (indexPlayer: int, row: int, column:int, adjacentRestriction: boolean, colorRestriction: boolean, valueRestriction: boolean, singleNewDice: boolean): void rollDiceInHand(indexPlayer: int):void oppositeFaceDice(indexPlayer: int):void endSpecialFirstTurn(indexPlayer: int):void + setValueDiceHand (indexPlayer: int, value: int):void increaseOrDecrease (indexPlayer: int, increase: boolean):void

checkState (indexPlayer: int):void

+ WindowPatternCard implements Serializable - name:String difficulty:int - matrix:Cell[][] numberOfCellWithDice:int + WindowPatternCard (name:String, difficulty:int, matrix:Cell[][]) ----methods -----getName():String getDifficulty():int + getMatrix (): Cell[][] + getColumn(line:int):Cell[] + getCell (line:int, column:int):Cell + getNumberOfCellWithDice ():int ~ setName (name: String): void setDifficulty(difficulty:int):void ~ setMatrix (matrix: Cell[][]):void - checkMatrixAdjacentRestriction (line:int, column:int):boolean - checkMatrixAdjacentColorRestriction (line:int, column:int, diceColor:DiceColor):boolean checkMatrixAdjacentValueRestriction (line:int, column:int, diceValue:int):boolean insertDice(line:int, column:int, dice:Dice):void + insertDice(line:int, column:int, dice:Dice, adjacentRestriction:boolean, colorRestriction:boolean, valueRestriction:boolean):void removeDice(line:int, column:int):Dice

 windowPatternCardsDeck : ArrayList < WindowPatternCard> extractedPublic:TreeSet<Integer> extractedPrivate :TreeSet<Integer> extractedTool:TreeSet<Integer> extractedWindow:TreeSet<Integer> final objectivePublicCardNumber:int final objectivePrivatedNumber:int - final toolCardNumber:int windowPatternCardNumber:int constructors——— - Deck() methods 
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 methods 
 me + synchronized getDeck():Deck resetDeck ():void + getObjectivePublicCardNumber():int + getObjectivePrivatedNumber ():int getWindowPatternCardNumber ():int + getToolCardNumber():int + drawObjectivePublicCard ():ObjectivePublicCard + drawObjectivePrivateCard ():ObjectivePrivateCard + drawToolCard():ToolCard + drawWindowPatternCard ():WindowPatternCard extractInt (bound:int, extracted: TreeSet<Integer> ):int