

GameDisplay

- GameDisplay()

+ main(args: String[]) : void
+ start() : void
+ clearConsole() : void
+ printWelcomeBanner() : void
+ printExitBanner() : void

Parade

- curParade : ArrayList<Card>
- INITIAL_PARADE_SIZE : int

+ Parade(d: Deck)
+ getParade() : ArrayList<Card>
+ getCollectibleCards(p: Card) : ArrayList<Card>
+ addCard(c: Card) : void
- getRemoveableCard(p: Card) : ArrayList<Card>

SingleGame

- par: Parade
- d: Deck
- endGame: boolean
- playerList: PlayerList
- turn: int
- INITIAL_HAND_SIZE: final int
- BOLD: final String
- RESET: final String
- ITALIC: final String

+ SingleGame(playerList: PlayerList)
+ run(): ArrayList<Player>
- dealInitialCards(): void
- getRound(): int
- handleEndGameException(e: EndGameException): void

Game

+ Game()
+ runGameLoop()
+ delayMessage(message: String)
+ delayMessageWithDots(message: String)

- resetGame(playerList: PlayerList)
- askToPlayAgain(): boolean
- askSamePlayers(): boolean

ScoreCalculator

- playerList: ArrayList<Player>
- scoreTracker: HashMap<Player, Integer>

+ ScoreCalculator(pl: PlayerList)
+ calculateScores(): void
+ findMaxPlayers(colour: Colour): ArrayList<Player>
+ findWinners(): ArrayList<Player>
+ printWinners(): void
+ getMinScore(): int
+ printAllScores(): void

Deck

- cardsInDeck: ArrayList<Card>
- DECK_REFERENCE: ArrayList<Card>

+ Deck()
+ drawCard(): Card
+ getSize(): int
+ resetDeck(): void

Card

- num: int
- colour: Colour

+ Card(n: int, c: Colour)
+ getCardNum(): int
+ getCardColour(): Colour
+ toString(): String

Colour

- colorCode: String
+ Colour(colorCode: String)
+ getColorCode(): String

<<enumeration>>
YELLOW: Colour
RED: Colour
GREEN: Colour
GREY: Colour
PURPLE: Colour
BLUE: Colour

HumanPlayer

+ HumanPlayer(name: String)
+ chooseCard(): Card

BotPlayer

+ BotPlayer(name: String)
+ chooseCard(): Card

<<Abstract>>
Player

- hand: ArrayList<Card>
- collectedCards: EnumMap<Colour, ArrayList<Card>>
- name: String
- wins: int

+ Player(name: String)
+ getName(): String
+ getHand(): ArrayList<Card>
+ getHandSize(): int
+ getWins(): int
+ getCollectedCards(): EnumMap<Colour, ArrayList<Card>>
+ getCollectedCardsWithColour(Colour): ArrayList<Card>
+ chooseCard(): Card
+ playCard(c: Card): Card
+ placeColourFaceDown(Colour)
+ addCard(c: Card) throws EndGameEx.
+ addCard(c: Card, endGame: Boolean) throws EndGameException
+ collectCard(cards: ArrayList<Card>) throws EndGameException
+ collectCard(cards: ArrayList<Card>, endGame: boolean) throws EndGameException
+ printCollectedCards(forFinalDisplay: boolean)
+ clearHand()
+ clearCollectedCards()
+ incrementWins()

PlayerList

- playerList: ArrayList<Player>
- MAX_PLAYER_NUM: static final int

+ PlayerList(d: Deck)
+ getPlayerList(): ArrayList<Player>
+ getNumberOfPlayers(): int
+ getPlayer(i: int): Player
+ displayPlayerProfiles()

UserInput

- sc: Scanner {static}

+ UserInput()
+ getUserInt(message: String, min: int, max: int): int {static}
+ getUserInt(message: String, min: int, max: int, errorMessage: String): int {static}
+ getString(message: String): String {static}
+ close(): void {static}

EndGameException

Inherits from: java.lang.Exception

+ EndGameException()
+ EndGameException(s: String)