Scala Documentation file for Blackjack

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| **Object Board** |
| Def show: String | Returns a string representation of the top card in the deck as well as the cards everyone has. |
| Var area | The variable that is holding the values and total display data. |
| Val members | Gives a list of the people playing. Aka the player order. |

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| **Class Player (val name: String)** |
| Var Cards | Empty list that stores the cards |
| Var move | The action. that is performed stored in as string |
| Var games\_won | Counter to keep track of games won |
| Var available\_move | If the possibly of completing a move is possible defined by true or false |
| Var strategy: string | Sets the type of strategy through a preset string. |
| Def Ace(hand: List[String]): Boolean | Returns a boolean value determining if their hand is less than or equal to 21. |
| Def sum\_cards(hand: List[String]): Int | Adds the value of the cards in the player’s hand. |
| Def show\_cards(hand: List[String]): String | Outputs what the player has in their hand |

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| **Object PlayerOrder** |
| Def advance | Advances the player order |
| Def show: String | Creates an empty string to return the player order |
| Def current: Player | Returns the head aka current player |
| Def resetPlayer: Unit | Advances the player order if the current playerorder is not equal to the first value of the playerList. |
| Def clearHands: Unit | Resets the games won to 0 |
| Def dealCards: Unit | Deals the cards from deck using drawCard. |

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| **Object Menu** |
| Def showGameArea: String | Outputs the game area in a string. |
| Def showPlayerOrder: String | Outputs the player order in a string |
| Def advancePlayerOrder: String | Advances the player order. |
| Def initialize: String | Starts the game by clearing everyone’s hands and reseting the deck. |
| Def checkForWinner: String | Outputs the winner in a string. |
| Def doMove(pl:Player): String | Completes a move for the player while checking if the player’s hand exceeds 21. |
| Def doTurn: String | Completes an entire round. |
| Def doGame: String | Completes a game from start to finish. |
| Def setStrategy(pl: String, strategy: String): Unit | Sets the strategy for a respective player. |
| Def doStrategyMove(up: Player): int | Performs a move based on a selected strategy. |
| Def showStrategies: String | Outputs the possible strategies in the game in a string. |

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| **Object Deck** |
| Var deck | List of the possible values in the game. Essentially values 1-10. |
| Var deck2 | List of the possible values in the game. Essentially values 1-10. |
| Def drawCard: String | Draws a card and sets it as the head value. |
| Def newDeck: Unit | Sets deck equal to deck2 |

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| **Class Card (face: String)** |
| Var card | This is an option of the possible cards. |
| Def show | Returns the face of the card in a string. |

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| **Object Strategies** |
| Def setup(pl: Player, strategy: String): Int | Essentially checks for what kind of strategy is set for the player and checks the value of their hand and acts accordingly to their strategy. |

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| **Class Model** |
| Def gameAreaMsg | Shows the game area. |
| Def playerOrderMsg | Shows the PlayerOrder. |
| Def advPlayerOrderMsg | Advances the PlayerOrder. |
| Def initGameMsg | Initializes the game; resets everyone’s hands as well as deck. |
| Def checkWinnerMsg | Checks and shows the winner. |
| Def doMoveMsg | Performs a single move for the current player. |
| Def doTurnMsg | Performs an entire turn. |
| Def doGameMsg | Performs a game from start to finish. |
| Private Var setPlayerStrategy | Assigns a specified strategy to a specific player. |
| Def setPlayerStrategyMsg | Sets the player strategy |
| Private Var showStrategies | Displays the possible strategies. |
| Def showStrategiesMsg | Returns the possible strategies. |
| Private Var doStrategyMove | Performs the player’s strategy |
| Def doStrategyMoveMsg | The actual action and code behind doing the strategy. |

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| **Object Controller(view: View, model: Model)** |
| Def showGameArea | An action that displays the Game area |
| Def showPlayerOrder | An action that displays the PlayerOrder |
| Def advPlayerOrder | An action that advances the PlayerOrder |
| Def initGame | An action that initializes the game. |
| Def checkWinner | An action that checks for the winner. |
| Def doMove | An action that completes a single move for a player. |
| Def doTurn | An action that completes an entire round of moves. |
| Def doGame | An action that completes an entire game. |
| Def setPlayerStrategy | An action that allows you to set the strategy for a player. |
| Def showStrategies | An action that displays the possible strategy. |
| Def doStrategyMove | An action that performs a player’s move according to a specified strategy. |
| Def exit | An action that quits the entire GUI. |