**CardGames API**

**Version 1.0.0**

**Card** class

Member variables

* *cardBack* – list of strings to print the back of the card
* *image* – list of strings to print the front of the card
* *shortImage* – list of strings to print a partial view of the front of the card
* *suit* – string denoting the card’s suit (“Spades”, “Clubs”, “Hearts”, “Diamonds”)
* *value­* – integer denoting the cards value (Ace = 1, Jack = 10, Queen = 11, King = 12]

Functions

* \_\_init\_\_(suit, value, image, cardBack)

Creates a card with a specific suit, value, and card back image

Input:

* + suit – string for the card’s suit (“Spades”, “Clubs”, “Hearts”, “Diamonds”]
  + value – integer for the card’s value (Ace = 1, Jack = 10, Queen = 11, King = 12)
  + image = list of string to print the front of the card
  + cardBack = list of strings to print the back of the card

**Deck** class

Member variables

* *cards* – list of **Card** objects that can still be dealt
* *size* – the number of unused **Card**s in *cards*
* *cardBack* – list of strings representing the image on the back of the **Card**s in *cards*
* *discarded* – list of **Card** objects that have already been dealt

Functions

* \_\_init\_\_()

Builds a deck of cards

* shuffle()

Randomizes self.*cards*

* getCard()

Removes first card from self.*cards* and puts it at the end of self.*discarded*

Returns:

* + First card in self.*cards*

**Player** class

Member variables

* *name* – string representing the player’s name
* *hand* – list of **Card** objects representing the player’s cards
* *money* – integer for amount of money the player currently has

Functions

* \_\_init\_\_(name, money=0)

Sets the player’s name, gives them 0 money, and no cards for their hand

Input:

* + name – string for the player’s name
  + money – integer for amount of initial money the player has
* addMoney(amount)

Adds more money to the player.

Input:

* + amount – integer number of money to add to the player

Returns:

* + amount – integer number of money to add to the
* makeBet(amount)

Removes money from the player only if the player has at least the bet *amount* currently.

Input:

* + amount – integer number of money to remove from the player

Returns:

* + integer - new amount of money the player has
* addCard(card, isKnown = True)

Adds one card to the player’s hand.

Input:

* + card – **Card** object to add to self.*hand*
  + isKnown – boolean whether the card is known to everyone
* clearHand()

Removes all cards from the player’s hand.

**Dealer** class

Member variables

* *None*

Functions

* \_\_init\_\_()

Does nothing

* printCards(cards, showFront, printShort = True)

Displays a list of cards, either face up or face down.

Input:

* + cards – list of **Card** objects to display
  + showFront – boolean for whether to show the front of the card (value)
  + printShort – boolean for whether to show only part of the card. Defaults is True to show partial card images
* printPlayerCards(player, printShort = False)

Displays a player’s cards, based on which cards are known.

Input:

* + player – **Player** object
  + printShort – boolean for whether to show only part of the card. Defaults is True to show partial card images
* dealCards(numCards, players)

Deals a certain number of cards to each player.

Input:

* + numCards – integer number of cards to deal to each player
  + players – a list of **Player** objects to deal cards to

Returns:

* + True – cards are dealt successfully
  + False – not enough cards in the deck to deal to all players