
pokercore Documentation

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CHAPTER 1

pokercore package

1.1 Subpackages

1.1.1 pokercore.test package

1.1.1.1 Submodules

1.1.1.2 pokercore.test.test_card module

```
class pokercore.test.test_card.TestCard(methodName='runTest')
Bases: unittest.case.TestCase

    test_arithmetic()
    test_compare()
    test_create()
```

1.1.1.3 pokercore.test.test_deck module

```
class pokercore.test.test_deck.TestDeck(methodName='runTest')
Bases: unittest.case.TestCase

    test_create()
    test_draw()
    test_shuffle()
```

1.1.1.4 pokercore.test.test_hand module

```
class pokercore.test.test_hand.TestHand(methodName='runTest')
Bases: unittest.case.TestCase
```

```
setUp()  
    Hook method for setting up the test fixture before exercising it.  
  
test_compare()  
  
test_create()  
  
test_value()
```

1.1.1.5 Module contents

1.2 Submodules

1.3 pokercore.card module

```
class pokercore.card.Card(rank, suit)  
Bases: object
```

Class representing a playing card.

A playing card consists of two integers, passed to the constructor during instantiation:

- rank - the rank of the card [0-12]
- suit - the suit of the card [0-3]

A Card can be compared to, added to, subtracted to and subtracted by other Card objects and integers (using their ranks, resulting in plain integers). For identity check, the identical_to method is provided.

```
classmethod from_chars(chars)  
    return a new object from a pair of character symbols  
  
identical_to(other)  
  
ranks = ('2', '3', '4', '5', '6', '7', '8', '9', 'T', 'J', 'Q', 'K', 'A')  
suits = ('c', 'd', 'h', 's')
```

1.4 pokercore.deck module

```
class pokercore.deck.Deck  
Bases: object
```

Class representing a deck of cards.

A Deck consists of 52 Card objects, starting shuffled. It has two methods:

- shuffle - Restore all cards to the deck, then shuffle it.
- **draw** - **Draw n cards from the top of the deck, returning them** as a list of Card objects. If n is not provided, draw and return one Card object.

```
draw(n=None)  
    remove and return a card from the deck, or a list of n cards, if n is given  
  
shuffle()  
    restore all cards to deck, then shuffle it
```

1.5 pokercore.exceptions module

```
exception pokercore.exceptions.CardArithmeticError
    Bases: pokercore.exceptions.CardError
        Invalid arithmetic operation on a Card object

exception pokercore.exceptions.CardComparisonError
    Bases: pokercore.exceptions.CardError
        Invalid comparison of a Card object

exception pokercore.exceptions.CardCreationError
    Bases: pokercore.exceptions.CardError
        Attempt to create a Card object using invalid arguments

exception pokercore.exceptions.CardError
    Bases: pokercore.exceptions.PokerError
        Card-related error

exception pokercore.exceptions.DeckError
    Bases: pokercore.exceptions.PokerError
        Deck-related error

exception pokercore.exceptions.DeckNotIntegerError
    Bases: pokercore.exceptions.DeckError
        Given draw count is not an integer

exception pokercore.exceptions.DeckTooManyError
    Bases: pokercore.exceptions.DeckError
        Given draw count is greater than the count of remaining cards

exception pokercore.exceptions.HandComparisonError
    Bases: pokercore.exceptions.HandError
        Invalid comparison of a Hand object

exception pokercore.exceptions.HandCreationError
    Bases: pokercore.exceptions.HandError
        Attempt to create a Hand object using invalid arguments

exception pokercore.exceptions.HandError
    Bases: pokercore.exceptions.PokerError
        Hand-related error

exception pokercore.exceptions.PokerError
    Bases: exceptions.Exception
        Generic poker error
```

1.6 pokercore.hand module

```
class pokercore.hand.Hand(cards)
    Bases: object
        Class representing a poker hand.
```

A poker hand consists of one or more Card objects, passed to the constructor contained in some iterable. Its main attributes are two:

- **value - an integer between 0 and 8 representing the category of** the poker hand
- **best_cards** - the best (at most 5) cards that consist the actual hand

A Hand can be compared to other Hand objects, judging by the value, and then the best cards, lexicographically.

```
classmethod from_chars(*args)
    return a new object from pairs of character symbols
    works with either multiple arguments, or a single iterable
names = ('high card', 'one pair', 'two pair', 'three of a kind', 'straight', 'flush',
```

1.7 Module contents

pokercore

A poker engine core, in Python

pokercore provides 3 classes to be used in a poker engine. Card (a playing card), Hand (a poker hand consisting of Cards, with evaluation capabilities) and Deck (a deck of Cards).

It is a simple starter, mainly written for exploring purposes, but can be extended and/or used to build something bigger. It is released under the MIT license.

Example

```
>>> from pokercore import Deck, Hand
>>> deck = Deck()
>>> first = Hand(deck.draw(5))
>>> first
Hand(one pair: Card(9c), Card(9h), Card(Ac), Card(Jh), Card(2h))
>>> second = Hand(deck.draw(5))
>>> second
Hand(high card: Card(As), Card(Kc), Card(9s), Card(7h), Card(4h))
>>> first > second
True
```

CHAPTER 2

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