**BlackJack Project Outline 2022-6-20**

import random #for shuffle method

playing = True

suits[] #list of strings

ranks[] #list of stings

values{} #mapping: string rank with integer value

**four classes**

class Card: rank, suit

class Deck: deck[]

def deal

def shuffle

class Hand: aces, value, cards[]

add\_cards

* calls deck.deal()

adjust\_aces

class Chips: total, bet

win\_bet

lose\_bet

**five gameplay methods**

def take\_bet(chips)

def hit(deck,hand)

def hit\_or\_stand(deck, p\_hand)

global playing

def show\_some(p\_hand, d\_hand)

def show\_all(p\_hand, d\_hand)

**five end result methods**

def player\_busts(chips)

def dealer\_busts(chips)

def player\_wins(chips)

def dealer\_wins(chips)

def push(chips)

**logic**

while True

create deck

shuffle deck

create p\_hand

create d\_hand

create chips

take\_bet()

show\_some()

while playing:

hit\_or\_stand()

show\_some()

if p\_hand.value > 21:

player\_busts(chips)

playing = False

if p\_hand.value <= 21:

while d\_hand.value <17:

hit(deck,d\_hand)

show\_all()

if d\_hand.value > 21:

dealer\_busts()

elif d\_hand.value > p\_hand.value:

dealer\_wins()

elif d\_hand.value < p\_hand.value:

player\_wins()

else:

push()

print(f”you now have {chips.total} chips.”)

new\_game = input(“play again? y or n?: “)

if new\_game[0].lower() = ‘y’:

continue

else:

print(“see ya”)

break