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## Documentation Roulette

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## 1 Documentation and User Guide

The purpose of this project is to create a simple Roulette game that is self-explanatory for every kind of user. Upon opening the game, the user starts with a Budget of 1000\$ and is shown the 13 possible bets that reach from a specific number to place a bet on a color or range of numbers. After choosing a bet the user can enter the amount of money he/she wants to spend, then the game starts.

To intensify the game for the player and make it a real-life experience we slowed down the game and comment on the actual location of the bullet in the spinning wheel. As soon as the bullet stops the game gives you your status if you won money or lost your bet and gives you an overview of your current budget. Now you can now choose to continue to a second or even third round, if you still have enough money left. As soon as you lost all your money, you will leave the game automatically. Good luck!

## 2 Code

```
import random
import time
budget = 1000
betin = 0
betmoney = 0
allred = [1, 3, 5, 7, 9, 12, 14, 16, 18, 19, 21, 23, 25, 27, 30, 32, 34, 36]
allblack = [2, 4, 6, 8, 10, 11, 13, 15, 17, 20, 22, 24, 26, 28, 29, 31, 33, 35]
allfirstcolumn = [1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34]
allsecondcolumn = [2, 5, 8, 11, 14, 17, 20, 23, 26, 29, 32, 35]
previousnumbers = []
randomsentences = ["Good Luck!", "I hope you're going to win!", "I believe in you!!!", "Wish you good luck!", "Good luck...", "Good game!", "I hope you'll win!", "Let the game begin!"]
randomsentences2 = ["Nice, the Bullet stopped at the right Number!", "Your gambling was perfect!!!", "Well played!!!", "WOW!!!!", "Nice gambling!!!", "Congrats!!!", "Nice, good choice!", "Good for you!!!", "Congratulation!!!", "OMG, so Lucky!"]
```

```

print("Welcome to the Roulette game!")
print("\n-----")
print("You start with a Budget of 1000 $")
print("\n" * 2)

def play():
    global land
    global betmoney
    global budget
    budget -= betmoney
    print("\n" * 3)
    print("The bullet is spinning.....")
    print("\n")
    time.sleep(3)
    random1 = random.randint(0, 36)
    print("The Bullet just passed Number", random1, "...")
    time.sleep(2)
    random2 = random.randint(0, 36)
    print("The Bullet nearly stopped at Number", random2, "...")
    time.sleep(2)
    print("THE BULLET LANDS ON NUMBER", land, "!")
    previousnumbers.append(land)
    time.sleep(2)

def lose():
    global betmoney
    global budget
    print("Oh no, you lost! Unlucky!")
    time.sleep(2)
    print("I'm sorry, you lost", betmoney, "$...")
    print("\n")
    time.sleep(1)
    print("Your Budget is now", budget, "$!")

def win(num):
    global betmoney
    global budget
    print(random.choice(randomsentences2))
    time.sleep(2)
    wincash = (betmoney * num) - betmoney
    print("You just won", wincash, "$!!!")
    budget += wincash + betmoney
    print("\n")
    time.sleep(1)

```

```

print("Your Budget is now", budget, "$!")

def getamount(num1, multi):
    sentences_for_gametype = ["You chose to bet on a specific Number... You are a gambler!",
    "You chose to bet on red Numbers...", "You chose to bet on black Numbers...", "You chose to bet
    on odd Numbers...", "You chose to bet on even Numbers...", "You chose to bet on Numbers
    between 1 and 18...", "You chose to bet on Numbers between 19 and 36...", "You chose to bet on
    Numbers between 1 and 12...", "You chose to bet on Numbers between 13 and 24...", "You
    chose to bet on Numbers between 25 and 36...", "You chose to bet on the first column...", "You
    chose to bet on the second column...", "You chose to bet on the third column..."]
    print("\n")
    global betmoney
    global budget
    global betin
    print(sentences_for_gametype[num1 - 1])
    if num1 == 1:
        while True:
            betin = input("Enter lucky Number: ")
            try:
                betin = int(betin)
            except:
                print("Error - Please only enter Integer Numbers. ")
            else:
                if betin < 0 or betin > 36:
                    print("In Roulette you only can bet on Numbers between 0 and 36. Check your Input.")
                else:
                    while True:
                        betmoney = input("How much money do you want to spend?: ")
                        try:
                            betmoney = int(betmoney)
                        except:
                            print("Error - Please only enter Integer Numbers.")
                        else:
                            if budget >= betmoney:
                                print("If the Bullet lands on number", betin, "you win", (betmoney * multi) - betmoney,
                                "$!")
                                print("\n" * 2)
                                print(random.choice(randomsentences))
                                time.sleep(1)
                                break
                            else:
                                print("You don't have enough budget to play with that amount of money... enter again!")
                                break
                    else:
                        while True:

```

```

betmoney = input("How much money do you want to spend?: ")
try:
    betmoney = int(betmoney)
except:
    print("Error - Please only enter Integer Numbers.")
else:
    if budget >= betmoney:
        print("You can possibly win:", (betmoney * multi) - betmoney, "$!")
        print("\n" * 2)
        print(random.choice(randomsentences))
        time.sleep(1)
        break
    else:
        print("You don't have enough budget to play with that amount of money... enter again!")

while budget > 0:
    land = random.randint(0, 36)
    input("Press Enter to see the Table of possible bets.")
    print("\n" * 2)
    print("The following Bets are possible: \n-----")
    print("Enter '1' if you want to bet on a specific Number!\nEnter '2' if you want to bet on red
Numbers!\nEnter '3' if you want to bet on black Numbers!\nEnter '4' if you want to bet on odd
Numbers!\nEnter '5' if you want to bet on even Numbers!\nEnter '6' if you want to bet on Numbers
between 1 and 18!\nEnter '7' if you want to bet on Numbers between 19 and 36!\nEnter '8' if you
want to bet on Numbers between 1 and 12!\nEnter '9' if you want to bet on Numbers between 13
and 24!\nEnter '10' if you want to bet on Numbers between 25 and 36!\nEnter '11' if you want to
bet on the first column!\nEnter '12' if you want to bet on the second column!\nEnter '13' if you
want to bet on the third column!")
    print("\n-----")
    while True:
        answerbet = input("Enter your Bet: ")
        try:
            answerbet = int(answerbet)
        except:
            print("Error - Please only enter integer Numbers.")
        else:
            if answerbet in range(1, 14):
                print("\n")
                print("Your Current Budget: ", budget)
                print("The previous Numbers are:", previousnumbers)
                if answerbet == 1:
                    getamount(1, 36)
                    play()
                elif answerbet == 2:
                    getamount(2, 2)

```

```

    play()
elif answerbet == 3:
    getamount(3, 2)
    play()
elif answerbet == 4:
    getamount(4, 2)
    play()
elif answerbet == 5:
    getamount(5, 2)
    play()
elif answerbet == 6:
    getamount(6, 2)
    play()
elif answerbet == 7:
    getamount(7, 2)
    play()
elif answerbet == 8:
    getamount(8, 3)
    play()
elif answerbet == 9:
    getamount(9, 3)
    play()
elif answerbet == 10:
    getamount(10, 3)
    play()
elif answerbet == 11:
    getamount(11, 3)
    play()
elif answerbet == 12:
    getamount(12, 3)
    play()
elif answerbet == 13:
    getamount(13, 3)
    play()
else:
    print("Error - Your Input is not on the table of possible bets.")
    break

if answerbet == 1 and betin == land:
    win(36)
if answerbet == 1 and betin != land:
    lose()
if answerbet == 2 and land in allred:
    win(2)
if answerbet == 2 and land not in allred:

```

```

lose()
if answerbet == 3 and land in allblack:
    win(2)
if answerbet == 3 and land not in allblack:
    lose()
if answerbet == 4 and land % 2 != 0:
    win(2)
if answerbet == 4 and land % 2 == 0:
    lose()
if answerbet == 5 and land % 2 == 0:
    win(2)
if answerbet == 5 and land % 2 != 0:
    lose()
if answerbet == 6 and land <= 18:
    win(2)
if answerbet == 6 and land > 18:
    lose()
if answerbet == 7 and land >= 19:
    win(2)
if answerbet == 7 and land < 19:
    lose()
if answerbet == 8 and land <= 12:
    win(3)
if answerbet == 8 and land > 12:
    lose()
if answerbet == 9 and land in range(13, 25):
    win(3)
if answerbet == 9 and land not in range(13, 25):
    lose()
if answerbet == 10 and land >= 25:
    win(3)
if answerbet == 10 and land < 25:
    lose()
if answerbet == 11 and land in allfirstcolumn:
    win(3)
if answerbet == 11 and land not in allfirstcolumn:
    lose()
if answerbet == 12 and land in allsecondcolumn:
    win(3)
if answerbet == 12 and land not in allsecondcolumn:
    lose()
if answerbet == 13 and land % 3 == 0:
    win(3)
if answerbet == 13 and land % 3 != 0:
    lose()

```

```
print("You lost all your Money... We hope to see you soon again!")
```

### 3 Example of Input and Output

Welcome to the Roulette game!

-----  
You start with a Budget of 1000 \$

Press Enter to see the Table of possible bets.

The following Bets are possible:

-----  
Enter '1' if you want to bet on a specific Number!  
Enter '2' if you want to bet on a red Number!  
Enter '3' if you want to bet on a black Number!  
Enter '4' if you want to bet on odd Numbers!  
Enter '5' if you want to bet on even Numbers!  
Enter '6' if you want to bet on Numbers between 1 and 18!  
Enter '7' if you want to bet on Numbers between 19 and 36!  
Enter '8' if you want to bet on Numbers between 1 and 12!  
Enter '9' if you want to bet on Numbers between 13 and 24!  
Enter '10' if you want to bet on Numbers between 25 and 36!  
Enter '11' if you want to bet on the first column!  
Enter '12' if you want to bet on the second column!  
Enter '13' if you want to bet on the third column!

-----  
Enter your Bet: 3

Your Current Budget: 1000  
The previous Numbers are: []

You chose to bet on the color black...  
How much money do you want to spend?: 200  
You can possibly win: 200 \$!

Good game!



The bullet is spinning.....

The Bullet just passed Number 25 ...

The Bullet nearly stopped at Number 16 ...

THE BULLET LANDS ON NUMBER 15 !

Nice, the Bullet stopped at the right Number!

You just won 200 \$!!!

Your Budget is now 1200 \$!

Press Enter to see the Table of possible bets.

The following Bets are possible:

-----  
Enter '1' if you want to bet on a specific Number!

Enter '2' if you want to bet on a red Number!

Enter '3' if you want to bet on a black Number!

Enter '4' if you want to bet on odd Numbers!

Enter '5' if you want to bet on even Numbers!

Enter '6' if you want to bet on Numbers between 1 and 18!

Enter '7' if you want to bet on Numbers between 19 and 36!

Enter '8' if you want to bet on Numbers between 1 and 12!

Enter '9' if you want to bet on Numbers between 13 and 24!

Enter '10' if you want to bet on Numbers between 25 and 36!

Enter '11' if you want to bet on the first column!

Enter '12' if you want to bet on the second column!

Enter '13' if you want to bet on the third column!

-----  
Enter your Bet: 10

Your Current Budget: 1200

The previous Numbers are: [15]

You chose to bet on Numbers between 25 and 36...

How much money do you want to spend?: 500

You can possibly win: 1000 \$!

I believe in you!!!

The bullet is spinning.....

The Bullet just passed Number 32 ...

The Bullet nearly stopped at Number 11 ...

THE BULLET LANDS ON NUMBER 34 !

WOW!!!

You just won 1000 \$!!!

Your Budget is now 2200 \$!

Press Enter to see the Table of possible bets.

The following Bets are possible:

-----  
Enter '1' if you want to bet on a specific Number!  
Enter '2' if you want to bet on a red Number!  
Enter '3' if you want to bet on a black Number!  
Enter '4' if you want to bet on odd Numbers!  
Enter '5' if you want to bet on even Numbers!  
Enter '6' if you want to bet on Numbers between 1 and 18!  
Enter '7' if you want to bet on Numbers between 19 and 36!  
Enter '8' if you want to bet on Numbers between 1 and 12!  
Enter '9' if you want to bet on Numbers between 13 and 24!  
Enter '10' if you want to bet on Numbers between 25 and 36!  
Enter '11' if you want to bet on the first column!  
Enter '12' if you want to bet on the second column!  
Enter '13' if you want to bet on the third column!

-----  
Enter your Bet: 2

Your Current Budget: 2200

The previous Numbers are: [15, 34]

You chose to bet on the color red...

How much money do you want to spend?: 300

You can possibly win: 300 \$!

I hope you'll win!

The bullet is spinning.....

The Bullet just passed Number 29 ...

The Bullet nearly stopped at Number 33 ...

THE BULLET LANDS ON NUMBER 15 !

Oh no, you lost! Unlucky!

I'm sorry, you lost 300 \$...

Your Budget is now 1900 \$!

Press Enter to see the Table of possible bets.