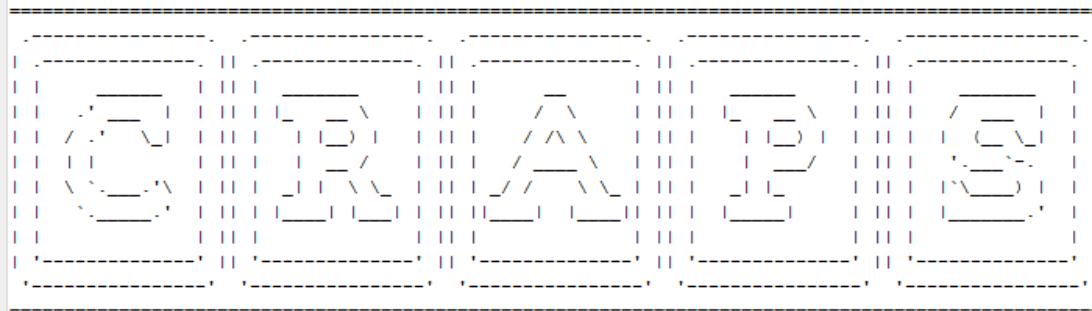# Project 1

Craps

In this project my main objective was to develop a game of craps. I did not want it to be any ordinary game of craps, but in the end I decided to still keep the original game if the player chooses to play it. The original game of craps is simple: You bet if you are going to either a 7 or 11 or bet you will roll a 2, 3, or 12. Now if you roll any other number beside that then that number becomes the point. If then after the point has been established and you roll a 7 you lose. But if you roll the point again one more time then you win. If you roll any other number you keep rolling until you get a 7 or the point. That is very simple but I wanted to do something extra in order to use all the various libraries. I then created "Story Mode". This story mode lays out a story of your mother needing her hospital bills paid and you deciding to take out a loan. Now that loan has interest and interest is taken every round you play. Now in order to win the game you have to come up with enough money to pay the debt off and save your mother.

Screenshot Examples of game being played


```
1. PLAY GAME (EASY MODE)
2. PLAY GAME (STORY MODE)
3. HOW TO PLAY
4. QUIT
D
```



```
"HOW TO PLAY CRAPS"

1. All craps games begin with a pass line bet. (Players start off with $100)
A craps player must choose whether they think the dice will land on a combined 7 or 11 to win ('pass the line') or lose by landing on a 2, 3 or 12.

2. The base dealers take all pass bets and add them to the craps table.

3. The shooter starts the craps game with the first roll of the dice, known as the comeout roll.

4.If the dice land on 7 or 11, pass line bettors win their wager.
Alternately, if the dice land on a combined 2, 3 or 12, don't pass bettors win.
Any other numbers the dice land on establishes a 'point' on the craps table, and the game continues.

5. Once a point (4, 5, 6, 7, 8, 9, 10) is set on the craps table,
craps players can bet on the dice landing the point or landing on 7.

6. The shooter rolls the dice until they land a 7 or the point.
```

EASY MODE
One game played and lost

```
EASY MODE

MONEY = $1000
Type P to bet on pass line or Type D for don't pass line
P
How much do you want bet?
500
TYPE R TO ROLL
r

SUM OF DICE = 4
POINT = 4

TYPE R TO ROLL
r

SUM OF DICE = 9

TYPE R TO ROLL
r

SUM OF DICE = 5

TYPE R TO ROLL
r

SUM OF DICE = 6

TYPE R TO ROLL
r

SUM OF DICE = 6

TYPE R TO ROLL
r

SUM OF DICE = 8

TYPE R TO ROLL
r

SUM OF DICE = 7

YOU LOSE

MONEY LOST = $500
MONEY = $500

MONEY LOST = $500
MONEY = $500

CONTINUE?(y/n)
n



THANKS FOR PLAYING!
GAMES LOST = 1
GAMES WON = 0
MONEY LOST = $500.00
RUN SUCCESSFUL (total time: 45s)
```

Two games played. One win One lost.

```
EASY MODE

MONEY = $1000
Type P to bet on pass line or Type D for don't pass line
p
How much do you want bet?
500
TYPE R TO ROLL
r

SUM OF DICE = 5
POINT = 5

TYPE R TO ROLL
r

SUM OF DICE = 9

TYPE R TO ROLL
r

SUM OF DICE = 12

TYPE R TO ROLL
r

SUM OF DICE = 8

TYPE R TO ROLL
r

SUM OF DICE = 5

YOU WIN

MONEY WON = $1000
MONEY = $1500
```

```
CONTINUE?(y/n)
y



MONEY = $1500
Type P to bet on pass line or Type D for don't pass line
p
How much do you want bet?
500
TYPE R TO ROLL
r

SUM OF DICE = 8
POINT = 8

TYPE R TO ROLL
r

SUM OF DICE = 6

TYPE R TO ROLL
r

SUM OF DICE = 7

YOU LOSE

MONEY LOST = $500
MONEY = $1000

CONTINUE?(y/n)
n



THANKS FOR PLAYING!
GAMES LOST = 1
GAMES WON = 1
BREAK EVEN
MONEY = $1000.00
RUN SUCCESSFUL (total time: 38s)
```

```
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BACKSTORY

It has been a long last three years. Your father died three years ago due to an unknown virus. Your mother has fallen ill, and has been bed ridden for the last year. She currently resides in the town hospital, but doctors have started to worry. They have stated that the illness has suddenly become more active, and things are starting to look grim for your mother. The doctor says that the hospital that houses her does not have the medical supplies to treat her illness. The doctor tells you that the hospital in the big city nearby can treat her illness, and possible cure her. The one caveat is that the bill for the medical treatment from that hospital is a $1000. Due to your mother illness you have barely been able to scrape on by with the money you earn from your full time CODING job. After hearing the information about the big city hospital you immediately head to your nearest bank. You ask for a $1000 loan from the bank, and eventually with a lot of hassle you were able to secure a $1000 loan. The Bank gave a list of responsibilities you have, due to you taking out a loan through them.

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```

LOAN = $1000
1. Must Pay loan back in full
2. A Compound Interest of 1% is charged per turn (MORE ON THAT LATER).
3. Loan must be paid back before you can pay for your mom's bills.

With that $1000 you have come up with a great idea. Ever since you were a kid you have been good at street craps. You have decided to take your skills to the local casino with a $1000 in hand. After every round of gambling a compound interest of 1% is charged on the loan. With your mothers life on the line you strategize a way to save the day.

```
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```
1. PAY the loan in full (loan amount + interest) to the bank before paying for mother's bills.
2. SAVE your mother by coming up with enough money to pay for her hospital expenses.

MONEY = $1000
Type P to bet on pass line or Type D for don't pass line

One game played and lost

```
MONEY = $1000
Type P to bet on pass line or Type D for don't pass line
P
How much do you want bet?
500
TYPE R TO ROLL
r

SUM OF DICE = 10
POINT = 10

TYPE R TO ROLL
r

SUM OF DICE = 12

TYPE R TO ROLL
r

SUM OF DICE = 5

TYPE R TO ROLL
r

SUM OF DICE = 9

TYPE R TO ROLL
r

SUM OF DICE = 4

TYPE R TO ROLL
r

SUM OF DICE = 7

YOU LOSE

MONEY LOST = $500
Current Loan Amount = $1010.00
Mother's Medical Bills = $1000.00
MONEY = $500.00
```

```
CONTINUE?(y/n)
n




You didn't win enough money to pay off your mother's medical bills or your loan.
Your mother dies soon after and you spend the rest of your life running from debt collectors.
MONEY = $-510.00
GAMEOVER
RUN SUCCESSFUL (total time: 2m 14s)
```

Multiple games play to win

```
MONEY = $1000
Type P to bet on pass line or Type D for don't pass line
P
How much do you want bet?
500
TYPE R TO ROLL
r

SUM OF DICE = 11
PASS THE LINE
YOU WIN

MONEY WON = $1000
Current Loan Amount = $1010.00
Mother's Medical Bills = $1000.00
MONEY = $1500.00

CONTINUE?(y/n)
y



MONEY = $1500.00
Type P to bet on pass line or Type D for don't pass line
P
How much do you want bet?
500
TYPE R TO ROLL
r

SUM OF DICE = 5
POINT = 5

TYPE R TO ROLL
r

SUM OF DICE = 4
```

```
r

SUM OF DICE = 5

YOU WIN

MONEY WON = $1000.00
Current Loan Amount = $1030.30
Mother's Medical Bills = $1000.00
MONEY = $2000.00

CONTINUE?(y/n)
y



MONEY = $2000.00
Type P to bet on pass line or Type D for don't pass line
P
How much do you want bet?
100
TYPE R TO ROLL
r

SUM OF DICE = 8
POINT = 8

TYPE R TO ROLL
r

SUM OF DICE = 8

YOU WIN

MONEY WON = $200.00
Current Loan Amount = $1061.52
Mother's Medical Bills = $1000.00
MONEY = $2100.00

CONTINUE?(y/n)
n'



You win enough money playing Craps to pay off your loan and your mother's medical bills.
You and your mother live happily ever after.
MONEY = $38.48
GAME OVER
```