

The background is a dark navy blue. On the left, there is a large, semi-transparent circular graphic containing a detailed image of a computer circuit board. Overlaid on the top left of this circle are two overlapping triangles: a blue one in front and a light green one behind it. In the top right corner, there is a faint, grey, 3D-rendered pattern of interlocking cubes or a circuit board layout.

# Nod Casino: Blackjack!

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# What is Blackjack?

- Game of chance
- Win by having a hand close to 21 or 21 but not over
- Gameplay: Player and dealer is dealt 2 cards and player must decide to hit or stand.



Tester: GETS a very, very attractive  
20 sek (cash) compensation





# Challenges we faced

... There were a few!





# Challenges in planning

## The simple complexities of Blackjack

Do we want to show strings J, Q, K, A for integers 10 and 11?

Split and double down functions?

Bank?

## Some functions too simple...?

Too many functions that did one thing



# Breaks... So many breaks!

Many possibilities when the game could stop

- Blackjack or bust for both the player and dealer turns

- Turns are while loops that need to be broken

Many if statements created many indents and many breaks

- Very difficult to keep track of when fixing bugs



# Scientific Method: Trial and Error

When we could not understand why our code was working or when it was not working.

Try to break the game to find flaws.





# Gamblers blues

Testing a game of chance means testing ALL outcomes

- Some outcomes happen often

- Some outcomes happen rarely

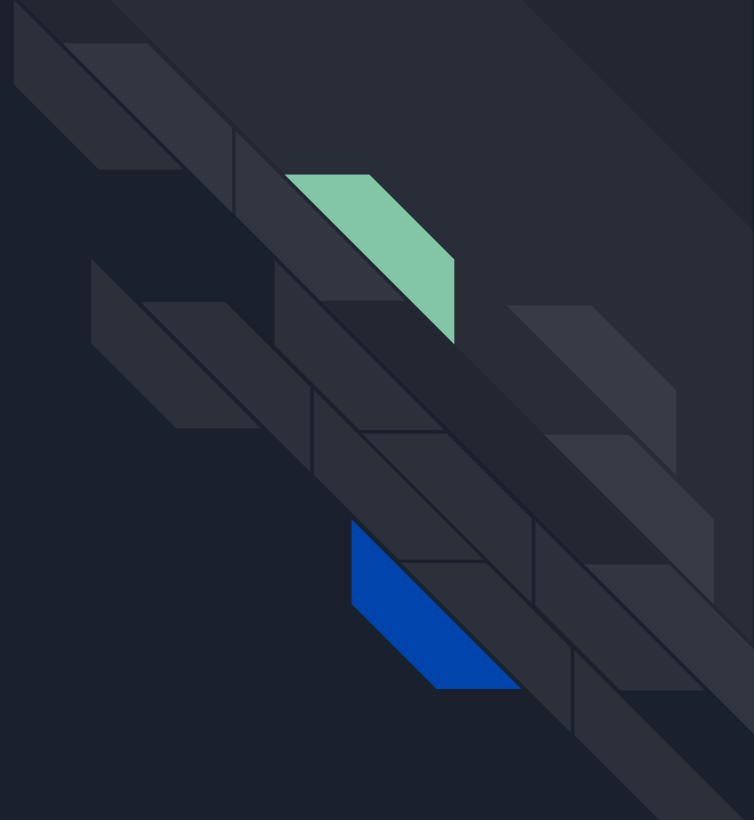
- Some outcomes happen almost never

Still not sure if there is a bug somehow somewhere...





# Highlights



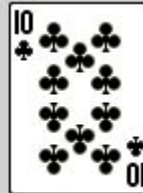
# Ace function

Worked really well from the beginning

We initially had another plan : -10 from hand but...

Good logic since we consider index position

You  
Score: 14





# Drawing cards from deck

Function worked well from the beginning

Utilized list logic to remove each drawn card from the deck

Meaning yes, you could count cards... But not really.



# Rewriting the logic

Rare bugs in our second version made us rewrite the code

Used almost the “same” logic but with simplified functions

... Failsafes included!

Easier to read, easier to understand, easier to bugfix and easier to add more functions and logic



# Improvements in future developments

## The simple complexities of Blackjack

- Add ability to split and double

- More than one player?

## Variables and inputs

- Transfer credits across games and ability to add more

- Able to enter string into integer inputs

“Realistic” card draw and persistent deck

Cheat easter egg!