

Website development/ Black Jack game



Research

Programming plays a critical role in website development, enabling the creation of visual appearance and the functioning of websites. Usually, developers divide the process of creation of the website into two categories: front-end and back-end. The front-end developers are usually responsible for the design of the website. They create a design first on different websites (Figma for example) and then create it in HTML/CSS or JavaScript. Then the back-end developer creates the functionality of the website using PHP, JavaScript or Python programming languages and Flask or Laravel frameworks, which are used to speed up development by providing pre-built modules for handling common tasks.



Research

I'm planning to become a website developer in the future (most likely both front-end and back-end because the salary is pretty good), so it's very important for me to know the process of creation of websites and which languages are mostly used in it.



Research

For this project I can't write a python code for website development because python is usually not used by programmers for website development, or if they use python the code is too difficult for me. The most common programming language used for website development is HTML/CSS and JavaScript, which I will learn in the future. For now, I'm writing a code for an online Black Jack game, in which I will show the probabilities of the win to players. So, my program will help players to understand if it's better to bet or not. By doing that I'm creating a real task for myself and enabling it to meet all the criteria for this assignment.

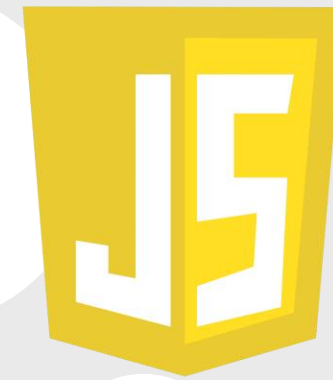
HTML



CSS



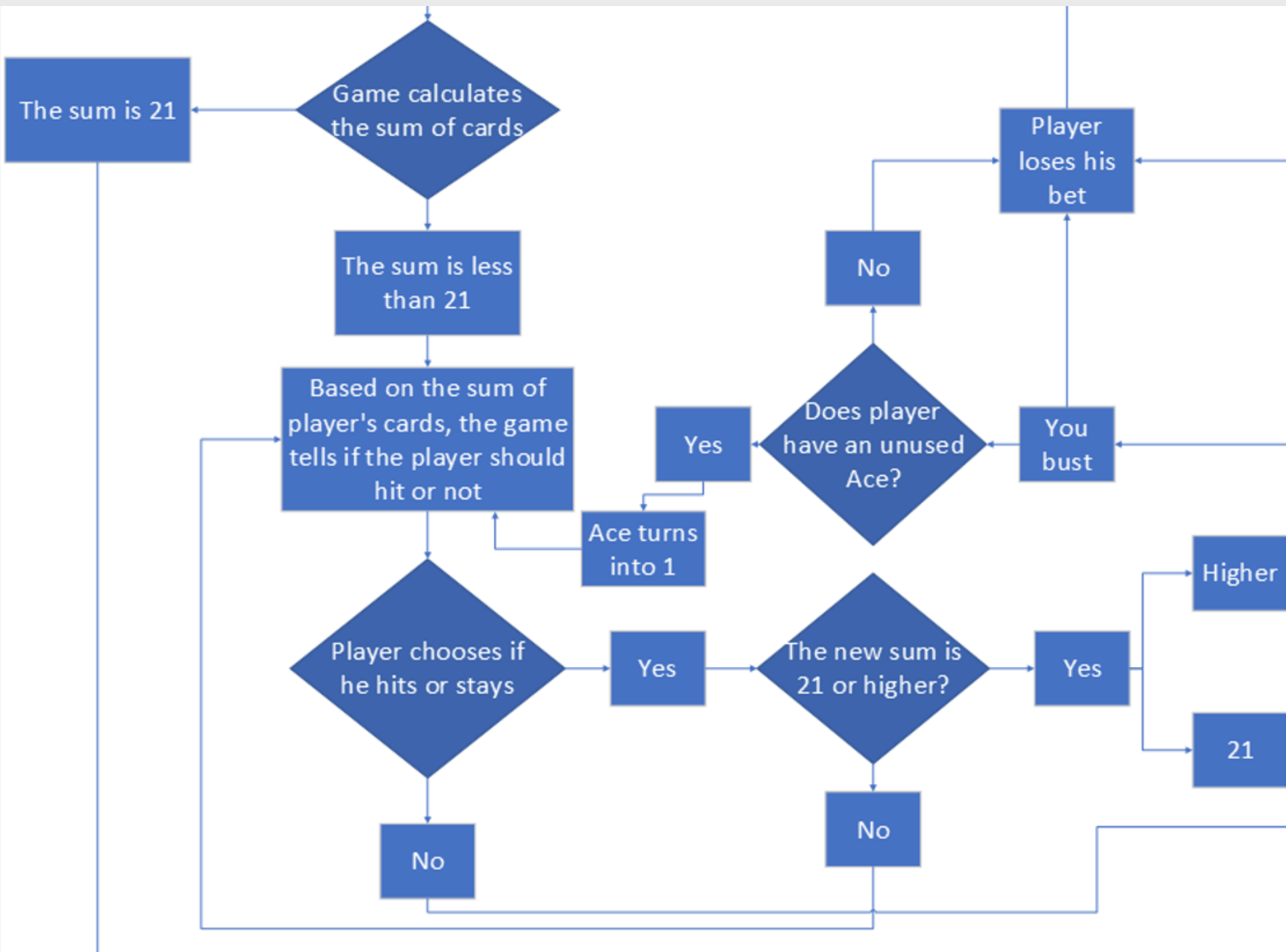
JavaScript



Flow Chart

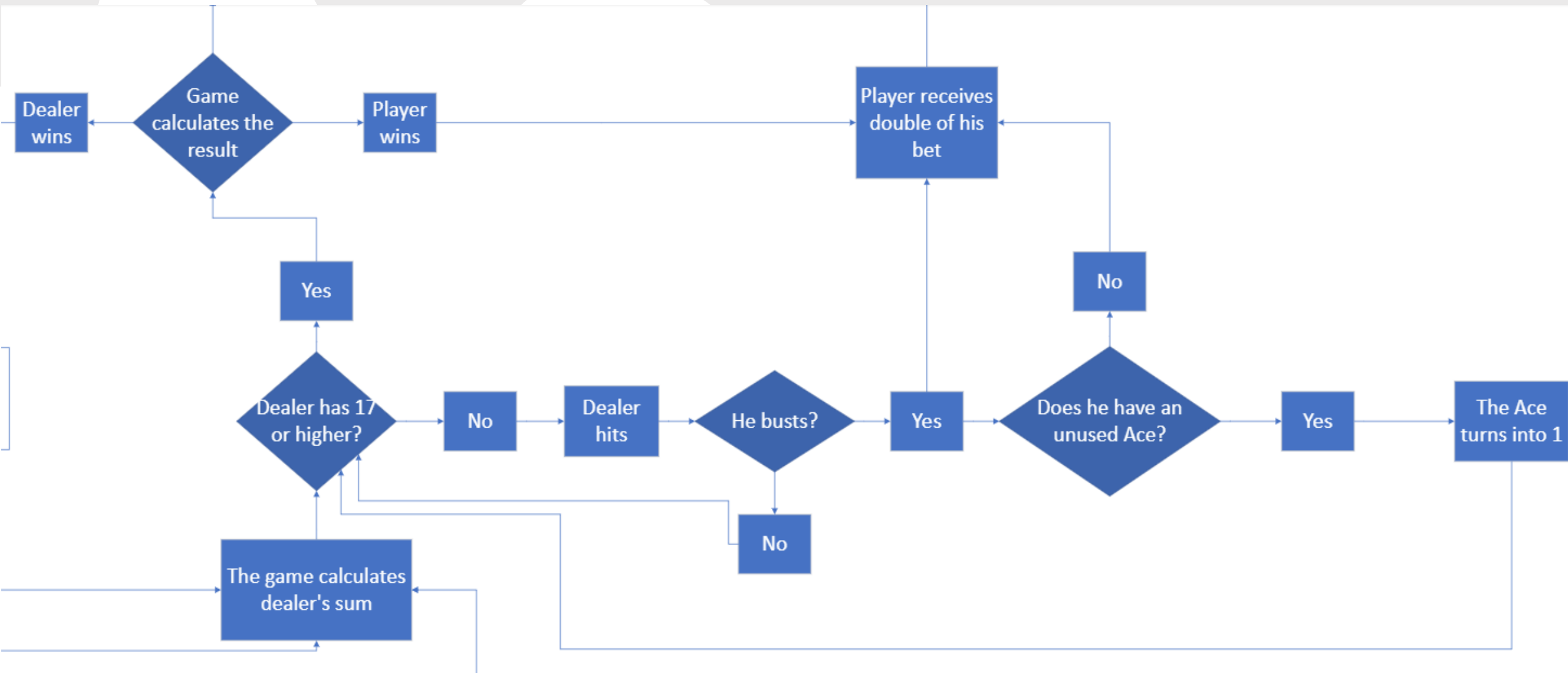
The beginning of the game

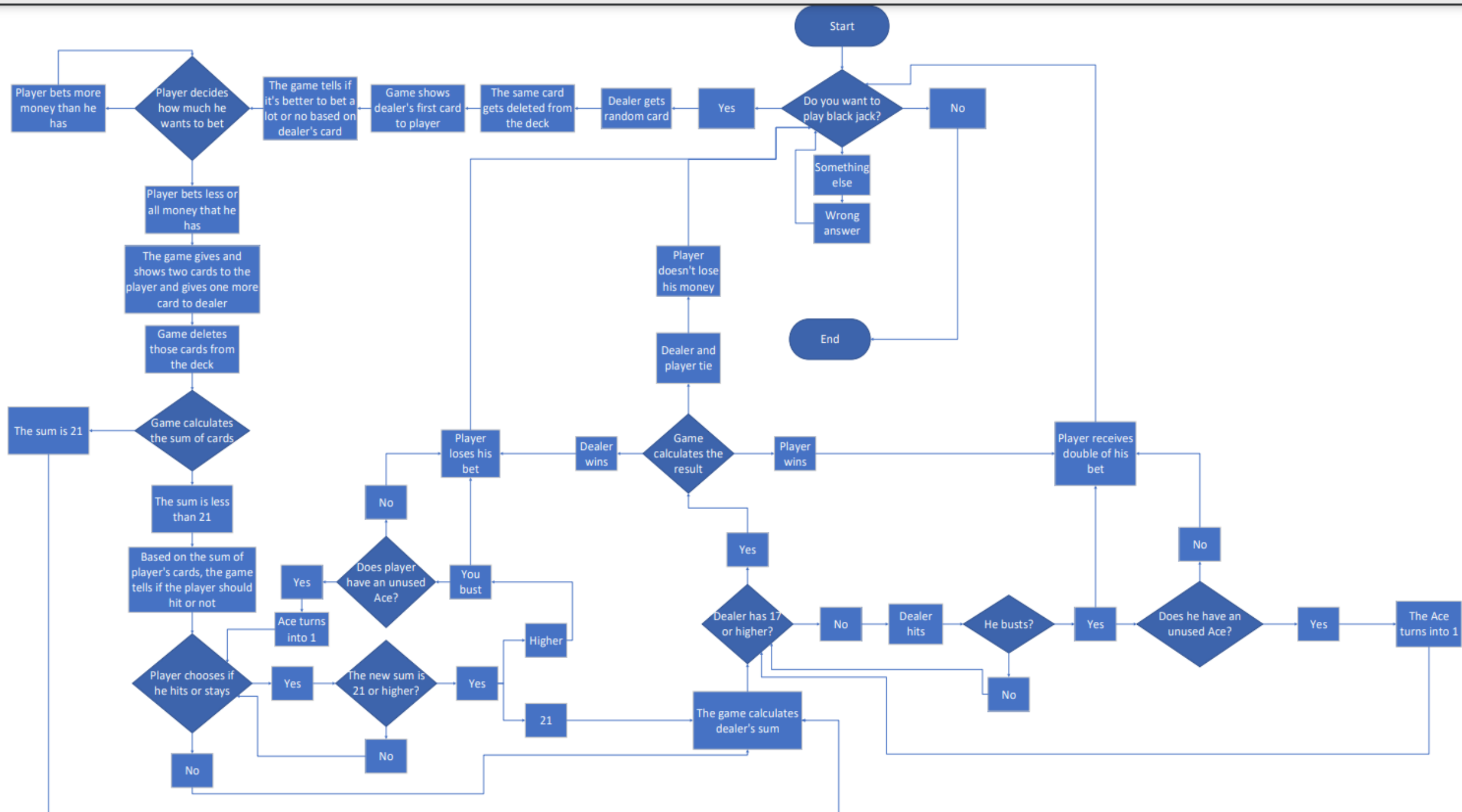




The game gives cards to player

The game gives cards to dealer and calculates the result





How Aces work

Example 2

```
Your cards are Jack and 6
Your sum is 16
It's risky to hit, but there is a small chance that you win with your cards
You should hit
Do you want to hit?
Your answer: stay
Dealer's cards are: 4 and Ace
Dealer has 15
dealer's new card is 8
Dealer has 23
One of dealer's cards was an Ace
Dealer has 13
dealer's new card is 4
Dealer has 17
You Lose!
```

Example 1

```
Do you want to hit?
Your answer: hit
Your new card is Ace
Your sum is 23
Another one of your cards was an Ace
The sum of your cards is 13
It's safe enough to hit
You should hit
Do you want to hit?
Your answer: yes
Your new card is 9
Your sum is 22
haha you bust
You have 160$ on your balance
```

Funny moments

Liam's game

"haha easy... WAIT WHAT THE"

```
Your cards are 5 and 5
Your sum is 10
You should hit
Do you want to hit?
Your answer: yes
Your new card is 10
Your sum is 20
You have good cards
You should stay
Do you want to hit?
Your answer: no
Dealer's cards are: King and 4
Dealer has 14
dealer's new card is 7
Dealer has 21
You Lose!
You have 199$ on your balance
Do you want to play Black Jack?
```

Funny moments

My game

*"Why is my computer
luckier than me?"*

```
Your new card is King
Your sum is 18
You have good cards
You should stay
Do you want to hit?
Your answer: stay
Dealer's cards are: 8 and 5
Dealer has 13
dealer's new card is Ace
Dealer has 24
Another one of dealer's cards was an Ace
The sum of dealer cards is 14
dealer's new card is 7
Dealer has 21
You Lose!
You have 220$ on your balance
Do you want to play Black Jack?
```

Funny moments

Jacob's game

*"AHAHAHA I'm built
different"*

```
Your cards are 2 and 8
Your sum is 10
You should hit
Do you want to hit?
Your answer: yes
Your new card is 10
Your sum is 20
You have good cards
You should stay
Do you want to hit?
Your answer: yes
Your new card is Ace
Your sum is 31
One of your cards was an Ace
The sum of your cards is 21
Dealer's cards are: 8 and 2
Dealer has 10
dealer's new card is 7
Dealer has 17
You Win!
```

Reflection

After I finished my code Mr. Macdonald told me that player bets before dealer shows his first card. But I didn't have time to re-do my code and I prefer the version where player bets after dealer shows his first card, so I decided not to change anything in my code. Also, for my website developer career maybe next time I'll create a program that's actually related to building a website.



Questions?

Sources:

- Chat GPT