

Blackjack Card Game

JavaScript Group Project

CodeClan, 5 November 2020

Dave, Jenken, Paul and Yana



1. Introduction

- ❖ Who we are: **The Suits!**
- ❖ What we made: **card game Blackjack**
- ❖ Structure of the presentation:
 - Brief
 - Planning
 - Implementation
 - Demo
 - Conclusion

BlackJack Game App Brief

The App should be able to:

1. On load: display a gaming table with “Draw Cards” button to start the game against the Dealer/computer
2. Have a control panel with "Deal Cards", "Hit" and "Stick" buttons
3. Deal two cards for Player and Dealer at the start of the game
4. Deal one card to the Player on "Hit" button
5. Calculate the hand total and display it next to the Player's and Dealer's hand
6. Show one of the cards face down in the Dealer's hand, and all cards flipped at end of the game
7. Determine win states and display the Game's result messages accordingly
8. Randomise 6 decks of 52 cards

Extensions:

1. Implement a “Double down”/“Split hand” option
2. Include multiple players in the game
3. Create a betting system
4. Have a high scoreboard with players' names

2. Planning

- ❖ Trello (tasks, division of labour) and Slack group
- ❖ Proto personas (Yana)
- ❖ Wireframes (Paul)
- ❖ User Journey (Dave)
- ❖ Components Structure and Data Flow (all)



Player Proto Persona no. 1 - Gregor

Life Motto: "Nothing ventured, nothing gained."



Age: 32

Work: Works in Marketing

Family: Single

Location: Aberdeenshire

Salary: 28K

Personality



Bio

Character traits: Free Spirit, Independence, Risk taker

Gamer type (Bartle classification): Explorer

Comes from a small town, self-made, always looking for new opportunities, professionally and socially, very much into online gambling

Spends lots of time on social media, has his own card games blog

Motivation

Incentive

Fear

Growth

Power

Social

Frustrations

- Finds his current job unrewarding
- Concerned about losing money via gambling

Goals

- Hopes to win a significant amount of money, get a mortgage and buy a faster car
- Wants to retire at the age of 50

User Needs

- As a keen gambler, Gregor wants a free gaming app that allows him to continue playing when the "fun (and funds) stop"

Preferred Channels

Traditional Ads

Online & Social Media

Referral

Player Proto Persona no. 2 - Alison

Life motto: "Take a break, take a breath"



Age: 20

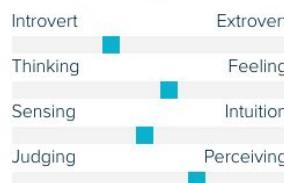
Occupation: Veterinary Student

Family: Single

Location: Glasgow

Salary: no

Personality



Bio

Character traits: Rational, Steady, Listener

Gamer type (Bartle classification): Achiever

Loves outdoors, films and reading. Attends a book club. Volunteers for local animal charity.

Frustrations

- Finds it difficult to socialise.
- Doesn't like living in a big city.

Goals

- Wants to move to the country after graduating.
- Wants to be more computer savvy.
- Hopes to be able to travel more and maybe even work in different countries.

User Needs

As card games beginner Alison wants to have access to a game with simple rules and clear instructions so that she can practice her player skills and have some fun in her spare time.

Motivation

Incentive

Fear

Growth

Power

Social

Preferred Channels

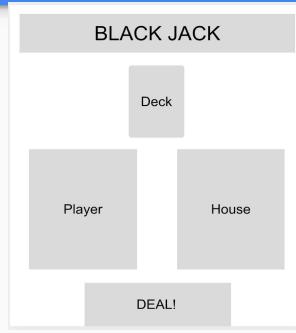
Traditional Ads

Online & Social Media

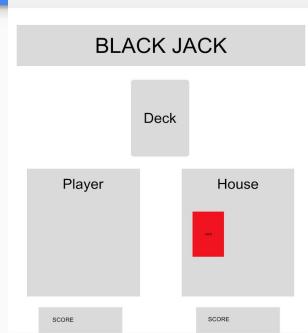
Referral

Wireframes

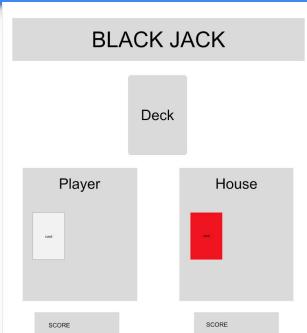
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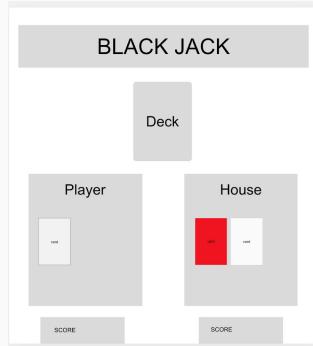
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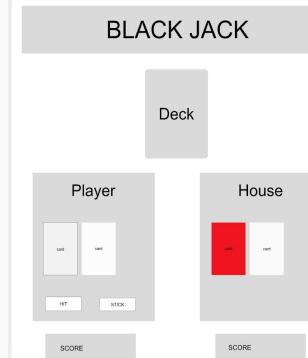
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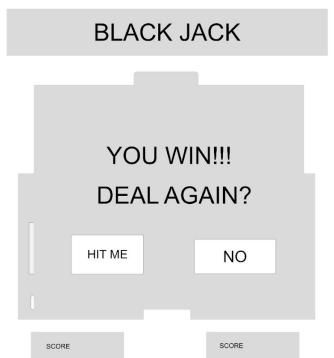
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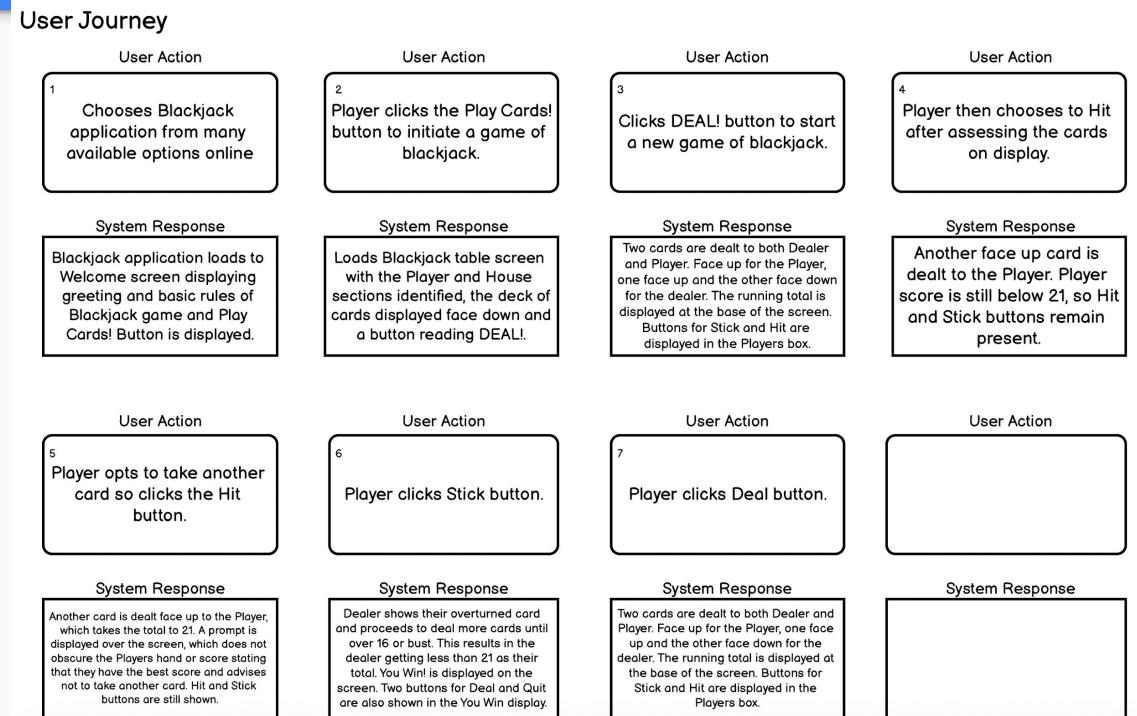


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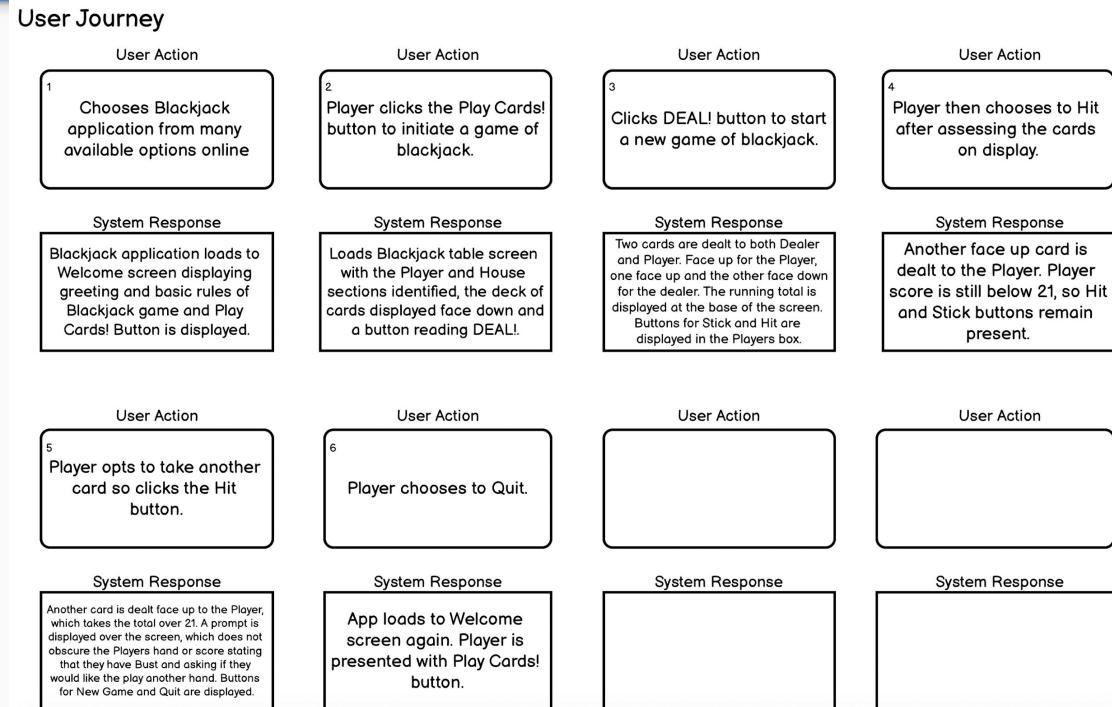
User Journey - 1

("Player Wins" scenario)



User Journey - 2

("Dealer Wins" scenario)



MVP Component Structure

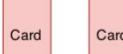
App.vue

Table.vue

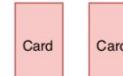
Result.vue

Dealer.vue

Deck.vue



Player.vue



ButtonField.vue

Hit

Stand

DoubleDown

Split

Quit

MVP Data Flow

App.vue

Components:

Table.vue

Table.vue

Components:
Result.vue
Dealer.vue
Deck.vue
Player.vue
ButtonField.vue

Methods:
quitGame()

Result.vue

Props:
dealerHandValue:[]
playerHandValue:[]

Methods:
calcResult()

Deck.vue

State:
deck:[]
dealersHand:[]
playersHand:[]

Methods:
drawCards()
addCardToHand()
shuffleDeck()

ButtonField.vue
Methods:
hit()
stand()
doubleDown()
split()

Dealer.vue

State:
dealerHandValue

Props:
dealerHand:[]

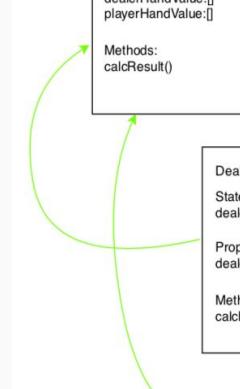
Methods:
calcHandValue()

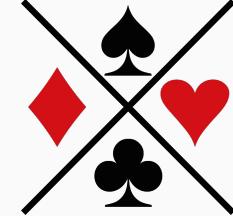
Player.vue

State:
playerHandValue

Props:
playersHand:[]

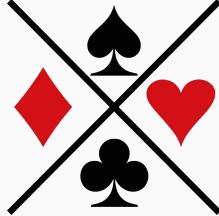
Methods:
calcHandValue()





3. Implementation

- ❖ Code (research, API, Axios)
- ❖ Logic (methods and cases)
 - Dealer Logic
 - Win states
 - Card value count
- ❖ Obstacles
 - Mob programming
 - Dealer infinite card draw
 - Aces logic



3. Implementation

❖ CSS

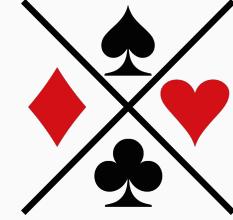
- Overall look
- Display the cards
- Buttons (active and disabled)
- Rules
- Total scores
- Card flip and the back of the card

SHOW TIME!



4. Conclusion

- ❖ Extensions
- ❖ What could have been done better
- ❖ What we've learnt



Pictures of our pets (and Jenken without his mask)

**“...just because -
why not?”**

Harrison Booth



Thank you for
listening :)

QUESTIONS?

