

HW3

Let's Play Blackjack

I. Introduction

- Design a webpage to play blackjack
- Use **HTML, CSS, JavaScript** to make a blackjack game
- Please follow the rules in following page
- You can add some the rules to make the game more playable
- Please write a readme to explain your codes and rules (-10pt)

II. Game Rules

- Game objective
 - Make the card points higher than the dealer's points but not exceeding 21
 - Exceeding 21 is called “bust”
- Card values
 - 2~10: counted as the number
 - J, Q, K: counted as 10
 - A (Ace): counted as 1 or 11, depending on which value benefits you most
- Betting
 - At the start of each round, players must place their bet

II. Game Flow

1. Deal: at the beginning of each round, every player and the dealer receive **two cards**
 - Each **player** gets two **face-up** cards
 - The **dealer** gets **one face-up card** and **one face-down card**
2. Player actions: each player takes turns choosing one of the following actions
 - **Hit:** take another card.
If your total points are not over 21, you may hit or stand
 - **Stand:** stop taking card and end your turn
1. Dealer's turn: after all players have finished their turns
 - The dealer reveals the hidden card
 - If total < 17, the dealer must **take another card**
 - If total ≥ 17 , the dealer must **stand**
 - If total > 21, the dealer **busts**
2. Payout phase
 - If a player busts, the player loses
 - If the dealer bursts, all players who have not busted win
 - Otherwise, compare the total points: the players with **higher total points (up to 21)** win
 - If both the player and dealer have the same total, it's a **tie**

III. Basic Requirement

- **Store the game information to `localStorage` and `sessionStorage` with `JSON` formats**
 - **`localStorage` (-10pt)**
 - Round of the game
 - Play time
 - The player's points of each round
 - The player's money after each round
 - The dealer's points of each round
 - **`sessionStorage` (-10pt)**
 - Round of the game
 - The player's cards of each round
 - The dealer's cards of each round
- **Design a display button** to read the game data from `localStorage` and `sessionStorage` (-10pt)
 - Display the results in an HTML table using CSS for styling
- **Design a reset button** to reset the game (-10pt)
 - Clear the data in `localStorage` and `sessionStorage`
- **Design a cheat button** to ensure the winning of dealer (-10pt)

IV. Important Notes

- Do not use jQuery, Vue or any library or related website tools, -30pt if you use it
- Use relative paths when linking files, -20pt if we need to modify your codes
- Compress all your files into HW3_313553000_王小明.zip, -10pt if you submit your file in the wrong format
- Delay = Copy = 0
- Deadline 11/13 23:59