

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