



- **OVERVIEW**

- Future RPS is a game based on Rock Paper Scissors. However Future RPS is not a randomness game. It is a mathematical and psychological game. Players need to memorize all cards and try to cheat their opponents. Future RPS has the easiest rule to play, but it is difficult to play well. "it takes a moment to learn, but a lifetime to master."

- **NUMBER OF PLAYER:** 2-6

- **CONTENTS:**

- Rock Cards x 13
- Paper Cards x 13
- Scissors Card x 13
- Chips x 60
- Blank Card x 3

- **OBJECT:**

- The object is to win the most chips in the game or make your opponents lose all their chips.

- **PRE- GAME SETUP**

- Each player gets 10 chips.
- Choose the beginner by the traditional Rock paper scissors game.
- Mix the  $([\text{number of players}] \times 2 + 1)$  Rock, Paper, and Scissors cards into the card deck. (Ex: if players are 3, then mix  $7(3 \times 2 + 1)$  Rock, Paper, and Scissors cards into the deck.)
- Deal 6 cards for each player from the card deck. (When it finished, there are still 3 cards in the deck.)

- **PLAY**

- The left player of the beginner should put the forced bet (one chip) into the pot, called blind bets.

- Beginner places one card face down on the desk and claims that card (you can cheat on it.)
- The second player, the right player of the beginner, has two choices.
- Throw one card away and give up this turn.
- Bet some chips, and places one card face down on the desk and claims that card (you can cheat on it.).
- Once a player has made their action the player to the left of them gets their turn to act.
- When the players have already placed a card face down on the desk. They have two actions.
- Add more chips into the pot and change the card which face down on the desk.
- Call: end this turn and waiting the result.
- Once a player has made their action the player to the left of them gets their turn to act.
- If all players call or throw the card, all players enter the resolution phase.
- In the resolution phase, all players reveal their cards and choose the winner of this turn by the traditional Rock paper scissors game. (paper> rock> scissors>paper)
- The winner takes all chips of the pot.
- In the second turn, the beginner becomes the right player of the last turn beginner and so on.

## ● **HOW TO WIN**

- The final winner is the player who has the most chips when one player has no chip anymore.
- The final winner is the player who has the most chips after six turns.

## ● **SPECIAL RULE FOR 3+ PLAYER**

- If it cannot decide the winner (Ex: there are three kinds of cards at the same time), throw the cards of this turn and move to next turn.
- If it cannot decide the winner (Ex: there are three kinds of cards at the same time), the chips of this turn will not return to the players.

# design process statement

- Defined problem of the traditional Rock paper scissors game.
  - Randomness
  - Fairness
- Randomness modification
  - Using the card deck to decrease the randomness.
  - Player should get more information by probability and statistics.
- Fairness modification
  - In the traditional Rock paper scissors game, some players delay their hand gestures to cheat on the game.
  - In the resolution phase, all players reveal their cards.
- More modification
  - Chips will make players get more achievements.
  - Blind bets will prevent the players throw the cards away much more often, slowing down the action considerably.
  - Claim card rule will add the psychology of game into the Future RPS because players need to cheat on the opponents and observing the opponent.
  - The special rule will prevent the draw in the game.

## Strategic

### 1. RISK VERSUS REWARD TRADEOFFS

- a. In this game, you can bet any chips you want. On the other hand, players can choose high reward with high risk, or low reward with low risk.

### 2. BLIND DECISIONS

- a. In this game, players need to make a blind decision to win a bet.
- b. However, blind decisions can be turned into other kinds of decisions by giving the player enough information. (Claim the card.)