

# Advance by chance

## Game Design Document

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# Game Design

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## Summary

“Advance by Chance” is a tile based game played on a 8x8 board that involves a dice roll paired with an optional betting system that has a high risk high reward outcome. If you are lucky, this game can be won in just 2 rounds, but the odds of that happening is either 6.7% or 5.7% depending on which betting route you take.

Similarly to blackjack, cards are removed from the stack once they have been played. (Counting cards is frowned upon, but definitely possible!)

## Gameplay

The goal of this game is to traverse through the board by rolling dice and determining what the best move is based on positional circumstances and roll outcome.

# Technical

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## Rules of play

- You cannot undo/take back bets once the outcome has been revealed
- If you are near the start and your bet doesn't go well, if the number of tiles to move backwards exceeds the total number of tiles moved forward, you simply return to the starting position. (No negative positions)
- If the stack of cards runs out, shuffle the used cards and keep going with the new stack
- Once the player has reached the end or rolled a number beyond the ending point, they are done.
- Aces = 1
- Bets are stackable

### **VALID BETS:**

1. Betting on numbered card {77%}: **+2**
2. Betting on odd {54%}: **+3**
3. Betting on even {46%}: **+4**
4. Betting on the exact card number/face {31%}: **+7**
5. Betting on suits {25%}: **+8**
6. Betting on face card {23%} **+9**

# Mechanics



## Simulated game:

- 1) Player 1 rolls the dice \*rolls a 5\*
- 2) Player 1 decides to bet that the card will even
- 3) The top card is flipped over and it is a red 4 of hearts.
- 4) Player 1 is correct, now the 5 he rolled becomes  $5+4=9$  (forwards)
- 5) \*everyone else does their roll and bets\*
- 6) Player 1 rolls the dice \*rolls a 1\*
- 7) Player 1 bets that it is jack
- 8) The top card is flipped over and it is a black 7 of clubs
- 9) Player 1 is wrong, now his roll becomes  $1+7=8$  (backwards)

# Design

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## Setting

There is no setting because it is a simple tile based game of chance, but it uses a chess board along with each player being represented as a keyboard cap.

## Objects

An object that directly influences the gameplay is the deck of cards. Depending on the bet of the player and the roll of the dice, you have the chance to gain a huge lead on the opponents. But on the other hand, it can also backfire and majorly screw up your chances of winning.

## Challenges

The main challenge is knowing when to make certain bets. Another prevalent challenge players face is the randomness of the dice roll and card pick. But if you play smart and not bet more than you can afford to lose, you should be able to use this game mechanic to your advantage in traversing across the gameboard.

## Development

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1. I decided I wanted to make a tile based game.
2. I initially wanted to make a game similar to chess where it is purely based on skill and knowledge.
3. I then realized that every idea I came up with was too complicated to explain or it has already been done.
4. I then utilized dice because everyone is familiar with it, and a little randomness makes this game more unpredictable/interesting.
5. I then realized that unpredictability leads to blaming the game for losses, so I needed to integrate a system which no matter the roll can boost your score.
6. I then analyzed the attributes of the cards and found ways to bet on them
7. I then made a point system for each bet and had their rewards be proportional to the probability of the win/loss ratio.

## Conclusion

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Overall, I enjoyed the process of making this game. I had some initial problems coming up with ideas on how to change things up from a simple board and dice game (which has been done a million times), to a unique probability based game that doesn't entirely rely on randomness. Because of this, the outcome of the game is often a result of your actions, which means it requires skill to be good. Something that I would have done differently if I were to make a game with this logic, is making custom cards with more attributes to bet on. Since cards have a finite number of attributes, the ways to bet on what the card will be picked is low in terms of how many cards there are in a deck.

**AFTER PLAYTESTING:**

Once my group and I finished playing my game, they provided some thoughtful genuine feedback that would make the gameplay more enjoyable. One of the main points brought up was the lack of direction on the gameboard. Since the route players take along the board is a zig-zag pattern, it was hard to keep track of which time you zig and which time you zag (turn left/right). Other than that, the group rated my game 4.5/5 enjoyability, 4.5/5 interested level at the start, and 4.5/5 interested level at the end.