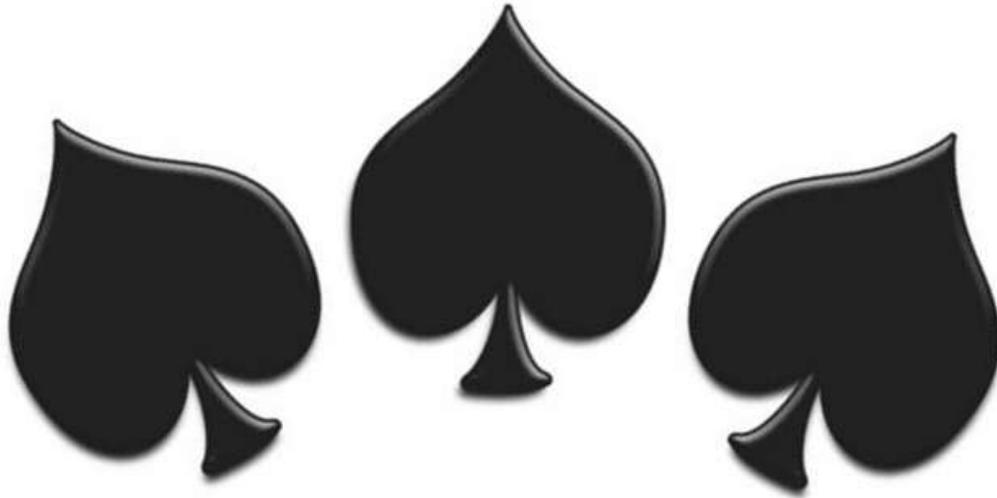


## Spade 3 Game Design



# Spade 3

A game of bidding, strategy & deception

By

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## ABSTRACT

Spade 3 is a card based game involving teams and strategy. It can be played using a standard deck of cards where some of the cards are associated with points. Based on the points each player thinks he can make by choosing a team, the player bids a certain number of points. The team then tries to garner those many points anonymously. The strategy lies in how well you can convince someone into believing that you are part of their team in either case that you really are or you are not. It basically helps keep mind alert and works your mind and brain cells in developing the strategy to be used.

## Author Keywords

Spade 3, Strategy, Card Game, Manipulative Behavior.

## MOTIVATION

When back in India I played a variety of card games with friends on weekends and during vacations. After coming to the US for doing my Masters Degree I started missing that experience. This game was introduced to me by my friends before I came here. The motivation behind designing and building this card game was that I can again play this game online or remotely with my friends.

## INTRODUCTION

The game of Spade 3 is a strategy based card game which can be played using a regular set of 52 playing cards. The main elements of the game are the points system associated with cards, bidding for points, team formation and trying to win the number of points bid (for bid winner's team) and not allowing them to do so (for the others). Trying to win points for your team using a good strategy, making other believe that you are on their team is what makes the game really interesting. It's a game of strategy and mental challenge.

## GAME OBJECTIVES

The main objective of the game is to help your team garner the total number of points required

before the other team does. The other sub-objectives in the order of occurrence are

- 1) Bid for the number of points you think you will be able to make and win the points bid.
- 2) For the winner of the bid, choosing the appropriate trump suit such that you can get the maximum number of hands.
- 3) For the winner of the bid, choosing a card whose owner will be the anonymous partner.
- 4) Win the number of points needed by your team before the other team does.
- 5) Stay anonymous and secretly help your partners.

## RULES

The game is based on points and there are two sets of rules:

- 1) Bidding Rules
- 2) Game Rules

Card	Points	Total
Spade 3	30	x 1 = 30
Aces	10	x 4 = 40
Kings	10	x 4 = 40
Queens	10	x 4 = 40
Jacks	10	x 4 = 40
Tens	10	x 4 = 40
Fives	5	x 4 = 20
Total		= 250

Table 1 – Points Table



The scoring system is pretty simple. The points of the player's cards are totaled according to the Table 1.

### **Bidding Rules:**

- 1) Bidding starts with:
  - a. The person who was dealt the first card.
  - b. The bid winner if he/she won the previous round.
  - c. The person from the winning team, with the maximum points if bid winner lost the previous game.
- 2) Remove the cards with the lowest points such that cards are distributed evenly among all players.
- 3) Bidding goes on in a round-robin fashion in the order the cards were dealt.
- 4) You can opt out of the bidding process if you think you cannot increase the bid further.
- 5) Once you opt out you cannot bid in the ongoing round.
- 6) The highest bidder wins the round when everyone else opts out.

### **Game Rules:**

- 1) The bid winner gets to choose the TRUMP suit and the card whose owner will be his anonymous partner.
- 2) The game starts with the bid winner playing a card.
- 3) One with the highest card (or highest TRUMP card) in a round of show of cards wins the round.
- 4) You can override every other card played before you by playing a card from the TRUMP suit.
- 5) A player can override with a TRUMP suit card only if he doesn't have a card of the same suit as that played by the first person in that round.

### **GAME PLAY**

The game is an exciting mix of "Strategy", "Suspense" and "Mental Challenge". Spade 3 has the highest point value and so it's important to get that for your own team by hook or by crook.

Every game starts with the distribution of cards and the bidding process. There need to be at least 4 players to play this game and is best played if the maximum number of players possible in the bid winner's team is lesser than those in the opposite team. Once the bid is won and the winner has chosen the TRUMP suit and the partner card, the game begins. The crucial feature of the game is how you can keep your loyalties anonymous. Since the bid winner's team generally contains lesser number of players it's important that the partner remains anonymous. This will help him in convincing the rivals that he is on their team and pull cards from them to add up to his team's points.

Strategy, cunningness and the ability to remain anonymous is extremely important here as the revelation of the partner early in the game can lead to a sure loss. To make the play balanced, the strategy of the bid winner's rival team members is to try and expose the anonymous partner as early in the game as possible. Thus it's a tug of war between the two teams, the bid winner's team in trying to keep the partner anonymous for as long as possible and for the other team to try and expose the partner early.

It is this clash between strategies, intentions and objectives that makes the game thrilling and fun.

### **DESIGN**

The game is intended to be an online version which can be played over the internet with friends. It can also be a LAN based game where multiple players can connect remotely to the central server.

The Game User Interface looks like shown in Figure 1 shown below. Each user will see two tabs from the UI namely the "Home" tab and his "Name" tab.

**Name Tab:**

This is the user’s own tab will contain the list of his cards in the form of buttons with the card’s icon which can be pressed to select a card to play. Once a card is selected for playing it will be removed from the user’s tab. The tab will also list the total number of points that the user currently has which will allow him to decide how much to bid and also how many points he has collected as the game progresses. It also has a text field to submit his bid which will reflect on the home tab.

**Home Tab:**

This is the tab which will be seen by all the players and is the common tab. This tab shows a two column layout.

The first column showing each player’s bid and once the game begins the “Highest Bid” and total of each player’s points that he/she has collected.

The second column shows the cards being currently played on the table.

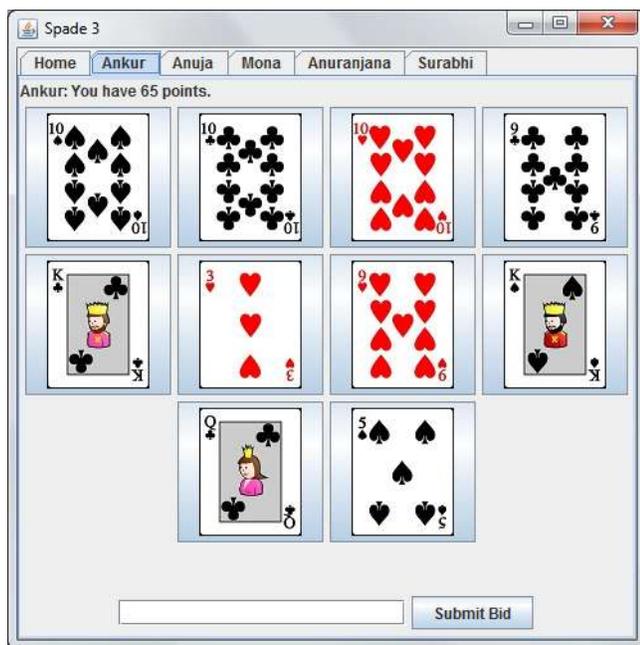


Figure 1 – The Game UI

This UI can be an applet based client window on the user’s screen or can be embedded onto a webpage like in case of Facebook Games.

**Architecture Diagram**

The diagram shown in Figure 2 is how the system architecture looks. The architecture is a client server based architecture wherein the central game server manages the game features like card shuffling, card dealing and ensuring that all the rules are followed.

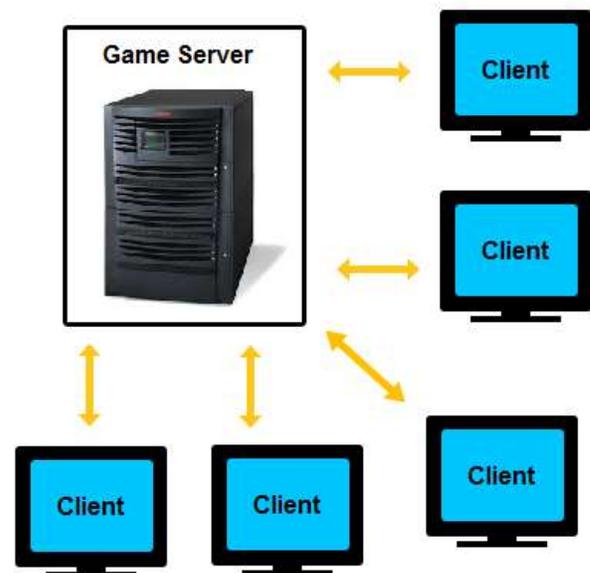


Figure 2 – Game Architecture

The server manages the client interaction and the connections. The clients see their respective UIs.

**IMPLEMENTATION**

The system implementation is in progress and currently is made up of a Java Applet based game which can be run on a single machine. Each client only has access to the Home tab and his/her own tab and the control is based on a password which each individual user will be given.



## LESSONS LEARNT

Game design is a complex process where you need to consider various factors. Despite this most games have some very common features:

- 1) An objective to be achieved
- 2) Rules for the game
- 3) A winner (single person or team)

Games have various objectives:

- 1) A means to have fun
- 2) A way to get a learning experience
- 3) Develop team spirit

Game design, objectives and rules change based on the audience and target age group.

## CHALLENGES

### Technical challenges:

- 1) One big challenge encountered in this project is converting the idea into implementation.
- 2) Deciding which technologies to use to build the system.
- 3) The interface of the system should be intuitive enough to be understood by user by leveraging familiarity.

## FUTURE WORK

I am planning to complete the implementation of the project, implementing all the rules first in an applet version and then an online version.

I also want to do a study and analysis of the game on psychological grounds. I also want to understand the psychological aspects like trust, effect of changing teams and partners, strategies used by people to gain trust and get points.

## CONCLUSION

The game of Spade 3 involves complex interaction between the players. Due to the manipulative nature of the game, trust levels get affected as multiple game rounds are played. The strategies affect game dynamics.

## ACKNOWLEDGMENTS

I thank Ellen for helping me with suggestion for the game and gave important feedback about my progress during class presentations.

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