

# 7 Diamonds



Link to Online Interface: <http://sp.yogeshmn.site90.net/7-diamonds-online>

**CS 8803 - DESIGN GAMES**  
(Under the guidance of Dr. Ellen Do)

By

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## ABSTRACT

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7 Diamonds is a strategic card game which is played with a normal deck of cards. The design of the game is aimed at encouraging strategic thinking to lower all your cards first. It requires being involved in the game by following the cards being lowered by other players in the game. The one who lowers all his cards first will be the winner of the game. Stakes can be placed on each game making the game more interesting. The person with the card 7 of diamonds is the one who has the privilege of starting the game and can plan strategically how he wants the game to proceed.

## Author Keywords

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7 diamonds

Strategy

age groups

creativity etc.

## MOTIVATION

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The motivation for designing this project came from a family card game which is very common in India called as “badaam satti” meaning “7 diamonds” in English. The popularity of the game is extremely high in Indian families for the core reason that the game does not deal with gambling in spite of it being a card game, it’s a fun game to play with members of the family of all age group, it involves active thinking and makes the mind alert and attentive and it brings out the creativity within the individuals. There is no age limit (upper nor lower) to play this game and can be enjoyed by people of all age groups.

## INTRODUCTION

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7 Diamonds is a game which has been inherited from the Indian card game prevalent among families called as “Badaam Satti”. The idea of the game is to encourage active thinking and then create a strategy to lower all your cards as soon as possible. A regular deck of 52 cards is used to play this game. The starter of the game has an advantage over the other players as he can lower the suite which is held by him i.e. the maximum number of cards held by him of that particular suite. The players are then supposed to lower the cards depending on the “7” which has been lowered. The cards can be lowered either in the increasing sequence or the decreasing sequence in order for the players to lower all the cards in their hands. Players can build strategies by blocking cards of a particular suite so that other players are not able to lower all their cards before you do. “Blocking” is a very major aspect of this game and can be perceived as a negative tactic in order to win the game. However, it is the strategy which is involved with this game and will not be considered as a negative tactic. The player who is successful in lowering all his cards first will be crowned as the winner of this game.

## RELATED WORK

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The idea of our project is to make this game popular along with other card games by involving the betting factor with the game. There is no online version of this game which has been developed by any other group. Moreover, there is not much reference about this game anywhere on the internet. The game can be made a part of “Zynga” games on facebook.com. This will make the game very popular on the global level and money can be replaced with a point system making the game competitive enough to be played amongst friends on facebook. There are a number of card games on the internet with



different variations. This game can be somewhat related to “solitaire” where in after you lower ace of each suite you are supposed to lower all your cards in a particular sequence to complete the game. The idea behind “7 Diamonds” is to start with 7 of each suite and then either go up or down lowering all your cards. The other difference here is that 7 diamonds can be played amongst various players by involving a stake at the end of each round in contrast to traditional solitaire.

cards(meaning that they can be lowered for sure)

- The first one to lower the last card shouts “DONE” and is the winner.

## SCORING

The scoring for this game is pretty simple. The sum of the remaining cards of all the players is recorded. The player with highest sum is the biggest loser.

## DESIGN AND IMPLEMENTATION

The game is very similar in design to the traditional game “solitaire” which contains a standard deck of 52 cards and the game begins with the player who holds the 7 of diamonds. The player can begin by lowering only the 7 of any suite before lowering any other card of any suite.

## THE PROCESS

- The Stack of cards is distributed equally amongst the players
- The “Key player” is the one who holds the 7 of diamonds.
- Each suite has to be lowered starting with a 7.
- The cards that the player lowers should be in the ascending or descending fashion.
- If the player does not hold a 7 of any suite or any consecutive card he has to say “PASS”.
- If the player has many options, he/she can successfully block a particular suite.
- When the player has last 3 cards he has to announce saying that he possesses 3 or 2 or 1 card and how many of them are SURE

## DESIGN SCHEMATICS

The games should start with 7 of any suite. The player is over when any player finishes all his cards in his hand. The game can also be continued to decide runner up and other positions in the game. In the ideal case considering that all players have lowered their cards, the figure would like the one below:

♥ King	♦ King	♠ King	♣ King
♥ Queen	♦ Queen	♠ Queen	♣ Queen
♥ Jack	♦ Jack	♠ Jack	♣ Jack
♥ 10	♦ 10	♠ 10	♣ 10
♥ 9	♦ 9	♠ 9	♣ 9
♥ 8	♦ 8	♠ 8	♣ 8
♥ 7	♦ 7	♠ 7	♣ 7
♥ 6	♦ 6	♠ 6	♣ 6
♥ 5	♦ 5	♠ 5	♣ 5
♥ 4	♦ 4	♠ 4	♣ 4
♥ 3	♦ 3	♠ 3	♣ 3
♥ 2	♦ 2	♠ 2	♣ 2
♥ Ace	♦ Ace	♠ Ace	♣ Ace

Fig. 1: The table will look like this when all the cards have been lowered by all the players in the game.



## ARCHITECTURE FOR ONLINE VERSION

The online version of the game will consist of a database which would maintain the points of a particular player. It would also maintain which player has which cards in his hands at that particular point of time and the card which is a valid card which can be lowered at that point of time. The schema would be that all the players are connecting to a common server where they can join a session and the cards will be distributed to them equally. The game will then be regulated by the server logic which will tell the game which card can be lowered by the player, whose turn it is, the cards remaining in each players hand, and also have suggestions (personalized) for blocking the card which would help the other players out.

The table for the game can be very similar to the one we have for poker:



Fig. 2: Possible online version for the game “7 Diamonds” which can be a part of Facebook Games.

## ARCHITECTURE DIAGRAM



Fig. 3: Architecture diagram of the online game

Steps to play the game:

1. Users of the system interact with the online interface eg. Facebook games, etc.
2. The online interface talks to the database to check for user data and the card it holds, no of moves left, etc.
3. The database communicated with the game logic to check for validation and the announce the winner and store the points/ money details again in to the database.
4. The database will then show this data to the user on the interface.

## TACTICS OF THE GAME

- The entire suite of cards can be blocked by a player if he has other consecutive cards to lower.
- This way if another players who possesses majority of cards of that particular suite has to PASS.
- For example, if you only have one card (say 9) of diamond suite. You know that the others cannot release cards 10, Jack, Queen, King of diamond suite, until you play out 9. Hence, this way you are blocking the other players from releasing their cards. You may keep blocking as far as you have some other cards to play with.
- Blocking other players wisely, increases the odds of winning.



## **DISCUSSION**

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The online version of the game will be the ultimate selling point of our group. Since such a game does not exist online and is a tested popular game we can be sure that it will be a viral once people start enjoying it.

## **UNIQUENESS**

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The uniqueness about this project is the idea itself. Although it may have been inherited from “solitaire”, the game as a whole is very different from solitaire. The idea of adding the betting factor and involving the money factor to this game will only make the game more interesting. The game also teaches one to think in various directions, right from trying to judge what cards the other players might have to trying to block and protect your cards until you are sure that it is the right time to play it. The game also will be working as a standalone game online and the players can be asked to join directly on our server without requiring them to be a part of facebook or any other social networking website.

## **LESSONS LEARNT**

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Game design, a subset of game development, is the process of designing the content and rules of a game in the pre-production stage and design of gameplay, environment, and storyline during production stage. The term is also used to describe both the game design embodied in a game as well as documentation that describes such a design. Game design requires artistic and technical competence as well as writing skills. [1]

The lessons learnt out of this project are as follows:

1. We understood the entire design process right from conception of the idea to the converting into an implementation.

2. This project has thought us to develop creative thinking strategies to play the game.

**Creative Thinking Strategies** consists of the following steps:

- Preparation: This involves how knowledgeable we are regarding the field.
- Incubation: It is the process of and is essential in the formation of many creative ideas
- Illumination: When one is enlightened with the possible Solution.
- Verification: This step involves conducting of experiments to verify if the solution is correct.

## **CHALLENGES**

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The challenges in building this project are as follows:

### **1. Technical challenges:**

- a. One of the major challenges in this project is convert the idea into implementation.
- b. It is also important to learn the various technologies to build the system.
- c. The interface of the system should be intuitive enough to be understood by the user.

### **2. Acceptance challenges:**

- a. Usability testing is one of the important criteria in making the game popular.
- b. People should be comfortable and interested in playing the game.



- Hence acceptability testing is a major criteria which needs to be sorted out before implementing the game.
- c. The money factor which would be a part of this game would need to be checked for as well. Including money to this game would not create an impression that the game is a “gambling game”. The target audience for the game is players from any age group.
- Play this game in normal and betting mode. The bet begins with \$700 and each round you can bet \$100.
  - To see the cards on board press key 2. Use keys 4 and 6 to navigate cards and 5 for action. You can say Pass by pressing key 0.

### **FUTURE WORK**

The future work in this project is to make the game available on facebook so that friends can compete against each other maintaining their score over time. With the popularity of the social networking sites and the remoteness of friends, including this game online is the best way to make people distant away from each other to play this game.

### **ONLINE VERSION**

A possible online version of this game could be something like this:

- The game is started by the player placing 7 of diamonds.
- The deck has to be placed in sequence. The sequence should be of same suit.
- The goal of the game is to be the first to release all cards.
- A tally will be taken at the end of 7 rounds and the one with the least points is the winner.

### **CONCLUSION**

The game is a strategic game to be played with friends/ family/ colleagues/ etc. It is a fun loving game to be enjoyed by players of all age group. The game concept is ready and is ready to be played by players physically by being present in one location. The rules of the game have also been mentioned and have been clearly explained to be followed by all the players.

### **ACKNOWLEDGMENTS**

We would like to thank Prof. Ellen Do for encouraging us to implement the idea of our choice and teaching us to focus on the stuff which we like to do. Her teachings in the class motivated us to come up with a game of our own and possibly make it bigger by creating an online version as well as a mobile version of it and making the game very popular.

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