Team name: Goon Squad

# Deliverable 1- Design Document

## 1. Project Background and Description:

For our project, we are doing Go Fish, which uses a standard pack of 52 cards. Cards are dealt to the players. Depending on the number of players there are, the cards dealt are different. For example, if two or three people are playing, each player receives seven cards. If there are 4 or more players, each player receives five cards. The rest of the cards are placed face down. The aim of the game is to have the most amount of “books”, and “books” are any four of a kind. The game goes in clockwise rotation. When a player is selected, the player can ask anybody for a certain card. If someone has that card, the player is required to give that card to the person who asked for it. If nobody has that card the asker has to “Go Fish”, which means to grab a card from the shared pool of cards in the middle. The player must have at least one card of the set or “book” in their hand in order to ask for that card. If you receive the card, your turn continues. When you receive all four cards you put it on the side.

## 2. Project Scope:

In our case, we are done when all the rules are implemented in the game logic/tested. As a team of two, we will split the workload 50/50. One person does half of the classes, the other person does the other half, and the rest of the requirements will be dynamically split.

## 3.High-Level Requirements

- Ability for each player to register with the game
- Ability for the game to communicate a win or loss
- Ability for players to know their status (score) at all times
- Randomisation of cards
- Card pick validation
- Turn based system
- Gameplay loop of Go Fish.

## 4.Implementation Plan

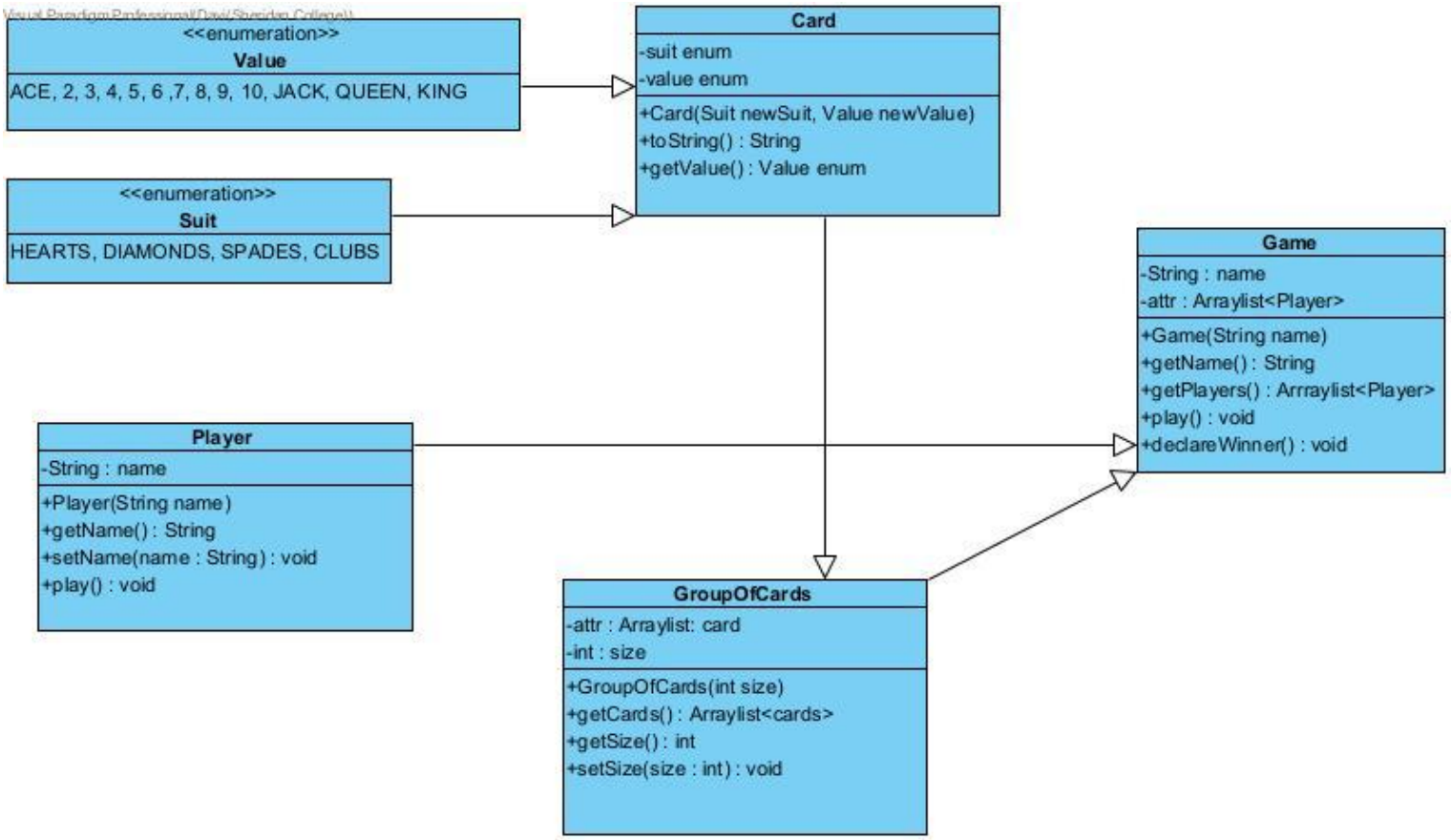
GitHub Link: https://github.com/YvesDonato/GoFish-GoonSquad

All files are stored appropriate files e.g. text files go into a text files folder. For our timeline, we can do two classes a week. One class for one person, the other class for the other. For the third week we will do the biggest class, game logic of Go Fish. Both of us are doing it together, because it is going to be the biggest class in the project.

## 5.Design Considerations

In order to make our project more cohesive, we can try to separate classes like game logic into smaller classes. We can focus on classes that aren’t inheriting any class to make it less coupled. We can be more sure we encapsulate a lot to make it more cohesive.

UML Diagram:


<<enumeration>>
Value
ACE, 2, 3, 4, 5, 6 ,7, 8, 9, 10, JACK, QUEEN, KING
<<enumeration>>
Suit
HEARTS, DIAMONDS, SPADES, CLUBS
Card
-suit enum
-value enum
+Card(Suit newSuit, Value newValue)
+toString() : String
+getValue() : Value enum
Game
-String : name
-attr : Arraylist<Player>
+Game(String name)
+getName() : String
+getPlayers() : Arrraylist<Player>
+play() : void
+declareWinner() : void
Player
-String : name
+Player(String name)
+getName() : String
+setName(name : String) : void
+play() : void
GroupOfCards
-attr : Arraylist: card
-int : size
+GroupOfCards(int size)
+getCards() : Arraylist<cards>
+getSize() : int
+setSize(size : int) : void

Team Contract

# SYST 17796 TEAM PROJECT

**Team Name: Goon Squad**

*Please negotiate, sign, scan and include as the first section in your Deliverable 1.*

**Please note that if cheating is discovered in a group assignment each member will be charged with a cheating offense regardless of their involvement in the offense. Each member will receive the appropriate sanction based on their individual academic honesty history.**

**Please ensure that you understand the importance of academic honesty. Each member of the group is responsible to ensure the academic integrity of all of the submitted work, not just their own part. Placing your name on a submission indicates that you take responsibility for its content.**

| Team Member Names (Please Print) | Signatures | Student ID |
|---|---|---|
| Project Leader:<br>Yves Donato |  | 991634397 |
| David Vallecampo |  | 991487504 |
| | | |
| | | |

**For further information read Academic Integrity Policy on AccessSheridan.**

By signing this contract, we acknowledge having read the Sheridan Academic Integrity Policy as per the link below.

https://policy.sheridanc.on.ca/dotNet/documents/?docid=917&mode=view

## Responsibilities of the Project Leader include:

- Assigning tasks to other team members, including self, in a fair and equitable manner.
- Ensuring work is completed with accuracy, completeness and timeliness.
- Planning for task completion to ensure timelines are met
- Any other duties as deemed necessary for project completion

## What we will do if . . .

| **Scenario** | **Accepted initials** | **We agree to do the following** |
|---|---|---|
| Team member does not deliver component on time due to severe illness or extreme personal problem | D.V Y.D | a) Team absorbs workload temporarily _X_<br>b) Team seeks advice from professor _X_<br>c) Team shifts target date if possible _X_<br>d) Other: |
| Team member cannot deliver component on time due to lack of ability | D.V Y.D | a) Team reassigns component _X_<br>b) Team helps member _X_<br>c) Team member must ask professor for reference material _X_<br>d) Other: |

| | | |
|---|---|---|
| Team member does not deliver component on time due to lack of effort | D.V Y.D | a) Team absorbs workload _X_<br>b) Team "fires" team member by not permitting his/her name on submission _X_<br>c) Other: |
| Team member does not attend team meeting | D.V Y.D | a) Team proceeds without him/her and will assign work to the absent member _X_<br>b) Team doesn't proceed and records team member's absence _X_<br>c) Team proceeds for that meeting but "fires" member after_X_ occurrences _X_ |
| An unforeseen constraint occurs after the deliverable has been allocated and scheduled (a surprise test or assignment) | D.V Y.D | a) Team meets and reschedules deliverable _X_<br>b) Team will cope with constraint _X_<br>c) Other: |
| Team cannot achieve consensus leaving one | D.V Y.D | a) Team agrees to abide by majority vote _X_ |

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|---|---|---|
| member feeling "railroaded", "ignored", or "frustrated" with a decision which affects all parties | | b) Team flips coin _X_<br><br>c) Other: |
| Team members do not share expectations for grade desired | D.V Y.D | a) Team will elect one person as "standards-bearer" who has the right to ask that work be redone _X_<br><br>b) Team votes on each submission's quality _X_<br><br>c) Team will ask for individual marking and will identify sections by author _X_<br><br>d) Other: |
| Team member behaves in an unprofessional manner by being rude or uncooperative | D.V Y.D | a) Team attempts to resolve the issue by airing the problem at team meeting _X_<br><br>b) Team requests meeting with professor to problem-solve _X_<br><br>c) Team ignores behaviour _X_<br><br>d) Team agrees to avoid use of all vocabulary inappropriate to the business setting _X_ |
| Team member assumes or requests that his/her name be signed to a submission but has not participated in | D.V Y.D | a) Team agrees that this is cheating and is unethical _X_ |

| | | |
|---|---|---|
| production of the deliverable | | b) Friends are friends and should help each other _X_<br><br>c) Team will submit with signature but will advise professor who will take action _X_ |
| There is a dominant team member who is content to make all decisions on the team's behalf leaving some team members feeling like subordinates rather than equal members | D.V Y.D | a) Team will actively solicit consensus on all decisions which affect project direction by asking for each member's decision and vote _X_<br><br>b) Team will express subordination feelings and attempt to resolve issue _X_<br><br>c) Other: |
| Team has a member who refuses to participate in decision making but complains to others that s/he wasn't consulted | D.V Y.D | a) Team forces decision sharing by routinely voting on all issues _X_<br><br>b) Team routinely checks with each other about perceived roles _X_<br><br>c) Team discusses the matter at team meeting _X_ |