SYST 17796 DELIVERABLE 1

TEXAS HOLDEM – SYNONYM FOR COMMERCE

OVERVIEW

1. Project Background and Description

With the completion of this project Synonym For Commerce will deliver a functioning and fun blackjack game that demonstrates our knowledge of programming as well as our dedication to industry standards, fundamentals and quality controls.

In a typical game of blackjack the player is dealt two cards visible only to them and competes against up to six other players given the same. The table is then dealt three cards; face up, so as to be visible to all. The game continues with two more deals of one card each to the table so long as there are still players completing. At intervals between each of these four deals players may bet money, hold, raise or fold. Who can do what is determined by a rotation. Players determine their likelihood of having a better “hand” than other players and bet money according to this perceived variance in hand values as well as psychological factors. The money bet is winner takes all (except in the case of split pots). Folding ends a players participation in the rest of the game and therefore forfeits their chances of winning the pot. If a bet is raised each player must “see” the raise or fold. A winner is determined based on who's hand has the highest value at the end of the game or who has not folded.

The provided Project_Starter_Code for this project is written in Java and loosely lays out the structure of the final project. The class Card is an abstract class, upon which, types of cards can be extended from. This team has created a PlayingCard class which extends the Card class to give it the properties of the type of cards feature in blackjack; these cards feature four suits of thirteen face values each, comprising a deck of fifty two cards in total. This deck is built using the class Deck which is an extension of the GroupOfCards class provided in the Project_Starter_Code. This same class will also be extended to make the hands used by the players. The players will be objects of a class extended from the provided Player class and these objects will interact with the deck object through rules laid out in the as of yet non-existant child of the provided Game class.

2. Project Scope

This Project will be created by the sole member of Synonym For Commerce; Conor Tompkins. The game will prompt the user to play with up to six others each of whom can start with varying amounts of money. After playing each round players will be given the option to quit and any

player lacking funds to continue will automatically be removed. The winner is whoever left the game with the highest amount of money once everyone has left or only one player remains. The game will be playable through console by default. The team will be looking into a gui if time permits.

3. High-Level Requirements

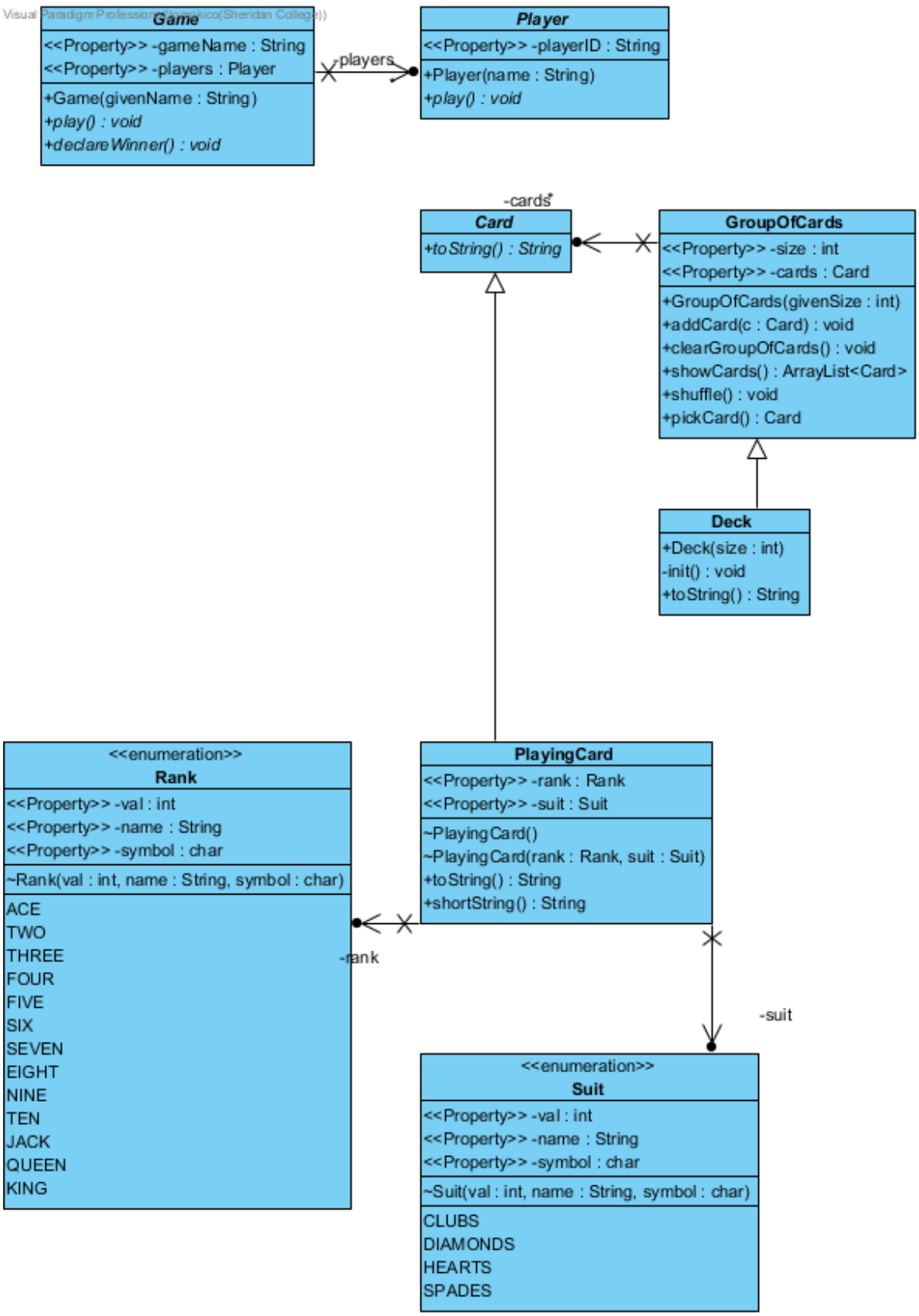
The High-Level Requirments will be met only if time permits and will have the game playable through a point and click interface with a table and cards. This will, most likely, be implemented through a web browser, however, as most web browsers do not support java it will require either a plugin or for the code to be converted to JS. It is for these reasons that an interactive GUI is a stretch goal for this team.

4. Implementation Plan

https://github.com/cnrtks/FundamentalsAssignment1.git
This repository will primarily be used to backup the project as it is modified as well as housing all supporting documentation for the project. Netbeans 10.0 is the IDE being used for the project. The visual structuring will be done with Visual Paradigm. Any art Assets will be created using GIMP.

5. Design Considerations

In order for this program to be as flexible as possible the code will be broken up into many classes. The provided code has already set a precedence for variable scope in that it does not make any assumption with regards to what kind of cards are being used. The program will be easily adjustable for different game rules, and even, different games.


Visual Paradigm Professional(Academico(Sheridan College))
Game
<<Property>> -gameName : String
<<Property>> -players : Player
+Game(givenName : String)
+play() : void
+declareWinner() : void
-players
Player
<<Property>> -playerID : String
+Player(name : String)
+play() : void
-cards*
Card
+toString() : String
GroupOfCards
<<Property>> -size : int
<<Property>> -cards : Card
+GroupOfCards(givenSize : int)
+addCard(c : Card) : void
+clearGroupOfCards() : void
+showCards() : ArrayList<Card>
+shuffle() : void
+pickCard() : Card
Deck
+Deck(size : int)
-init() : void
+toString() : String
<<enumeration>>
Rank
<<Property>> -val : int
<<Property>> -name : String
<<Property>> -symbol : char
~Rank(val : int, name : String, symbol : char)
ACE
TWO
THREE
FOUR
FIVE
SIX
SEVEN
EIGHT
NINE
TEN
JACK
QUEEN
KING
PlayingCard
<<Property>> -rank : Rank
<<Property>> -suit : Suit
~PlayingCard()
~PlayingCard(rank : Rank, suit : Suit)
+toString() : String
+shortString() : String
-rank
-suit
<<enumeration>>
Suit
<<Property>> -val : int
<<Property>> -name : String
<<Property>> -symbol : char
~Suit(val : int, name : String, symbol : char)
CLUBS
DIAMONDS
HEARTS
SPADES

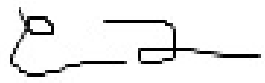
SYST 17796 TEAM PROJECT

Team Name: Synonym For Commerce

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: Conor Tompkins		991512323

For further information read Academic Honesty Policy on AccessSheridan or visit the faculty office and speak with the Program Support Specialist.

By signing this contract, we acknowledge having read the Sheridan Academic Honesty 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 Y/N + initial**	**We agree to do the following**
Team member does not deliver component on time due to severe illness or extreme personal problem	Y : CT	**a) Team absorbs workload temporarily __**
Team member cannot deliver component on time due to lack of ability	Y : CT	**b) Team helps member __**
Team member does not deliver component on time due to lack of effort	Y : CT	**a) Team absorbs workload __**

Scenario	**Accepted Y/N + initial**	**We agree to do the following**
Team member does not attend team meeting	Y : CT	**c) Team proceeds for that meeting but "fires" member after _2_ occurrences __**
A piece of production equipment fails such as a printer, disk drive, or laptop	Y : CT	**a) Backup copies will be made and kept in the college __**
An unforeseen constraint occurs after the deliverable has been allocated and scheduled (a surprise test or assignment)	Y : CT	**a) Team meets and reschedules deliverable**
Team cannot achieve consensus leaving one member feeling "railroaded", "ignored", or "frustrated" with a decision which affects all parties	Y : CT	**a) Team agrees to abide by majority vote**
Team members do not share expectations for grade desired	Y : CT	**a) Team will elect one person as "standards-bearer" who has the right to ask that work be redone**

Scenario	**Accepted Y/N + initial**	**We agree to do the following**
Team member behaves in an unprofessional manner by being rude or uncooperative	Y : CT	**c) Team ignores behaviour __**
Team member assumes or requests that his/her name be signed to a submission but has not participated in production of the deliverable	Y : CT	**a) Team agrees that this is cheating and is unethical __**
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	Y : CT	**b) Team will express subordination feelings and attempt to resolve issue**
Team has a member who refuses to participate in decision making but complains to others that s/he wasn't consulted	Y : CT	**a) Team forces decision sharing by routinely voting on all issues**