Deliverable 1:
Group: Twenty One
Members: Joshua Clark, Ryan Barrett, Nicholas Nieto

Blackjack Design Document

1.
Project Background and Description:

Our final project will be a fully functioning game of blackjack (or 21), without the gambling aspect. Players will be dealt 2 cards at the start and then have a prompt if they want to receive another card, give up their cards, or move to the next player. The goal to this game is have your cards add up to the total of 21, no higher, no less. This project will be coded in java using the existing card game starter code with the standard card deck being added into the card deck array.

2.
Project Scope:

This project's members contains Joshua Clark, Ryan Barrett, and Nicholas Nieto. Joshua's role is the project leader and is responsible for seeing if things are done on time and to complete the Design Document Template, Ryan Barrett is responsible for managing the Git repository, and Nicholas is responsible for UML diagrams. All of us have equal say on ideas and solutions on how to code the project and the coding itself.

3.
High Level Requirements:

Requirements our game must meet consist of a fully functioning randomized deck, which is able to be distributed one card at a time and which cards will be removed out of the deck (array). This project also must be able to retain 4 players worth information throughout a session of the game to keep track of their points and which cards they currently have. Any time during a players turn they will have an option to view their cards just like in the real game. In the event that a player has a total of 21, the game will congratulate that player, and reset while a point is added to that player.

4.

Implementation Plan:

Git Link: https://github.com/barrerya/blackJack

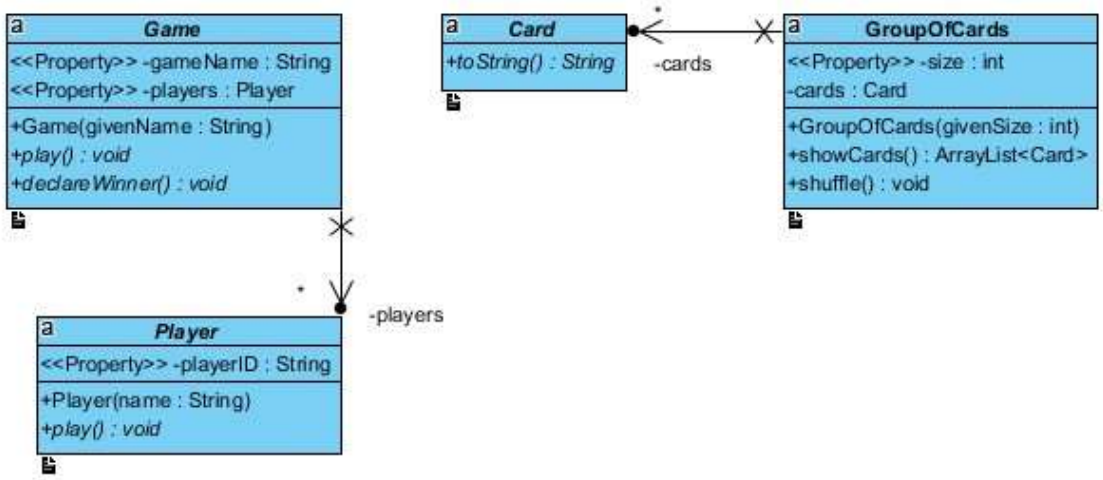
With the link above our group is expected to check the current code present to make sure any changes made are correct and present. In the event that someone's work was not pushed to the repository they will be asked to try again. Our design document and UML diagrams will be available in this repository. As previously stated this will be coded in java using Eclipse and NetBeans

5.

Design Considerations:

The current code has premade arrays and methods for the base purpose of the game, to collect player information, game information, and card information. For encapsulation we can use enums to store card suites or card values, and then have an array to track player scores or which cards the player currently has. Delegation is present where taking out a card from the array affects the total cards both the player and deck still have, as well as the value of the player's hand. This base program is flexible because it has just enough code to get us started and we can easily add on to it and modify it to suit our needs.

UML Diagram



Team Contract

SYST 17796 TEAM PROJECT

Team Name: ~~Sathea~~ ~~Clark~~ Twenty One

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.

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

Team Member Names (Please Print)	Signatures	Student ID
Project Leader: Joshua Clark	Joshua Clark	991516472
Ryan Barrett	Ryan Barrett	991538231
Nicholas Nieto	Nicholas Nieto	991524366

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 JC PR ML	a) Team absorbs workload temporarily ✓ b) Team seeks advice from professor __ c) Team shifts target date if possible __ d) Other:
Team member cannot deliver component on time due to lack of ability	Y JC PR ML	a) Team reassigns component __ b) Team helps member ✓ c) Team member must ask professor for reference material __ d) Other: b
Team member does not deliver component on time due to lack of effort	Y JC PR ML	a) Team absorbs workload __ b) Team "fires" team member by not permitting his/her name on submission ✓

		c) Other:

"ignored", or "frustrated" with a decision which affects all parties		b) Team flips coin __ c) Other:
Team members do not share expectations for grade desired	Y SC RP MM	a) Team will elect one person as "standards-bearer" who has the right to ask that work be redone __ b) Team votes on each submission's quality __ c) Team will ask for individual marking and will identify sections by author ✓ d) Other:

Scenario	Accepted Y/N + initial	We agree to do the following
Team member behaves in an unprofessional manner by being rude or uncooperative	Y JC 	a) Team attempts to resolve the issue by airing the problem at team meeting __ b) Team requests meeting with professor to problem-solve ✓ c) Team ignores behaviour __ d) Team agrees to avoid use of all vocabulary inappropriate to the business setting __
Team member assumes or requests that his/her name be signed to a submission but has not participated in production of the deliverable	Y JC 	a) Team agrees that this is cheating and is unethical __ b) Friends are friends and should help each other __ c) Team will submit with signature but will advise professor who will take action ✓
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 JC 	a) Team will actively solicit consensus on all decisions which affect project direction by asking for each member's decision and vote ✓ b) Team will express subordination feelings and attempt to resolve issue __ c) Other:
Team has a member who refuses to participate in decision making but complains to others that s/he wasn't consulted	Y JC 	a) Team forces decision sharing by routinely voting on all issues __ b) Team routinely checks with each other about perceived roles ✓ c) Team discusses the matter at team meeting __

Scenario	Accepted Y/N + initial	We agree to do the following
Team member does not attend team meeting	Y JC RB MM	a) Team proceeds without him/her and will assign work to the absent member ✓ b) Team doesn't proceed and records team member's absence __ c) Team proceeds for that meeting but "fires" member after __ occurrences __
A piece of production equipment fails such as a printer, disk drive, or laptop	Y JC MM RB	a) Backup copies will be made and kept in the college __ b) A locker or "share" directory will be used for joint access __ c) A photocopy and duplicate disk of all deliverables will be made __ d) Other: google drive
An unforeseen constraint occurs after the deliverable has been allocated and scheduled (a surprise test or assignment)	Y JC RB MM	a) Team meets and reschedules deliverable __ b) Team will cope with constraint ✓ c) Other:
Team cannot achieve consensus leaving one member feeling "railroaded",	X JC RB MM	a) Team agrees to abide by majority vote ✓