

## SYST 17796 TEAM PROJECT: BLACKJACK

### Group Members:

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2. Karim Kamel
3. Hafsa Khan
4. Hayoung Jung

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## Team Contract

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**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.**

By signing this contract, we acknowledge having read the Sheridan Academic Honesty Policy as

Team Member Names (Please Print)	Signatures	Student ID
Project Leader: SAIM KHAN		991659827
HAFSA KHAN		991660683
KARIM KAMEL		991653561
HAYOUNG JUNG		

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

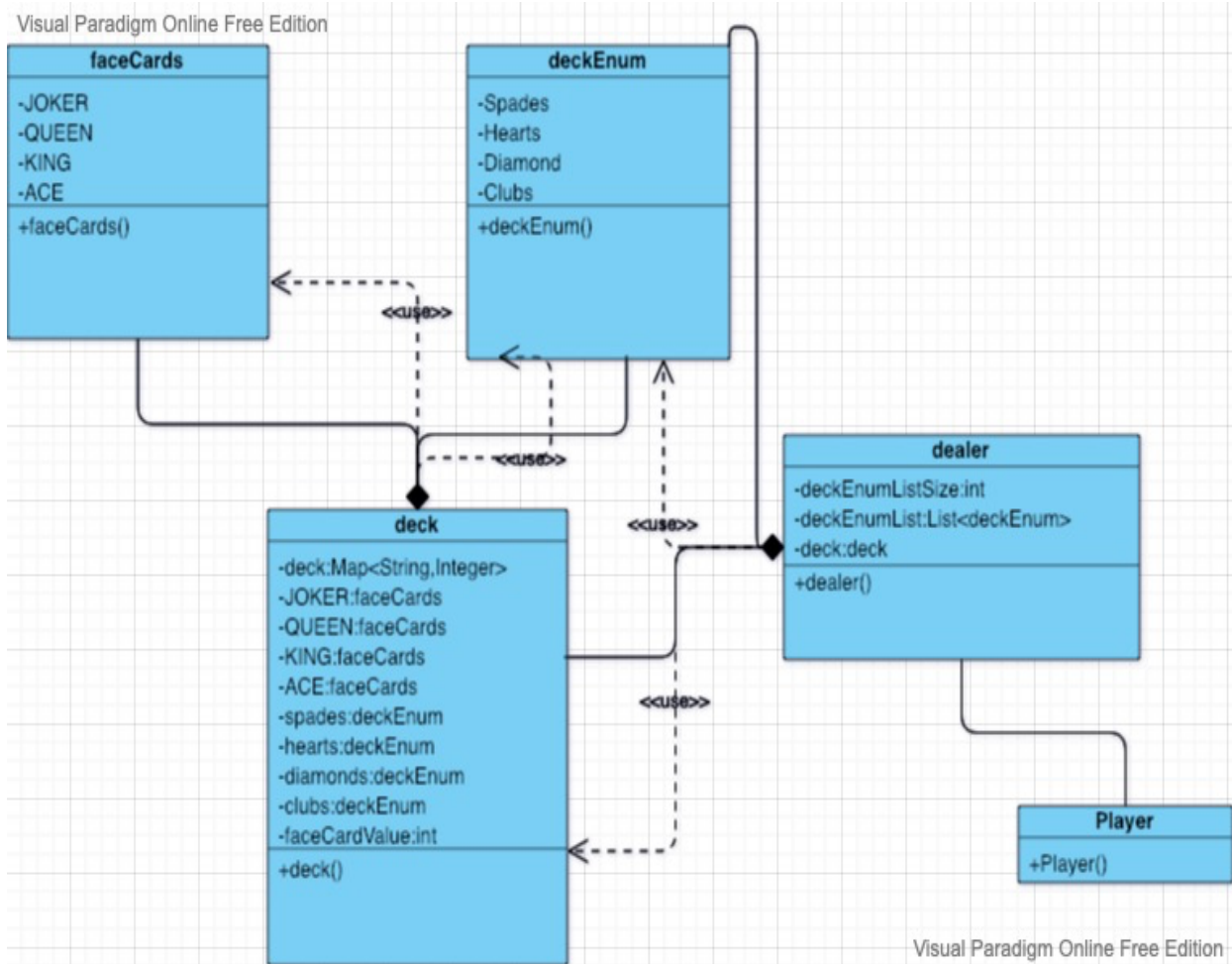
## What we will do if . . .

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	SK HK KK YK	a) Team absorbs workload temporarily _Y_ 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	SK HK KK YK	a) Team reassigns component __ b) Team helps member _Y_ c) Team member must ask professor for reference material __ d) Other:
Team member does not deliver component on time due to lack of effort	SK HK KK YK	a) Team absorbs workload _Y_ b) Team "fires" team member by not permitting his/her name on submission __ c) Other:
Team member does not attend team meeting	SK HK KK YK	a) Team proceeds without him/her and will assign work to the absent member _Y_ b) Team doesn't proceed and records team member's absence __ c) Team proceeds for that meeting but "fires" member after __ occurrences __

Scenario	Accepted initials	We agree to do the following
An unforeseen constraint occurs after the deliverable has been allocated and scheduled (a surprise test or assignment)	SK HK KK YK	a) Team meets and reschedules deliverable _Y_ b) Team will cope with constraint ____ c) Other:
Team cannot achieve consensus leaving one member feeling "railroaded", "ignored", or "frustrated" with a decision which affects all parties	SK HK KK YK	a) Team agrees to abide by majority vote _Y_ b) Team flips coin ____ c) Other:
Team members do not share expectations for grade desired	SK HK KK YK	a) Team will elect one person as "standards-bearer" who has the right to ask that work be redone _Y_ b) Team votes on each submission's quality ____ c) Team will ask for individual marking and will identify sections by author ____ d) Other:
Team member behaves in an unprofessional manner by being rude or uncooperative	SK HK KK YK	a) Team attempts to resolve the issue by airing the problem at team meeting _Y_ b) Team requests meeting with professor to problem-solve ____ c) Team ignores behaviour ____

Scenario	Accepted initials	We agree to do the following
		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	SK HK KK YK	a) Team agrees that this is cheating and is unethical _Y_  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	SK HK KK YK	a) Team will actively solicit consensus on all decisions which affect project direction by asking for each member's decision and vote Y__  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	SK HK KK YK	a) Team forces decision sharing by routinely voting on all issues _Y_  b) Team routinely checks with each other about perceived roles __  c) Team discusses the matter at team meeting __

## Class Diagram



## Deliverable 1

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### Overview

#### Project Background and Description

Blackjack is one of the most widely played games in casinos. It uses a standard deck of 52 cards and is based on the mathematical concept of “probability”. Players on the table (minimum 1) have to play against the dealer, who draws two cards for each player and for himself from the deck of shuffled cards. Whosoever has the highest-scoring pair to a blackjack (21 points) wins. Reference to official blackjack rules:

<https://www.casinoreports.ca/blackjack/rules/>

Our group intends to replicate this game of “Blackjack” using object-oriented principles in Java. Our goal is to have a user play blackjack against the computer who is also the “dealer” in this case.

#### Project Scope

Saim Khan/Hafsa Khan/Karim Kame/Hayoung Jungl: Coding / Design / Documentation

Each group member will be an equal part in all deliverables.

Technical scope: Blackjack is played between the player and the dealer. Therefore, the group is focused on making the functionality for at least one player, but we are aiming to make it two players. The dealer draws two cards at random for the player and two cards for himself. Our project deals with the functionality to generate these random cards and then follows the rules of Blackjack to declare the winner. The project will be deemed completed if the game follows all the rules of actual Blackjack for at least 1 player.

#### High-Level Requirements

The new system must include the following:

- Ability for each player to play the game
- Ability for each player to wager bets
- Ability for each player to see the dealer’s cards at the end of the round
- Ability for the game to communicate a win or loss
- Ability for players to know their status (score) at all times



### Implementation Plan

We plan to implement our project using principles of object-oriented programming. We will build a “key-value” pair to represent the values of cards in a deck(1, 2, 3 ... J, K etc.). Using said value map, we will build a “randomizer” to generate random card values when being distributed to players and the dealer, which ensures our game is not “rigged”. Finally, the logic will compare each player’s “hands” with that of the dealer, and the winner will be decided according to the rules of blackjack. This summarizes the core functionality of our project. Additionally, we want to add a feature to wager bets before each round of blackjack is played, adding to the thrill and representing a real world scenario tad more accurately.

### GIT URL

[https://github.com/saimkhan065/SYST17796\\_PROJECT](https://github.com/saimkhan065/SYST17796_PROJECT)

repository is public, so that all group members / instructor has easy access to the project. Each group member will fork the repository and use that as the development template. Each group member writes code assigned to them and pushes the changes on origin. Each group member will safe merge code before beginning their work.

Tools the group expects to use is several IDEs according to each group members preference( vsCode / IntelliJ / NetBeans )