<Jokers>

<Sacred Heart University Senior Project>

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# Overview

## Theme / Setting / Genre / Problem Statement

- The general theme of this game is that of a virtual blackjack game. Our game, Jokers, provides a twist in the traditional realm of virtual blackjack where YOU play as the dealer. This game would fall under the category of casino games/entertainment games. The theme is the roaring 1920s.

Jokers Problem Statement:

When playing a typical game of blackjack, one may find it to be simple in terms of mechanics. To master this game, a player must go beyond hitting, staying, and doubling down. They must efficiently calculate their odds of winning, react accordingly, and bluff in a convincing manner to make a profit. To newcomers, this game seems to be just a game of chance, because they cannot possibly bluff when they do not know the estimated value of the dealer hand. Some video game versions of this game calculate the player’s chances of winning for them. In addition, players do not have to pay attention to their own “tells” because their computer does not have the ability to read them. In that case, why bother playing? To effectively make a blackjack game in the context of a video game, one should focus on the difference between the physical and virtual mediums. Enter Jokers, a reimagined game of video blackjack that encourages players to cheat. By using different cheating methods and card mechanics such as strips, dealing seconds, bottom dealing, and so forth; you, the dealer, will have to find ways to out cheat your opponents. We intend to invite new players who have never played blackjack before to understand the game a lot better through a different lens.

## Core Gameplay Mechanics Brief

- Card Mechanics

-Shuffles- Shuffles allow the dealer to shuffle the deck in 6 different type of ways in order manipulate the deck.

-Shuffle- This will put the deck in a random order

-Riffle- The deck will split somewhere in the middle. The two halves of the deck are combined onto each other.

-Perfect Riffle- The deck will perfectly split in half and combine the cards. The top and bottom cards are preserved.

-Cut-Selects random point near middle of deck and cuts the deck into 2 sections. The top and bottom halves of the deck are swapped.

-Perfect Cut- Deck is split into 2 equal parts and the top and bottom halves of the deck are swapped.

-Strip-Deck splits into 3 different sections. Those sections are then placed back into the deck in reverse order.

- Deals

-Deals allow the dealer to give the cards in the deck to themselves or the players in different ways

-Deal- Allows dealer to take the top card from the deck starting from right to left (first card from the deck)

-Second Deal- Allows dealer to take the second card from the deck (behind the first card)

-Bottom Deal- Allows dealer to deal last card from deck (left most card)

- Currency

- There will be a target amount of money that the player needs to achieve. This will be the quota. If the player fails to reach the quota by the end of a set amount rounds, they will lose the game. The player starts off the game with $1000. Each AI they beat, they will win back that player’s bet amount. If the dealer’s register also hits 0, they will lose the game.

Bets- Each AI will bet a predetermined amount of money. During the game, the AI can also double down their bet, which doubles the amount of money they are betting, depending on the hand they have. If the AI wins a hand, they get back twice what they had.

## Targeted platforms

- PC/Steam

## Project Scope

- Time Scale

-Time estimates to completed Beta version are approx. 6 months and for a complete Alpha version approx. 7-8 months.

- Team Size

- Core Team will consist of 3 members

- Ryan Rogers

- Lead Programmer

- Daniel Murtagh

- Lead Game Designer

- Christian Moncada

- IT Analyst

- IT Documentation

- Data & Research

- Licenses / Hardware / Other Costs

We will be using Unity 2018.2.1.0f Personal on our own personal computer devices.

## Influences (Brief)

### - Papers Please

- Video Game

- Papers Please day to day income system influenced us to make Jokers story a daily job where the main protagonist, the dealer, has to survive on day to day paychecks based on his success in winning blackjack games for the casino.

### - Fortune 499

- Video Game

- The game features a card-based attack system that allows you to use card mechanics (e.g. palming cards), which adds an element of strategy to an otherwise luck-based game.

### - Richard Turner on Penn & Teller Fool Us!

- Television

- Richard’s excelled card mechanic play is the type of feeling we want the player to achieve. By manipulating the card deck in certain types of ways using different card mechanics as shown by Richard Turner, we aim to make the player a master manipulator of cards just like him.

## The elevator Pitch

What if you could take a break from the traditional way of playing blackjack and play something that not only is different but can teach you blackjack player mentality?

# What sets this project apart?

- Reason #1 -This project aims to create a fun and thought-provoking atmosphere that isn’t found with traditional video game blackjack (i.e. We do not intend to create another blackjack simulator). We set to change the way video blackjack is played by introducing elements of cheating via different card mechanics the dealer (you) can do.

- Reason #2 -By introducing a new way of playing blackjack, we want to create an environment where both pros and new comers can enjoy the experience of blackjack at the same level. Pros can challenge their true understanding of card mechanics by being placed in situations they would never otherwise be in. Meanwhile, newcomers would be introduced to card mechanics and understand fundamentally how they change the way blackjack is played. This creates a new experience for both pro and newcomer that they can understand.

- Reason #3 -Typically, video blackjack aims to simply emulate the physical game in a virtual environment. The problem is, you cannot read social cues, bluff, or worry about what your face is saying while evaluating your hand in a virtual blackjack game. Even if such functionality was put in, it would hardly be effective. In its place, we hope the mechanics of cheating can create a new dynamic of play that can only be found in a video game environment.

## Core Gameplay Mechanics (Detailed)

### - Deck Mechanics

- Deck Mechanics

Manipulating the positions of cards by doing different kinds of shuffles

- Before each round, the dealer (i.e. the player) must shuffle the cards twice

### - Card Mechanics

- Dealing Cards

The player can deal from different parts of the deck. This is the player’s primary tool for manipulating the game.

- How it works

During each game, the player can select which type of deal they would like to perform. The player is able to deal normally as well as perform second deals (dealing the card second from the top) and bottom deals (dealing the card from the bottom of the deck).

### - Currency

- Details

There will be a target amount of money that the player needs to achieve. This will be the quota. If the player fails to reach the quota by the end of a set amount rounds, they will lose the game. The player starts off the game with $1000. Each AI they beat, they will win back that player’s bet amount. If the dealer’s register also hits 0, they will lose the game.

- Bets

Each AI will bet a predetermined amount of money. During the game, the AI can also double down their bet, which doubles the amount of money they are betting, depending on the hand they have. If the AI wins a hand, they get back twice what they had.

# 

# Story and Gameplay

## Story (Brief)

You are playing as a dealer for a corrupt casino, Jokers Casino. Your objective is to find anyway to win via using card mechanics, deck shuffles, and different types of deals to win the game either for the casino or a specific person for the casino.

## Story (Detailed)

As the dealer for the slimiest Casino in Vegas, you need to strategize how to make those other suckers lose and make yourself win. Don’t feel too bad though, you need these pay checks to support your family, (and your Bulgarian hooker wife, yikes!). Cheat your way to victory, but don’t let the other players win! Remember, if they get to 21 or you go over, they win, and you lose money for the casino. If you don’t meet your quota, you’re out of a job!

## Gameplay (Brief)

This will be a 2D first person blackjack game where the player will play as the dealer. They will have certain options at the beginning of the round such as how to shuffle the deck and how to deal out the deck.

## Gameplay (Detailed)

As the dealer you have control over the deck. At the start of each round, you can select up to 2 shuffles via buttons. Once the deck is shuffled, you will start dealing out cards starting from left most player, back to you, one card at a time. You can choose to deal normally, first card from the deck (starting from the right most card), second deal, deal the card behind the first card, or bottom deal, dealing the last card (left most card) from the deck. This gives the dealer control over who gets what cards. By doing this, you can strategize the best way to meet your quota. If the dealer is skilled enough, they can make AI double down and make them lose to earn more winnings.

# Assets Needed

## - 2D

- Textures

- Card Textures

-Backgrounds

- Character Sprites

- Character Animations with idle animations

## - Sound

- Sound List (Ambient)

- Main Menu

-Jazzy theme music (Kevin MacLeod-HardBoiled)

-In game music

-Same jazzy theme (Kevin MacLeod-Fake it till you make it)

- Sound List (Gameplay)

-Cards

-Card being dealt

## - Code

- GUI to have cards shown on screen

-Script for AI functionality

-Game Manager

## - Animation

- Character Animations

- NPC

- Idle Animations (frame by frame)

# Schedule

### - Game Concept

- First 2 months

- Game Title and concept

- Problem Statement

- Data Gathering and Research

### - Documentation & Resource Management

- Following 2 months

- Rough Outline of GDD complete

- Allocation of Tasks

- Acquiring necessary resources

### - Development & Testing

- Following 2 months

- Code front end

- Code back end

- Artwork

- Testing

### - Updates and Presentation

- Last 2 months

- Fix bugs

- Gameplay Testing

- Work on Presentation

- Final Presentation