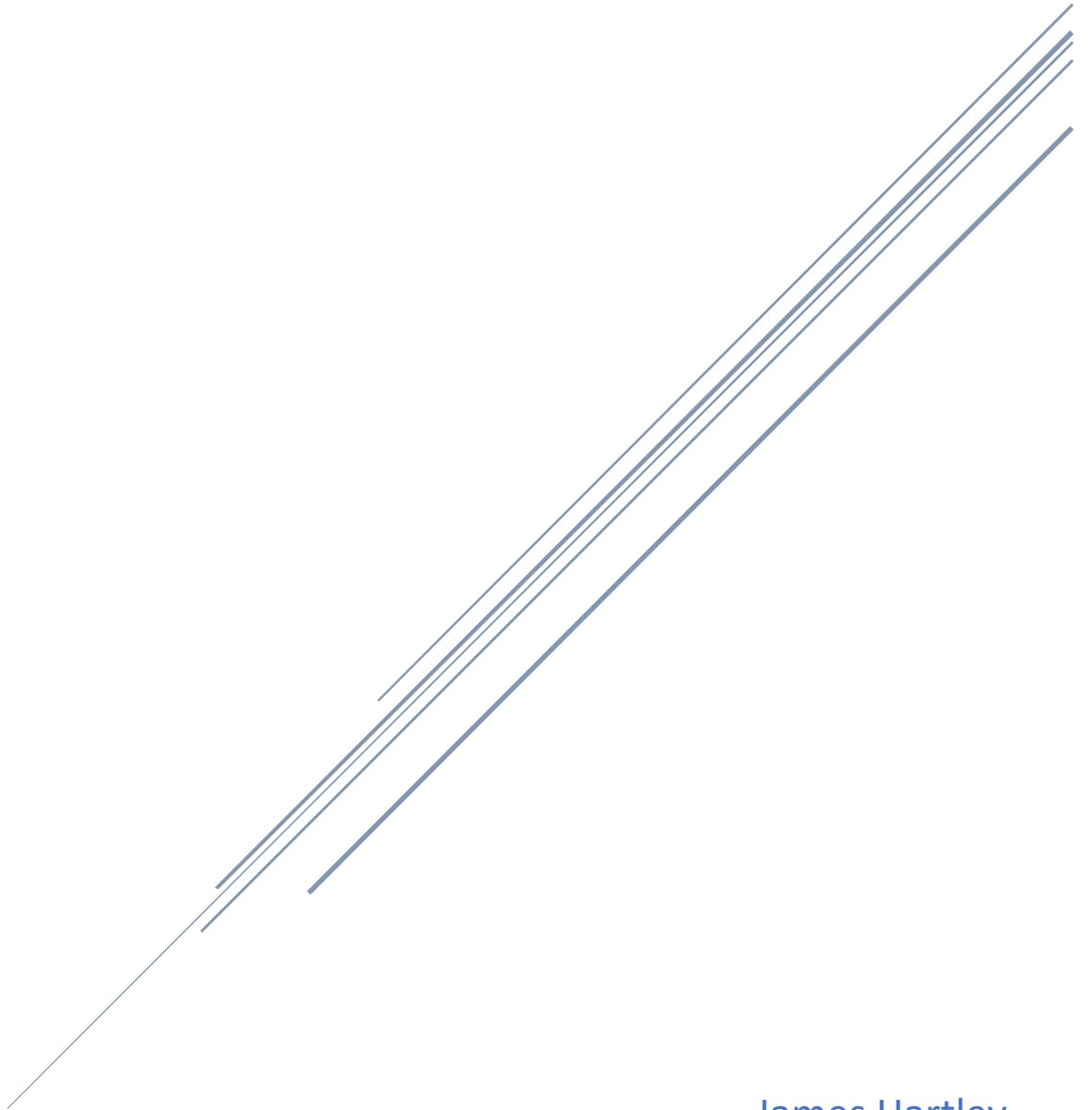


PROJECT 1

Klondike – The Dice Game



James Hartley
CSC-5-40136

Introduction

Title: Klondike

This is a gambling game that was played in cheap casinos in frontier America, using five dice. The combinations (or hands) used are similar to Poker but with some omissions.

Play:

A banker rolls the dice first and the player then rolls the dice trying to beat the combination first thrown. Only one throw is allowed. Numbers rank high to low as 1, 6, 5, 4, 3, 2. Any die not used in a combination is ignored. If a player rolls a combination equal to the banker's, the banker wins. The payoffs are made by the banker at even odds. i.e. player gets their stake back with an equal amount.

Winning combinations:

(In Descending Order)

- Five-of-a-kind
- Four-of-a-kind
- Full House (Three-of-a-kind and a pair)
- Three-of-a-kind
- Two pairs
- One pair

Summary:

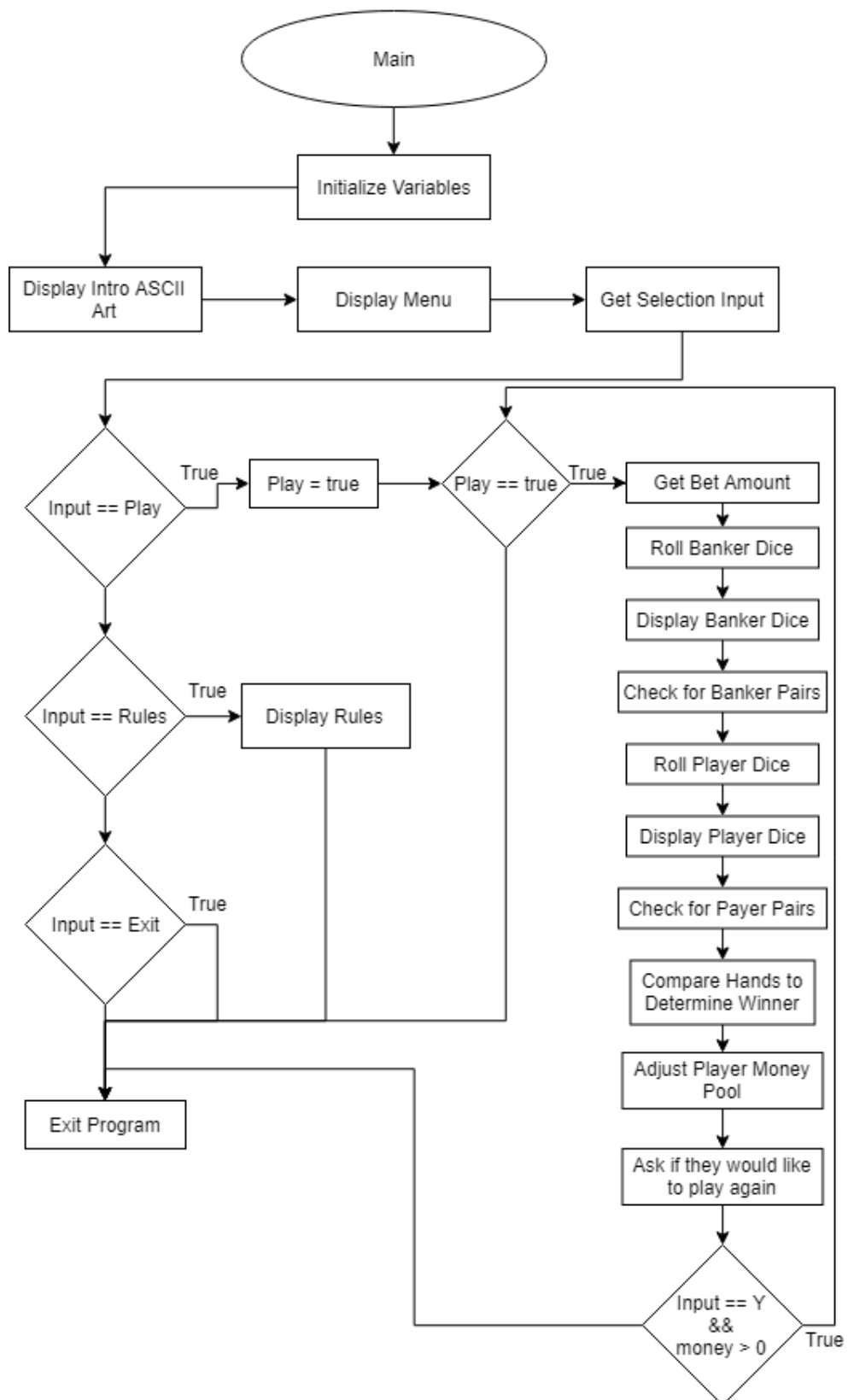
Project Size: 333 Lines

Number of Variables: 19

Total Time Spent: ~1.5 Weeks

Project 1 for CSC-5-40136. The object of this project was to create a game emphasizing all that was learned up to this point, including variable types, loops, decision statements, console input/output and file input/output as well as various functions included in various C++ standard libraries such as cmath, iomanip and time, no custom functions were allowed in the development of this application.

Klondike Psuedocode Flow



Major Variables

Type	Name	Description
char	pPairs	How many 1 st combination dice the player has.
	pPairs2	How many 2 nd matching dice the player has
	pValue	Face value of players 1 st combination
	pValue2	Face value of players 2 nd combination
	bPairs	How many 1 st combination dice the banker has
	bPairs2	How many 2 nd matching dice the player has
	bValue	Face value of bankers 1 st combination
	bValue2	Face value of bankers 2 nd combination
	pHand	Total hand value for the player
	bHand	Total hand value for the banker
	pDie[4]	This is an array representing the player's dice
	bDie[4]	This is an array representing the banker's dice
ifstream	ifs	This is the input file stream, used for reading in the rules
string	rules	This is a string used with getline to import the rules from rules.dat
float	money	This is the player's money pool used for better.
	betAmt	This is the amount the player has bet.
bool	play	This is set to true while playing the game to keep the main loop going.

Screenshots

```
C:\Windows\system32\cmd.exe

****      Klondike      ****
****      The Dice Game      ****
****      By      ****
****      James Hartley      ****
*****
-----
P.....Play
R.....Rules
E.....Exit
Please input a selection...
r
Klondike
This is a gambling game that was played in cheap casinos in frontier America, using five dice. The combinations or hands used are similar to Poker but with some omissions.

Play:
A banker rolls the dice first and the player then roll the dice trying to beat the combination first thrown. Only one throw is allowed. Numbers rank high to low as 1, 6, 5, 4, 3, 2. Any die not used in a combination is ignored. If a player rolls a combination equal to the banker's, the banker wins. The payoffs are made by the banker at even odds. i.e. player gets their stake back with an equal amount. Winning combinations in descending order are as follows.

Five-of-a-kind
Four-of-a-kind
Full House (Three-of-a-kind and a pair)
Three-of-a-kind
Two pairs
One pair

Restart the game to play

C:\Users\JDBHa\Desktop\Klondike-1a49655479e17ca50e74b43b0f6b30c0aa14eaf8\dist\Debug\Cygwin-Windows\klondike-1a4965547...

*****
****      Klondike      ****
****      The Dice Game      ****
****      By      ****
****      James Hartley      ****
*****
-----
P.....Play
R.....Rules
E.....Exit
Please input a selection...
P
-----
Your Money: $1000.00
Enter your bet: $25
Banker Rolls
2 2 6 6 3
Banker has: 2 2's and 2 6's.
TWO PAIRS!
Player Rolls
5 6 4 4 3
Player has: 2 4's.
ONE PAIR!
Banker Wins!
Play Again? (Y or N)
```