**PROJECT 1**

**<Guessing Game>**

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**CIS-43952**

**Introduction**

**Title: GUESSING GAME**

**PROGRAM PLAN:**

* **This Casino game requires you guess a number between 1 and 10.**
* **Player deposits a certain amount to start playing the game.**
* **If he wins he will get 10 times of money he bets.**
* **If the player bets a wrong number he will lose the money he bet.**
* **Game continues till the user exits the game by saying no.**

**SUMMARY:**

**Project size: 128 lines**

**This project includes many concepts that we learned from the chapters in the book. Also, it has many possibilities to be extended for next project. I ran into problems and got great assistance from cplusplus gurus.**

**Reference: cplusplus referene and articles**

**Pseudo Code**

**The 1st step is to request the players name so the game can ascertain the winner or looser. The future game will be asking the user if they want their money back or not.**

**2ndly, Enter the deposit amount to play the game.**

**3rd step is the rules of the game will be displayed and you can know what you have in store.**

**4th: The program should ask you how much money you want to bet.**

**5th: Guess a number between 1 and 10.**

**6th: based upon your guess, you either win or lose**

**7th: The program should ask you if you want to play again (y) or (n)**

**PROGRAM:**

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**\* File: main.cpp**

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**\* Created on April 24th 25, 2015, 10:45 PM**

**\* Purpose: Project 1**

**\*/**

**//System Libraries**

**#include <iostream>**

**#include <string> // Needed to use strings**

**#include <cstdlib> // Needed to use random numbers**

**#include <ctime>**

**using namespace std;**

**//User Libraries**

**//Global Constants**

**//Function Prototypes**

**//Execution Begins Here!**

**void drawLine(int n, char symbol);**

**void rules();**

**int main()**

**{**

**//declare variables**

**string plyName;**

**int amount; // hold player's balance amount**

**int betAmnt;**

**int guess;**

**int dice; // hold computer generated number**

**char choice;**

**srand(time(0)); // "Seed" the random generator**

**drawLine(60,'\_');**

**cout << "\n\n\n\t\tCASINO GAME\n\n\n\n";**

**drawLine(60,'\_');**

**cout << "\n\nEnter Your Name : ";**

**getline(cin, plyName);**

**cout << "\n\nEnter Deposit amount to play game : $";**

**cin >> amount;**

**do**

**{**

**system("cls");**

**rules();**

**cout << "\n\nYour current balance is $ " << amount << "\n";**

**// Get player's betting amount**

**do**

**{**

**cout <<plyName<<", enter money to bet : $";**

**cin >> betAmnt;**

**if(betAmnt > amount)**

**cout << "Your betting amount is more than your current balance\n"**

**<<"\nRe-enter data\n ";**

**}while(betAmnt > amount);**

**// Get player's numbers**

**do**

**{**

**cout << "Guess your number to bet between 1 to 10 :";**

**cin >> guess;**

**if(guess <= 0 || guess > 10)**

**cout << "Please check the number!! should be between 1 to 10\n"**

**<<"\nRe-enter data\n ";**

**}while(guess <= 0 || guess > 10);**

**dice = rand()%10 + 1; // Will hold the randomly generated integer between 1 and 10**

**if(dice == guess)**

**{**

**cout << "\n\nGood Luck!! You won Rs." << betAmnt \* 10;**

**amount = amount + betAmnt \* 10;**

**}**

**else**

**{**

**cout << "Bad Luck this time !! You lost $ "<< betAmnt <<"\n";**

**amount = amount - betAmnt;**

**}**

**cout << "\nThe winning number was : " << dice <<"\n";**

**cout << "\n"<<plyName<<", You have $ " << amount << "\n";**

**if(amount == 0)**

**{**

**cout << "You have no money to play ";**

**break;**

**}**

**cout << "\n\n-->Do you want to play again (y/n)? ";**

**cin >> choice;**

**}while(choice =='Y'|| choice=='y');**

**cout << "\n\n\n";**

**drawLine(70,'=');**

**cout << "\n\nThanks for playing game. Your balance amount is $ " << amount << "\n\n";**

**drawLine(70,'=');**

**return 0;**

**}**

**void drawLine(int n, char symbol)**

**{**

**for(int i=0; i<n; i++)**

**cout << symbol;**

**cout << "\n" ;**

**}**

**void rules()**

**{**

**system("cls");**

**cout << "\n\n";**

**drawLine(80,'-');**

**cout << "\t\tRULES OF THE GAME\n";**

**drawLine(80,'-');**

**cout << "\t1. Choose any number between 1 to 10\n";**

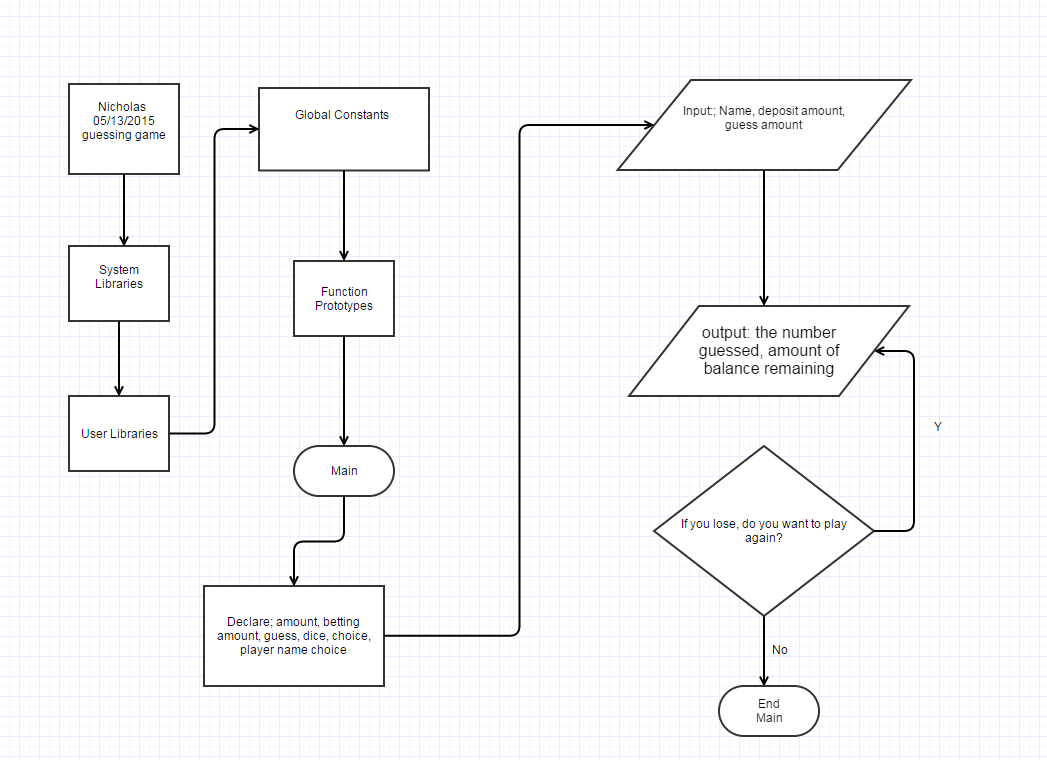
**cout << "\t2. If you win you will get 10 times of money you bet\n";**

**cout << "\t3. If you bet on wrong number you will lose your betting amount\n\n";**

**drawLine(80,'-');**

**}**

**FLOW CHART:**

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