<Project 2>

Text Adventure

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**Introduction**

Title: Text Adventure

How to play the game: This game starts out by asking the player for some basic information. It then asks you to choose which direction you want to go in: North, South, East, or West. Based on the orientation you get you will either be sent to another room where again you’re asked which direction you would like to go in, or you will be send to the exit where the game then calculates your score and then ends. The way one gets points is by collecting bananas and oranges. Depending in which room you end up in you will either lose or obtain bananas and oranges. There is really no strategy to this game, it’s a luck game. It could either go on for a while or finish very fast; it all depend on the direction you pick.

**Pseudo Code**

*Initialize*

*Input information*

*Choose direction (N,S,E,orW)*

*If orientation 1*

*If North*

*Monster Room*

*Choose direction*

*If South*

*Genie Room*

*Choose direction*

*If East*

*Picture Room*

*Choose Direction*

*If West*

*Calculate score*

*End game*

*If orientation 2*

*If North*

*Calculate Score*

*End Game*

*If South*

*Monster Room*

*Choose direction*

*If East*

*Genie Room*

*Choose Direction*

*If West*

*Picture Room*

*Choose Direction*

**Actual Code**

**#include <cstdlib>**

**#include <iostream>**

**#include <string>**

**#include <ctime>**

**using** **namespace** std;

**void** **drawPicture**();

**void** **monsterRoom** (**int** **&** bananas, **int** **&** oranges, string monster);

**void** **genieRoom** (**int** **&** bananas, **int** **&** oranges);

**void** **pictureRoom** ();

**int** **main**(**int** argc, **char\*\*** argv) {

   string monstername **=** " ";

**int** bananas **=** 5;

**int** oranges **=** 3;

**int** orientation **=** 0;

   string doornumber **=** " ";

**int** score **=** 0;

   string fname **=** " "; *//First Name*

   string lname **=** " "; *//Last Name*

   string monster **=** " ";

**float** age;

*//Enter Player's Information*

*//Input first name*

   cout **<<** "First Name: ";

   cin **>>** fname;

   cout **<<** endl;

*//Input last name*

   cout **<<** "Last Name: ";

   cin **>>** lname;

   cout **<<** endl;

*//Input age*

   cout **<<** "Age: ";

   cin **>>** age;

   cout **<<** endl;

   cout **<<** "Monster: ";

   cin **>>** monster;

   cout **<<** endl;

*//Used for random*

   srand (500);

   srand (time(0));

**while** (doornumber **!=** "exit")

   {

       cout **<<** fname **<<** " " **<<** lname **<<** ", you are in a room with 4 doors.";

       cout **<<** endl;

       cout **<<** "You are carrying " **<<** bananas **<<** " bananas and " **<<** oranges

**<<** " oranges." **<<** endl;

       cout **<<** endl;

*//Enter 1 out of 4 possible directions*

*//North, South, East, West*

       cout **<<** "Pick a door to enter by typing the direction it is "

**<<** "in (N/E/S/W): ";

       cin **>>** doornumber;

       cout **<<** endl;

**while**( (doornumber **!=** "W") **&&** (doornumber **!=** "E") **&&** (doornumber **!=** "N")

**&&** (doornumber **!=** "S") )

       {

*//Enter 1 out of 4 possible directions*

*//North, South, East, West*

           cout **<<** "Pick a door to enter by typing the direction it is in "

**<<** "(N/E/S/W): ";

           cin **>>** doornumber;

           cout **<<** endl;

       }

*//Sets a random orientation*

       orientation **=** rand() **%** 2;

*//Possible Orientation 1*

**if**(orientation **==** 0)

       {

**if**(doornumber **==** "N")

           {

               monsterRoom (bananas, oranges, monster);

           }

**else** **if**(doornumber **==** "S")

           {

               genieRoom (bananas, oranges);

           }

**else** **if**(doornumber **==** "E")

           {

               pictureRoom ();

           }

**else** **if** (doornumber **==** "W")

           {

               doornumber **=** "exit";

           }

       }

*//Possible Orientation 2*

**else** **if**(orientation **==** 1)

       {

**if**(doornumber **==** "N")

           {

               doornumber **=** "exit";

           }

**else** **if**(doornumber **==** "S")

           {

               monsterRoom (bananas, oranges, monster);

           }

**else** **if**(doornumber **==** "E")

           {

               genieRoom (bananas, oranges);

           }

**else** **if**(doornumber **==** "W")

           {

               pictureRoom ();

           }

       }

   }

*//End Game*

*//Calculate Score*

   cout **<<** "You found the exit!" **<<** endl;

   score **=** bananas **+** oranges;

   cout **<<** "Your score is " **<<** score **<<** " (" **<<** bananas **<<** " bananas and "

**<<** oranges **<<** " oranges)." **<<** endl;

   cout **<<** "Bye bye!!!" **<<** endl;

**return** 0;

}

*//Possible room*

*//Points reset to zero*

**void** **monsterRoom** (**int** **&** bananas, **int** **&** oranges, string monster)

{

   bananas **=** 0;

   oranges **=** 0;

   cout **<<** "WATCH OUT!!" **<<** endl;

   cout **<<** monster **<<** " attacks you and steals all of your bananas and "

**<<** "oranges." **<<** endl;

   cout **<<** endl;

}

*//Possible room*

*//Three points added to current score*

**void** **genieRoom** (**int** **&** bananas, **int** **&** oranges)

{

   bananas **=** bananas **+** 2;

   oranges **=** oranges **+** 1;

   cout **<<** "!!POOF!!" **<<** endl;

   cout **<<** "A genie pops out and grants you 2 bananas and 1 orange.";

   cout **<<** endl;

}

*//Possible Room*

*//Picture Room*

**void** **pictureRoom** ()

{

   cout **<<** "You found a picture!" **<<** endl;

   drawPicture();

}

*//Displays picture of a house*

**void** **drawPicture**()

{

   cout **<<** " \_--~~--\_" **<<** endl;

   cout **<<** " /~/\_| |\_\\~\\" **<<** endl;

   cout **<<** " |\_\_\_\_\_\_\_\_\_\_\_\_|" **<<** endl;

   cout **<<** " |[][][][][][]|" **<<** endl;

   cout **<<** " \_\_| \_\_ |\_\_" **<<** endl;

   cout **<<** " | ||. | == | |" **<<** endl;

   cout **<<** " (| ||\_\_| == | |)" **<<** endl;

   cout **<<** " | |[] [] == | |" **<<** endl;

   cout **<<** " | |\_\_\_\_\_\_\_\_\_\_\_\_| |" **<<** endl;

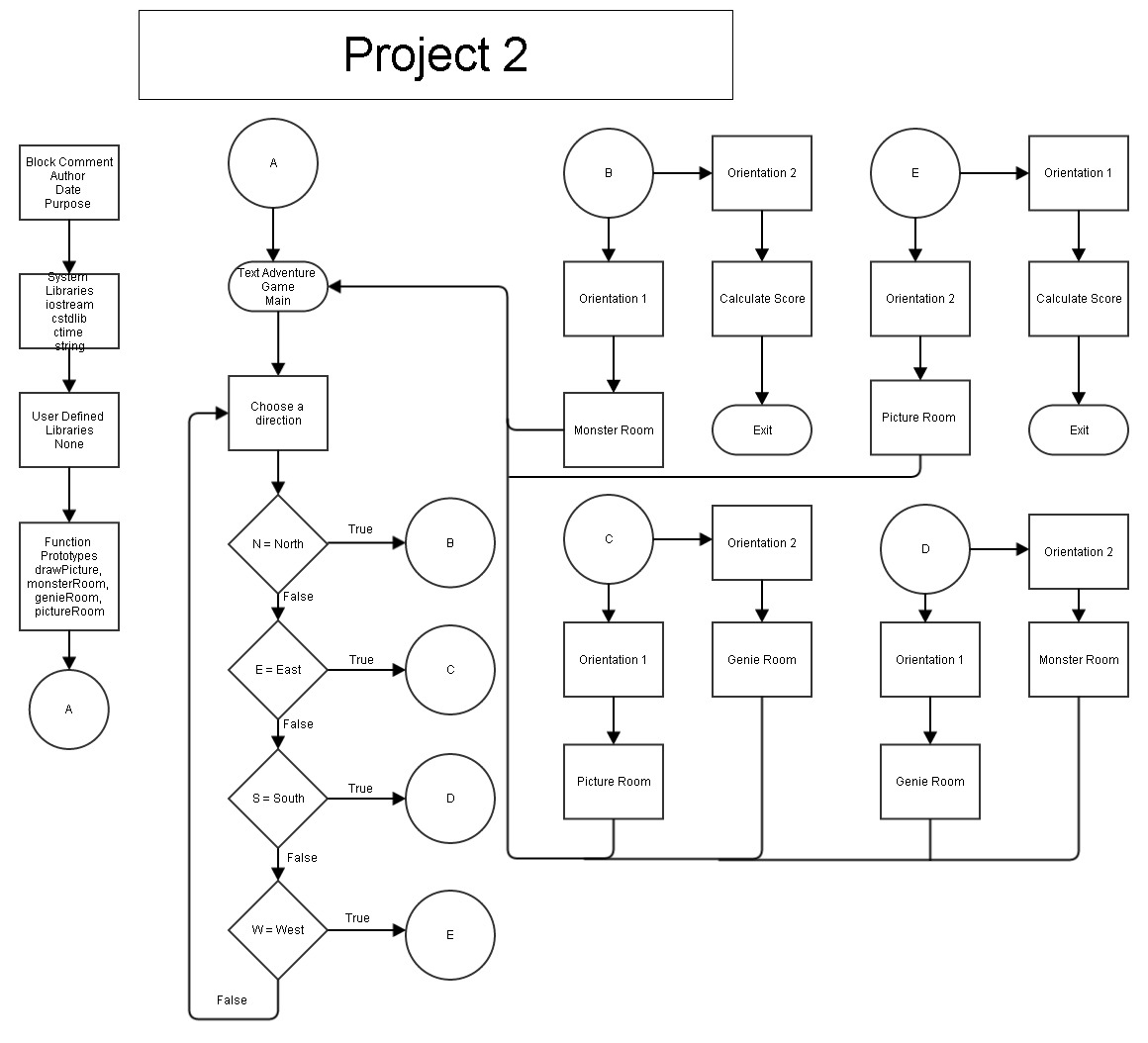
   cout **<<** " /\_\_\\ /\_\_\\" **<<** endl;

   cout **<<** " ~~ ~~" **<<** endl;

   cout **<<** endl;

}

**Flowchart**

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