

Tugano, John Benedict Z. (and) Chavez, Charles Joseph

CPE 201 (PLDL01E)

PLDL01E PROGRAMMING LOGIC AND DESIGN

PROJECT

- 1. Use C++ to make a simple application on business or games.**
- 2. The project is 20 pts.**
- 3. Employ menu options in the application. (See example below)**

```
// "DigiGuess It?"
// A mini programming project by JB Tugano & CJ Chavez (C++)
// CPE 201 (PLDL01E)
// Finals' Project

#include <iostream>
#include <time.h>
#include <stdlib.h>
using namespace std;
int main()
{
    int n,i;
    int number;
    int choice;
    bool isGuessed = false;
    char playAgain = 'y';

    cout << "Welcome to "DigiGuess It?"\n";
    cout << "A mini programming project by: JB Tugano and CJ Chavez" << endl;
    cout << " _____\n";
        cout << "0. EXIT" << endl << "1. PLAY THE GAME\n\n" << endl;
```

```
cin >> choice;
```

```
switch(choice)
```

```
{
```

```
case 0:
```

```
cout << "-----\n";
```

```
cout << "Aww...I hope we can play soon. Thank you very much!\n";
```

```
return 0;
```

```
case 1:
```

```
cout << "Come On! Let's Play 'DigiGuess It?'\n";
```

```
cout << "NOTE: This game is in Survival Mode (when you WIN).\n";
```

```
cout << "-----\n";
```

```
break;
```

```
}
```

```
srand(time(0)); // Generating different random numbers each time game will run
```

```
number=rand()%100 + 1; //Generating random numbers
```

```
while (playAgain == 'y' || playAgain == 'Y')
```

```
{
```

```
cout << "Guess a number between 1-100, only 10 turns to take: ";
```

```
for(i=0;i<10;i++)
```

```
{
```

```
cin>>n;
```

```
if(number==n)
```

```
{
```

```
cout<<"\nHOORAY, WELL DONE! You have guessed the right number, "<<number;
```

```
cout<<"\nNumber of guesses made: "<<i+1 << endl;
```

```
    break;
}

else if(number>n)
{
    cout<<"\nToo low, Turns left: "<<10-(i+1);
    if(10-(i+1)>0)
    {
        cout<<"\nTry again, use higher digit: ";
    }
}

else if(number<n)
{
    cout<<"\nToo high, Turns left: "<<10-(i+1);
    if(10-(i+1)>0)
    {
        cout<<"\nTry again, use lower digit: ";
    }
}
}

if(i==10)
{
    cout<<"\n\nGAME OVER! You failed to guess the correct number.";
    cout<<"\nThe correct answer is: "<<number << endl;

    cout << "Would you like to play again? (y/n)" << endl;

    cin >> playAgain;

    if (playAgain == 'y' || playAgain == 'Y')
        isGuessed = false;
```

```

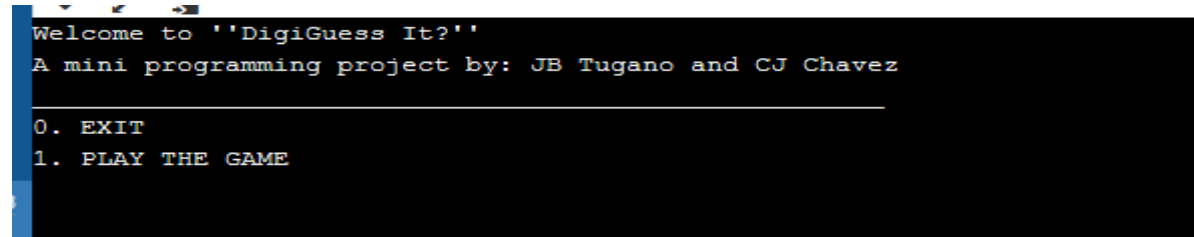
    else
        return 0;
    }

}

return 0;
}

```

Screenshot of the Menu options



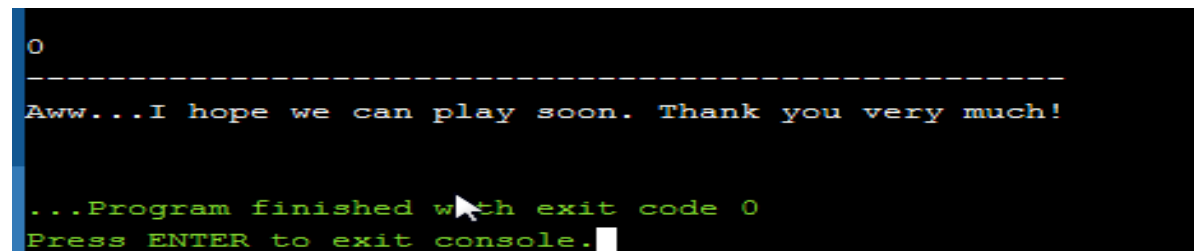
```

Welcome to 'DigiGuess It?'
A mini programming project by: JB Tugano and CJ Chavez

0. EXIT
1. PLAY THE GAME

```

If you choose "0"



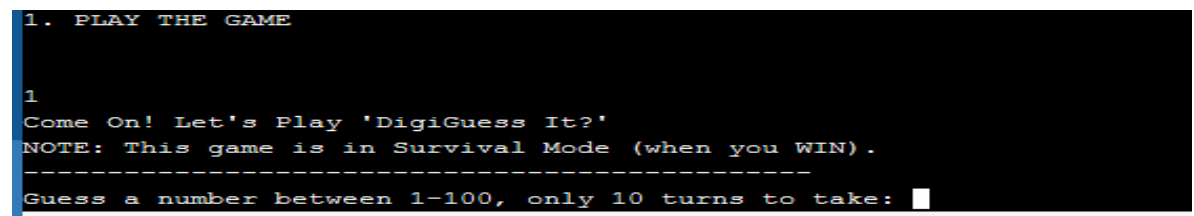
```

0
-----
Aww...I hope we can play soon. Thank you very much!

...Program finished with exit code 0
Press ENTER to exit console.

```

If you choose "1"



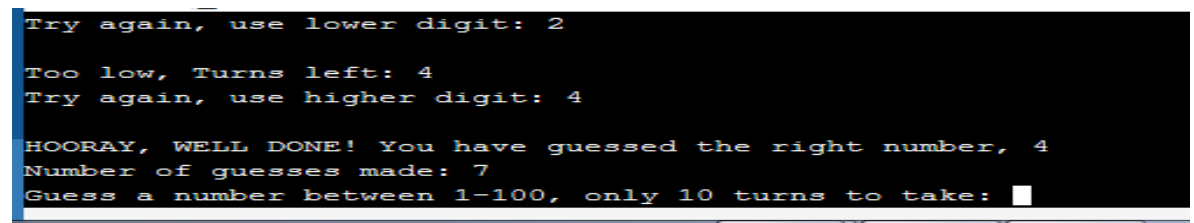
```

1. PLAY THE GAME

1
Come On! Let's Play 'DigiGuess It?'
NOTE: This game is in Survival Mode (when you WIN).
-----
Guess a number between 1-100, only 10 turns to take:

```

When you win the game



```

Try again, use lower digit: 2
Too low, Turns left: 4
Try again, use higher digit: 4
HOORAY, WELL DONE! You have guessed the right number, 4
Number of guesses made: 7
Guess a number between 1-100, only 10 turns to take:

```

When you lose the game

```
Try again, use higher digit: 1  
Too low, Turns left: 0  
GAME OVER! You failed to guess the correct number.  
The correct answer is: 60  
Would you like to play again? (y/n) I
```

When you click "n" in lose game

```
GAME OVER! You failed to guess the correct number.  
The correct answer is: 60  
Would you like to play again? (y/n)  
n  
...Program finished with exit code 0  
Press ENTER to exit console.
```

When you press "y" in lose game

```
Too low, Turns left: 0  
GAME OVER! You failed to guess the correct number.  
The correct answer is: 81  
Would you like to play again? (y/n) I  
y  
Guess a number between 1-100, only 10 turns to take:
```