

Fishing game

Teachers version

Summary

This activity is designed to teach the participants of this activity how to do loops using the activity itself as an example of this function. The game like nature of this activity will help them learn 'for' loops by means of the turn order, 'while' loops will be learned as each game is a single while loop and 'if' statements by means of their success or failure to capture a fish. Using these simple concepts to demonstrate these concepts will make it easier on participants to learn them whilst they have some fun in the process.

What is a loop?

A loop is in essence a circle. an example of this is a clock, a clock starts at 12 o'clock at the top and goes around until it reaches 12 o'clock again and again, this is an example of a loop.

Required components:

This activity requires:

1. A pool of water
2. A set of rods and fishable items
3. A set of score cards and writing utensils

Set up:

1. First get or set up a pool of water
2. Place the fishable item within the pool of water
3. Get rods and score cards.

The Activity:

1. Choose how many people are doing the activity
2. The game starts
3. Player X tries to capture one of the fishable items

4. Writes down if they caught it
5. Cycle though the players repeating steps 3 and 4 till there are no fishable items left
6. Announce the scores

Code Reference:

```
1 //global
2 int playernum = 0;
3 int ducks = 10;
4 int score[];
5 int fished;
6 //string fished;
7 Random rnd = new Random();
8 //the function
9 // main funtion
10 void main()
11 {
12     //number of players
13     //string num =console.ReadLine();
14     playernum = rnd.Next(1, 5);/*num.parse;*/
15
16     while (ducks>0)
17     {
18         //turn order
19         for(int i=1;i<playernum;)
20         {
21             //chance
22
23             fished = rnd.Next(0, 2);
24
25             //scoring
26             switch(i)
27             {
28                 case i:
29                     if (fished ==1)
30
31                     {
32                         ducks--;
33                         score[i]+=1;
34                     }
35                     break;
36
37             }
38             //restar turn order
39             if (i ==playernum)
40             {
41                 i=1;
42             }
43             else
44             {
45                 i++;
46             }
47         }
48         for(int p=1;p<playernum;p++)
49         {
50             console.writeline( "Player {0} fished {1} ducks out of the pool.", p, score[p]);
51         }
52     }
```

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Summary

This activity is designed to teach young learners how to use loops. This game incorporates math and technology aspects of stem improving their understanding through the counting and scoring as well as the turn-based nature of this system.

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Required components:

This activity requires:

1. A pool of water
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Set up:

1. First get or set up a pool of water
2. Place the fishable item within the pool of water
3. Get rods and score cards.

The Activity:

1. The game starts
2. The first person takes their turn and tries to capture one of the fishable items
3. then write down their score (1 if they caught something, 0 if they did not)
4. Go through the turn order repeat steps 2 and 3 for each person
5. Once the last person has had the their turn repeat steps 2,3 and 4 until the game is over
6. Announce the scores and declare a winner