

Instructor:  
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Computer Programming  
@ECTS

# Who Am I? (Mr. Klins)



Prior to starting my teaching career in 2019, I worked at Larson Texts, a publishing company based in Erie with online math platforms. I held several positions while I was there, the most recent being a Solutions Engineer, which was a position I genuinely loved because every day brought new challenges and new opportunities to learn and improve the systems we worked with.

I love to explore and share ideas, so I thought teaching would be a fun new challenge for me. This is where we currently are with the story of my professional career.



## How Much Does a Computer Programmer Make?

Computer Programmers made a median salary of \$102,790 in May 2022. The lowest 10 percent earned less than \$54,310, and the highest 10 percent earned more than \$157,690.

# Why Computer Programming?

Develop A More Creative and Structured Way of Thinking

Make Your Life Easier

Learn Persistence

An Amazing Career

Learn A New Language

Be in Control

Think Like a Programmer


Be the Envy of Everyone

Make Anything


Become Empowered

# What does a typical day in ECTS computer programming look like?

My goal for this course is to offer a structure that defines the objectives for a period of a week or so and each student can work on those objectives at a pace that works best for them. The learning will occur through online resources, small group or individual instruction, and student collaboration.



Students who finish the objectives for a time period may request additional exercises or work on other programming projects they'd like to explore. I am happy to help with the development of personal projects as well.



We will also be accepting work from the community to develop projects that are used by businesses, schools and individuals.

# What does this Class Focus On?

This class will begin by learning the fundamentals of Computer Programming and then practice, explore and expand on these techniques through the following languages:

- Visual Basic
- Java
- SQL
- HTML/CSS/Javascript
- PHP



# What Are Those Languages Used In?

The languages covered in this course will give you the tools you need to develop any of the following:



WINDOWS  
APPLICATIONS



GAMES



ANIMATION



ONLINE  
PLATFORMS/WE  
B  
APPLICATIONS



MOBILE APPS



DATABASE  
SYSTEMS



...AND JUST  
ABOUT  
ANYTHING  
ELSE YOU CAN  
IMAGINE!

```
Binary search
Module1
607
608
609 If WL = True Then
610     Console.BackgroundColor = C
611     Console.ForegroundColor = C
612     Console.WriteLine("Player t
613     Console.BackgroundColor = C
614     Console.ForegroundColor = C
615 End If
616
617 While WL = True
618     user2 = Console.ReadLine
619
620     If valid(user2) Then
621         If user2 = rannum Then
622             WL = False
623
624         ElseIf rannum < (user2
625             Console.WriteLine("
626             WL = False
627
628         ElseIf rannum > (user2
629             Console.WriteLine("
630             WL = False
```

C:\WINDOWS\system32\cmd.exe



Module1.vb Tac Toe

```
166 End Sub
167 Sub Board()
168     Console.WriteLine(" _____".PadLeft(44))
169     Console.WriteLine(" | | | ".PadLeft(45))
170     Console.WriteLine(" {0} | {1} | {2} |".PadLeft(51), num(0), num(1), num(2))
171     Console.WriteLine(" | | | ".PadLeft(45))
172     Console.WriteLine(" _____".PadLeft(44))
173     Console.WriteLine(" {0} | {1} | {2} |".PadLeft(51))
174     Console.WriteLine(" | | | ".PadLeft(45))
175     Console.WriteLine(" _____".PadLeft(44))
176     Console.WriteLine(" {0} | {1} | {2} |".PadLeft(51))
177     Console.WriteLine(" | | | ".PadLeft(45))
178 End Sub
179 Sub PickAi()
180     While l = True
181         t = AiPick()
182         If t = 1 Then
183
184             If num(0) = "X" Then
185                 l = True
186             ElseIf num(0) = "1" Then
187                 num(0) = "O"
188                 l = False
189             End If
190         End If
191         If t = 2 Then
192
193             If num(1) = "X" Then
```

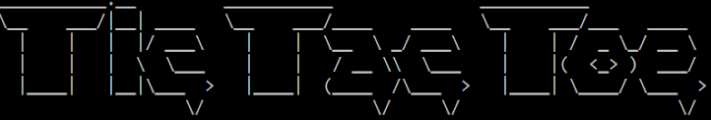
Solution Explorer

Search Solution Explorer (Ctrl+;)

Solution 'Tac Toe' (1 project)

- Tac Toe
  - My Project
  - References
  - App.config

C:\WINDOWS\system32\cmd.exe



1	2	3
4	5	6
7	8	9

75 %

Output

Score: 8200

QUESTION 5 OF 10

27

Use the control's \_\_\_ property to determine whether a radio button or check box is selected or unselected.

clicked

ticked

checked

selected

## High Scores

212 2021-05-04 Max  
197 2021-03-08 Sarah  
189 2021-01-29 Julie

 Keep Keep Keep Keep Keep

Ones

1

Twos

Threes

9

Fours

Fives

Sixes

3 of a kind

4 of a kind

Full House

Small Straight

30

Large Straight

40

Yahtzee!

Chance

***Roll***

Top Half Total:

***10***

Top Half Bonus:

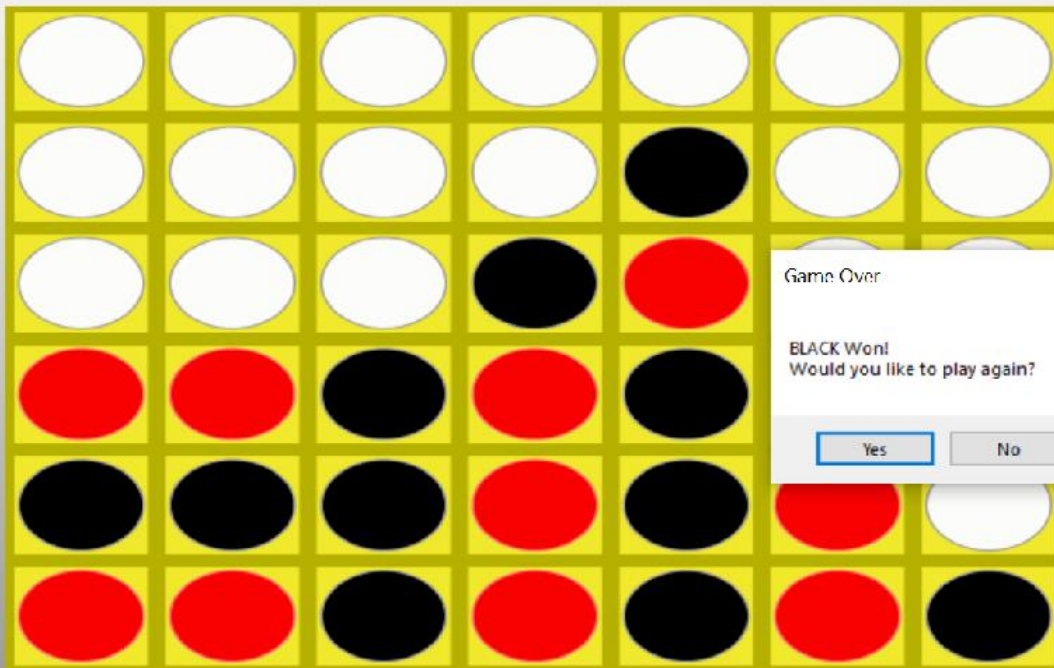
Bottom Half Total:

***70******Grand Total:******80***

Reset

Current Turn: Black

Drop Drop Drop Drop Drop Drop Drop



Game Over ✕

BLACK Won!  
Would you like to play again?

```

html  => x
58
59
60 }
61
62 document.getElementById('TheImage').src = story.step1.img
63 document.getElementById('StoryText').innerHTML = story.step1.text;
64 document.getElementById('Btn1').innerHTML = story.step1.btn1.text;
65 document.getElementById('Btn2').innerHTML = story.step1.btn2.text;
66
67
68 document.getElementById('Btn1').addEventListener('click', function () {
69     currentStep = story[currentStep].btn1.step;
70     if (story[currentStep].btn1 == undefined) {
71         document.getElementById('ButtonDiv').classList.add('hidden');
72     } else {
73         document.getElementById('Btn1').innerHTML = story[currentStep].btn1.text;
74         document.getElementById('Btn2').innerHTML = story[currentStep].btn2.text;
75     }
76     document.getElementById('TheImage').src = story[currentStep].img;
77     document.getElementById('StoryText').innerHTML = story[currentStep].text;
78 });
79
80 document.getElementById('Btn2').addEventListener('click', function () {
81     currentStep = story[currentStep].btn2.step;
82     if (story[currentStep].btn2 == undefined) {
83         document.getElementById('ButtonDiv').classList.add('hidden');
84     } else {
85         document.getElementById('Btn1').innerHTML = story[currentStep].btn1.text;
86         document.getElementById('Btn2').innerHTML = story[currentStep].btn2.text;
87     }
88     document.getElementById('TheImage').src = story[currentStep].img;
89     document.getElementById('StoryText').innerHTML = story[currentStep].text;
90 });
91
92 //script

```

## Raid Area 51

Choose your own adventure.



You are a rich billionaire who lives in New York City, and you see on all of your social media sites that there will be an Area 51 raid on September 20th. The raid is only a few days away from the current date, September 17th. You see how many attend, and there are over 2 million people attending. You have two choices: either go to the raid with the other 2 million people, or stay home with everyone else in the world, and not even care what happens.

Go to the raid. Don't go to the raid.

ENTER SOME TERMS TO SEE A RANDOM GIF!

Apple

Go!

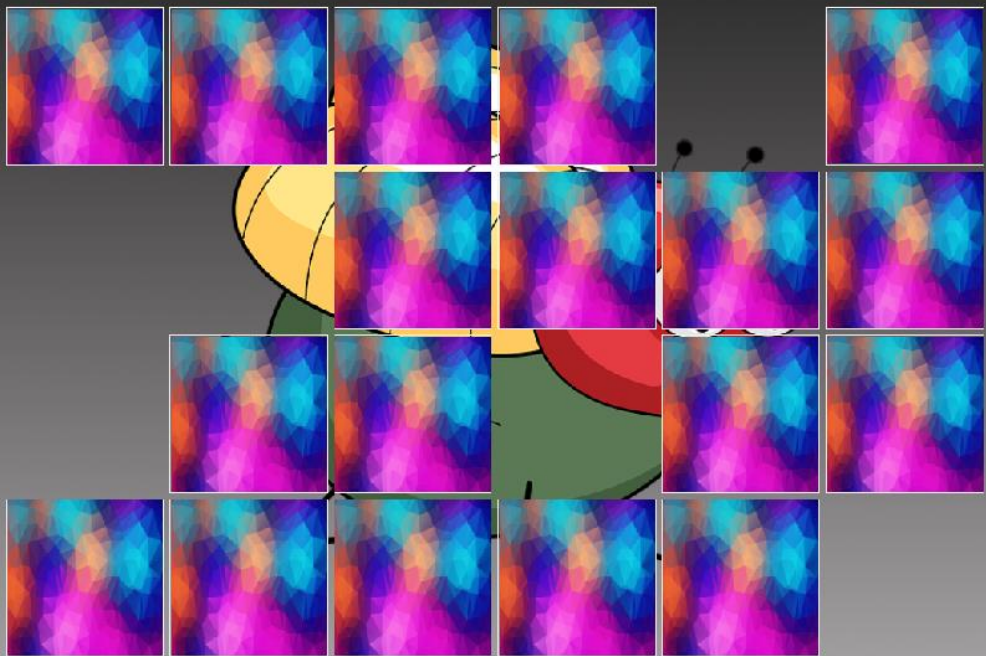
APPLE



JSON RESPONSE WILL APPEAR BELOW

```
{
  "type": "gif",
  "id": "t5wDMqMYp5NXa",
  "url": "https://giphy.com/gifs/disney-evil-t5wDMqMYp5NXa",
  "slug": "disney-evil-t5wDMqMYp5NXa",
  "bitly_gif_url": "http://gph.is/118SnJg",
  "bitly_url": "http://gph.is/118SnJg",
  "embed_url": "https://giphy.com/embed/t5wDMqMYp5NXa",
  "username": "",
  "source": "http://neonchopsticks.tumblr.com/post/47877781039/neon",
  "title": "Snow White Disney GIF",
  "rating": "g",
  "content_url": "",
  "source_tld": "neonchopsticks.tumblr.com",
  "source_post_url": "http://neonchopsticks.tumblr.com/post/47877781039/neon",
  "is_sticker": 0
}
```

# Memory!



Play Music