Week_21

Trinity - Coding 4 Kids 02/19/2024

Happy President's Day!

Touch Typing - is a style of typing without looking at the keys as you type. Although the phrase refers - typing without using the sense of sight to find the keys. A ***touch typist will know the location of the keys on the keyboard through muscle memory***.

Our number one rule is
"Don't Look at the Keyboard"

Learn the finger for each key and memorize the location, the practice typing each key while NOT looking at the keyboard.
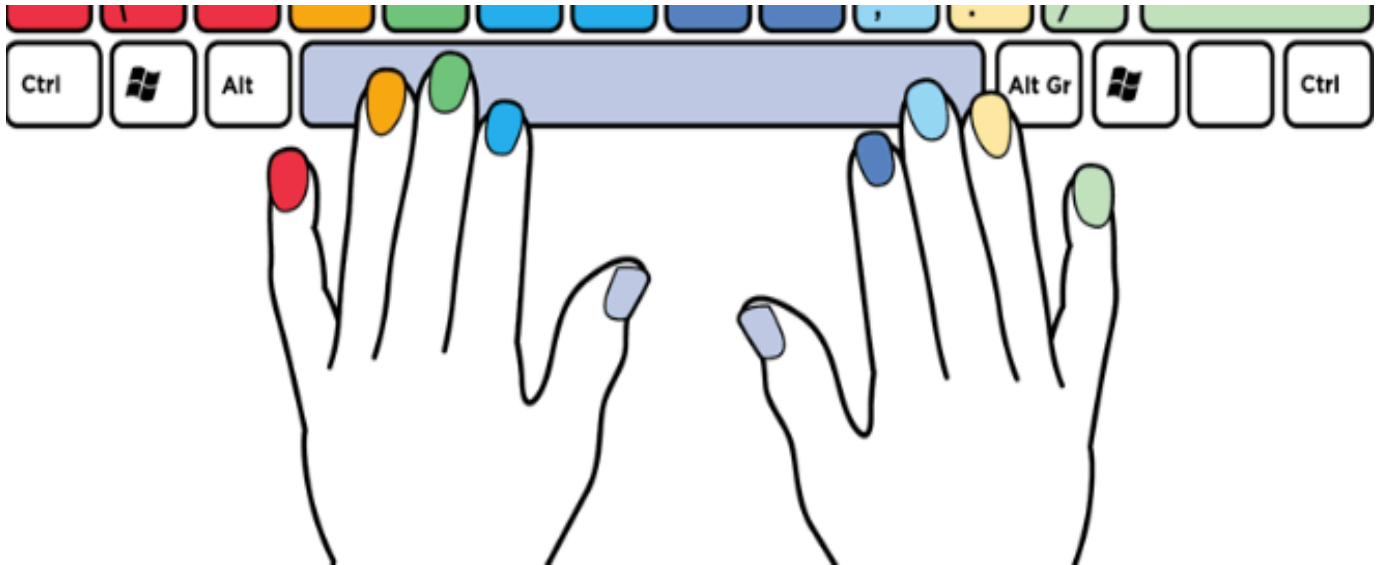
From this image: what keys does the left hand middle finger hit?
What keys does the right hand (4th) finger hit?
What keys does the left hand (2nd) finger hit?
What keys does the right hand (2nd) finger hit?
Which finger hits the most number of keys?

Touch Typing Question:
Which finger do you use for the [Space Bar] ?
Which finger do you use for the [A] Key?
Which finger do you use for the [J] Key?
Which finger do you use for the [D] Key?
Which finger do you use for the [L] Key?
Which finger do you use for the ["enter"] Key?

Today we will talk about Computer Programing

Coding.

Today we will talk about Computer Programing - Coding.

In coding there are "Classes".

A Class is the <mark>blueprint</mark> for an object.
For example lets say we have a class for a "Vehicle"
 (a vehicle can be a car, truck, motorcycle, or a tank)

Every object has Properties and Methods.

Properties store information about the class, examples
Of properties are:
<mark>Color</mark>, what color is the vehicle.
<mark>Wheels</mark>, number of wheels on the vehicle.
<mark>Gas gage</mark>, how much fuel is left, half tank, empty or full.
<mark>Seats</mark>, how many seats does the vehicle have.

Methods are actions you can perform on the object, methods are functions or blocks of code that run when the user executes an event. Examples of methods:
<mark>Start</mark>, start the vehicle.
<mark>Turn off</mark>, turn off the vehicle.
<mark>Go forward,</mark>
<mark>Turn right,</mark>

==Start==, start the vehicle.

==Go forward,==
==Turn right,==
==Turn left,==
==Increase speed,== (hit the gas)
==Decrease speed==, (hit the breaks)
==Fire the cannon,== (if the vehicle is a tank)

Typing Test:

☑ Week_21__Beginner_TouchTyping ◉

Students will take this beginner touch typing take.

Test active	Feb 19, 2024 - Feb 29, 2024
Created on	Feb 18, 2024

☑ Week_21__IntermediateTouchTypingTest ◉

Students will take this simple touch typing with a bible verse.

Lets take a look at the
"Star Wars" coding exercise and
How this can apply...

Score: 500

Instructions

"They're multiplying!"

Can you make two or more Mouse Droids 🔲 appear every time R2-D2 gets
Droid? Get 20 Mouse Droids.

Toolbox   **Workspace**   🔄 Start Ov
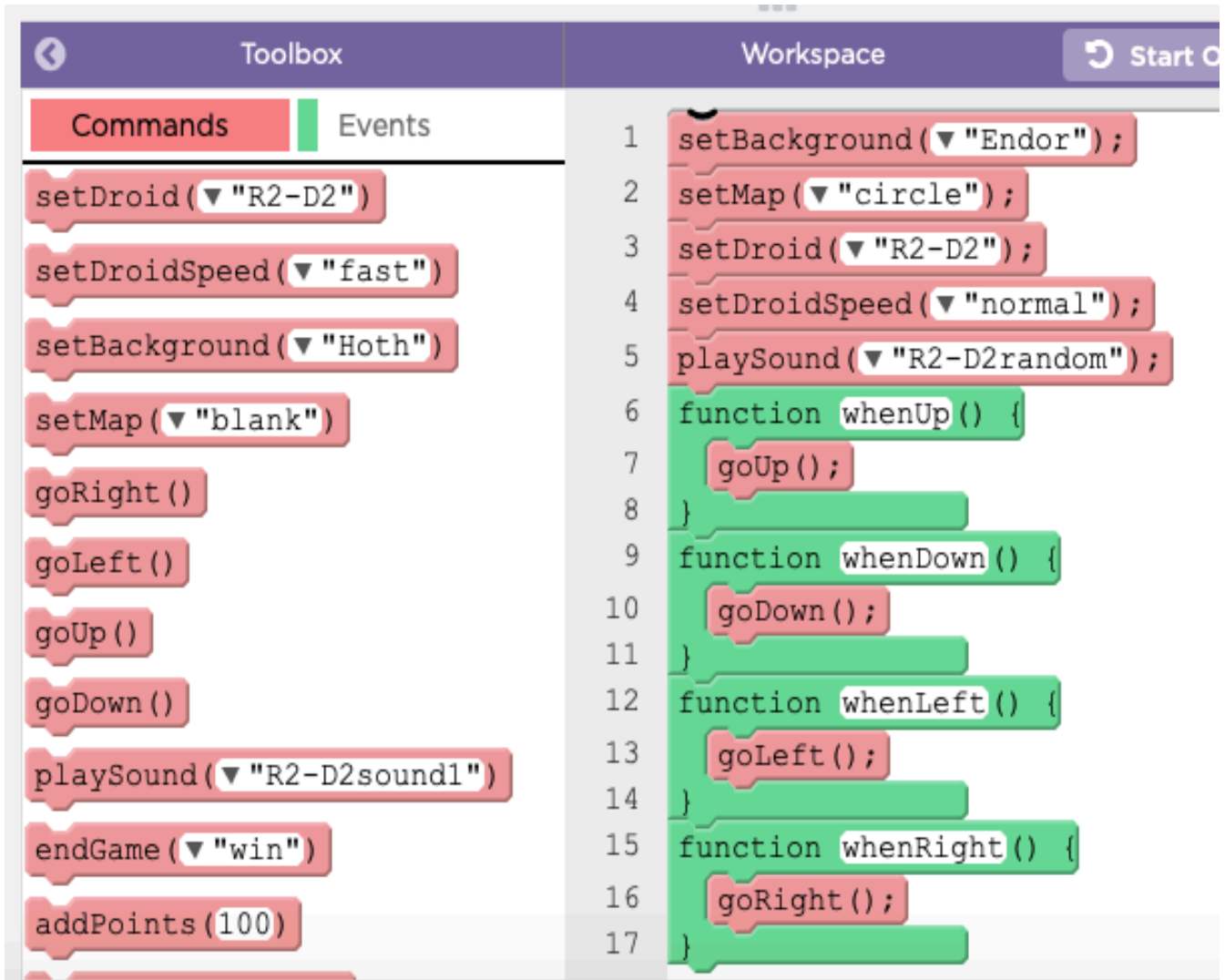
```
playSound(▼ "R2-D2sound1")
addPoints(100)
removePoints(100)
addCharacter(▼ "MouseDroid")
function whenGetMouseDroid()
```

```
1  addCharacter(▼ "MouseDroid");
2  function whenGetMouseDroid() {
3      playSound(▼ "R2-D2sound1");
4      addPoints(100);
5      addCharacter(▼ "MouseDroid");
6      addCharacter(▼ "Mynock");
7      addCharacter(▼ "Tauntaun");
8  }
```

🔄 Reset

◄ ► ▲ ▼

What are properties?
What are methods?

What are properties?
What are methods?

	Toolbox		Workspace	Start C
	Commands	Events		

Toolbox (Commands):
- setDroid(▼ "R2-D2")
- setDroidSpeed(▼ "fast")
- setBackground(▼ "Hoth")
- setMap(▼ "blank")
- goRight()
- goLeft()
- goUp()
- goDown()
- playSound(▼ "R2-D2sound1")
- endGame(▼ "win")
- addPoints(100)
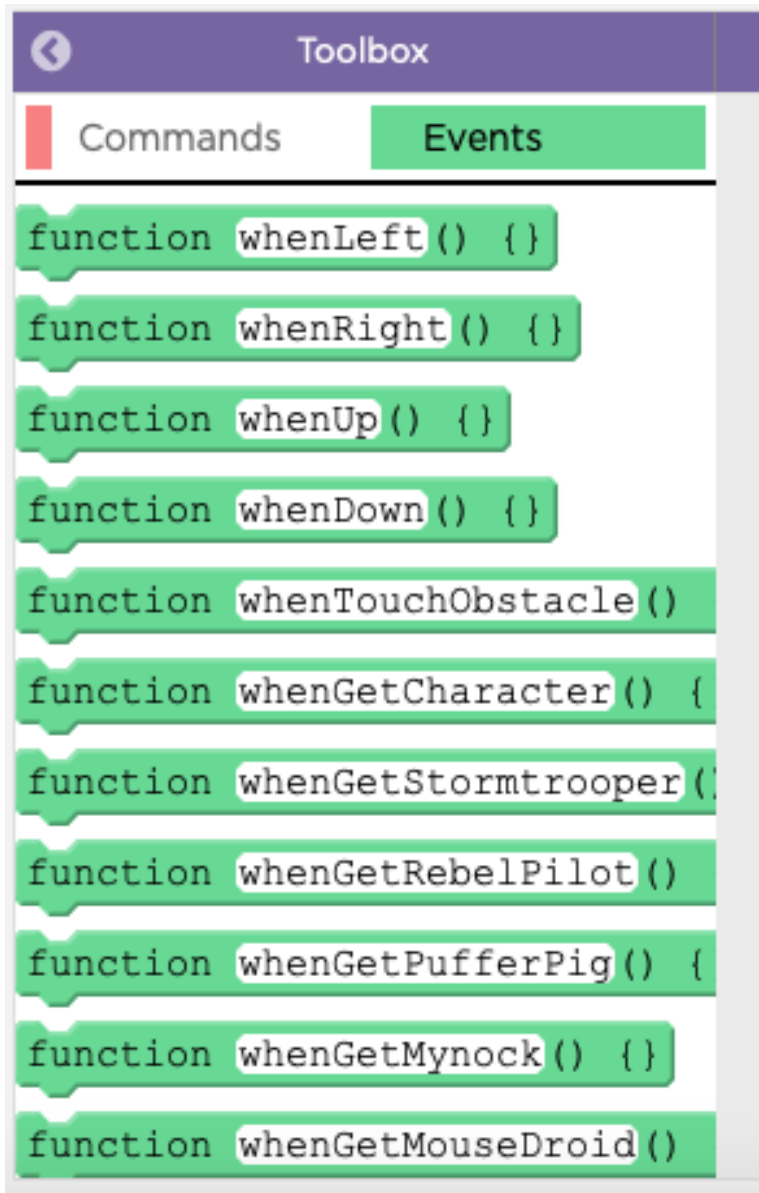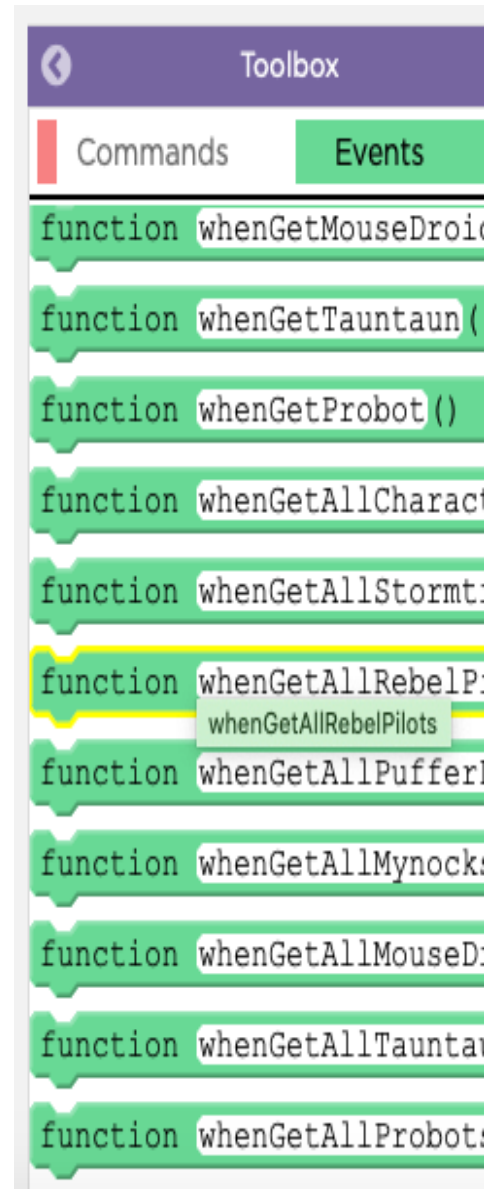
Workspace:
```
1    setBackground(▼ "Endor");
2    setMap(▼ "circle");
3    setDroid(▼ "R2-D2");
4    setDroidSpeed(▼ "normal");
5    playSound(▼ "R2-D2random");
6    function whenUp() {
7        goUp();
8    }
9    function whenDown() {
10       goDown();
11   }
12   function whenLeft() {
13       goLeft();
14   }
15   function whenRight() {
16       goRight();
17   }
```

Which of these are properties, and which are Methods...

User to play the game:

Methods...

Which are more important for the

User to play the game:
Properties or methods?

Toolbox

Commands   Events

function whenLeft() {}

function whenRight() {}

function whenUp() {}

function whenDown() {}

function whenTouchObstacle()

function whenGetCharacter() {

function whenGetStormtrooper(

function whenGetRebelPilot()

function whenGetPufferPig() {

function whenGetMynock() {}

function whenGetMouseDroid()

Toolbox

Commands   Events

function whenGetMouseDroid

function whenGetTauntaun(

function whenGetProbot()

function whenGetAllCharact

function whenGetAllStormt:

function whenGetAllRebelP:
    whenGetAllRebelPilots

function whenGetAllPufferl

function whenGetAllMynocks

function whenGetAllMouseD:

function whenGetAllTauntau

function whenGetAllProbot:

Color ,

Number of bullets,

Turn Left ,

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{}

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Pigs

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s()

Color ,

Number of bullets,

Turn Left ,
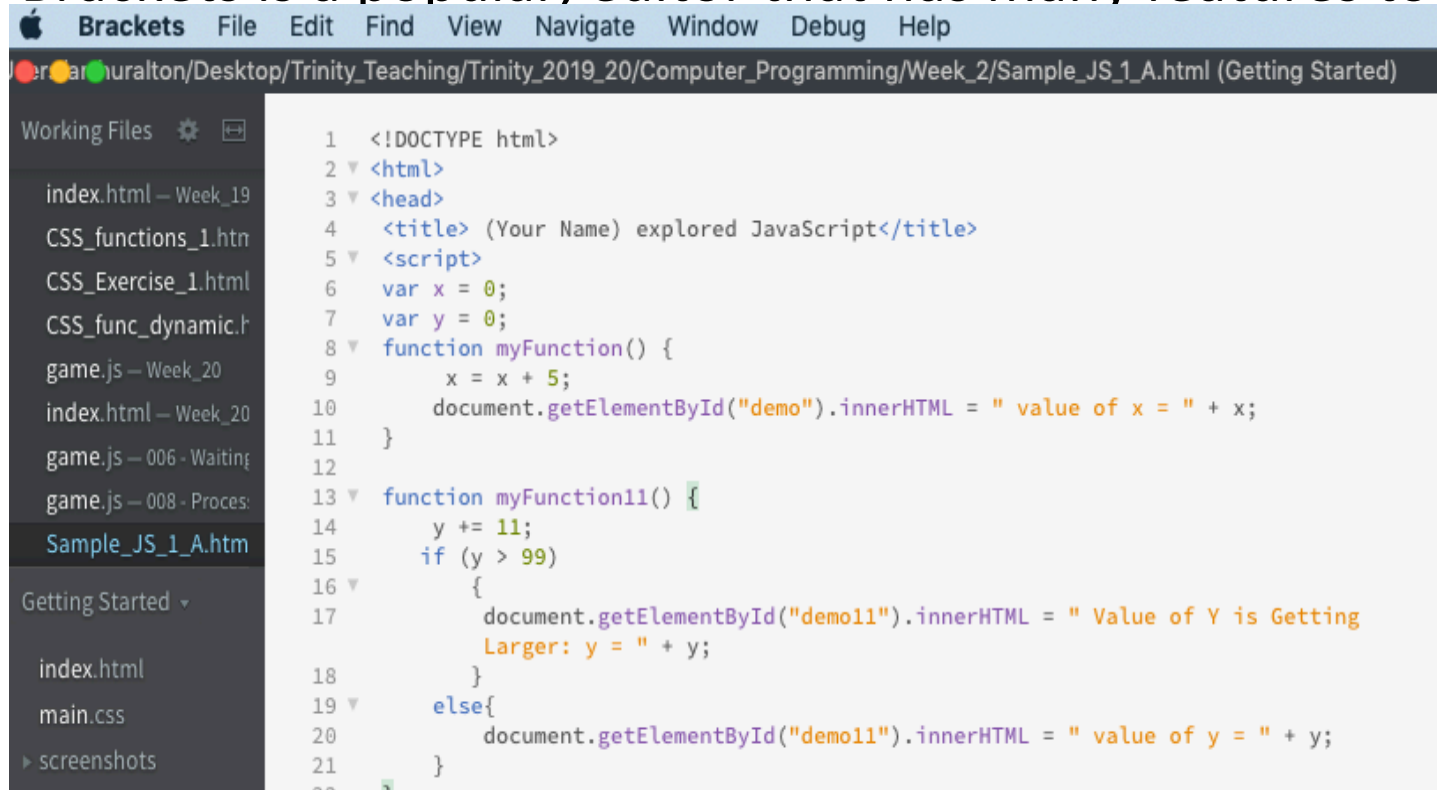
When the game is done ,

Number of players

Today we are going to use a I.D.E.
Individual
Development
Environment
Called Brackets.

Individual

Environment
Called Brackets.

Brackets is a popular, editor that has many features to


```
Brackets    File    Edit    Find    View    Navigate    Window    Debug    Help

User@muralton/Desktop/Trinity_Teaching/Trinity_2019_20/Computer_Programming/Week_2/Sample_JS_1_A.html (Getting Started)

Working Files

index.html — Week_19        1    <!DOCTYPE html>
CSS_functions_1.htm        2    <html>
CSS_Exercise_1.html        3    <head>
CSS_func_dynamic.h         4      <title> (Your Name) explored JavaScript</title>
                           5    <script>
game.js — Week_20          6      var x = 0;
index.html — Week_20       7      var y = 0;
game.js — 006 - Waiting    8    function myFunction() {
game.js — 008 - Process    9        x = x + 5;
Sample_JS_1_A.htm         10        document.getElementById("demo").innerHTML = " value of x = " + x;
                          11    }
Getting Started           12
                          13    function myFunction11() {
index.html                14        y += 11;
main.css                  15        if (y > 99)
screenshots               16        {
                          17            document.getElementById("demo11").innerHTML = " Value of Y is Getting
                                        Larger: y = " + y;
                          18        }
                          19        else{
                          20            document.getElementById("demo11").innerHTML = " value of y = " + y;
                          21        }
```

We will use Brackets to create and edit JavaScript.

We will not learn the complexity of coding,
Just how to modify and run JavaScript programs.

JavaScript is fun

help