

launch code

- Codergirl – WebDev Unit
 - Class 17
- June 16 October 26th, 2020

Agenda

- Studio Review
- Housekeeping
- Review
- Livecoding
- Studio

Housekeeping

- .Graded Assignment #5
- .Launch Checklist Form
- .Due June 23rd

Review – Typescript

.Dynamically Typed

- .Variable types determined at runtime
- .Examples: Javascript and Python
- .More flexible

.Statically Typed

- .Variable types are determined at compile
- .Types are assigned by developer
- .Examples: Java, C#, and Typescript
- .More stable

Review – Typescript

- .Typescript

- .Superset of Javascript

- .Can be used along with JS code

- .Created by Microsoft

- .Developed to add greater stability to large enterprise-level software projects

Review – Typescript

- All variables require a data type

- Javascript:

```
let programmingLanguage = "JavaScript";
```

- Typescript:

```
let variableName: type = value;
```

Review – Typescript

- .Arrays in Typescript

- .Must be declared an array

- .`const array: number[] = [1, 3, 4]`

- .All items must be the same type

- .Use tuple to store items of different types

- .Tuples

- .Similar to JS array, but with defined size

- .Must declare types of items in each position

```
let element1: [string, string, number];
element1 = ['hydrogen', 'H', 1.008];
```

Review – Typescript

Functions

Function name

Parameter type

```
function myFunction(x: number): number {  
    return x*2;  
}
```

Return type

Review – Typescript

Classes

Properties declared with type before constructor

```
class Astronaut {  
    name: string;  
    constructor(firstName: string, lastName: string) {  
        this.name = firstName + " " + lastName;  
    }  
    greet() {  
        return "Hello, " + this.name;  
    }  
}  
  
let Bob = new Astronaut("Bob","Smith");
```

Types included with constructor parameters

Review – Typescript

.Interfaces

- .Not used in JS, but often used in Typescript
- .Create a contract that essentially says:
 - .“If you want to create an object that implements
 - .Implementation up to the user of the interface
 - .All classes that implement the interface are considered to be of that type
- .Covered more in C#/Java Unit 2**

Review – Typescript

ANY
QUESTIONS
?

Live Coding



Now

- Find your group Zoom Studio
- Graded Assignment
- Prep for next week