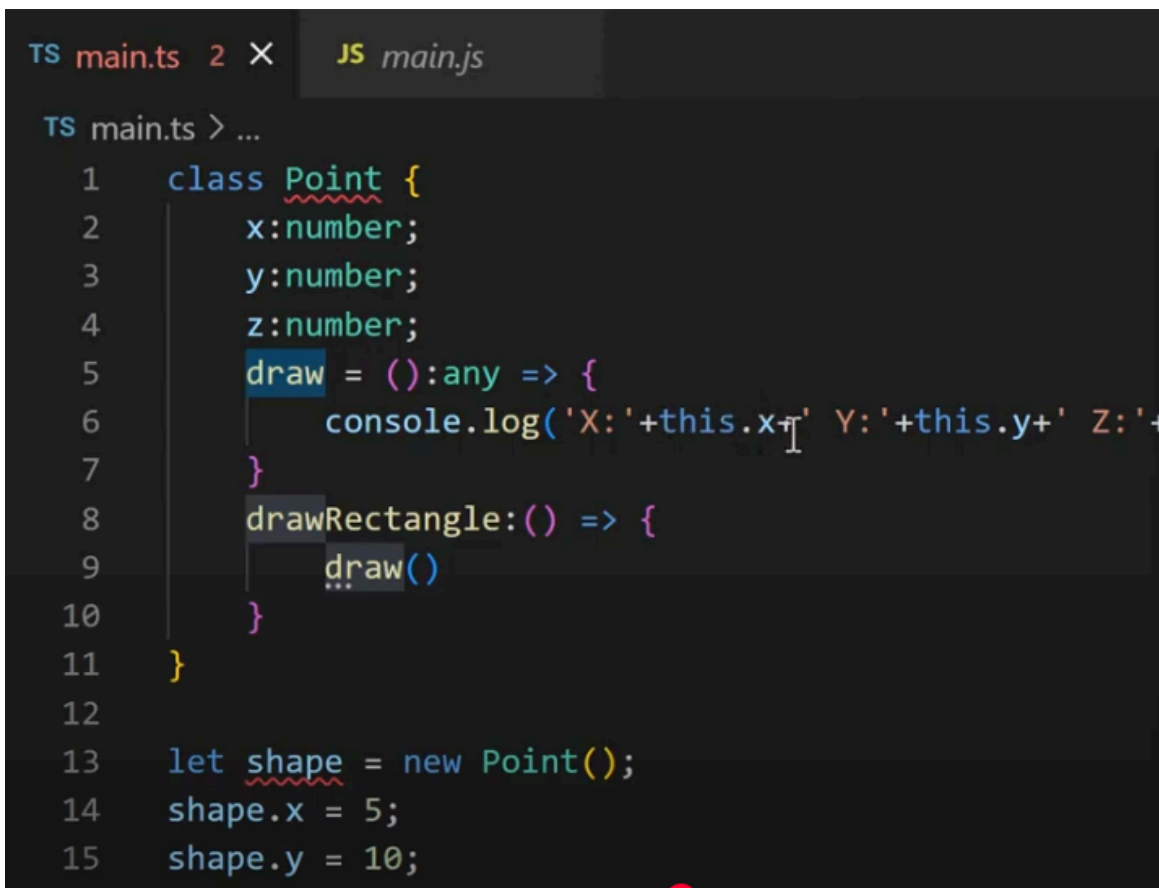


Class

Programming languages has a cohesion (rule)

all the group related thing should need to be in a single class

Class without constructors



```
TS main.ts 2 X JS main.js
TS main.ts > ...
1  class Point {
2      x:number;
3      y:number;
4      z:number;
5      draw = ():any => {
6          console.log('X: '+this.x+' Y: '+this.y+' Z: '+
7      }
8      drawRectangle:() => {
9          draw()
10     }
11 }
12
13 let shape = new Point();
14 shape.x = 5;
15 shape.y = 10;
```

```
let shape = new Point();  
shape.x = 5;  
shape.y = 10;  
shape.z = 15;  
shape.draw()  
💡  
let shape2 = new Point();  
shape2.x = 6;  
shape2.y = 12;  
shape2.z = 18;  
shape2.draw()
```

Objects using the constructors

```
main.ts > ...  
class Point {  
  x:number;  
  y:number;  
  z:number;  
  constructor(x:number, y:number, z:number) {  
    this.x = x;  
    this.y = y;  
    this.z = z;  
  }  
  
  draw = ():any => {  
    console.log('X: '+this.x+ ' Y: '+this.y+ ' Z: '+  
  }  
  drawRectangle:() => {  
    draw()  
  }  
}
```

```

13     }
14     drawRectangle:() => {
15         draw()
16     }
17 }
18
19 let shape = new Point(5,10,15);
20 shape.draw()
21
22 let shape2 = new Point(6,12,18);
23 shape2.draw()

```

To make the constructor optional you can use the ?

```

y:number;
z:number;
constructor(x?:number, y?:number, z?:number) {
    this.x = x;
    this.y = y;
    this.z = z;
}

```

```

let shape = new Point();
shape.draw()
let shape2 = new Point();
shape2.draw()

```

```
E:\Teach\Typscript>node main.js
X:5 Y:10 Z:15
X:6 Y:12 Z:18

E:\Teach\Typscript>tsc main.ts

E:\Teach\Typscript>node main.js
X:undefined Y:undefined Z:undefined
X:undefined Y:undefined Z:undefined

E:\Teach\Typscript>
```

```
src > TS index.ts > ...
 97     id: number
 98     name: string
 99
100     constructor(id: number, name: string) {
101         this.id = id
102         this.name = name
103     }
104
105
106     const iyy = new Person(1, 'Iyyappan')
107     const iyy1 = new Person(2, 'Code')
108     const iyy2 = new Person(3, 'Tamozha')
109
110     console.log(iyy, iyy1, iyy2)
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
iyyappanm@Iyyappans-MacBook-Pro dist % node index
Person { id: 1, name: 'Iyyappan' } Person { id: 2, name: 'Code' } Person { id: 3,
name: 'Tamozha' }
iyyappanm@Iyyappans-MacBook-Pro dist %
```

• Classes >