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Day 4: Create a Rectangle Object 🖈

Points: 15/17



Topics

Problem Submissions Leaderboard Discussions Editorial by AllisonP We can construct the rectangle using the built-in Object constructor: However, there isn't a lot of sense in doing this, at the very least because the properties of the object we created won't be very obvious to someone else reading this code. Here are some more optimal approaches: 1. Use a Constructor Function Here are a few approaches: function Rectangle(a, b) { return { get length() { return a; }, get width() { return b; }, get perimeter() { return 2 * (a + b); }, get area() { return a * b; } } } function Rectangle(a, b) { // Set the object's properties this.length = a; this.width = b; this.perimeter = 2 * a + 2 * b; this.area = a * b; // This isn't necessary, but it prevents new properties f // It also prevents the properties we've already set from Object.freeze(this); } function Rectangle(a, b) { Object.defineProperty(this, 'length', { get: () => { return a; } }); Object.defineProperty(this, 'width', { get: () => { return b; });

Object.defineProperty(this, 'perimeter', {

STATISTICS

Difficulty:

Easy

Time Complexity:

Publish Date:

May 30 2016

This is a Practice Challenge

Editorial

NEED HELP?

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```
get: () => {
          return 2 * (a + b);
    }
});

Object.defineProperty(this, 'area', {
          get: () => {
              return a * b;
          }
});
}
```

2. Use an Object Initializer / Object Literal

Probably the easiest way to construct an object on the fly is to use object literals. For example:

```
let myObject = {
    property1: 1,
    property2: 2
    // ... and so on
}
console.log(myObject)
// This prints:
// { property1: 1, property2: 2 }
```

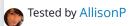
In the context of this challenge, we construct our rectangle like so:

```
function Rectangle(a, b) {
   const rectangle = {
      length: a,
      width: b,
      perimeter: 2 * (a + b),
      area: a * b
   };
   return rectangle;
}
```

Set by AvmnuSng

Problem Setter's code:

```
function Rectangle(a, b) {
   const rec = {
      length: a,
      width: b,
      perimeter: 2 * (a + b),
      area: a * b
   };
   return rec;
}
```



```
function Rectangle(a, b) {
    this.length = a;
    this.width = b;
    this.perimeter = 2 * a + 2 * b;
    this.area = a * b;
    Object.freeze(this);
}

Feedback
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```

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