



기초 웹

22 Winter CNU 기초 스터디

21 남정연

21 박준서

Javascript Object

```
const person = {  
  name : {  
    first: 'Bob',  
    last: 'Smith'  
  },  
  age: 32,  
  bio() {  
    console.log(`${this.name[0]} ${this.name[1]} is ${this.age} years old.`);  
  },  
  introduceSelf() {  
    console.log(`Hi! I'm ${this.name[0]}.`);  
  }  
};
```

Object Notations

```
const person = {  
  name : {  
    first: 'Bob',  
    last: 'Smith'  
  },  
  age: 32,  
  bio() {  
    console.log(`${this`  
  },  
  introduceSelf() {  
    console.log(`Hi! I`  
  }  
};
```

```
person.age  
person.name.first
```

```
person['age']  
person['name']['first']
```

Object Notations

```
const person = {  
  name : {  
    first: 'Bob',  
    last: 'Smith'  
  },  
  age: 32,  
  bio() {  
    console.log(`${this`  
  },  
  introduceSelf() {  
    console.log(`Hi! I`  
  }  
};
```

```
person.age = 45;  
person['name']['last'] = 'Cratchit';
```

```
person['eyes'] = 'hazel';  
person.farewell = function() {  
  console.log('Bye everybody!');  
}
```

Object Notations

```
const person = {  
  name : {  
    first: 'Bob',  
    last: 'Smith'  
  },  
  age: 32,  
  bio() {  
    console.log(`${this}`);  
  },  
  introduceSelf() {  
    console.log(`Hi! I`);  
  }  
};
```

```
const myDataName = 'height';  
const myDataValue = '1.75m';  
person[myDataName] = myDataValue;
```

'this' keyword

```
introduceSelf() {  
  console.log(`Hi! I'm ${this.name[0]}.`);  
}
```

'this' keyword

```
const person1 = {  
  name: 'Chris',  
  introduceSelf() {  
    console.log(`Hi! I'm ${this.name}.`);  
  }  
}  
  
const person2 = {  
  name: 'Deepti',  
  introduceSelf() {  
    console.log(`Hi! I'm ${this.name}.`);  
  }  
}
```

Javascript Constructor

```
function createPerson(name) {  
  const obj = {};  
  obj.name = name;  
  obj.introduceSelf = function() {  
    console.log(`Hi! I'm ${this.name}.`);  
  }  
  return obj;  
}
```

```
const salva = createPerson('Salva');  
salva.name;  
salva.introduceSelf();  
  
const frankie = createPerson('Frankie');  
frankie.name;  
frankie.introduceSelf();
```


Javascript Constructor

This works fine but is a bit long-winded: we have to create an empty object, initialize it, and return it. A better way is to use a **constructor**. A constructor is just a function called using the `new` keyword. When you call a constructor, it will:

- create a new object
- bind `this` to the new object, so you can refer to `this` in your constructor code
- run the code in the constructor
- return the new object.

Javascript Constructor

```
function Person(name) {  
  this.name = name;  
  this.introduceSelf = function() {  
    console.log(`Hi! I'm ${this.name}.`);  
  }  
}
```

```
const salva = new Person('Salva');  
salva.name;  
salva.introduceSelf();  
  
const frankie = new Person('Frankie');  
frankie.name;  
frankie.introduceSelf();
```

Prototype Chain

```
const myObject = {  
  city: 'Madrid',  
  greet() {  
    console.log(`Greetings from ${this.city}`);  
  }  
}  
  
myObject.greet(); // Greetings from Madrid
```

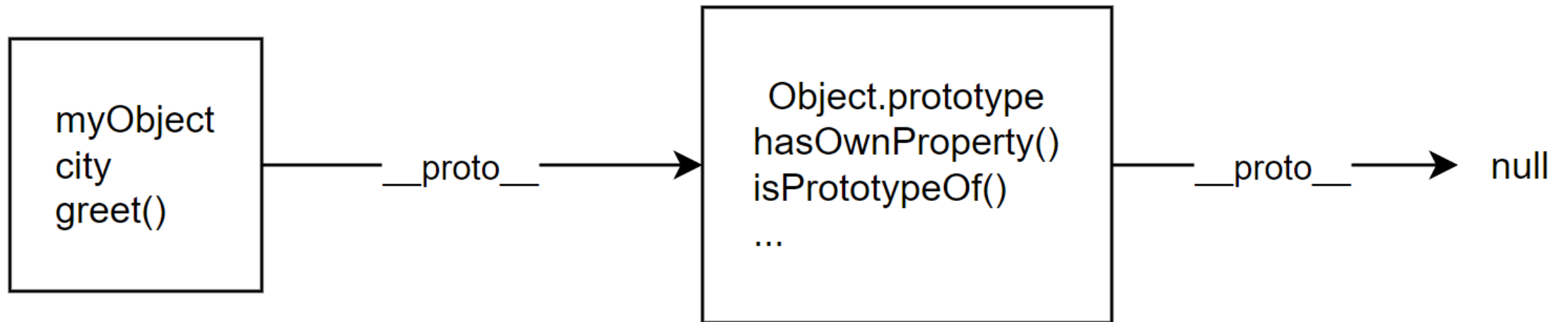
```
myObject.toString(); // "[object Object]"
```

Prototype Chain

```
const myObject = {  
  city: 'Madrid',  
  greet() {  
    console.log(`Greetings from ${this.city}`);  
  }  
}  
  
myObject.greet(); // Greetings from Madrid
```

```
__defineGetter__  
__defineSetter__  
__lookupGetter__  
__lookupSetter__  
__proto__  
city  
constructor  
greet  
hasOwnProperty  
isPrototypeOf  
propertyIsEnumerable  
toLocaleString  
toString  
valueOf
```

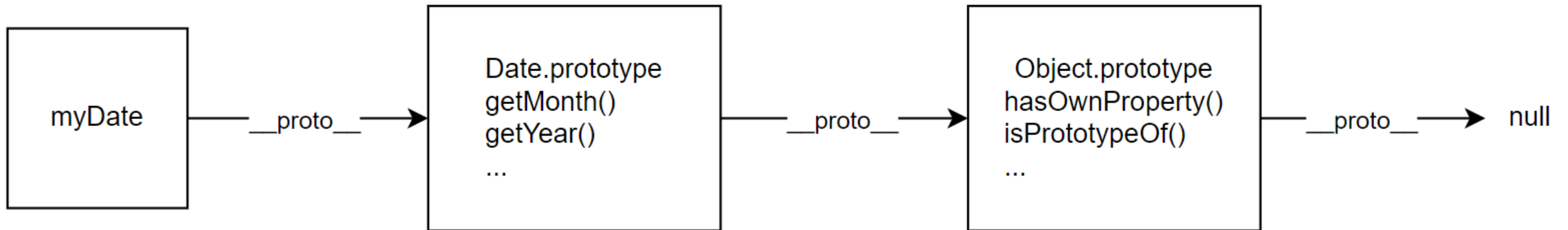
Prototype Chain



Prototype Chain

```
const myDate = new Date();  
let object = myDate;  
  
do {  
  object = Object.getPrototypeOf(object);  
  console.log(object);  
} while (object);  
  
// Date.prototype  
// Object {...}  
// null
```

Prototype Chain



Shadowing Property

```
const myDate = new Date(1995, 11, 17);

console.log(myDate.getFullYear()); // 95

myDate.getFullYear = function() {
  console.log('something else!')
};

console.log(myDate.getFullYear()); // 'something else!'
```


Setting a prototype

```
const personPrototype = {  
  greet() {  
    console.log('hello!');  
  }  
}  
  
const carl = Object.create(personPrototype);  
carl.greet(); // hello!
```

```
const personPrototype = {  
  greet() {  
    console.log(`hello, my name is ${this.name}!`);  
  }  
}  
  
function Person(name) {  
  this.name = name;  
}  
  
Person.prototype = personPrototype;  
Person.prototype.constructor = Person;
```

Setting a prototype

```
const personPrototype = {  
  greet() {  
    console.log('hello!');  
  }  
}  
  
const carl = Object.create(personPrototype);  
carl.greet(); // hello!
```

```
const personPrototype = {  
  greet() {  
    console.log(`hello, my name is ${this.name}!`);  
  }  
}  
  
function Person(name) {  
  this.name = name;  
}  
  
Person.prototype = personPrototype;  
Person.prototype.constructor = Person;
```

Setting a prototype

```
const irma = new Person('Irma');  
  
console.log(Object.hasOwn(irma, 'name')); // true  
console.log(Object.hasOwn(irma, 'greet')); // false
```

Setting a prototype

```
const irma = new Person('Irma');  
  
console.log(Object.hasOwn(irma, 'name')); // true  
console.log(Object.hasOwn(irma, 'greet')); // false
```