JavaScript
Advanced Course
Part 1

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Agenda

1. Primitives and Objects

PRIMITIVES

Numbers
Strings
Booleans
Undefined
Null

OBJECTS

Arrays
Functions
Objects
Dates
Wrappers for Numbers,
Strings, Booleans

... IS AN OBJECT

2. Object Oriented Paradigm

OOP (Object Oriented Programming)

- Object interacting with one another through methods and properties

- Used to store data, structure applications into modules and keeping clode clean

3. Constructors and Instances

```
var john = {
         Name: 'John',
         yearOfBirth: 1990,
         isMarried: false
}
```

```
var jane = {
         Name: 'Jane',
         yearOfBirth: 1991,
         isMarried: true
}
```

```
var mark = {
         Name: 'Mark',
         yearOfBirth: 1948,
         isMarried: true
}
```

3. Constructors and Instances

```
var john = {
        Name: 'John',
        yearOfBirth: 1990,
        isMarried: false
}
```

```
var jane = {
        Name: 'Jane',
        yearOfBirth: 1991,
        isMarried: true
}
```
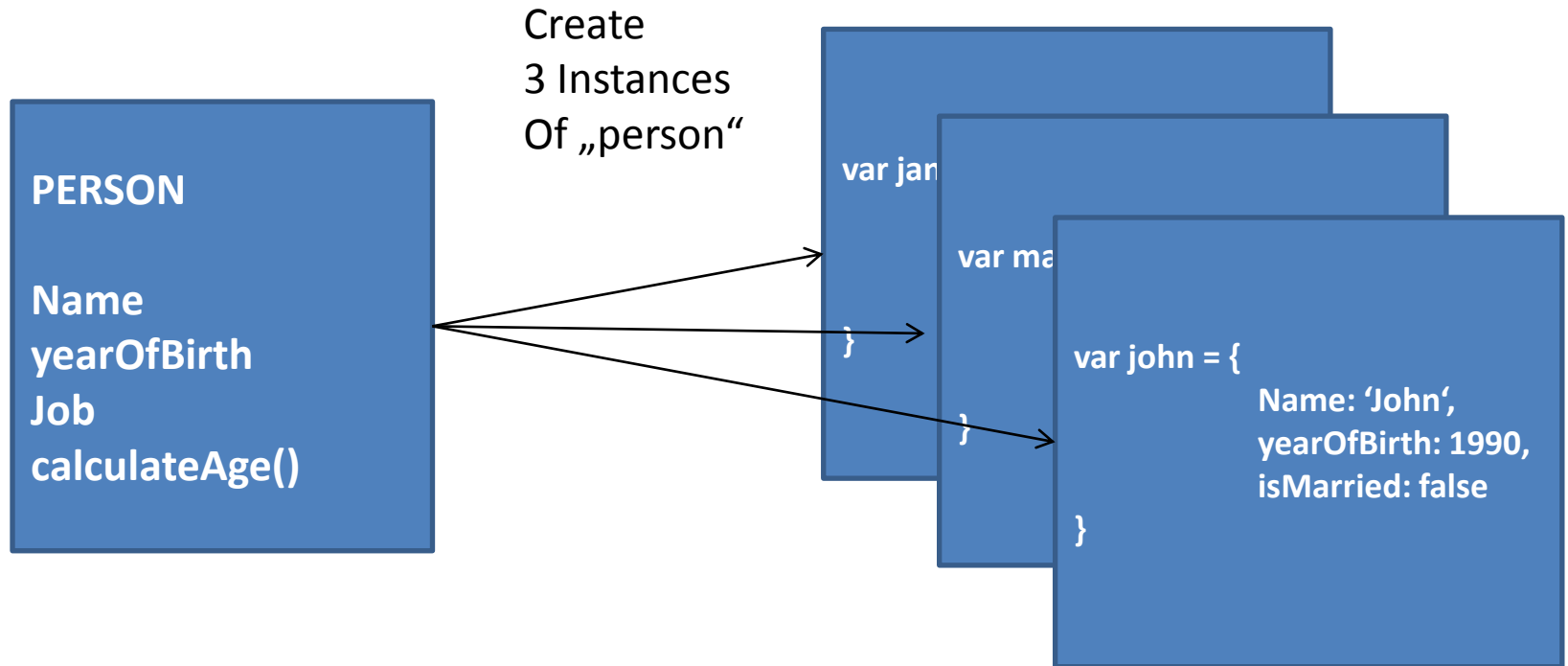
```
var mark = {
        Name: 'Mark',
        yearOfBirth: 1948,
        isMarried: true
}
```

3 Objects = A lot of typing

3. Constructors and Instances

CONSTRUCTOR

INSTANCES

Create
3 Instances
Of „person"

PERSON

Name
yearOfBirth
Job
calculateAge()

var jan

}

var ma

}

var john = {
Name: 'John',
yearOfBirth: 1990,
isMarried: false

}

4. Inheritance

PERSON

Name
yearOfBirth
Job
calculateAge()

4. Inheritance

PERSON

Name
yearOfBirth
Job
calculateAge()

ATHLETE

Olympics
olympicMedals
allowedOlympics()

4. Inheritance

PERSON

Name
yearOfBirth
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ATHLETE

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4. Inheritance

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olympicMedals
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ATHLETE

Name
yearOfBirth
Job
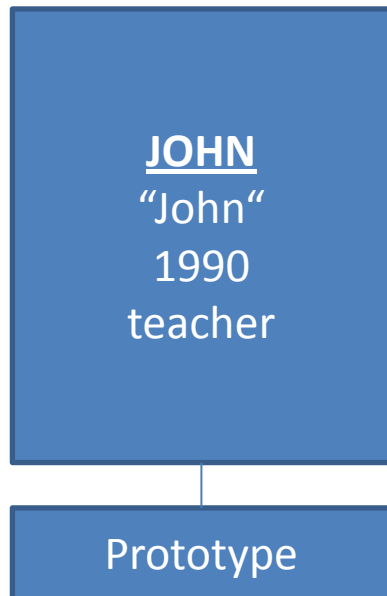**calculateAge()**
Olympics
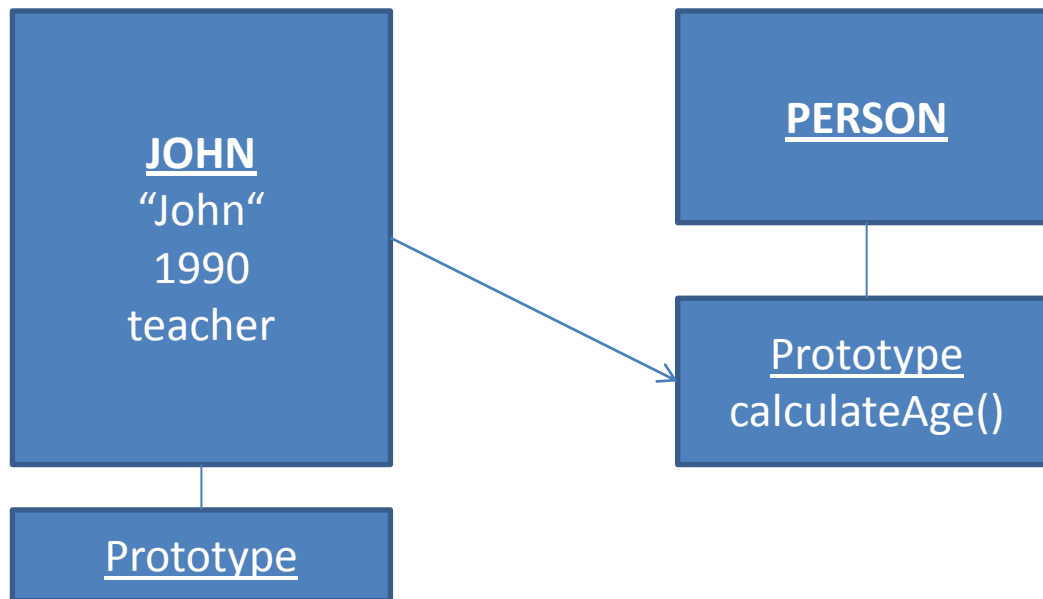**olympicMedals**
allowedOlympics()
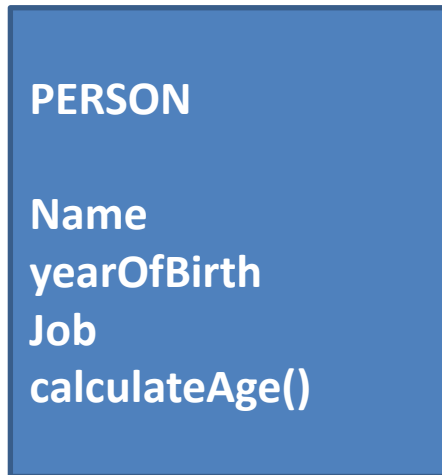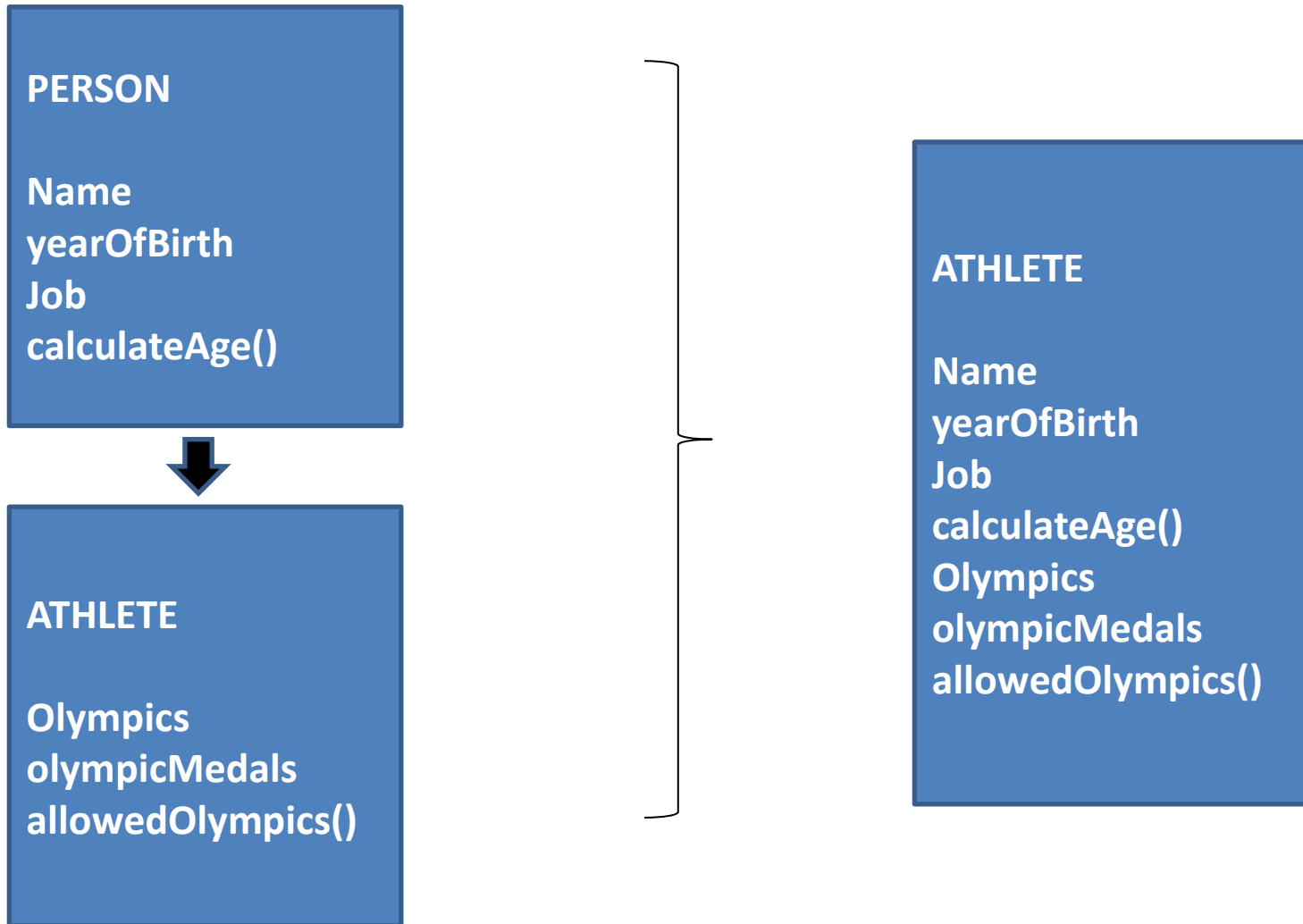
5. Prototype

- Every object in JavaScript has an attribute called **prototype**
- Each prototype has an attribute, which itself a prototype
- This goes on, **until prototype is null**

6. Prototype-Chain

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