

Object.create()

```
const createPlayerFuncs = {  
  charge: function charge() {  
    this.battery = 100;  
  }  
}
```

```
function createPlayer(name, battery) {  
  let newPlayer = Object.create(createPlayerFuncs)  
  newPlayer.name = name;  
  newPlayer.battery = battery;  
  return newPlayer;  
}
```

Object.create creates a link from newPlayer to createPlayerFuncs object.

So now newPlayer object that we created via Object.create() has access to createPlayerFuncs object through prototypal inheritance.

If you `console.log(newPlayer)` you won't see charge function, but if you log `newPlayer.__proto__` you can see it because newPlayer is pointing upto createPlayerFuncs in the prototypal chain.

Another alternative → Constructor functions

```
function createPlayer (name, battery) {  
    this.name = name;  
    this.battery = battery;  
}
```

```
const player1 = new createPlayer('John', 20)  
> player1.name  
> John
```

Any function invoked with the new keyword is a constructor function.

We don't need to return the object from the constructor function, instead it is automatically created and returned.

Convention : Always start your constructor function with capital letter.

So CreatePlayer instead of createPlayer

★★ when it comes to constructor functions, 'this' keyword doesn't point to global (window) object

instead it points to the object we want to create. In this case player1.

So `this.name = name;` is equivalent to `player1.name = name`

That's how we get these properties in `player1`

So all of it happens because we're using new keyword

Now how^{do} we actually attach charge function when using constructor functions.

When it comes to constructor functions, we can attach any new properties using prototype that every function has access to when created

```
createPlayer.prototype.charge = function() {  
    this.battery = 100;  
}
```