

Creating objects

Declare a variable

```
int nrStudents;
```

Declare an object reference

```
Player player;
```

Declare and init a variable

```
int nrStudents;  
nrStudents = 17;
```

```
int nrBands = 123;
```

Declare and init an object

```
Player player;  
player = new Player();
```

Or

```
Player player = new Player();
```

What?

```
new Player();
```

What?

```
player = new Player();
```

Constructor

Mechanism to construct objects.

Name of the Player object?

It would be nice to be able to give the Player object a name. Sort of like,

```
Player player =  
    new Player("Adam");
```

Constructor

Can have parameters for passing information (to the constructor).

Declare and init an object

```
Player player = new Player("Adam");
```

- The Player object is an instance of Player
- Player is like a template for Player objects
- player is a (reference) variable referring to the Player object

Ok, the reference variable player refers to the object. Big deal?

Yes, it is a very big deal.

We can have multiple reference variables referring to the same object.

It is NOT three different objects. It is one object and three references.

How about multiple objects?

Declare and init an object

```
Player player1 = new Player("Adam");
```

```
Player player2 = new Player("Anna");
```

Remove objects?

Not needed in Java

Done automatically