Building Blocks

Local Variable Type Inference (LVTI)

Local Variable Type Inference

- this feature is introduced in Java 10

- *local variable* - can be used only with local variables

- *type inference* - the type of the variable is inferred by the compiler

```
var a = 5;
```

- in this example, a is inferred to be of type `int`

  - and this will stay so for the duration of the variable scope

```
var a = "John Wayne";   // DOES NOT COMPILE
```

```java
// you cannot assign null to LVTI (it's impossible to infer type)
var s = null;    // DOES NOT COMPILE


// var is NOT the reserved word (for backward compatibility reasons)
public class Var {}    // OK
var var = 5;           // OK
Var var = new Var();   // OK


// remember - only local variables!
public int sum(var a, var b) {
  int result = a + b;
  return result;
}  // DOES NOT COMPILE
```

```
// practical usage


// old way

SomeClassWithVeryVeryLongName myInstance = new SomeClassWithVeryVeryLongName();

// new way

var myInstance = new SomeClassWithVeryVeryLongName();


// old way

ClientList<Client> clientList =
  new SomeClassWithVeryVeryLongName().getClientList();
// new way

var clientList = new SomeClassWithVeryVeryLongName().getClientList();
```