

# OO Programming

## Lab 01

Do the following to prepare for the module:

1. register for **password recovery if necessary**
  - <https://www.tudublin.ie/password/>
2. get your **free Student Github account-pack** with your **university email** address
  - <https://github.com/education/students>
  - as well as Github benefits, it means you can use your email/account to use the IntelliJ-IDEA Java for free at college and on your own computer (from JetBrains company)
3. Sign up for JetBrains Education - free licences
4. <https://www.jetbrains.com/community/education/#students>
5. ensure **Java** is working
  - create, compile and run a simple **Main.java** program to display "**Hello OO Programming from Java**" at the command line (**Exercise 1**)
6. Try creating a new class for "**Car**" - with **make** (String) and **colour** (String)
  - then create a **Main** class, containing a **main(String[] args)** method, that creates 2 car objects and prints out their details
  - NOTE: each class should be in its own file - so here you have 2 files: **Main.java** and **Car.java** (**Exercise 2**)
7. Work through the OO Java topics recap materials

NOTE:

- if you need to change the Java Version for an IntelliJ-IDEA project, follow these steps:

<https://www.baeldung.com/intellij-change-java-version>

Extra tasks:

- once you've signed up to Github education and JetBrains, you could try the 3-month Java programming course from JetBrains
  - <https://lp.jetbrains.com/jba-for-students/>

## Exercise 1

Declare a Main class, containing a main() method that outputs the text:  
Java is working!

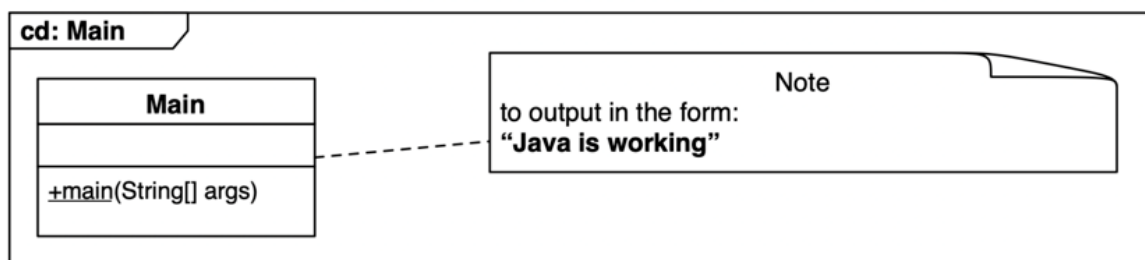


Figure 1.1: Class diagram (cd) for class Main

## Lab Sheet 1 - hints

Java in "Hello.java"

```
String message= "Hello world from Java"  
System.out.println(message)
```

## Exercise 2

- Try creating a new class for "**Car**" - with **make** (String) and **colour** (String)
  - then create a **Main** class, containing a **main(String[] args)** method, that creates 2 car objects and prints out their details
  - NOTE: each class should be in its own file - so here you have 2 files: **Main.java** and **Car.java**

## Exercises

Work through exercises at the end of Chapter 3 in Book 1