## How to program a simple controller in Java - Tutorial

Download the contest package, TORCS Launcher, torcs.properties and the submission template.

Open torcs.properties and change the paths.

Create a Java project with your IDE (you should be using Java 1.7 or newer) and import the contest package and the submission template.

Set the path to torcs.properties in the main function of the class DeafaultDriverAlgorithm.

You can use the submission template to get started. You may implement or add any methods, classes or packages you need.

The main class is DefaultDriverAlgorithm.

The following code allows you to save and load the state of objects. This will be saved as a .mem file in a directory called memory.

```
DefaultDriverAlgorithm algorithm = new DefaultDriverAlgorithm();
DriversUtils.registerMemory(algorithm.getDriverClass())
```

When submitting a .jar file to the website, make sure the .jar contains the java class files, your source code, the memory directory, any packages your controller uses and a valid MANIFEST.MF.

The MANIFEST.MF should contain the following entries:

```
Main-Class: /path/to/DefaultDriverAlgorithm Driver: /path/to/DefaultDriver
```

## **Example**

An example of a driver can be downloaded here.

You can run the class DefaultDriverAlgorithm to see the controller in action.

For mac users Torcs should launch automatically to see the race if withGUI is set to true.

Windows and Linux users will see the following message on their console once the program is run:

Driver name: Sending init String via port: 3001...

After seeing this message, one should Launch Torcs manually, configure a race where a scr server bot is selected and start the race. After this, a connection will be established with the client in your IDE and you will see the controller in action.