

3C03 Concurrency

Lab Session 2 - Work Sheet

This lab session will give you practical experience on how to implement Java Threads.

Java source files end with the file name extension `.java`. The java compiler that creates machine independent bytecode is given a Java source file as a command line argument. It is invoked using `javac <file>`.

The on-line documentation of the java development kit (jdk) and in particular of the Java API that is installed on the machines in lab B13 is available from `file:/usr/java/webdocs/release.html`

For the exercises in this lab you want to copy the Java and HTML source file from <http://www.cs.ucl.ac.uk/staff/W.Emmerich/lectures/C340-98-99/classes/ThreadDemo> into an empty directory of yours.

Exercise 1:

We want to modify the behaviour of `ThreadDemo` such that there are three concurrent rotations. Define this modified behaviour in FSP

Exercise 2:

Modify the Java source of `ThreadDemo` that you downloaded from my web page so that it implements this modified behaviour.

Exercise 3:

The `DisplayThread` class in the `ThreadDemo` applet and your modified version implement threads by inheriting from `Thread`. Implement `DisplayThread` without this inheritance relationship.