

## **C340 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 source file from `http://www.cs.ucl.ac.uk/staff/W.Emmerich/lectures/concurrency/classes/MyThreadDemo/ThreadDemo.html` 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 `ThreadDemo` applet and your modified version implement threads by inheriting from `Thread`. Implement `ThreadDemo` without this inheritance relationship.