UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG
School of Electrical and Information Engineering
SD Methodologies, Analysis and Design

Design Patterns — Presentation Topics

The time-limit for each presentation is strictly 20 minutes.

Presentations need to be *interactive*, in other words, the class needs to be involved in some *activity or exercise* to illustrate the topic that you are explaining. This implies that your actual talk-time is much less than 20 minutes!

Please email your presentations, in PDF or PowerPoint format, to me by 12:00 on the presentation day (joshua@jcse.org.za).

Each presentation should include sections on:

- the problem that needs to be solved (choose a *realistic* yet understandable problem as opposed to a toy problem invented to illustrate the pattern);
- a description of the solution;
- the trade-offs that the pattern makes or the consequences of adopting the pattern;
- the pattern implementation in either Java, C++ or C#.

The design patterns to be covered are:

1 Observer (behavioural)

2 Command (behavioural)

3 Strategy (behavioural)

4 Factory Method (creational)

5 Facade (structural)