

# COMP 47480 Contemporary Software Development

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## Lab Journal

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**BSc. (Hons.) in Computer Science**



UCD School of Computer Science  
University College Dublin

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# Practical 1: Extreme Programming

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## 1.1 Work Done

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## 1.2 Reflections

I worked in an agile environment during an internship though we didn't use XP Programming. We worked in two week sprints or iterations and had stand-ups on a daily basis. Because of this I thought I was familiar with most of what there is to know about an agile development environment, but this practical session showed me that I have barely touched the surface of what there is to know about an agile environment.

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## 2 Practical 2: Modelling with UML

This practical involved ... Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

### 2.1 Work Done

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Note that if you need to write code, this document has a *code* style for formatting short excerpts of source code. It is a simple indented, single-spaced style using a fixed font (e.g. `menlo`) to produce code that appears like the following:

```
let names = ["Science" "Computer" "of" "School" "UCD"]
func backwards(s1: String, s2: String) -> Bool
{
    return s1 > s2
}
var reversed = sorted(names, backwards)
// reversed is equal to ["UCD", "School", "of", "Computer", "Science"]
```

### 2.2 Reflections

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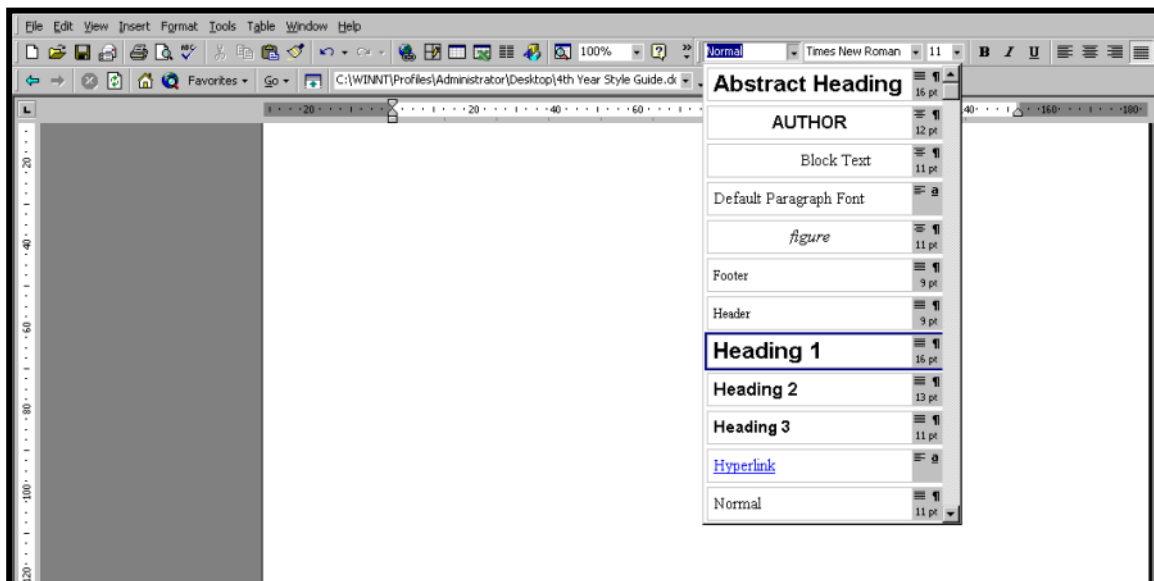


Figure 1. This is a random figure. The text in the legend should explain the figure.

## 3 Practical 3: Test-Driven Development

Introductory text.

### 3.1 Work Done

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### 3.2 Reflections

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## 4 Practical 4: Object-Oriented Principles

Introductory text.

### 4.1 Work Done

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### 4.2 Reflections

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## 5 Practical 5: Refactoring

Introductory text.

### 5.1 Work Done

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### 5.2 Reflections

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## 6 Practical 6: Design Patterns

Introductory text.

### 6.1 Work Done

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### 6.2 Reflections

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## **7 Practical 7: Company Seminar Series**

Introductory text... three companies. About 1,000 words on each seminar, and similar number on comparing the companies.

### **7.1 IBM Seminar**

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### **7.2 Facebook Seminar**

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### **7.3 FoodCloud Seminar**

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### **7.4 Comparison of Company Seminars**

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## References

Excellent reports will have references to support the 'Reflections' sections. Here's where they should go.

[1] Erich Gamma, Richard Helm, Ralph Johnson and John Vlissides, *Design patterns: elements of reusable object-oriented software*, Addison-Wesley, 1995.

## Comp 47480 Practical Exercises and Journal

Practical exercises are undertaken either individually, or a small group. You are partially assessed on your work in the lab, so it is essential to attend. If you are not able to attend a practical due to illness, please submit a medical certificate to the TA.

In most practicals, an artefact is produced -- it may be a report, a UML design or, more usually, a piece of code. You will be given a deadline by which to submit this. Submission is always through the 47480 GitHub repository you were provided with.

### Lab Journal

As well as the artefact you produce, you are also asked to maintain a lab journal throughout the module. The lab journal comprises a chapter of 600-800 words<sup>1</sup> on each of the practical exercises. This is your personal journal and should **not** be written in collaboration with other members of your group. It forms a very significant part of the assessment of your work in the 47480 practicals.

**FORMATTING:** Your journal should be organised as a proper report with a header page providing your student details, module name etc. One chapter per practical, and each chapter should start on a new page. A messy report creates a poor impression.

**CONTENT:** In general, there's no need to reproduce your lab solution (artefact) in its entirety in your journal, but you may include parts of it. The purpose of the journal is to show your reflections on the practical (and module) material.

**STRUCTURE:** A suggested basic structure for each lab entry is as follows:

**Work done:** A *short*, factual account of what you did. Keep this section as terse as possible

**Reflections:** Personal reflections on the exercise.

Topics you might write about include, but are not limited to:

- Why you did things a certain way, alternative approaches you considered, alternatives you may have preferred on reflection;
- Linkages to other modules, other areas of computer science, or other experiences you've had;
- A deeper study of some aspects of the lab you found particularly interesting.

Further details will be provided with each practical.

Rote entries will get at best a good grade. For a very good or excellent grade you need to demonstrate that you've thought about the material and read beyond what's been covered directly in the module. Don't be shy to 'show off' the extra work you've done -- that's what the journal is for.

You can write in a fairly informal style — it's a personal journal. Assume that the report is being read by someone who hasn't seen your actual lab work. So don't include the lab artefact entirely, but where appropriate add specific code snippets etc, that provide more detail on what you did.

After each practical you should:

1. Place your lab journal entry and the artefact produced into the GitHub directory for that practical.
2. Add a new chapter to your lab journal in your root directory with a copy your lab entry for that practical.

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<sup>1</sup> 800 words of quality is better than 1000 words of padding. For comparison purposes, the document you're reading is about 650 words.

What you place in the practical directory is used to assess your work during the semester. You may (and are encouraged to) keep updating the lab journal in the root directory up until the end of the semester.

### **Final Lab Report**

At the end of the semester, you submit your final lab report. As described above, this should be a polished presentation of the practical work you did on the module. Chapters 1 to 6 should cover the regular practicals, while Chapter 7 should deal with the company presentations. Chapter 7 should describe each company presentation separately (in Sections 7.1 to 7.3), and then compare and contrast the companies' approaches in Section 7.4.

**Plagiarism:** Needless to say, the report should be your own work and not written with any other student. It should reference any extra material you've read, and all text should be your own and not copied from any other source.