

# Learning Log

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The purpose of the learning log is to reflect upon your progress in learning the content of SE 2AA4/ CS 2ME3. This is a personal journal. The intention is for you to be aware of your progress by means of recording and reflecting. A template is provided for each week. You should fill in the question marks. You are also free to add your own subsections.

## 1 Week 1 Intro to Course

### Dates

Jan 6 to Jan 10

### Lecture 1 Introduction to Course

Simple introduction to the course. Apparently this Parnas guy is going to appear frequently in this course.

### Lecture 2 Software Engineering Profession

Correctness in software is extremely important, as software failures can have catastrophic affects, both financial and social (can even cause loss of life). For example, we briefly mentioned a couple of examples of Software failures in real life, including the infamous Ariane 5 disaster.

### Lecture 3 Software Quality

### Tutorial 1 Git, Doxygen and A1

Git is a version controlling system for software, which can be very important when you need to find old code. Doxygen is a tool that automatically generates documentation for your code given a specific commenting format.

### **Textbook Reading (Ghezzi, H&S or other)**

Did not read the textbook.

### **Assignment Progress**

I didn't start the project this week.

### **Midterm/Final Review Progress**

Did not review for the midterm.

## **2 Week 2**

### **Dates**

Jan 13 to Jan 17

### **Lecture 4 Software Quality**

Solidified the idea of requirements -> design -> implementation -> verification -> maintenance.

### **Lecture 5 Software Engineering Principles**

### **Lecture 6 Software Engineering Principles**

Learnt about the various important traits of software (correctness, usability, maintainability, readability, efficiency, etc ...)

### **Tutorial 2**

Learnt about the basics of latex, and how to compile .tex files on my computer. I also integrated LaTeX development through my own workflow, via LaTeX workshop in vscode.

### **Textbook Reading (Ghezzi, H&S or other)**

Did not read this textbook section.

### **Assignment Progress**

Finished the majority of the code, documentation, and test cases for the Assignment. The problem/code itself was not difficult in the slightest, however it got me thinking about good code and documentation. It helped me understand the power of interface specifications, and how software specifications (like the one's we were given) can be extremely ambiguous.

### **Midterm/Final Review Progress**

Did not review for the midterm/final.

## **3 Week 3**

### **Dates**

Jan 20 to Jan 24

### **Lecture 7 Introduction to Modules**

Wasn't able to attend this lecture due to family circumstances.

### **Lecture 8 Math for MIS**

Learned about abstraction via module interface specifications, which is important component of effective software design. It allows you to define the "interface"/"actions" of a module, without revealing the inner workings and implementation. All that matters to the user, is what each class/functions does.

### **Lecture 9 MIS**

Learnt about MIS (module interface specifications). An MIS specifies the external behaviour of a module to a user (someone who interfaces with the module). Implementation details are not specified, just what the inputs are, and what the output should be (as well as the semantics of the module functions/objects/variables).

### **Tutorial 3**

Reviewed important discrete math concepts relevant to the scope of this course and software engineering as a whole.

### **Textbook Reading (Ghezzi, H&S or other)**

Did not read this textbook section.

### **Assignment Progress**

Completed the assignment and created a comprehensive list of test cases. I could've done the assignment in 20 different ways depending on what assumptions and implementations I used. I imagine that my partners test cases will fail because of differences in assumptions.

### **Midterm/Final Review Progress**

Did not review for the midterm or final this week.

## **4 Week 4**

### **Dates**

Jan 27 to Jan 31

### **Lecture 10 ADTs**

Introduction to abstract data types. They are similar to abstract objects. They are implemented using a "template module", and serve as an abstraction for certain semantics ideas (like a x,y,z coordinate, or a circle object). This allows us to organize related information and functions into an ADT. We looked at a couple of examples in class such as the aforementioned CircleADT as well as LineT and DequeCircleModule.

### **Lecture 11 Generic MIS**

Introduction to generic modules to encompass larger ideas (for examples stacks, queues, lists are generic modules that can be used in place of many different non-generic modules).

### **Lecture 12 OOD**

This lecture introduced us to Object Oriented Design (OOD), and reviewed ideas of interfaces, modules and inheritance in the context of OOD.

### **Tutorial 4 Review of MIS and Assignment 2**

Did not attend tutorial section.

### **Textbook Reading (Ghezzi, H&S or other)**

Did not read this textbook section.

### **Assignment Progress**

Briefly reviewed what needed to be done for assignment 2 part 1 to give myself context. Decided against working on it this week/weekend as there were more pressing assignments/midterms to worry about.

### **Midterm/Final Review Progress**

Did not review for the midterm/final this week

### **Reflection Relating Course Topics, Other Courses, Other Experiences**

This week reinforced the importance of Git. We are now also using it in 2XB3, and has been a useful tool for me when I collaborated on a project at DeltaHacks 2020.

## **5 Week 5 ?**

### **Dates**

Feb 3 to Feb 7

### **Lecture 13 ?**

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### **Lecture 14 ?**

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### **Tutorial 5 ?**

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### **Textbook Reading (Ghezzi, H&S or other)**

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**Assignment Progress**

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**Midterm/Final Review Progress**

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**Reflection Relating Course Topics, Other Courses, Other Experiences**

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## **6 Week 6 ?**

**Dates**

Feb 10 to Feb 14

**Lecture 15 ?**

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**Lecture 16 ?**

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**Tutorial 6 ?**

?

**Textbook Reading (Ghezzi, H&S or other)**

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**Assignment Progress**

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**Midterm/Final Review Progress**

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**Reflection Relating Course Topics, Other Courses, Other Experiences**

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## **7 Midterm Break**

**Dates**

Feb 17 to Feb 21

## **8 Week 7 ?**

**Dates**

Feb 24 to Feb 28

**Lecture 17 ?**

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**Lecture 18 ?**

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**Tutorial 7 ?**

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**Textbook Reading (Ghezzi, H&S or other)**

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**Assignment Progress**

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**Midterm/Final Review Progress**

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**Reflection Relating Course Topics, Other Courses, Other Experiences**

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## **9 Week 8 Midterm Exam Week**

**Dates**

Mar 2 to Mar 6

**Lecture 19 ?**

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**Lecture 20 ?**

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**Tutorial 8 ?**

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**Textbook Reading (Ghezzi, H&S or other)**

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**Assignment Progress**

?

**Midterm/Final Review Progress**

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**Reflection Relating Course Topics, Other Courses, Other Experiences**

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## **10    Week 9 ?**

### **Dates**

Mar 9 to Mar 13

### **Lecture 21 ?**

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### **Lecture 22 ?**

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### **Tutorial 9 ?**

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### **Textbook Reading (Ghezzi, H&S or other)**

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### **Assignment Progress**

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### **Midterm/Final Review Progress**

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### **Reflection Relating Course Topics, Other Courses, Other Experiences**

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## **11    Week 10 ?**

### **Dates**

Mar 16 to Mar 20

**Lecture 23 ?**

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**Lecture 24 ?**

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**Tutorial 10 ?**

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**Textbook Reading (Ghezzi, H&S or other)**

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**Assignment Progress**

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**Midterm/Final Review Progress**

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**Reflection Relating Course Topics, Other Courses, Other Experiences**

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**12 Week 11 ?**

**Dates**

Mar 23 to Mar 27

**Lecture 25 ?**

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**Lecture 26 ?**

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**Tutorial 11 ?**

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**Textbook Reading (Ghezzi, H&S or other)**

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**Assignment Progress**

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**Midterm/Final Review Progress**

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**Reflection Relating Course Topics, Other Courses, Other Experiences**

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## **13    Week 12 ?**

**Dates**

Mar 30 to Apr 3

**Lecture 27 ?**

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**Lecture 28 ?**

?

**Tutorial 12 ?**

NA

**Textbook Reading (Ghezzi, H&S or other)**

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**Assignment Progress**

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**Midterm/Final Review Progress**

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**Reflection Relating Course Topics, Other Courses, Other Experiences**

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## **14    Week 13 ?**

**Dates**

Apr 6 to Apr 7

**Lecture 29 ?**

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**Tutorial 13 ?**

NA

**Textbook Reading (Ghezzi, H&S or other)**

?

**Assignment Progress**

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**Midterm/Final Review Progress**

?

**Reflection Relating Course Topics, Other Courses, Other Experiences**

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