

Tute 9: More Design Patterns

Programming Concepts:

What is the command pattern? Could this help you with your design of the controller in assignment 2?

What is binary i/o? How does it differ from ascii?

What does it mean to serialise an object? What issues do we need to consider?

What functions do we use for binary i/o?

Compilation: None this week.

Errors: None this week.

Debugging: Comments

Exercises:

Consider a datastructure such as the following. We have an array of students. For each student we want to store on disk their student number, name and results for each course they have studied where the results are a linked list of pairs of course code and result out of 100.

Write a program that inserts some students with a variable number of grades into the datastructure.

Next write the routine to serialize this data to a binary (not ascii) file.

Sample Data:

Fred Nerks, s6757389

Grades:

COSC1076, 89

COSC1111, 67

COSC1234, 43

David, Wannabe, s7849003

Grades:

COSC1108, 78

COSC1243, 89

Paul Malcanchio, s6788398

Grades:

COSC1111, 45