



# Object Oriented Programming

## Topic 6: Elements of Good Design

### Resources

The following resources can help you with this topic:

- Case Study Requirements Document
- Case Study Implementation Plan

### Topic Tasks

Before starting to work on the tasks, first read through this entire document to get a sense of the direction in which you are heading. Complete the following tasks and submit your work to Doubtfire for feedback before the deadline (check Doubtfire for the submission deadline).

Pass Task 14 - Case Study: Iterations 1 and 2

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Remember to submit your progress, even if you haven't finished everything.

After you have **discussed** your work with your tutor and **corrected any issues**, it will be signed off as complete.

## Pass Task 14 - Case Study: Iterations 1 and 2

Over the remainder of the semester you will implement a larger object oriented program that demonstrates the elements of good object oriented design and uses all of the concepts covered so far. This will help you to develop a deeper understanding, and create additional pieces of work to communicate this understanding.

1. Read the **Case Study Requirements** document. It outlines what you need to create.

**Note:** As with any requirements document, you **should** have questions. It is important to understand what the user wants you to create before you start to design and implement a program — it is easy to build the wrong program. Post up questions to the unit's discussion board to clarify your questions.

2. Review the stages in the **Case Study Implementation Plan** document.

**Note:** This is a **design** document, things may be missing or not fully thought through. You are likely to have questions or encounter issues. These should be discussed on the discussion board, the teaching staff can then guide your implementation.

**Tip:** Contribute to the discussion and you can include those posts in your portfolio!

3. For this week aim to complete Iteration 1 and Iteration 2.

**Note:** At this point there will not be a "program" as such, just a set of unit tests that help demonstrate that your solution is moving toward completion.

Once your tests are working correctly create your own cover page for this piece, you will add to this over the next few weeks. Remember to relate what you are doing to the unit's learning outcomes.

### Pass Task 14 - Assessment Criteria

Make sure that your task has the following in your submission:

- Iteration 1 and 2 are implemented
- The new classes have XML documentation for all public features.
- Code must follow the C# coding convention used in the unit (layout, and use of case).
- The code must compile and the screenshot show the tests passing.