Faculty of Science, Engineering and Technology

Object Oriented Programming

Credit Task 7.2: Object Oriented Programming Concept Map

Overview

A concept map visually shows the relationships between concepts. Think through the various relationships between the object oriented programming concepts and the associated artefacts, and to demonstrate your understanding.

Purpose:	Express your understanding of custom types within programming.
Task:	Create a concept map to communicate your new understanding of object oriented programming.
Time:	This task should be completed before the start of week 8, but may be completed later (see the following note).
Resources:	- Concept Map YouTube video - Concept Maps or Mind Maps on Wikipedia or a Search Engine

Note: If you are not currently up to date you should skip this task and return to it once you are up to date with the Pass Tasks. Do not allow Credit Tasks to delay you in keeping up with the unit's Pass Tasks.

Submission Details

You must submit the following files to Doubtfire:

- A picture or image for your concept map.

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

- Demonstrates thought in what is presented, and how it is presented.
- Demonstrates a deep understanding of programming concepts.
- Relationships are clearly shown and annotated with explanations, not just listed.

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Instructions

Create a of concept map that elaborates on the relationships between the following concepts and programming artefacts (as a minimum, feel free to extend this).

> **Note**: You will need to think about this as you do it. Try to capture what you think is important and communicate it to the viewer.

Concepts	Artefacts	Action	Terminology
Abstraction	Class	Method Call	Value Type
Encapsulation	Object	New	Reference Type
Inheritance	Interface		Abstract Class
Polymorphism	Method		Abstract Methods
Roles	Fields		Private
Responsibilities			Public
Collaborations			Protected
Coupling			Overload
Cohesion			Override
			Virtual

> **Tip**: Be creative, box and line concepts maps are ok but if you can make it more visual go for it. We encourage you to use metaphors to communicate ideas.