SIT102 Introduction to Programming

Credit Task 9.3: Concept Visualisation

Overview

To meet the credit, and higher standard, you need to be able to demonstrate that you have developed a good understanding of the concepts associated with the unit.

For this task, you will develop some form of visualisation that aims to communicate the core concepts you have learnt to others.

> **Note:**
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> To be eligible for a Distinction grade, you need these concept visualisations to clearly communicate the concepts associated with the unit. You want them to be of a standard where we would be happy to show them to others as good visualisations of the concepts. This doesn't mean they need to be large and complex, rather quite the opposite. Aim for your visualisations to be clear and concise.
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> You are suggested to use a software tool you have registered or owned to create your visual contents (not limited to the following suggestions). For example, MS PowerPoint is one of efficient tools for simple primitive shapes drawings. Here are two free software available online useful for you creating various visual forms, like posters, infographics, flowcharts, etc:
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> - **Canva** (https://www.canva.com/) is a graphic design platform that allows users to create posters, infographics and other visual contents. It offers free trial registration and free download of your artwork in pdf format is available in the trial version.
>
>   *An infographic sample created with Canva graphic design platform in a topic of SIT102 Weeks 1 -6 Overview, is available for your reference: pdf here or mp4 here.*
>
> - **Lucidchart** (https://www.lucidchart.com/) has been introduced in the earlier topic - using UML to model structure and functionality for your program. It is a web-based platform allowing users to work on drawings like flowcharts, revising charts and diagrams. It offers free trial registration.

Submission Details

Submit the following files to OnTrack.

- An image of your visualisation. Have its orientation as portrait, even if it is a landscape image. OnTrack will convert it to fit on an A4 page
- An explanation of your visualisation (PDF)

Spend some time reflecting on what you have learnt, focus on the concepts and ideas, how they work, and how they are related. You want to demonstrate that you have really understood these ideas.

Instructions

Design a visualisation to communicate your understanding of the core concepts listed below.

For example, you could design a poster to help others learn the concepts, or you could create a concept map, mind map, picture, comic, or any other visual form.

Concepts for this visualisation include:

- arrays
- dynamic arrays (vectors in C++)
- for loops

In your explanation PDF, write a paragraph or two on what you are trying to communicate. This is for the teaching team to read, so you can assume that the person reading it has a good understanding of the concepts. So, the text should just relate how *you* are *communicating* these concepts in your visualisation.

We look forward to seeing what you create.

It would be great if you could share this with others on the discussion board.

Remember to backup your task, and submit your work to OnTrack for feedback.