Custom Project – Implementation

In this task you will build and demonstrate the program you started planning in the D2 Custom Project – Plan task. Uses this as an opportunity to show your inventiveness and passion and showcase the new capabilities you have developed.

Learning Goals

To complete this task, you need to demonstrate that you can do the following:

- Design, implement, test, and discuss a program of your own creation.
- Demonstrate effective use of the programming concepts, processes, coding practices, and professional characteristics required to meet the Distinction or High Distinction standard within the unit.

Focus

As you work through this task, focus on the following aspects of the unit:

- **Programming concepts:** Ensure your program demonstrates effective use of the structured and procedural programming concepts you have learnt.
- **Programming process**: Make sure to demonstrate you can design and build your software in a considered way.
- **Coding**: Show that you can effectively use the tools and processes needed to build and test your program.
- **Professional character:** Focus on demonstrating your inventiveness and passion. Capture this in the way you showcase and discuss your program. Show others that you are proud of your achievements in creating this program.

Your Task

For this task you will need to submit the following:

- A PDF document containing:
  - Summary of your design and your programs features and links to related video demonstration.
- Source code
  - A single source code file that concatenates all of the code in your program.

1. Design, implement, test, and demonstrate your program

Using your plan as a starting point, design, implement, and test your program until you feel you have reached a point where you feel happy or need to submit it for feedback. When you are preparing to submit, record a screen capture video showing your program in action.

Here are some things to consider as you progress:

- Ensure you have some design notes that outline how your program is structured internally. This should capture ideas on how the different main features can be achieved.

Tip

Write the notes so that they could be shared with others to get them to help you implement the code. There should be enough to see how it all fits together. You should write this for someone who already knows how to program – so do not explain basic concepts, just show how you put things together to achieve your goals.

- Implement your program iteratively. Make sure you always have a working version at the end of each iteration so that you can demo where you are up to at any time.
- Show others your design and see if you can answer their questions. This will help you test your ideas and improve your final solution.
- Have fun!

2. Prepare Submission

For your submission you will need notes on your design, your code, and a video demonstrating its features.

3. Upload Your Submission

Once you have all the evidence in place, login to OnTrack and mark the task as **Ready for Feedback**. The submission process will ask you to do the following:

- Upload each of the files mentioned in [Prepare Submission](#),
- Reflect on how what you learnt related to the unit focuses (Programming Concepts, Processes, Coding, and Professional Characteristics)

4. Engage with Feedback

At the Distinction level, you should demonstrate that you are independent. Feedback should be used as a tool and an opportunity to get advice, and confirmation that you are on the right track. This is a task where you really want to engage with your tutor to get feedback as you go. Discuss this regularly to make sure you are showcasing effective coding practices, use of concepts, and development processes. Once you have submitted, these discussions will then help ensure your task is likely to be up to standard on the first submission. If you do not discuss this with the teaching team as you work on it you may also be asked to discuss your solution in order to get the task signed off as complete.

If you are asked to resubmit, make sure your subsequent submission includes a comment that describes how you have addressed the feedback you received. Engage in a dialogue about the feedback if required. Do you not agree with or understand the feedback? Do you want to approach what has been pointed out differently? What is important is that you demonstrate you have addressed all the concerns raised by your tutor in their feedback on your learning.

Tip: Manage emotions

It is important to manage emotion in feedback interactions. Don't think of feedback as someone judging your mistakes and pointing them out but as someone who is putting time and effort into finding ways to help you learn and do even better.