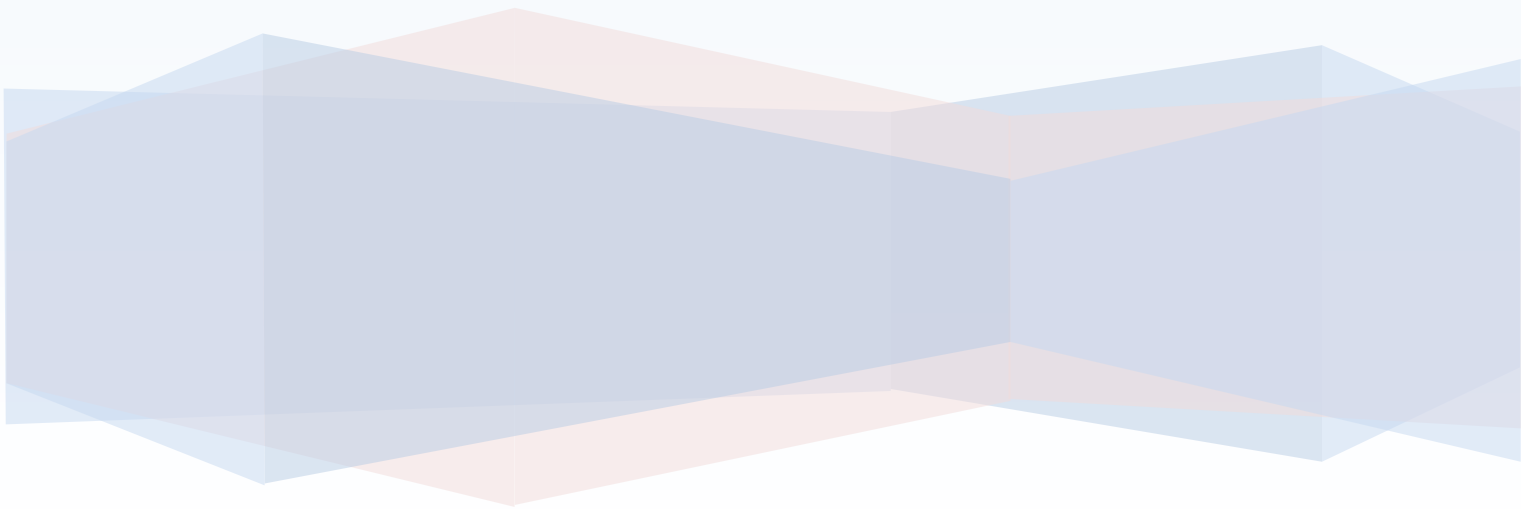


# COS30043 – Interface Design and Development

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*Learning Summary Report*

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## Self-Assessment Details

The following checklists provide an overview of my self-assessment for this unit.

	Pass (D)	Credit (C)	Distinction (D)	High Distinction (HD)
Self-Assessment (please tick)			✓	

### *Self-assessment Statement*

	Included (please tick)
Learning Summary Report	✓
Use of Bootstrap that demonstrate coverage of core concepts	✓
Use of VueJS that demonstrate coverage of core concepts	✓

### *Minimum Pass Checklist*

	Included (please tick)
Progress on Credit Tasks	✓
All Pass Tasks signed off	✓

### *Minimum Credit Checklist, in addition to Pass Checklist*

	Included (please tick)
Credit and Pass Tasks done, and Progress on Distinction Tasks.	✓
Custom program meets Distinction criteria	✓
Design report with screenshots for custom program	✓

### *Minimum Distinction Checklist, in addition to Credit Checklist*

	Included (please tick)
Research report, and associated pieces	
Custom project meets HD requirements	✓

### *Minimum High Distinction Checklist, in addition to Distinction Checklist*

## Declaration

I declare that this portfolio is my individual work. I have not copied from any other student's work or from any other source except where due acknowledgment is made explicitly in the text, nor has any part of this submission been written for me by another person.

Signature: \_\_\_\_\_ Marco Giacoppo

## Introduction

This report summarises what I learnt in COS30043 Interface Design and Development. It includes a self-assessment against the criteria described in the unit outline, a justification of the pieces included, details of the coverage of the unit's intended learning outcomes, and a reflection on my learning.

## Overview of Pieces Included

This section outlines the pieces that I have included in my portfolio...

1. **Task 2.1P: Getting Bootstrap Up and Running:**  
Installing Bootstrap and creating a "Hello World" web page.
2. **Task 2.2P: My Calculator:**  
Designing a calculator layout using Bootstrap.
3. **Task 2.3P: My Bootstrap Template Library:**  
Creating a one-page corporate site template using Bootstrap.
4. **Task 3.1P: String Test Web App with VueJS:**  
Creating a web app that tests a user's name and displays a message.
5. **Task 3.2P: Lookup Web App:**  
Creating a web app that lists units and supports search filters.
6. **Task 3.3C: Compute Web App:**  
Designing a BMI calculator that dynamically responds to user input.
7. **Task 3.4C: Registration Form Web App:**  
Creating a phone registration web app with conditional and loop directives.
8. **Task 4.1P: Event Handling:**  
Developing a number guessing game with event handling.
9. **Task 5.1P: Creating Components:**  
Using VueJS to create modular components.
10. **Task 5.2P: Parent Child Communication:**  
Implementing parent-child communication using VueJS components.
11. **Task 5.3C: Creating Router:**  
Designing a router for dynamic content display.
12. **Task 6.1C: My Registration Form:**  
Creating a registration form with validation.
13. **Task 7.1P: Requesting External Data:**  
Retrieving data from an external source using jQuery getJSON().
14. **Task 7.2P: Retrieving Data from a Text File:**  
Retrieving data from a text file using JavaScript fetch() method.
15. **Task 8.1P: Student Marks:**  
Adding pagination to a table.
16. **Task 8.2C: My Table:**  
Adding pagination and styling to a table.
17. **Task 9.1P: Single Page Application:**  
Developing a SPA with VueJS and Bootstrap.
18. **Task 9.2C: Single Page Application:**  
Creating a SPA with router, tab, and pagination.
19. **Task 10.1P: Creating a Single Page Application Using Vue CLI:**  
Using Vue CLI to create a SPA.
20. **Task 6.2D HD: Custom Project: Trinacria:**  
A fully functional website with features such as dynamic menu handling, a user-friendly interface for selecting and customizing order details, real-time updates of item quantities and prices, secure checkout and user authentication, and a responsive design for desktop and mobile devices.

## Coverage of the Intended Learning Outcomes

This section outlines how the pieces I have included demonstrate the depth of my understanding in relation to each of the unit's intended learning outcomes.

### ILO 1: Apply Design

*Apply fundamental design concepts and standards to the development of user interfaces*

The following pieces demonstrate my ability in relation to this ILO:

- **Task 2.2P: My Calculator:**  
Demonstrates the application of fundamental design concept in creating a calculator layout.
- **Task 2.3P: My Bootstrap Template Library:**  
Shows the ability to design a one-page corporate site template using Bootstrap.
- **Task 3.3C: Compute Web App:**  
Illustrates designing a BMI calculator that dynamically responds to user input.
- **Task 6.2D HD: Custom Project: Trinacria:**  
Demonstrates the application of design principles in creating a user-friendly and visually appealing interface

### ILO 2: Use Frameworks

*Use contemporary frameworks to create dynamic user interfaces.*

- **Task 2.1P: Getting Bootstrap Up and Running:**  
Demonstrates the use of the Bootstrap framework
- **Task 5.1P: Creating Components:**  
Shows the use of VueJS to create modular components
- **Task 5.2P: Parent Child Communication**  
Illustrates parent-child communication using VueJS components
- **Task 5.3C: Creating Router**  
Demonstrates the use of VueJS to create a router for dynamic content
- **Task 10.1P: Creating a Single Page Application Using Vue CLI:**  
Demonstrates the use of Vue CLI to create a SPA
- **Task 6.2D HD: Custom Project: Trinacria:**  
Utilizes frameworks such as Vu.js and Bootstrap to develop dynamic, responsive web applications.

### ILO 3: Develop User Interfaces

*Design and develop user interfaces optimised for a range of devices and platforms.*

- **Task 3.1P: String Test Web App with VueJS:**  
Demonstrates creating a dynamic web application using conditional directives.
- **Task 3.2P: Lookup Web App:**  
Shows the development of a lookup app with search and filter functionalities.
- **Task 4.1P: Event Handling:**  
Illustrates developing a number guessing game with event handling.
- **Task 6.1C: My Registration Form:**

Demonstrates creating a registration form with validation.

- **Task 9.1P: Single Page Application:**  
Shows developing a SPA with VueJS and Bootstrap
- **Task 6.2D HD: Custom Project: Trinacria:**  
Developed a responsive design optimized for both desktop and mobile devices, ensuring a seamless user experience.

#### **ILO 4: Evaluate User Interfaces**

*Evaluate user interfaces with respect to usability and accessibility using appropriate techniques, and propose improvements.*

- **Task 1.3P: Form Accessibility:**  
Demonstrates testing and fixing accessibility issues in an HTML form.
- **Task 1.4P: Table Accessibility:**  
Illustrates applying guidelines to improve table design.
- **Task 6.2D HD: Custom Project: Trinacria:**  
Implemented secure checkout and user authentication features, enhancing the usability and security of the interface.

## Reflection

### The most important things I learnt:

- The importance of applying design principles to create user-friendly interfaces.
- The value of using contemporary frameworks like VueJS and Bootstrap to enhance development efficiency.
- Techniques for ensuring web accessibility and improving user experience.

### The things that helped me most were:

- Hands-on projects that provided practical experience with design and development tools.
- Feedback from instructors and peers, which guided my learning process.
- Access to extensive online resources and documentation for frameworks like VueJS and Bootstrap
- YouTube videos and tutorials

### I found the following topics particularly challenging:

- Ensuring cross-browser compatibility and responsive design across different devices.
- Implementing complex functionality with VueJS components and directives tasks like Task 9.2C: Single Page Application.

### I found the following topics particularly interesting:

- The dynamic capabilities of VueJS, which allow for creating highly interactive web applications, as seen in my custom project.
- The principles of web accessibility and their impact on user experience.

### I feel I learnt these topics, concepts, and/or tools really well:

- Using Bootstrap for responsive design and layout management, as demonstrated in Task 6.2D HD (Trinacria).
- Developing modular components and handling parent-child communication in VueJS.

### I still need to work on the following areas:

- Advanced JavaScript techniques and optimization.
- Improving the efficiency and performance of web applications.
- Ensuring using the correct versions of tools I'm using.

**My progress in this unit was ...:**

Steady and consistent, with a gradual improvement in my understanding of web development principles and frameworks, as evidenced by the progression from Task 1.1P: Data Preparation to the comprehensive Custom Project: Trinacria.

**This unit will help me in the future:**

- By providing a strong foundation in interface design and development, which is essential for my career as a software developer.
- The skills and knowledge I gained will be valuable for future projects and job opportunities

**If I did this unit again I would do the following things differently:**

- Allocate more time for practice and experimentation with different design frameworks.
- Seek more feedback from peers to identify areas for improvement earlier.

**Other...:**

I truly appreciated the balance between theoretical knowledge and practical application in this unit. The hands-on project, especially my Custom Project: Trinacria, were incredibly beneficial for reinforcing what I learned. This project allowed me to see the real-world impact of the concepts we discussed in class and helped me build a solid foundation for future work in web development. Thank you for the experience!