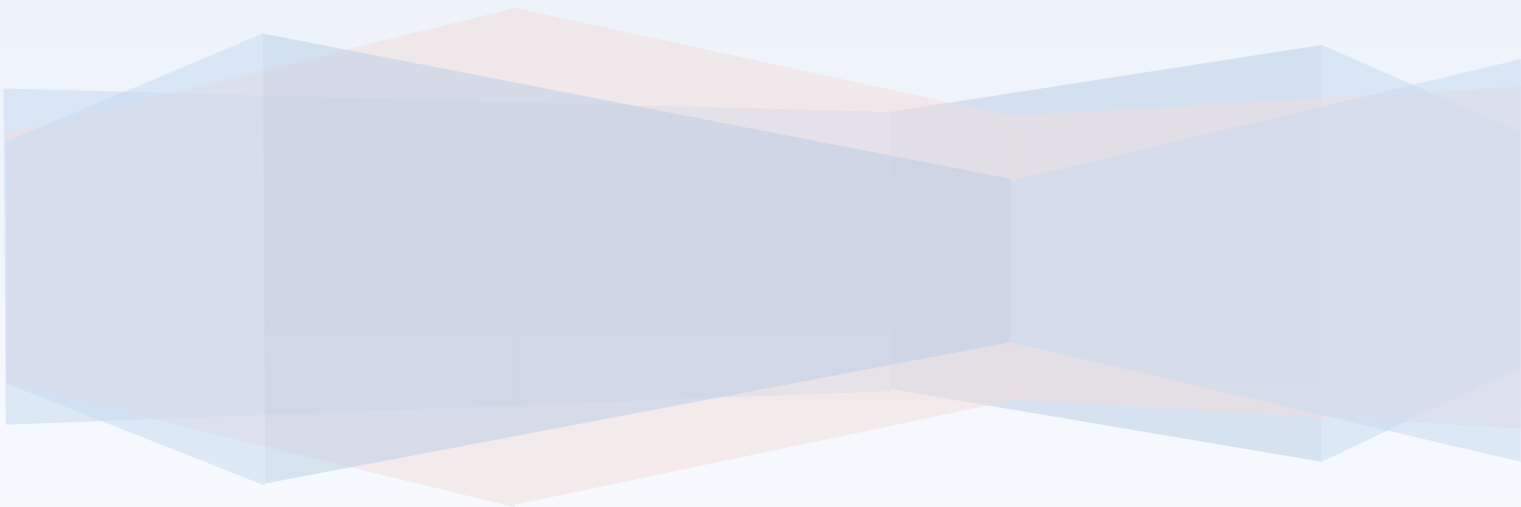


COS30043 – Interface Design and Development

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)				X

Self-assessment Statement

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

Minimum Pass Checklist

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

Minimum Credit Checklist, in addition to Pass Checklist

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

Minimum Distinction Checklist, in addition to Credit Checklist

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

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: Quang

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:

- 1.1P: A web project have completed and submitted in COS30049 – Computing Technology Innovation Project
- 1.2P: Hello world
- 1.3P: Form Task
- 1.4P: Table Task
- 2.1P: Setting Bootstrap Up and answer to the given questions
- 2.2P: My Calculator using Bootstrap
- 2.3P: Use Bootstrap to create a layout web
- 3.1P: Use v-model and v-if to create String Test app
- 3.2P: Lookup Web App
- 3.3C: BMI calculator app
- 3.4C: Registration Form Web App
- 4.1P: Use VueJS to create Guessing Game
- 5.1P: My Post web app
- 5.2P: Menu List app
- 5.3C: Router
- 6.1C: My Registration Form
- 6.2D HD: Design custom app
- 7.1P: Get External Data from an open API
- 7.2P: Retrieving Data from an external file
- 8.1P: Student Marks look-up app with pagination
- 8.2C: Unit Information look-up app with pagination
- 9.1P: Single Page Application
- 9.2C: Single Page Application
- 10.1P: Single page application with Vue-CLI
- 10.2HD: Research Report and Tutorial Video
- 11.1P: Learning summary report

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:

- 2.1P and 2.2P => Setting up the Bootstrap to development user interface, developing the web app can display in any size of screen
- 2.3P => Using Bootstrap to create the web layout include responsive
- 10.2HD => Use Bootstrap to create a Custom Project with grid system and responsive

ILO 2: Use Frameworks

Use contemporary frameworks to create dynamic user interfaces.

- 3.1P => Simple web app using conditional directives to display custom string.
- 3.2P => Using Bootstrap to develop units look-up app with grid table classes.
- 3.3P => Get input (height and weight) of the users and calculate BMI using conditional directives by VueJS.
- 3.4C => Registration web app displays information of client inputs.
- 4.1P => Create Guessing Game web page with different function: generate random number, check input guess, give up and restart.
- 5.1P => Create component to upload status by posting app.
- 5.2P => Using props to build a menu by passing value from parent component to a child.
- 5.3C => Use Vue Router to create the route for different components.
- 6.1C => Use Vuetify to create a form include check inputs of the user and reply if have errors.

ILO 3: Develop User Interfaces

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

- 2.1P and 2.2P => Design a calculator with responsive in different size of screen.
- 2.3P => Layout for web app with responsive.
- 10.2HD => Develop UI/UX interface for Custom Project

ILO 4: Evaluate User Interfaces

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

- 7.1P and 7.2P => Use external source (public API) to retrieve data and display it on user interface.
- 8.1P and 8.2C => Use Vue Paginate to divide a list with multiple pages, highlight the page is displaying.
- 9.1P and 9.2C => Create Single page app.
- 10.1P => Use Vue CLI to create Single Page App.

Reflection

The most important things I learnt:

The most important things I learned include the following skills and knowledge:

1. Using Bootstrap CSS & JS: During the course, I learned how to use Bootstrap to create flexible web interfaces that can be applied on many different device sizes. In addition, it can edit fonts, layout sizes (grid system) very scientifically and also includes responsiveness. Bootstrap has helped me save maximum time designing interfaces, while still ensuring consistency and professionalism for the website.
2. VueJS: Using VueJS to create more dynamic and interactive web applications. Vue helps me manage the application's state effectively through the use of reactive data binding and directives such as "v-model", "v-if", "v-for". VueJS also has structures that make coding easier, easier to develop, debug and reuse complex code.
3. Vue Router: Use Vue Router to create and manage pages (components). Vue Router provides Routes to navigate to different components. The redirection is smooth, without having to reload the entire website. This enhances the user experience, providing a smooth interface and stable performance.
4. Vue CLI: Use Vue CLI to create and manage projects effectively, creating a powerful environment with many features. It helps me quickly create new projects and manage libraries easily.

The things that helped me most were:

In addition to the skills and knowledge listed above, what helped me the most were the Lecturers, the study materials, the instructions and the labs. Throughout the course, the Lecturers helped me a lot through lectures, demonstrations and feedback for each lab. These factors determined my understanding of the lessons and the ability to apply the knowledge I had learned. The specific and detailed feedback also helped me improve and complete my projects.

I found the following topics particularly challenging:

Connecting to and retrieving data from public APIs sometimes encounters unexpected errors, and handling them requires knowledge of error handling and performance optimization.

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

- Bootstrap: I have applied the appropriate use of Bootstrap CSS JS, using available utilities to create a more beautiful and quality website, and also save time.
- VueJS: Through this course, I have learned about a new type of framework and can apply it to future projects. It is a useful, reasonable and convenient tool when wanting to manage and develop components, and can reuse code.

I still need to work on the following areas:

I still need to develop and maintain my knowledge and skills about VueJS, although I can use it but I need to use it proficiently and master the skills. Some issues such as fixing bugs or connecting to external sources need to be developed better. Therefore, maintaining and using it in future projects is necessary for me.

My progress in this unit was ...:

I have completed all the assignments and achieved the required criteria of the course. I have also applied the knowledge I have learned to real projects, which has helped improve my programming and user interface development skills.

This unit will help me in the future:

The knowledge and skills I learned from the course will be very useful in my future projects. I can apply Bootstrap and VueJS to real projects to create more dynamic and interactive web

applications. This also makes me more confident when facing new challenges in the field of user interface development.

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

If I were to do this course again, I would probably aim for a higher goal, creating better quality custom projects. I would plan in detail and study the lessons and theory in advance, as well as reading and practicing a variety of skills. Better time management is also a way to do homework and study more effectively.