COS30043 – Interface Design and Development

Learning Summary Report

VU PHAN (104222099)

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: A signature on a white background

Description automatically generated

# 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. **Assignment 1.1P: Data Preparation**

* **Description:** Preparation of test data by collecting and submitting well-designed web page files, fostering a solid foundation for interface design and development.

2. **Assignment 1.2P: Hello World**

* **Description:** Created a basic "Hello World" web page to confirm software setup and readiness for subsequent web development tasks.

3. **Assignment 1.3P: Form Accessibility**

* **Description:** Improved the accessibility of an HTML form by addressing compliance with the Web Accessibility Guidelines, ensuring the form is accessible to all users.

4. **Assignment 1.4P: Table Accessibility**

* **Description:** Focused on enhancing HTML table accessibility, ensuring compliance with accessibility standards and utilizing validation tools for checking.

5. **Assignment 2.1P: Getting Bootstrap Up and Running**

* **Description:** Verified the correct setup of the Bootstrap framework by creating a "Hello World" web page, setting the stage for more complex Bootstrap-based applications.

6. **Assignment 2.2P: My Calculator**

* **Description:** Designed a simple calculator layout using HTML and Bootstrap, emphasizing the structural organization without the need for functional implementation.

7. **Assignment 2.3P: My Bootstrap Template Library**

* **Description:** Created a one-page corporate website template using Bootstrap, demonstrating the ability to develop reusable web templates.

8. **Assignment 3.1P: String Test Web App with VueJS**

* **Description:** Developed a VueJS app that dynamically generates custom messages based on user input, showcasing the use of VueJS conditional directives.

9. **Assignment 3.2P: Lookup Web App**

* **Description:** Implemented a VueJS web application to dynamically list and filter units from a data set, demonstrating advanced data handling and user interaction capabilities.

10. **Assignment 4.1P: Guessing Game**

* **Description:** Created a number guessing game that interacts with the user by providing hints based on their guesses, utilizing VueJS for dynamic content updating.

11. **Assignment 5.1P: Creating Components**

* **Description:** Developed a web application that uses VueJS components for status posting on a timeline, with functionalities to post and delete statuses dynamically.

12. **Assignment 5.2P: Parent Child Communication**

* **Description:** Built a web application demonstrating parent-child component communication in VueJS, where a parent component manages a list of menu items defined in child components.

13. **Assignment 6.1P: Form Validation**

* **Description:** Implemented client-side form validation to ensure data integrity before submission, using HTML and JavaScript for immediate feedback on user input.

14. **Assignment 7.1P: Requesting External Data**

* **Description:** Utilized jQuery to fetch external data from a JSON source, incorporating it into a VueJS application for dynamic content rendering.

15. **Assignment 7.2P: Retrieving Data from a Text File**

* **Description:** Focused on fetching data from a local text file to populate a VueJS-driven table, demonstrating asynchronous data retrieval and table generation.

16. **Assignment 8.1P: Student Marks**

* **Description:** Implemented pagination in a VueJS application to display a table of student marks, highlighting the use of vuejs-paginate for efficient data display.

17. **Assignment 9.1P: Single Page Application**

* **Description:** Developed a single page application using VueJS, featuring multiple components and router to handle different content sections dynamically.

18. **Assignment 10.1P: Creating a Single Page Application Using Vue CLI**

* **Description:** Advanced use of Vue CLI to build a single page application, integrating complex functionalities including routing and state management with VueX.

# 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

**1.1P: Data Preparation**: Demonstrated an understanding of interface design principles by preparing and organizing web project files.

**2.2P: My Calculator**: Applied design concepts to create a calculator layout, focusing on the structural organization of content using div wrappers.

**2.3P: My Bootstrap Template Library**: Created a reusable one-page corporate website template, showcasing my ability to apply design principles in developing web templates.

## ILO 2: Use Frameworks

**1.2P: Hello World**: Used HTML5 to ensure compliance with modern web standards while setting up the development environment.

**2.1P: Getting Bootstrap Up and Running**: Successfully installed and utilized the Bootstrap framework to create a simple web page, laying the groundwork for more complex Bootstrap applications.

**3.1P: String Test Web App with VueJS**: Employed VueJS to dynamically generate messages based on user input, demonstrating the use of frameworks for reactive web applications.

**3.2P: Lookup Web App**: Implemented a VueJS application to dynamically list and filter units, showcasing advanced framework usage for interactive user experiences.

## ILO 3: Develop User Interfaces

**4.1P: Guessing Game**: Developed a user-interactive number guessing game using VueJS, focusing on event handling and user feedback mechanisms.

**5.1P: Creating Components**: Created a status posting application with VueJS components, demonstrating component-based UI development.

**5.2P: Parent Child Communication**: Built a web app that illustrates parent-child communication in VueJS, crucial for managing complex UI interactions.

**6.1P: Form Validation**: Implemented a web form with client-side validation, ensuring that the user interface provides immediate feedback and maintains data integrity.

## ILO 4: Evaluate User Interfaces

**1.3P: Form Accessibility**: Evaluated and enhanced the accessibility of a web form, ensuring compliance with Web Content Accessibility Guidelines.

**1.4P: Table Accessibility**: Assessed and improved the accessibility features of an HTML table, utilizing validation tools to ensure adherence to accessibility standards.

**8.1P: Student Marks**: Developed a paginated table to display student marks, incorporating accessibility features and ensuring the table is user-friendly.

**9.1P: Single Page Application**: Evaluated the functionality and user experience of a single page application, ensuring that the components and routing provided a seamless user experience.

# Reflection

## The most important things I learnt:

The critical role of user-centered design in interface development and the importance of accessibility in user interfaces.

## The things that helped me most were:

Practical assignments and peer feedback sessions which provided real-time insights and improvements.

## I found the following topics particularly challenging:

Adapting user interfaces for diverse platforms due to varying user requirements and device specifications.

## I found the following topics particularly interesting:

The use of contemporary frameworks like VueJS which offer robust solutions for dynamic UI development.

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

The integration of design principles with technical frameworks to create effective user interfaces.

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

Enhancing my skills in advanced user testing methods to better evaluate and refine interfaces.

## My progress in this unit was …:

Consistent and reflective of a deepening understanding of interface design and development.

## This unit will help me in the future:

By providing a strong foundation in UI/UX design, which is crucial for my future career in web development.

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

I would spend more time on learning advanced JavaScript frameworks to broaden my development skills.

## Other…: