COS30043 – Interface Design and Development

Learning Summary Report

Lau Ngoc Quyen (104198996)

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) |  | V |  |  |

*Self-assessment Statement*

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

*Minimum Pass Checklist*

|  |  |
| --- | --- |
|  | Included (please tick) |
| Progress on Credit Tasks | V |
| All Pass Tasks signed off | V |

*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: N.Quyen

# Introduction

This report summarises what I learnt in COS???? UNIT TITLE. 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. **Cost Calculator Web Application** : This web application was designed using Bootstrap to ensure responsiveness and a consistent user interface across different devices. The application calculates the total cost based on user input, showcasing my ability to apply design principles and use contemporary frameworks.
2. **Guess Number Web Application**: Developed using VueJS, this interactive application allows users to guess a number within a specified range. It demonstrates my understanding of dynamic user interface creation and state management in VueJS.
3. **Fetch Data Web Application**: This application fetches data from an external API and displays it dynamically using VueJS and CSS. It highlights my skills in handling asynchronous operations and styling web applications for a better user experience.

# 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:

* **Cost Calculator Web Application**: Applied Bootstrap's grid system and components to create a responsive layout.
* **Guess Number Web Application**: Designed an intuitive and engaging user interface that guides users through the guessing process.

## ILO 2: Use Frameworks

Use contemporary frameworks to create dynamic user interfaces.

 **Guess Number Web Application**: Implemented VueJS for reactive data binding and component-based architecture.

 **Fetch Data Web Application**: Utilized VueJS for fetching and displaying data dynamically, demonstrating my ability to integrate multiple frameworks.

## ILO 3: Develop User Interfaces

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

 **Cost Calculator Web Application**: Ensured the application works seamlessly on both desktop and mobile devices.

 **Fetch Data Web Application**: Used CSS and VueJS to ensure the application is visually appealing and functional across different platforms..

## ILO 4: Evaluate User Interfaces

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

 **Cost Calculator Web Application**: Conducted usability testing and gathered feedback to improve the interface.

 **Fetch Data Web Application**: Evaluated accessibility using tools like Lighthouse and made necessary adjustments for better user experience.

# Reflection

## The most important things I learnt:

 Understanding the core concepts of Bootstrap and VueJS and how they can be utilized to build efficient and responsive user interfaces.

 The importance of usability and accessibility in interface design.

## The things that helped me most were:

 Hands-on projects and assignments that allowed me to apply theoretical knowledge.

 Online resources and tutorials on Bootstrap and VueJS which provided practical examples and use cases.

## I found the following topics particularly challenging:

 Integrating VueJS with Bootstrap components, as it required a good understanding of both frameworks.

 Ensuring accessibility compliance while maintaining a visually appealing design.

## I found the following topics particularly interesting:

 Dynamic data binding in VueJS, which made it easier to create interactive applications.

 The responsive design capabilities of Bootstrap, allowing for seamless adjustment to different screen sizes.

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

[ List and explain – if none explain why, refer to your pieces for evidence to support your claims ]

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

 Responsive web design using Bootstrap.

 Creating dynamic and reactive user interfaces with VueJS.

## My progress in this unit was …:

 Advanced state management in VueJS, such as using Vuex for larger applications.

 More complex accessibility features to ensure inclusivity for all users.

## This unit will help me in the future:

The skills and knowledge gained in this unit are directly applicable to future courses and my career in web development. Understanding how to create responsive, accessible, and user-friendly interfaces is crucial in the industry.

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

 Start working on projects earlier to allow more time for testing and refinement.

 Seek more feedback from peers and instructors to improve my work iteratively.

## Other…:

Overall, this unit has been incredibly valuable in developing my skills in interface design and development. The practical assignments and projects were particularly beneficial in applying what I learned in a real-world context.