

## 1. Declaration

I, Yijiang Liu, declare that this assignment, titled [Assignment Title], is my own original work and has not been copied from any other source except where explicitly acknowledged. I have not engaged in plagiarism, collusion, or any other form of academic misconduct in the preparation and submission of this assignment. All sources of information and data used in this assignment have been properly cited and referenced in accordance with the prescribed guidelines. I have not used unauthorized assistance in the preparation of this assignment and have not allowed any other student to copy my work. I am aware that any breach of academic integrity may result in disciplinary action as per the [policies of Monash University](#), which may include failing this assignment or the course, and further academic penalties.

Signature: Yijiang Liu

Date: 09/01/2024

## 2. Github Check

Enter your Github details here.

Github Username <i>Enter your username here</i>	AttackingtonCaesar
<b>A2 Shared?</b> <i>Have you started and shared your assignment repository with your tutor yet?</i>	<a href="https://github.com/AttackingtonCaesar/FIT5032_ASS">https://github.com/AttackingtonCaesar/FIT5032_ASS</a>

## 3. Self-Evaluation

Rate your performance for each criteria. Put a ✓(tick) in the box where you think your work belongs.

Criteria	Exceeds Expectations	Meets Expectations	Needs Improvement	Fail to meet expectations
BR (A.1): Development Stack and Coding		✓		
BR (A.2): Responsiveness		✓		
BR (B.1): Validations		✓		
BR (B.2): Dynamic Data & Data Structure		✓		

BR (C.1): Authentication		✓		
BR (C.2): Role-based authentication		✓		
BR (C.3): Rating		✓		
BR (C.4): Security		✓		

## 4. Screen Recording of BRs

Create a 3 minute video showing your basic web application in action! Upload this video to your Google Drive and put the link here (ensuring that you have updated the access list so its not private).

[https://drive.google.com/file/d/1MetmCc\\_q1zNvzd0Ty0Cyuolj5M6x9u1j/view?usp=sharing](https://drive.google.com/file/d/1MetmCc_q1zNvzd0Ty0Cyuolj5M6x9u1j/view?usp=sharing)

(make sure in the access settings you have shared it with your tutor OR set the permissions so that anyone with Monash account can video the video)

## 5. Reflections: Implementation of C.4 Security

If you have implemented BR C.4, in less than 200 words describe the approach that you have taken to implementing Security in your application. What security flaws were you trying to prevent and what security measures have you implemented to fix those flaws? How do you know that these measures will help prevent those issues from happening? Optionally you can cite external sources to provide evidence for your claim.

In the actual code, I have taken some steps to enhance the security of the application to prevent common security breaches:

**Input Validation:** On the login form and the rating submission form, I use required attributes and type restrictions to ensure that user input is in the expected format. This reduces the risk of XSS (cross-site scripting attacks) by preventing users from entering malicious data, such as insecure scripts injected through the form.

**Show Feedback:** In the event of a validation failure, provide immediate feedback to the user notifying them of the input error by using conditional rendering v-if="login error" in the login form. This prevents brute-force attacks because the user will immediately know the reason for the input error instead of having to try again and again.

**Modal box control:** Using Vue's v-model to control the show and hide state of the login and rating modal boxes ensures that the modal boxes only appear when they are needed, which reduces the risk of potential UI spoofing attacks such as click-jacking.

## 6. Reflections: Challenges

What has been the most challenging part of this assignment for you? How has this stretched you as a programmer?

The most challenging part of this task was dealing with the intricate interdependencies in the code. As I struggled with trying to connect the various parts of the application using existing knowledge, I often encountered unexpected problems and was unable to pinpoint the root cause of the problem. This experience highlighted the complexity of coding, where even minor modifications can disrupt overall functionality. In the process, I realized the importance of maintaining a holistic view of the code, rather than focusing on just one component. As a programmer, this challenge pushed me to think more comprehensively about how different parts of the code interact with each other and how small changes can have a significant impact on the overall system. It also taught me the value of patience and the need for thorough testing when making even the smallest changes.

## 7. Declaration: Additional Help

Any tools that you used (including Gen AI or existing code reuse) must be declared here.

**Note:** GenAI is not allowed for coding purposes in any assignment,

However, you may use GenAI for brainstorming and problem solving. You need to declare all such uses here. One row per help used.

Name	Description
<i>Contents</i>	<i>Use of ChatGPT to assist in writing introductory content and finding related sites within the site</i>
Use ChatGPT to assist in finding ideas	Assisted me in thinking about how I should organize the site modules and what functionality to implement initially