1. Declaration

I, Sri Aditya Nulu, declare that this assignment, titled Basic Application Development (Version 2), 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: N.S. Aditya.   Date:14-09-2025

2. Github Check

Enter your Github details here.

Github Username *Enter your username here*	snul0001
Repository Shared? *Have you started and shared your assignment repository with your tutor yet?*	Yes and https://github.com/snul0001/Fit5032.git

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

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).

📧 35438428_assignment_1.3_videoPresentation.mp4

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.

We display clear authentication messages during sign-up/sign-in so users know exactly what went wrong or that login succeeded. Inputs are validated client-side (required fields, password ≥ 6 chars, confirm match, normalized lowercase email). Firestore Security Rules enforce authorization on the server: new users are role: "user", only admin can create/update/delete resources, and users can't change their own role. The rating feature allows one rating per user and only accepts values 1-5 (validated in rules and clamped in the UI). We also sign out users explicitly and never store private API keys in the client (only Firebase's public config). Together, these measures provide immediate feedback, block bad input, and prevent unauthorized writes.

6. Reflections: Challenges

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

The hardest part was wiring Firebase into a Vue app in a way that actually works end-to-end. I hit a bunch of "white screen"/import errors, then learned to trace them (bad paths, missing routes, wrong component names).

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
ChatGPT for brainstorming ideas	*I used ChatGPT to brainstorm how to do user rating.*