<Hongrui Sun>
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1. Declaration

I, [Student Name], 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: _____Hongrui Sun_____ Date: _____19/10/2025_____

2. Github Check

Enter your Github details here.

Github Username *Enter your username here*	<hsun0069-code>
Repository Shared? *Have you started and shared your assignment repository with your tutor yet?*	<https://github.com/hsun0069-code/FIT5032-Assignment1> NOTE: If you are extending your previous A2 submission, you can just copy-paste the same link here. This is the preferred option as you do not have to create a new project and a new repo from scratch. Otherwise, if you are creating a new project and new repo - you need to have shared it with your tutor and paste the link here.

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 (D.1): External Authentication	✅			
BR (D.2): Email	✅			
BR (D.3): Interactive Table Data	✅			

BR (D.4): Deployment to the Cloud	✅			
BR (E.1): Cloud Functions	✅			
BR (E.2): Geo Location	✅			
BR (E.3): Accessibility	✅			
BR (E.4): Export	✅			
BR (F.1): Innovation	✅			

4. Screen Recording of BRs

Create a 3-5 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/1YxxtQweClGXfun4NH_4qtQfkxIEzvP-t/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. BR F.1 - Innovative Features

If you have implemented BR F.1, list your choices below and a brief description of how you implemented it.

0	F.1Bulk Email (SendGrid) Action: Admin page → Bulk Email panel above "Users - Interactive Table (Bulk Email)": Select a few users (or select all). Enter the Email Subject and Body (you can click AI Suggest to automatically generate the text, see the next step). (Optional) Select an attachment. Click Send to X users and wait for the success message.	Administrators can send group emails to selected users, with AI automatically generating subjects and bodies, and can also include attachments.	No idea
1	F.2External REST API (2 routes) Action: Admin Page → Public API Endpoints:	The platform exposes two REST routes, allowing third parties to	No idea

	Click Test(owmForecast?city=Melbourne) to display the returned weather JSON snippet in a pop-up window. Click Test(aiSuggest?prompt=...) to display the text generated by LLM in a pop-up window.	obtain weather data through HTTP or call the AI text suggestion interface for integration.	
2	F.3GenAI (Gemini) integration Operation: Click AI Suggest Subject & Body in the group message panel on the Admin page and wait for the filling to complete.	We call the Gemini API in the backend function and generate a suitable email subject and body draft according to the prompts. The administrator can edit and send it directly.	No idea
3	F.4Admin Dashboard (Chart.js) Action: Return to the top of the Admin page to display four metric cards and two charts: User Roles pie chart (Admin / Member ratio). Avg Rating by Resource bar chart (equal distribution for each resource).	The Dashboard provides a visual overview of the entire site, allowing administrators to quickly see the role composition and resource quality distribution.	No idea
4			

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 assignment was integrating multiple APIs and ensuring smooth communication between the front end and back end. It pushed me to better understand asynchronous operations, CORS issues, and secure API key management. Overall, it stretched me as a programmer by improving my debugging skills and deepening my knowledge of full-stack development.

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, problem solving and learning. You need to declare all such uses here. One row per help used. More details on how to acknowledge the use of Gen AI can be found here.

Name	Description
Example: ChatGPT for brainstorming ideas	*I used ChatGPT to brainstorm how to do X because I was feeling stuck with Y problem.*