Member 3 — API Integration (Fetch Logic)

Objective: Enable the application to retrieve real-time weather data from the API.

Role and Importance: Member 3 is the **data backbone**. Accurate API integration ensures the app can display dynamic, real-time weather information.

Detailed Responsibilities: - Establish a reliable connection to the chosen weather API. - Retrieve weather data based on user input. - Validate API responses for accuracy. - Handle errors (invalid cities, network issues). - Provide data in a structured format usable by UI and logic members.

Weekly Objectives & Milestones: - **Week 1:** Define API connection and mock data structure. - **Week 2:** Implement real API fetching and error handling. - **Week 3:** Optimize for multiple city inputs and efficient data handling.

Goal: Deliver a **reliable mechanism for fetching and supplying weather data** to enable dynamic application behavior.

Parallel Work & Dependency Management

Principles: - Define **module ownership** and **clear interfaces** for each member. - Use **skeleton HTML, placeholders, and mock data** to allow parallel work. - Maintain **weekly objectives** to track progress. - Integrate modules periodically to avoid conflicts. - Communicate daily to confirm status and resolve issues.

Result: Each member works independently, minimizes idle time, and contributes to incremental progress, ensuring smooth final integration.

Summary Table of Member Contributions

Member	Role Focus	Key Objective	Importance
1	Structure	Build HTML foundation	Allows styling and interactivity to work effectively
2	Visual Design	Style & make responsive	Ensures user-friendly, professional interface
3	Data	Fetch & provide weather data	Enables dynamic, real-time content
4	UI Updates	Display data dynamically	Translates raw data into visible, understandable info
5	Interaction	Connect input → data → UI	Makes app interactive and functional

This document can be split into five individual sections, each detailed enough to serve as a standalone guide for one member, including objectives, responsibilities, weekly goals, and integration strategies.