

Member 4 — DOM Manipulation & Dynamic UI Updates

Objective: Translate raw API data into real-time, visually updated content for the user.

Role and Importance: Member 4 acts as the **bridge between data and user experience**, ensuring seamless updates to the interface as new data arrives.

Detailed Responsibilities:

- Receive data from API and update interface sections accordingly.
- Dynamically update text, icons, and backgrounds based on weather.
- Control loading indicators and error messages.
- Ensure smooth state transitions for consistent UX.
- Use skeleton HTML and mock API data to start working independently.

Weekly Objectives & Milestones:

- **Week 1:** Write functions to update placeholders with mock data.
- **Week 2:** Integrate functions with real API data.
- **Week 3:** Implement dynamic updates for all states, including loading and error handling.

Goal: Deliver a **dynamic interface** that accurately reflects real-time weather data and responds to user actions.

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.