

## MOM (MINUTES OF MEETING)

Date: 5<sup>TH</sup> February 2026 – 12:00 PM to 12:30 PM

### Attendees

Haripriya Varanasi - Scrum Master

Siva Mani Subrahmanya Hari Vamsi Pullipudi - Product Owner

Rishika Baddam - Development

Vaibhav Hasu- Development

Aryan Patel Kolagani - Development

Sujith Sriram Nangunoori – Development

William Martinez – Client

### Notes:

#### 1) Purpose of the meeting

- Client walked the team through the **GitHub-based setup, Jupyter notebooks**, and a **working map/dashboard demo** that validates the data pipeline outputs.
- Aligned on **what the client expects from the team next** (focus: pipeline + analytics, UI later).

#### 2) Key client expectations

##### *A. Collaboration + Repository*

- Use **GitHub as the main collaboration platform** (version control, PRs, issues, change tracking).
- Team should review client's repo content and contribute via:
  - **Pull Requests (PRs)**
  - **Issues**
  - Improvements to notebooks/docs

##### *B. Data Pipeline Milestone (Immediate focus)*

- Client is uploading **4 working Jupyter notebooks** that:
  - Pull data from **USGS, National Weather Service, and NOAA**
  - Combine **weather + hydrologic metrics** for Puerto Rico:
    - **Water height/level**
    - **Water flow/discharge**

- **“Bed of water” / soil saturation (water table depth)**
    - Include Puerto Rico **bounding box coordinates**
- Team expectation: **run the notebooks successfully** and validate outputs.

### ***C. API Keys (Homework)***

- Each team member must generate their **own API keys** (USGS / NWS / NOAA).
- Reason: keys are throttled; shared keys can get blocked if many users run simultaneously.

### ***D. Validation Using Demo Map/Dashboard***

- Client shared a live map/dashboard demo to:
  - Validate sensor readings and trends
  - Compare notebook outputs vs what’s visible on the map
  - Understand layers, legends, turning layers on/off, clicking points to view telemetry

### ***E. Project Philosophy / Scope Expectations***

- Focus on the **“heart and brain”** of the project:
  - data acquisition
  - cleaning/standardizing
  - analytics and indicators
- UI/UX is considered the **last mile** (important, but not the core work right now).
- Avoid building “just dots on a map.” The goal is **insights + decision support**.

### ***F. Outputs the client wants from the team (next stages)***

After the pipeline is verified, start building:

- **Indices / risk-readiness indicators**
- **Correlations and trend signals**
- **Prediction patterns** (if feasible)
- Support questions like:
  - Where is risk highest?
  - How to rank/stack locations based on limited resources?
  - Where to place resources before storms (preparedness)?

- Later: reactive decisions after an event (routes/resources)

### ***G. Geography scope***

- Initial focus is **Puerto Rico**, because client has strongest domain familiarity and existing setup.
- Code should be written to be **reusable** for other locations later (e.g., Texas flood example).

### ***H. Tools the client recommends***

- Use **Jupyter notebooks** (documentation + repeatability).
- Client preference: **VS Code** or **Colab**; avoid workflows that make cell-by-cell prompts difficult.
- Client will convert docs into **Markdown** for easier reading inside GitHub.

### ***I. License / Open Source***

- Repo uses **Apache 2.0** license.
- Expectation: build in a way that future students and global contributors can reuse and extend.

## **3) Team updates shared in the call**

- **GMU official GitHub** repo is being created / will be shared by professor.
- **YouTrack** will be used for project management; accounts are set up; tasks will be created.
- Team will prepare and share **MOMs for each meeting** to keep both sides aligned.

## **4) Action items**

### ***Client***

- Upload **4 Jupyter notebooks** to GitHub (USGS + NWS + NOAA integration).
- Convert supporting documents (currently ODT) to **Markdown** under /docs.

## **Team**

1. Access GitHub repo and review notebooks + docs.
2. Generate personal **API keys** (USGS/NWS/NOAA).
3. Run notebooks end-to-end and confirm:
  - a. data downloads correctly
  - b. Puerto Rico bounding box works
  - c. key metrics load (water level/flow/soil saturation)
4. Log issues/bugs/questions as **GitHub Issues**.
5. Submit improvements via **PRs** (small, reviewable changes).
6. Update **YouTrack** with high-level tasks and ownership.
7. Share MOM for this call with client + team.

## **5) Decisions / Agreements**

- GitHub is the primary collaboration tool for code + documentation + review.
- Near-term milestone = **verify pipeline + notebooks** before deeper analytics.
- Puerto Rico is the initial scope; build reusable code where possible.
- Team will maintain MOMs and align regularly.

## **6) Risks / Dependencies**

- API key throttling: each person must use **their own key** to avoid bans.
- If notebooks don't run consistently across environments, standardize setup instructions.

## **7) Next meeting**

- **Next sync:** (add confirmed date/time client mentioned this time works better; proposed shifting by 30 mins for future) [12:00 PM to 12:30 PM EST]
- Agenda:
  - Notebook run status + issues
  - Pipeline validation complete?
  - Start defining first **risk/readiness indicators**