SQE Software Engineering Challenge

We want to obtain the data required to programmatically recreate the MBTA subway map:

Using mbta API (https://www.mbta.com/developers/v3-api, https://api-v3.mbta.com/docs/swagger/index.html)

Guidelines:

- Any language and/or frameworks may be used to complete this assignment
- Any use of AI tools (embedded or otherwise) MUST be disclosed
- No frontend should be created to display the data collected, as that is not the focus of this assessment

Requirements:

1. Design and implement any number of API endpoints which can provide the following information:
    - For each subway (light and heavy rail) stop:
        - GPS coordinates
        - Subway (light and heavy rail) lines which pass through

        - Adjacent stops (and which line(s) they are connected by)
2. Create a “QUALITY_STRATEGY.MD” document which describes your strategy for ensuring the quality of this application which includes sections on the following:
    - Objectives
    - Scope
    - Testing
    - Observability
    - Release Process
    - Stakeholders

Submission:

- MUST exist on GitHub
- Contains the source code which satisfies requirement 1
- Contains documentation of each API endpoint created (https://editor.swagger.io/ is a good option)
- Contains a README with the following:
    - How to install and run the program locally
    - Rationale for the design decisions you made
    - Description of any problems or limitations you encountered during this assessment and how you solved them
    - Description of how you would improve this program if you were to continue working on it
- Contains the QUALITY_STRATEGY.MD which satisfies requirement 2

TODO

What we are evaluating:

- API design ()
- Code readability (could another developer understand the code by just reading it?)
- Testability of the code
- Each section of the “QUALITY_STRATEGY.MD”

What we are NOT evaluating:

- Cleverness/efficiency of algorithms
- Compactness of the code
- Specific frameworks known/used