Overview

This assignment is designed to evaluate your technical skills, decision-making, and approach to solving integration challenges. We've intentionally kept the requirements open-ended to give you the freedom to showcase your expertise and creativity.

Objective

Build a simple synchronization system that keeps Cases (projects) in sync between two systems:

- **System A:** Intempus, using a provided test account and our API. You can find the credentials on the other attached file, and you can find your API key when you login on the settings page of Intempus.
- **System B:** A system of your choice (this can be a file, a mock API, a database etc.)

Your solution should:

- Detect changes in the resource on either side.
- Propagate updates to keep both systems synchronized.
- Ensure data integrity throughout the process.

Key points and constraints

- **Blank Canvas:** Aside from the requirements below, you are free to make your own architectural and design decisions.
- **Technology Constraints:**
  - Use **Python** for the implementation.
  - Use pytest for testing.
- **Testing:**
  - Your solution should be thoroughly tested, covering both typical and edge cases.
  - Use pytest to write clear, maintainable, and meaningful tests.
  - We will pay close attention to the quality, coverage, and clarity of your tests as part of our evaluation.
- **Time Expectation:**
  - Aim to complete the assignment in **3 hours.**
- **Submission Format:**
  - Submit your solution as a public code repository (GitHub, GitLab, etc.).
  - Include clear instructions on how to build, run, and test your solution.
  - Provide a brief README explaining your approach and any trade-offs or assumptions.

Evaluation Criteria

- Code quality, structure, and readability
- Thought process and architectural decisions

- Correctness and robustness of synchronization logic
- Thoroughness and quality of tests
- Clarity of documentation and instructions

There are no hidden requirements or tricky edge cases - focus on demonstrating your best work. If you have any questions or need clarification feel free to reach out.