FR1: The system should load patients from the text file

Design Pattern: Adapter Pattern

The System is required to take data from the text file. The PatientFileLoader class is already given to me to read the patient data from a local file (patients.txt in this case). However, it is not compatible with the interface expected from the class (AbstractPatientDatabaseLoader), since it was designed for the database. Adapter pattern is used to solve this problem, it allows incompatible interfaces to work together by creating a class which convert one interfaces into another. In this case, the adapter is (FilePatientDatabaseLoader), it adapts the PatientFileLoader to conform to AbstractPatientDatabaseLoader interface.

A diagram of a patient database

AI-generated content may be incorrect.

**How it works:**

1. Creates an adapter that implements AbstractPatientDatabaseLoader

2. Uses the existing PatientFileLoader internally

3. Converts between the database-style interface and file loading

4. Allows easy switching between database and file loading with one line change

5. Maintains the existing PatientFileLoader implementation

**Git Commits:**

2. Composite Pattern

3. Strategy Pattern

4. Observer Pattern