QUIZZ 08

Impar.

Observer

In the academy grade register project, the observer design pattern can be effectively implemented to manage real-time updates and notifications across various components of the system. For intance, when a student's grade is update in the Database, the Observer pattern would be used to notify other parts of the application such as the user interface or reporting modules, about this change.

By having a GradeSubject class that maintains a list of observers (such as GradeDisplay or GradeReport), any change in the student's grades would trigger the Grade Subject to notify all registered observers. This ensures that the UI or any reporting to always reflects the most up-to-date information without needing to manually refresh or re-query the database. This approach enhances the modularity and scalability of the project, allowing different part of the system to stay synchronized with minimal coupling.