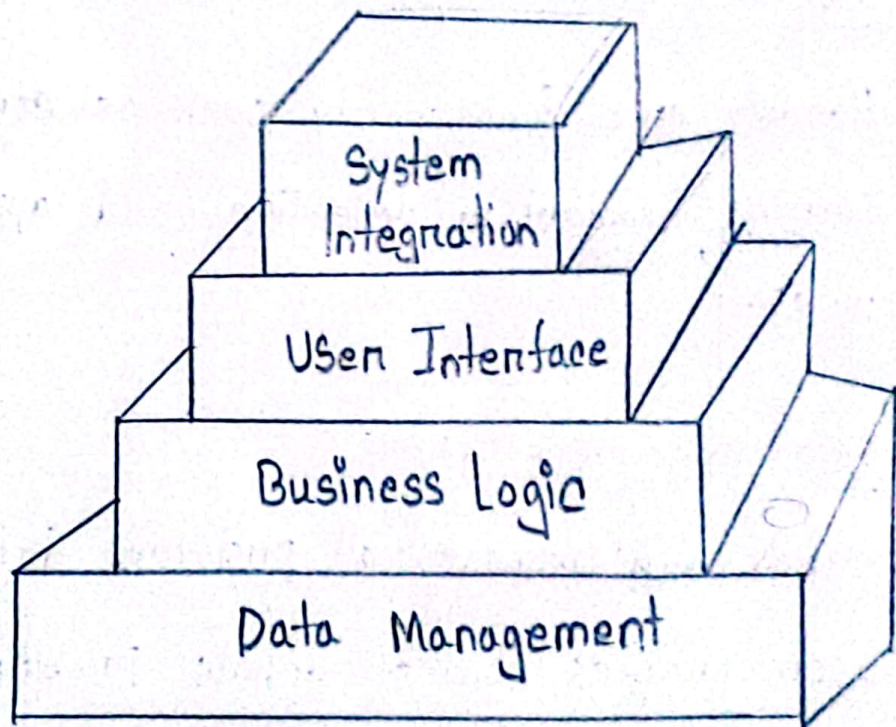


Layered architecture model of an Online Judge System:

Online Judge System Architecture



System Integration Layer:

Ensures smooth communication and data exchange between internal components and external systems, such as, authentication services or APIs.

User Interface Layer

Provides platform for the users to interact with the system, including submitting code, viewing results and managing profiles.

Business Logic Layer

Handles core functionality such as code execution, scoring, plagiarism detection, and applying contest rules.

Data Management Layer

Stores and manages all persistent data, including user profiles, contest details, problem sets, and submission results.

These layers work together to provide a scalable, efficient and organized Online Judge System.