Architecture Pattern

Course Name: **Software Development Project**
Course No: **CSE 3106**

Submitted to:
Dr. Amit Kumar Mondal
Associate Professor
Computer Science & Engineering Discipline,
Khulna University,
Khulna.

Submitted by:

Name: Muhammad Fahim
Student ID: 210210

Name: Umme Talha
Student ID: 210223

Project Title: Text Editor

Decision: Use Layered Architecture for Text Editor Development

Reasoning:

By organizing the text editor's functionality into these distinct layers, we ensure modularity, scalability, and maintainability. Each layer focuses on specific tasks, making it easier to understand, develop, and maintain the text editor codebase. Additionally, the optional layers (Language Support and Extensions/Plugins) provide flexibility for extending the editor's functionality based on specific requirements or user preferences.

Layered Architecture Details:

1. Presentation Layer (User Interface):
    - Responsibility: Handles the graphical user interface (GUI) components and interactions.

2. Application Layer:
    - Responsibility: Implements core logic and functionalities of the text editor.
    - Functionalities: Text editing operations (insertion, deletion, formatting), syntax highlighting, undo/redo, file operations.

3. Business Logic Layer:
    - Responsibility: Encompasses the core business rules and logic specific to the text editor.

4. Data Access Layer (Persistence Layer):
    - Responsibility: Manages the storage and retrieval of data, including file input/output operations.
    - Functionalities: Reading from and writing to files, managing file formats and encoding.

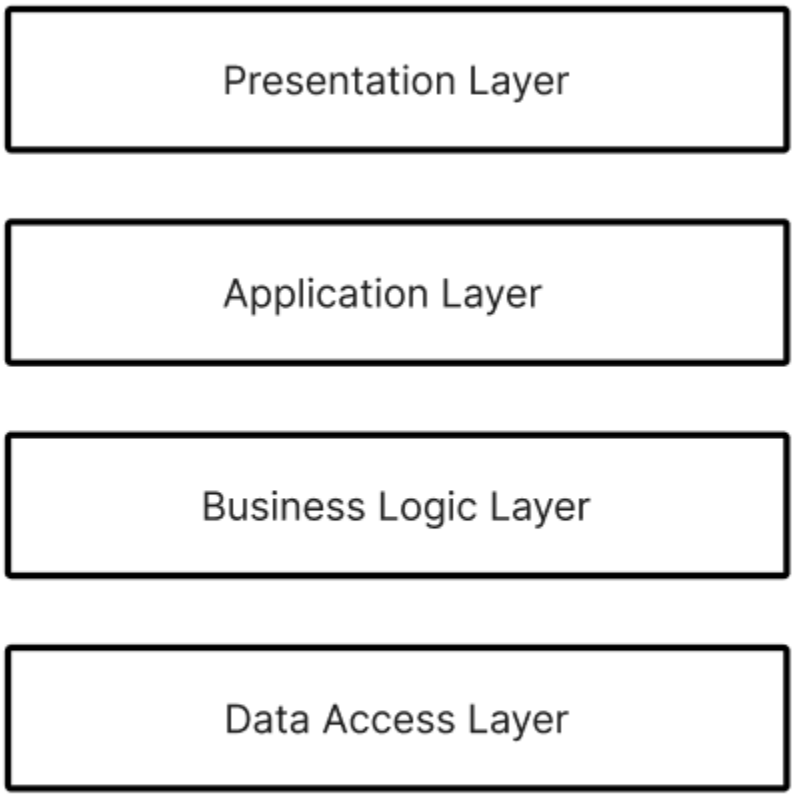

Figure: Diagram of Layered Architecture Pattern