Name: Anei Agany Them

Reg No: IS19B00/023

Course unit: software construction (BSCS3)

Assignment

Design Patterns are reusable solutions to commonly occurring software design problems. They provide a way to structure code in a way that is easy to maintain and extend.

Design Patterns are often divided into three main categories:

Creational, Structural, and Behavioral. Each of these categories has several specific design patterns within them. By understanding and applying design patterns, software developers can create programs that are more flexible, maintainable and extensible.

Facade design patterns are a type of software design pattern used to create a layered architecture for the development of software applications. The pattern provides a modular approach to the design of an application which allows for flexibility and scalability. The pattern is made up of a number of layers consisting of a presentation layer, a business layer, and a data access layer. Each of these layers contains a set of related components that provide functionality to the application as a whole. The layers are responsible for differentiating between the application's functionality and its data. The pattern promotes code reuse and helps reduce the complexity of large applications. Additionally, it allows for the development of applications to be divided into components that can be worked on independently by different teams.