

Learning Guide Unit 3

Overview

Unit 3: Software Design and Architecture

Topics:

- Principles of Software Design
- Cohesion and Coupling
- Software Architecture Patterns and GRASP Principles
- Unified Modeling Language (UML) and System Design
- Design Patterns for Reusable Solutions

Learning Outcomes:

By the end of this unit, you will be able to:

1. Explain the principles of software design, classifying common software architecture patterns and GRASP principles.
2. Identify design patterns for reusable solutions, considering cohesion and minimizing coupling.
3. Apply Unified Modeling Language (UML) techniques to create effective system design diagrams.