Week 5 - 9:
In-depth Study of Object-Oriented Programming (OOP)

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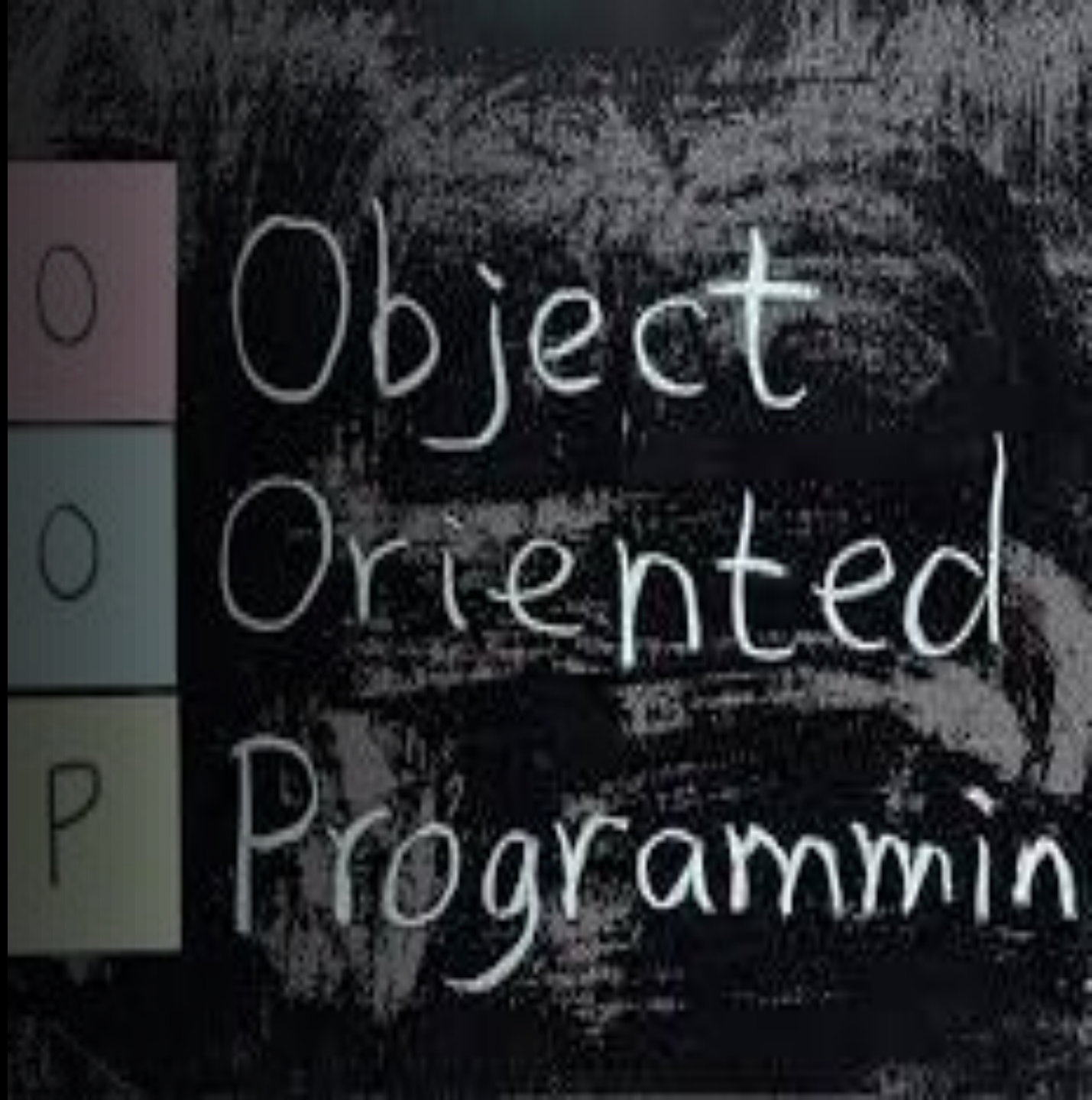


Learning Objective

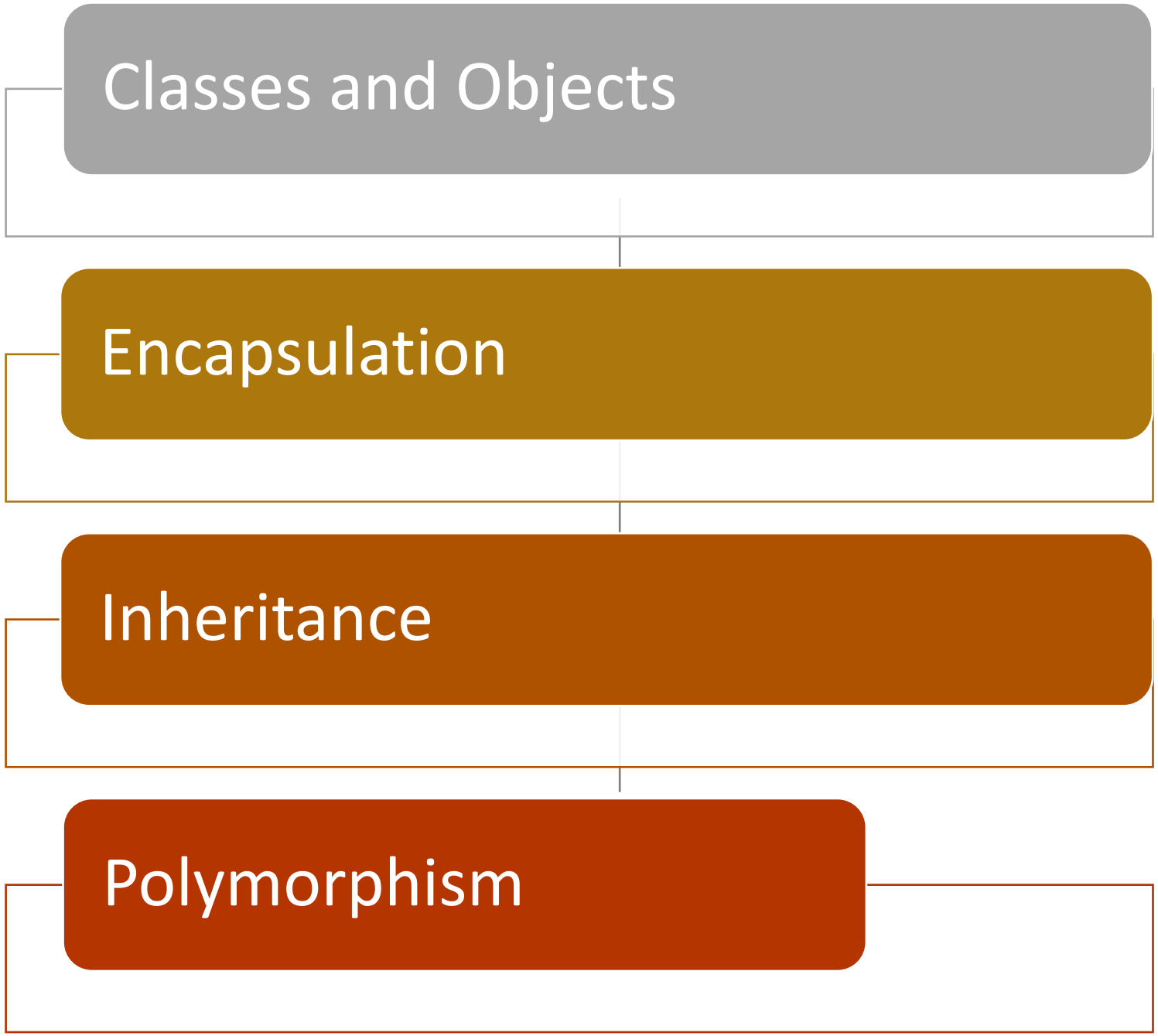
1. Understand the core principles of Object-Oriented Programming (OOP).
2. Apply OOP concepts to design and implement efficient and maintainable software solutions.
3. Demonstrate proficiency in using key OOP features such as encapsulation, inheritance, and polymorphism.
4. Analyze and evaluate the advantages and disadvantages of OOP in different programming scenarios.

Object Oriented Programming

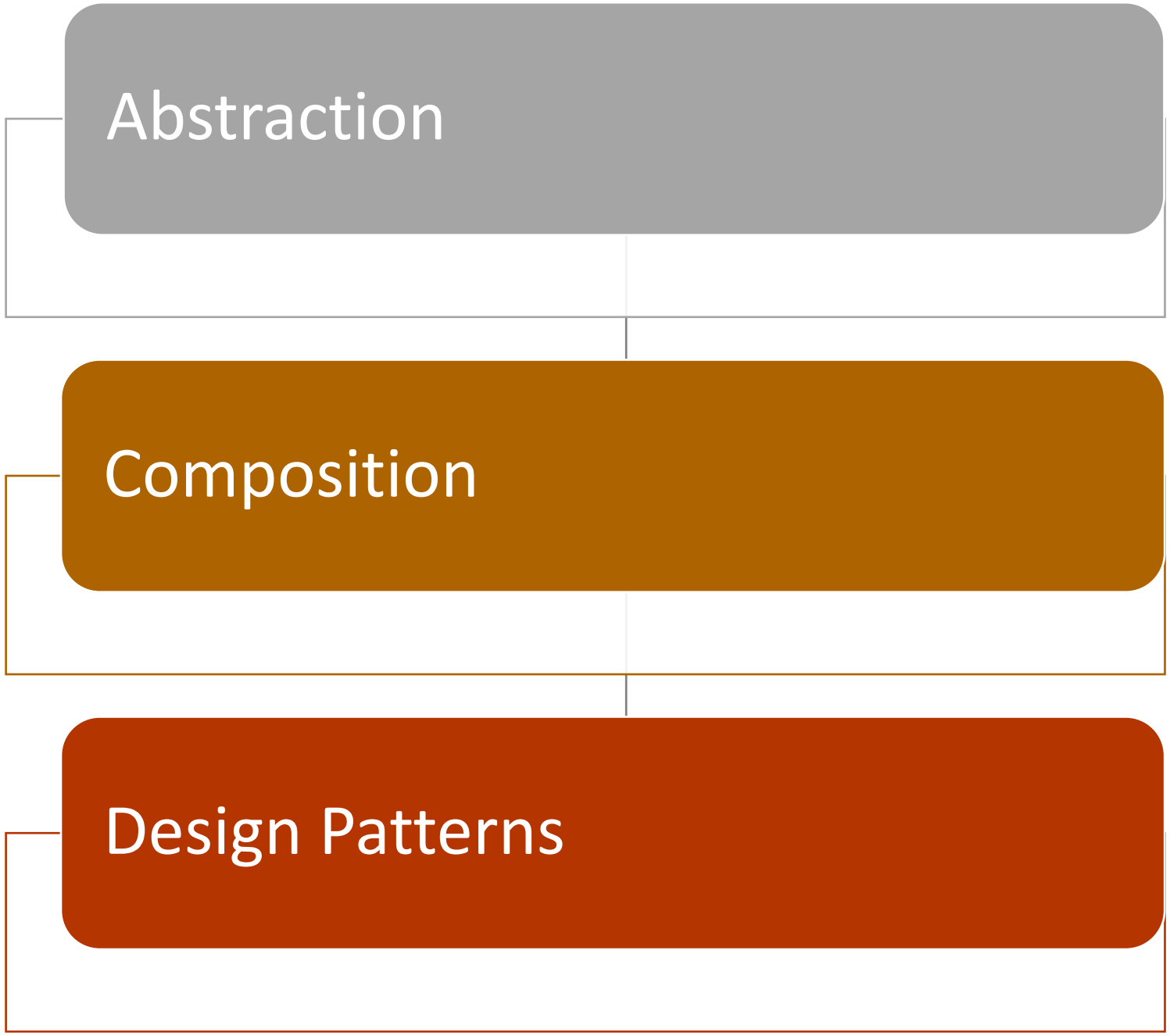
Object-Oriented Programming (OOP) is a paradigm that promotes the organization of code through the use of objects, encapsulation, inheritance, and polymorphism. It provides a modular structure for software design, making it scalable, reusable, and easy to maintain.

Object-Oriented Programming (OOP) is a programming paradigm based on the concept of "objects," which can encapsulate data and behaviors. The fundamental principles of OOP provide a structured approach to software development, fostering code organization, reusability, and ease of maintenance.

Basic Object-Oriented Programming Concepts



Advanced Object-Oriented Programming Concepts



Assignment

Discuss the strengths and weaknesses of OOP.

Explain the designing of a software system using OOP principles.