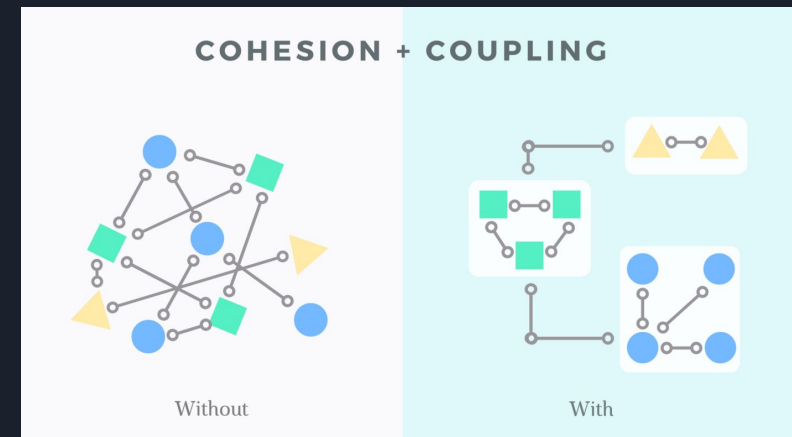# Cohesion

By Tower Defense

Agenda

- Definition

- High and Low Cohesion

- Measuring
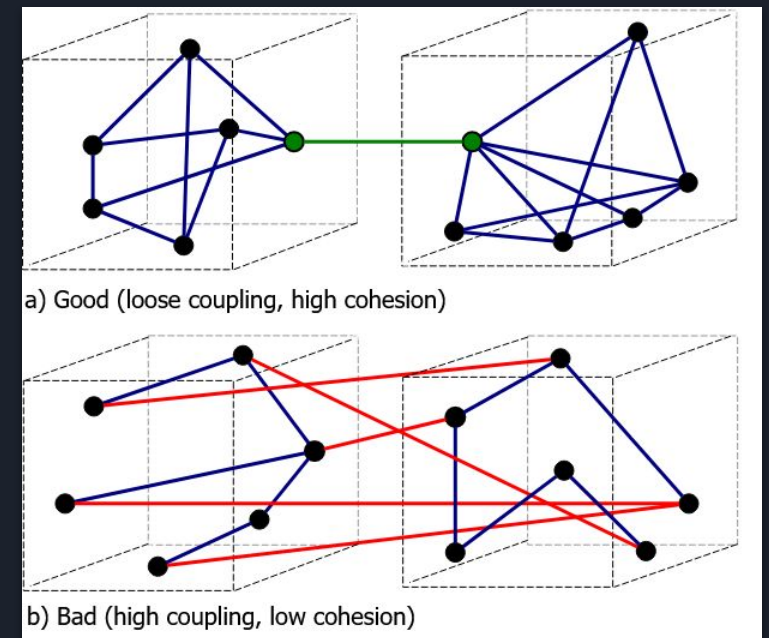
- Live Demonstration

- Software

Definition

- Cohesion refers to the degree to which elements within a module work together to fulfill a single, well-defined purpose.

- High cohesion means that elements are closely related and focused on a single purpose, while low cohesion means that elements are loosely related and serve multiple purposes.

High and Low Cohesion

- High cohesion is preferable, because it is associated with several desirable traits of software including robustness, reliability, reusability, and understandability.

- In contrast, low cohesion is associated with undesirable traits such as being difficult to maintain, test, reuse, or even understand.

a) Good (loose coupling, high cohesion)

b) Bad (high coupling, low cohesion)

Measuring

- Logical Flow

- Consistency

- Clarity and Understanding

- Connection and Relevance

- Contextual Appropriateness

LIVE DEMO

Software

- Tools like SonarQube, ESLint, and Pylint analyze source code

- Identify potential issues and enforce coding standards

- They can flag potential code, like duplicated code or inconsistent naming conventions

Thanks for listening