

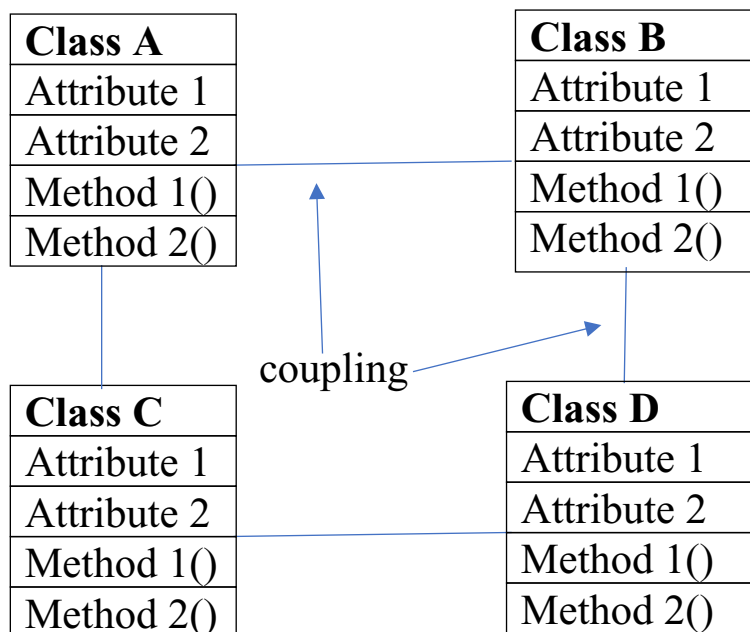
Coupling and cohesion

These are important concepts of software development because they control the complexity level of systems as requirements increase.

Coupling:

Coupling refers to relationship or degree of interdependence between modules. Coupling has different techniques i.e uncoupled, loosely coupled and strongly coupled.

Illustration:



Types of coupling

1. No coupling
2. Data coupling
3. Stamp coupling
4. Control coupling
5. External coupling
6. Common coupling
7. Content coupling

best coupling

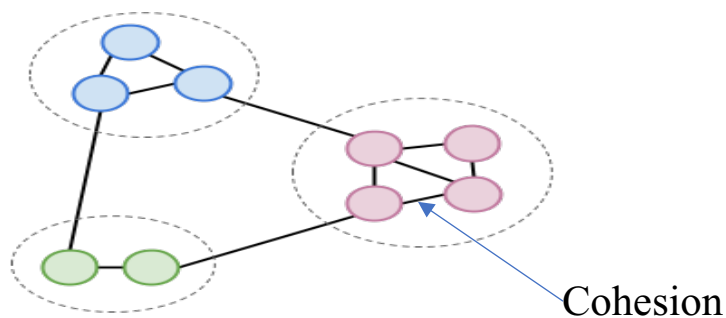
worst coupling

Note: Following the order above it ranks from the best to the worst.

Cohesion:

Cohesion refers to the degree at which elements of a module interact with each other. Highly cohesive systems represent a high level of functionality and vice versa.

Illustration:



Types of Cohesion:

1. Functional cohesion
2. Sequential cohesion
3. Communication cohesion
4. Procedural cohesion
5. Temporal cohesion
6. Logical cohesion
7. Coincidental cohesion

best cohesion

worst cohesion

Comparison between coupling and cohesion

Coupling	Cohesion
It is inter-binding centred	It is intra-binding centred
Modules are linked to each other	Modules focus on one task

It shows relative independence between modules.	It shows the module's relative functional strength.
Low coupling is preferred so that modules rely less on each other.	High cohesion is emphasized due to its focus on a particular task.

Reference:

1. <https://unstop.com/blog>