

Feature      Association Aggregation Composition

Definition    A generalization A specialization A stronger form of association where one class contains another, and the contained class's lifecycle depends on the container.

Lifespan      Independent Independent Dependent. The contained object cannot exist independently of the container object.

Type of Rel: "Uses-a" re "Has-a" rel: "Part-of" or "Owns-a" relationship

Example      A Teacher a Library an A House and Room where House contains Room objects, and Room cannot exist without House.

Class Relat Weak association Stronger than: Strong association between classes

Implementation: Typically, a Typically, a Typically, a member variable reference, created and managed internally by the containing class

Ownership    No ownership Partial ownership Full ownership

Example      C Teacher has Library has House has a List<Room>, and Room cannot exist without House.