

10 Types of Unified Modeling Language or UML Arrows

A ————— B **Association**
A and B are associated in some way

A —————> B **Directional Association**
A has access to B but not vice versa

A <————> B **Bidirectional Association**
A and B have access to each other

A —————> B **Inheritance**
A inherits from B, A "is-a" B

A - - - - -> B **Realization**
A implements the interface B

A - - - - -> B **Dependency**
A depends on B, B is a dependency of A

A ◇———— B **Aggregation**
A "has-a" B which can exist without A

A ◆———— B **Composition**
A "has-a" B which cannot exist without A

A —————⊕ B **Containment**
A is contained within B

A 3 ————— 1..* B **Multiplicity**
each A has 1 or more B's,
and each B has exactly 3 A's