Relationship

between classes

IN THE NAME OF ALLAH

بسم الله الرحمن الرحيم

THE GRACIOUS, THE MERCIFUL.

GETS - GETTING EDUCATION WITH TECHNOLOGICAL SYSTEM

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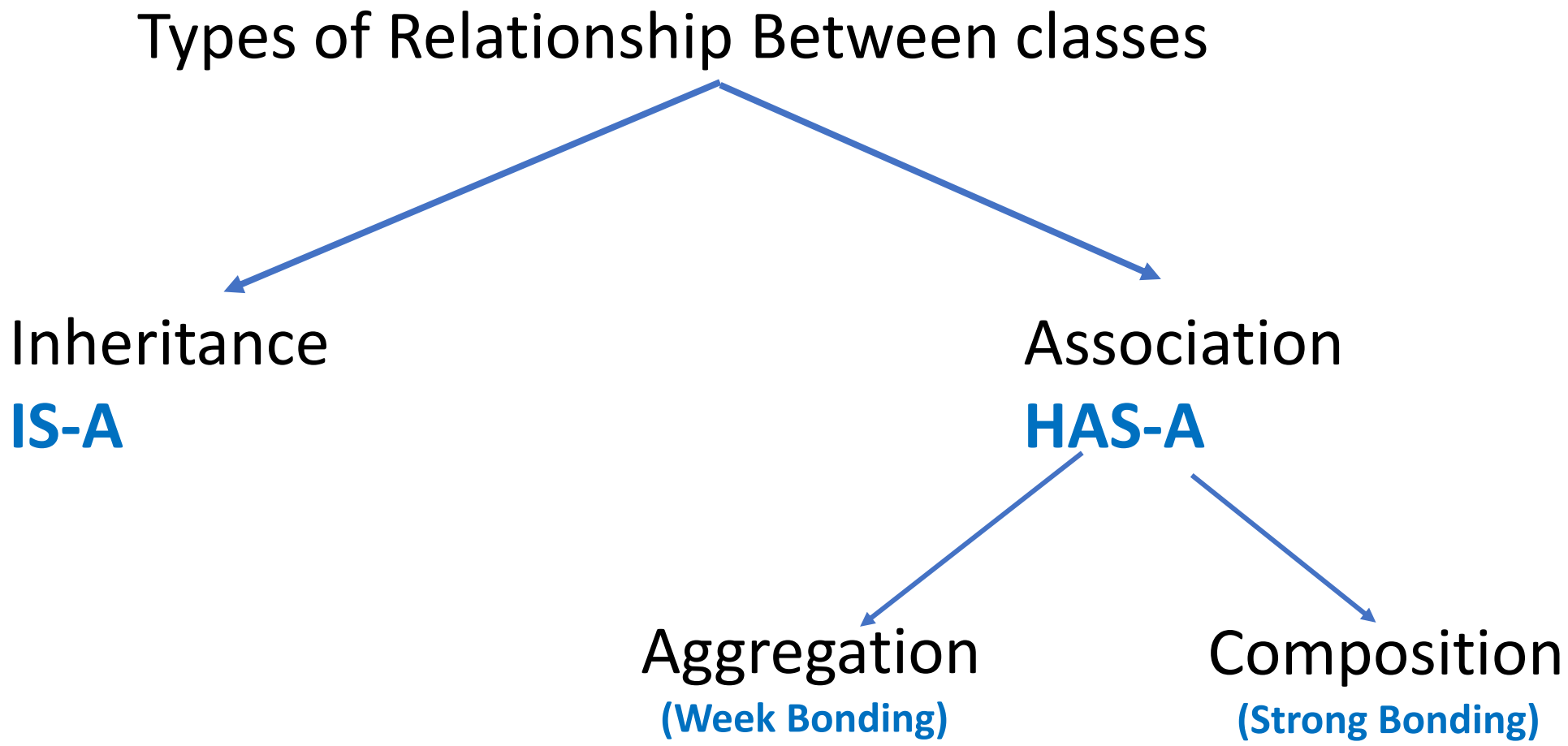
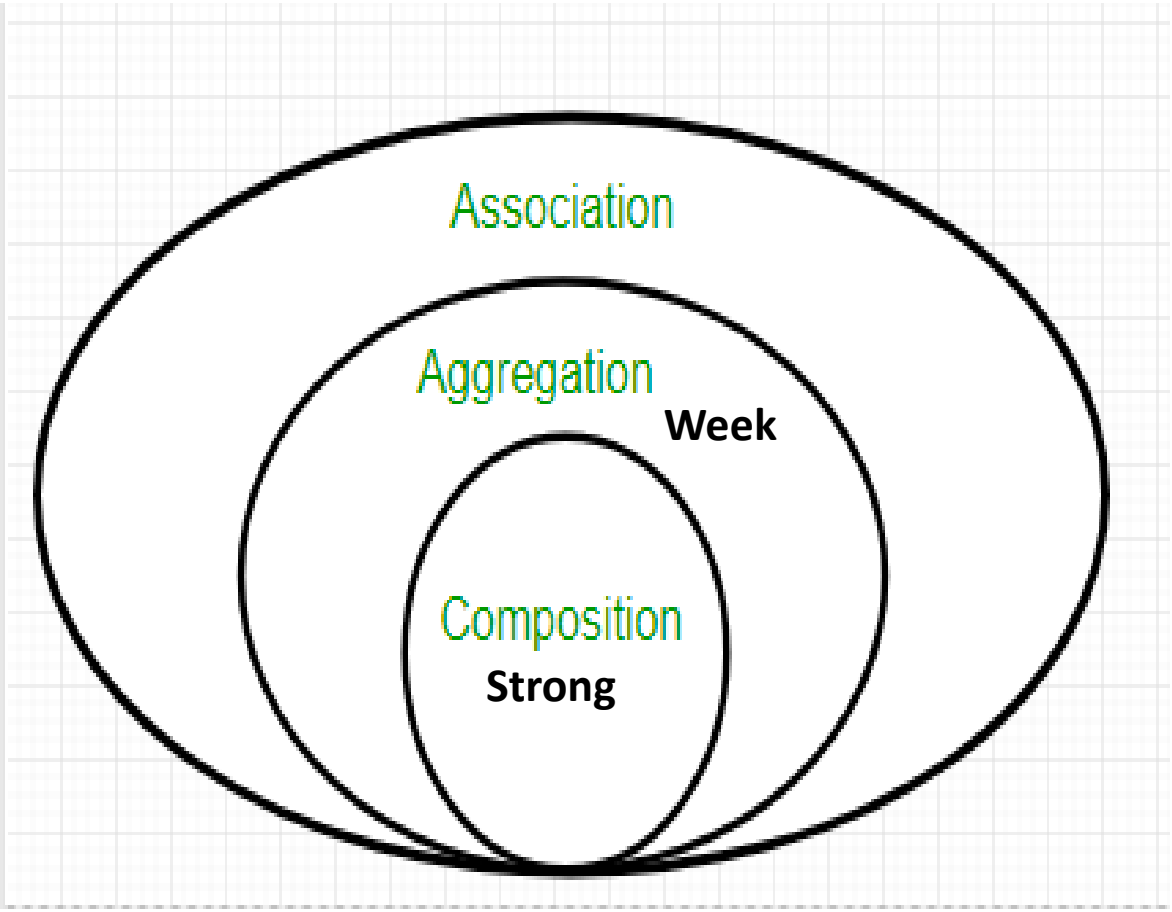
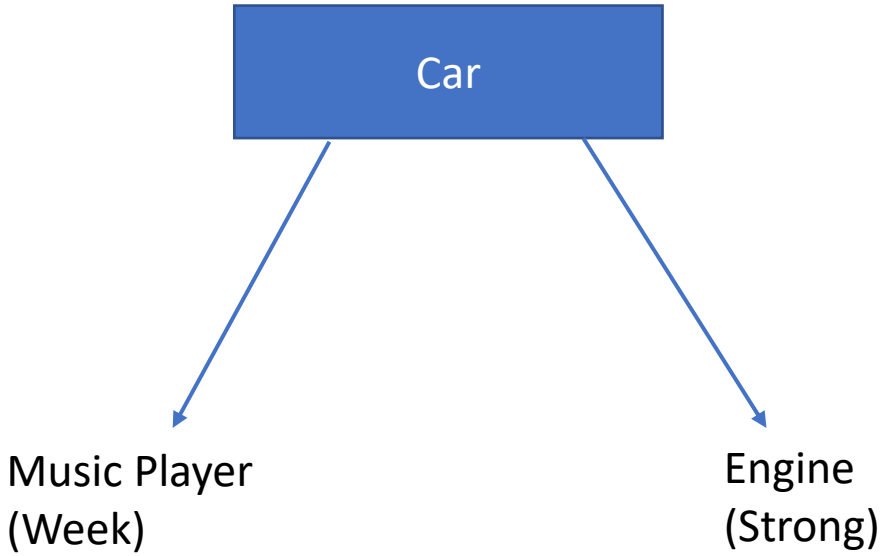
LECTURE: 6
Relationship Between Classes


Types of Relationship Between classes
Inheritance
IS-A
Association
HAS-A
Aggregation
(Week Bonding)
Composition
(Strong Bonding)

Relationship Bonding





Advantages of relationship between classes

- Code reusability
- Cost cutting
- Reduce redundancy

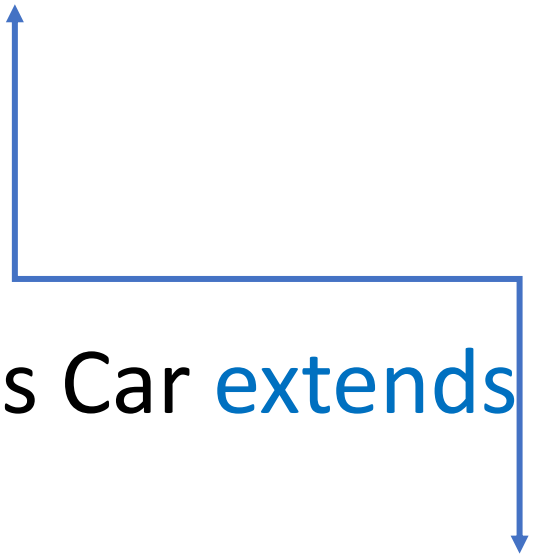
Inheritance IS-A

```
class Vehicle {

}

class Car extends Vehicle{

}
```



Car **IS-A** Vehicle

Inheritance IS-A is a tightly coupled relationship.

if we change the parent properties, it will also change the child properties.

Association HAS-A

```
class Engine {

}

class Car {
    Engine ob = new Engine();
}
```

Car **HAS-A** Engine

Association HAS-A
Is not tightly coupled relationship.

Programmer prefer to use it in a big Projects

Relationship Between Classes

Inheritance IS-A

- IS-A Relationship
- Extends
- Tightly coupled

Association HAS-A

- HAS-A Relationship
- Ref var, new
- Not Tightly coupled
- Aggregation (Week)
- Composition(Strong)

Understanding bonding relationship