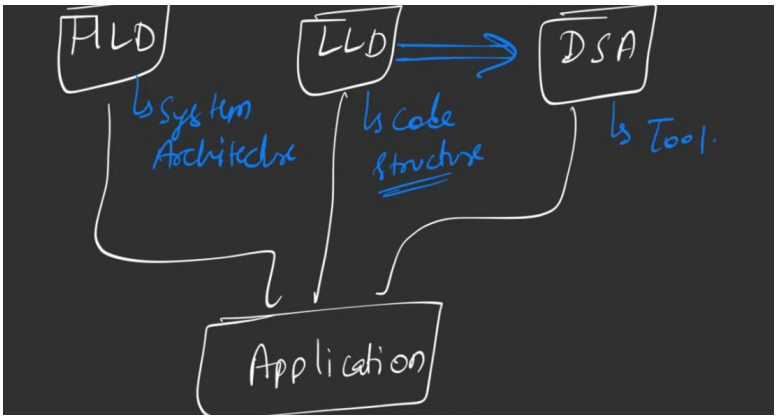
HDD - system Architecture like simplify, maintainability , cost optimization
LLD – focus on object /class
DSA – used for actual development for class object.

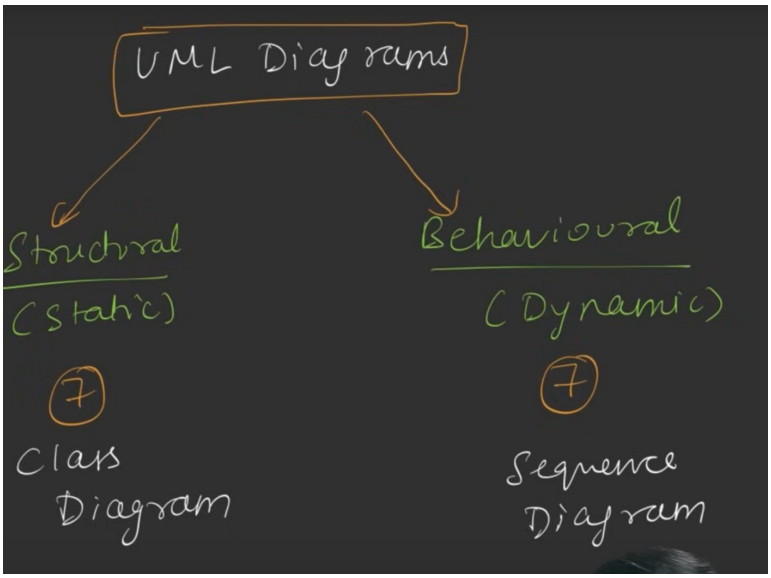


Why oops is need ?

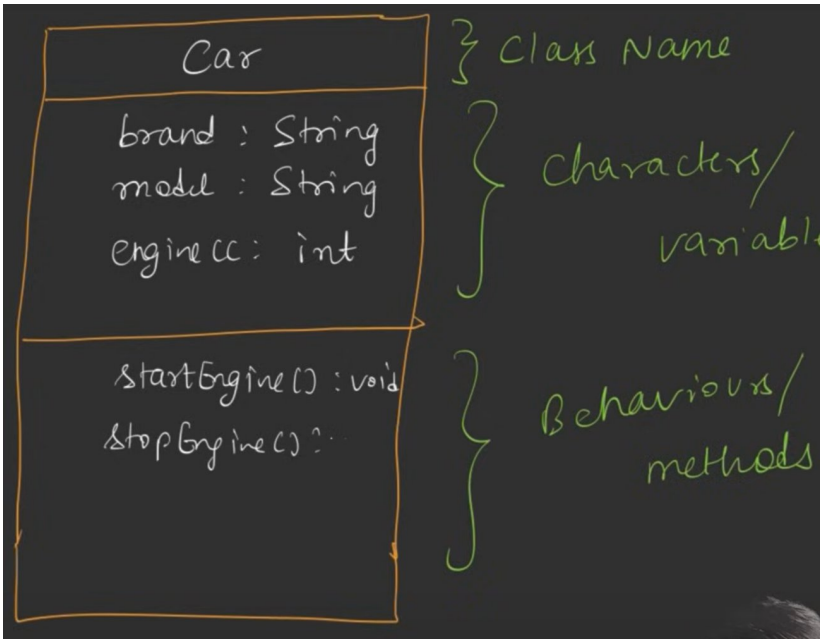
=> it will solved actual real world problem . What u see real world like inheritance(reuse code) , like ex, skeleton and object is like you & me as human object and its behaviour like walking, talking, speaking.

In UML diagram 2 part important

1. Class Diagram
2. Sequence Diagram

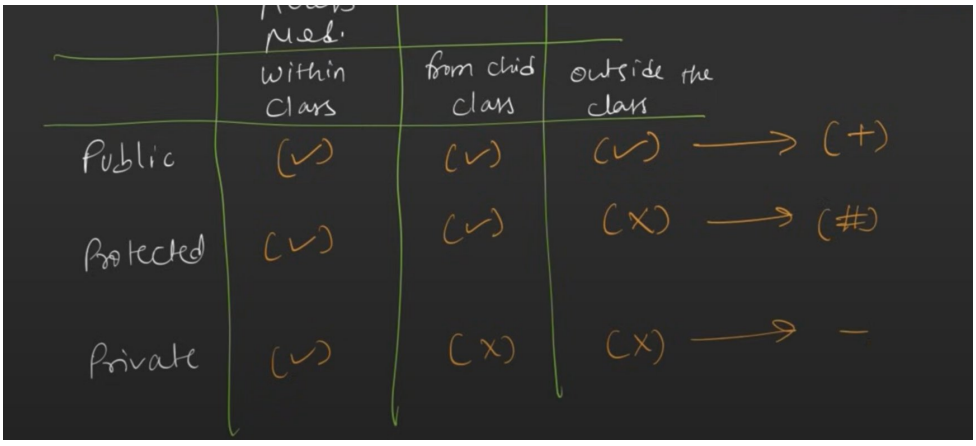


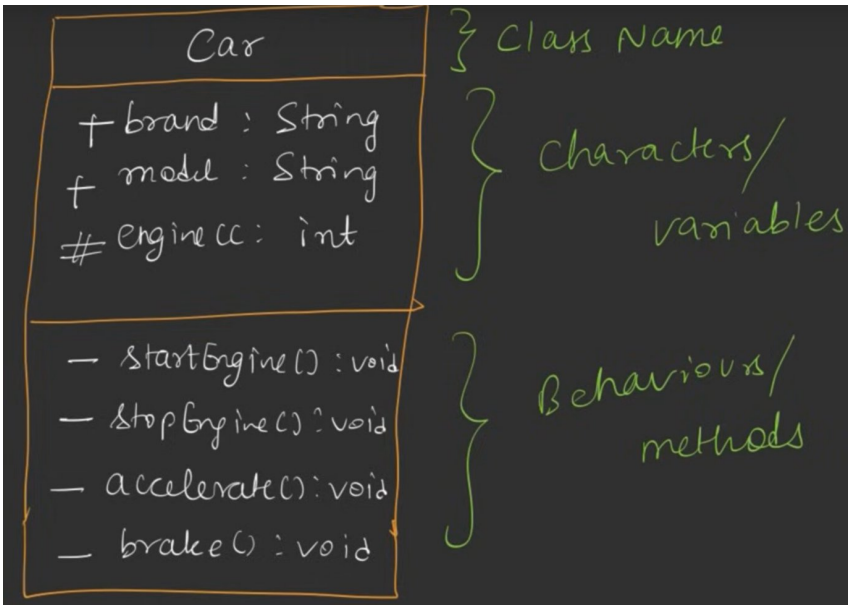
Class Diagram



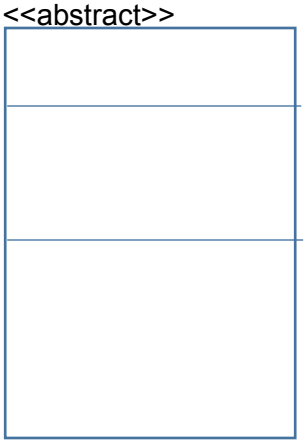
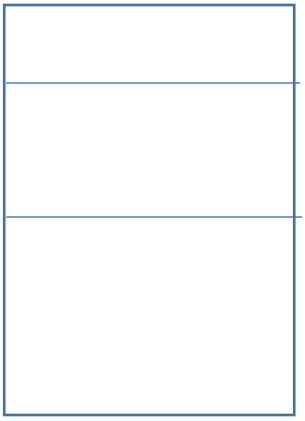
Access Specifier in UML representation

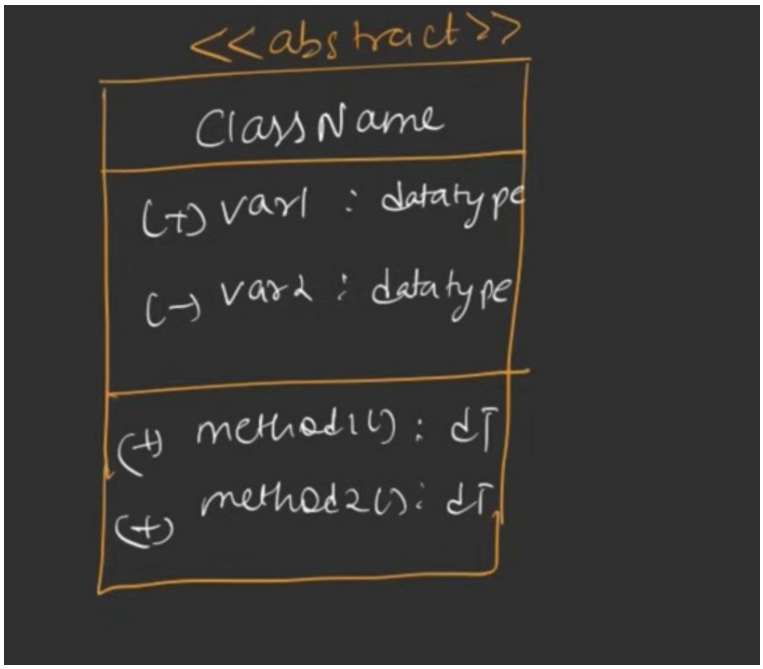
1. Private: -
2. Protected : #
3. Public : +



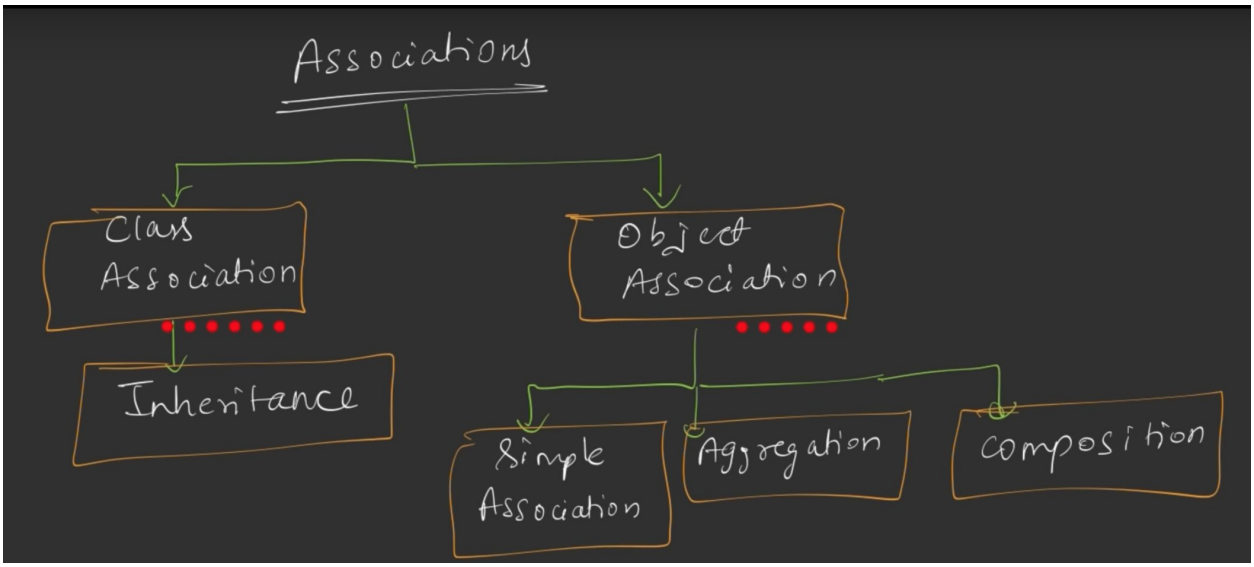


How to represnt abstract class And concrete class

abstract class	**concrete class**
<<abstract>> 	

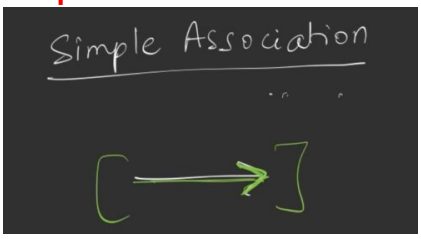


Association



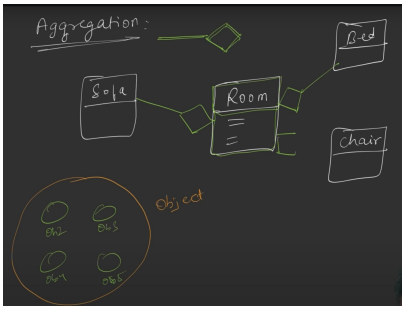
Simple Association : Arjun lives in house.

It represent —>



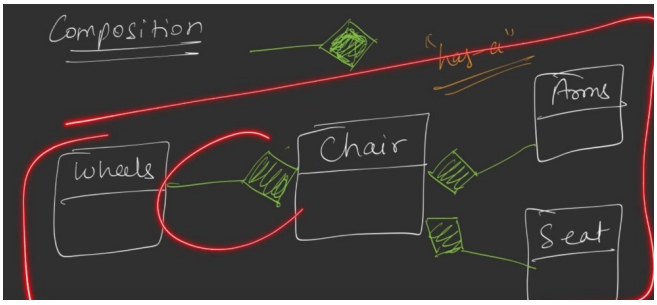
Aggregation : Room has chair,sofa, tables. So chair ,sofa, table has container as Room.

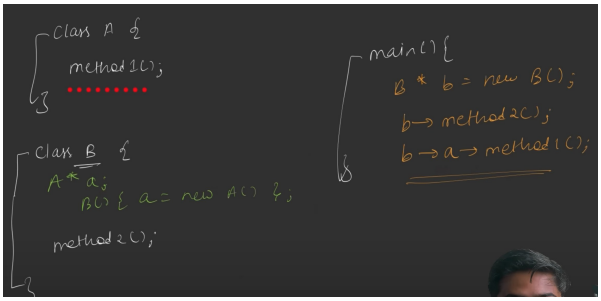
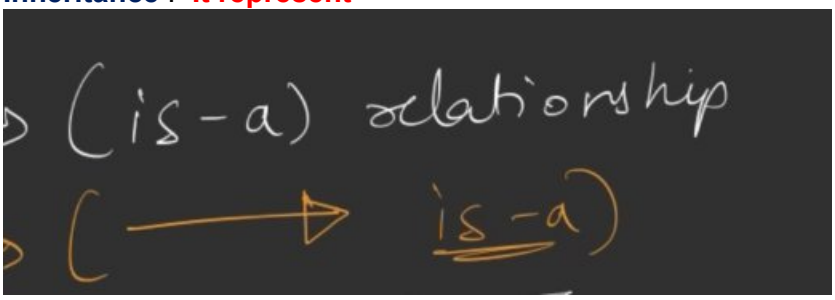
It is represent ◇—



Composition : Car has wheel,Engine. It strong entity relationship. Car is made combination of different componenet like wheel, engine. If car is broken then different part is not useful.

It is represent ◆—





Inheritance : It represent —▷