



Laboratory ASSIGNMENT: 01

**ASSIGNMENT NAME: Generalization & Association Diagram
and Java Code**

**COURSE TITLE: System Analysis & Design
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Generalization

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Fig .1 : Diagram of Generalization

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Generalization

Generalization is the process of taking out common properties and functionalities from two or more classes and combining them together into another class which acts as the parent class of those classes or what we may say the generalized class of those specialized classes. All the subclasses are a type of superclass.

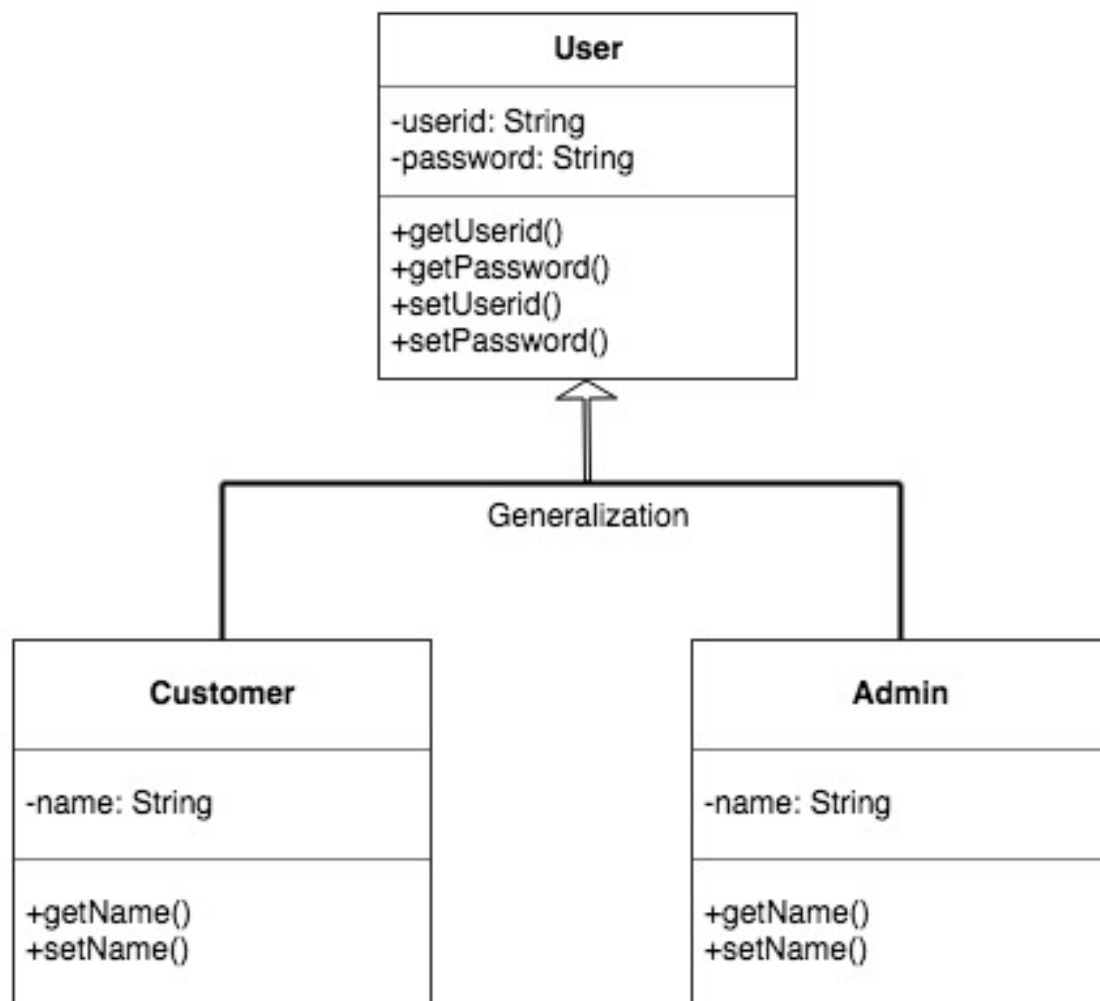


Fig .1 : Diagram of Generalization

In this figure, we see that there are two types of users so we made a User class which will contain common properties and then we have an Customer and Admin class which are an extension of User class and will have properties of User as well as their own. Here User is the parent/superclass and the other two are child/subclass. Customer User “is-a” User as well as the Admin User.

Association

Association establishes a relationship between any two objects. It can be defined as the multiplicity between the objects.

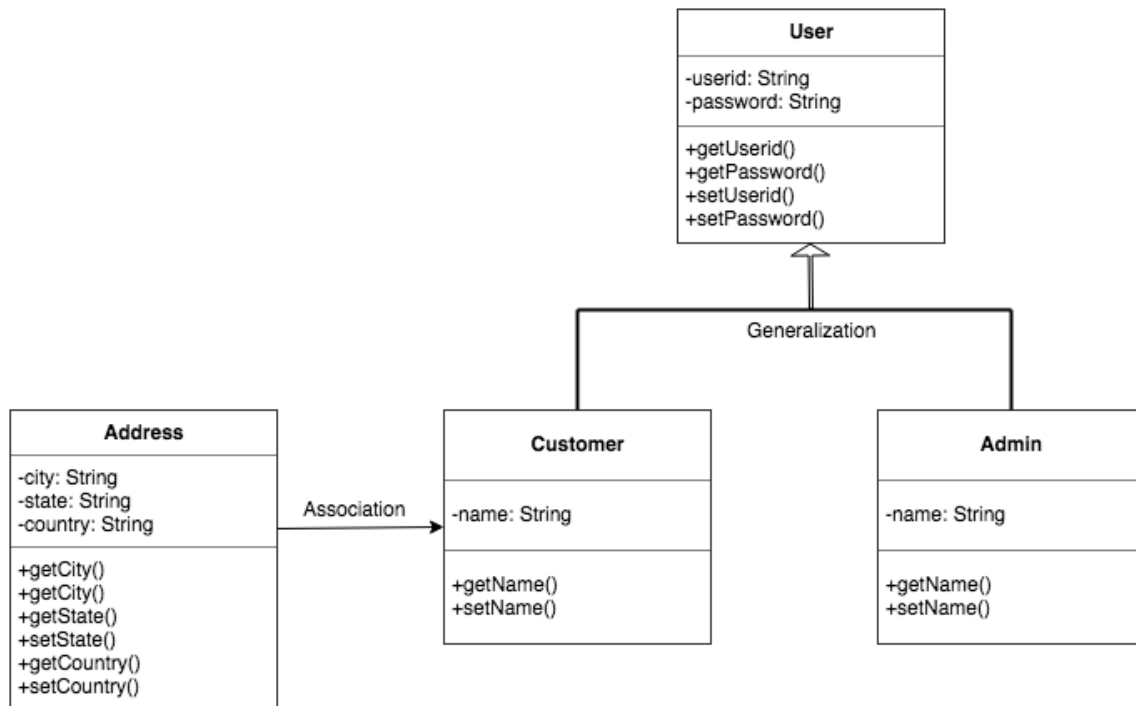


Fig .2 : Diagram of Association

In the above figure, one Address has many numbers of Customers. Therefore the relationship between the Address and Customers is one-many. And also those two are two different entities. Therefore the relationship between the two entities is called association.