Class Diagram Symbols

| SR  NO | Symbols | Description |
| --- | --- | --- |
| 1 |  | * Represents an "is-a" relationship. * That is, inheritance relationship between the classes. |
| 2 |  | * A special type of association. * It represents a "part of" relationship. |
| 3 |  | * A special type of aggregation where parts are destroyed when the whole is destroyed. * Objects of Class2 live and die with Class1. * Class2 cannot stand by itself. |
| 4 | **-** | This sign before a data member or method says that particularly its Private. |
| 5 | **+** | This sign before a data member or method says that particularly its Public. |
| 6 | **#** | This sign before a data member or method says that particularly its Protected. |
| 7 | **1…\*** | Its says about the multiplicity of the containment. Owner Owns computers , but how many. So 1 to many, that is one owner owns many computers. |

Description for Class Diagram:

The UML Class diagram is a graphical notation used to construct and visualize object oriented systems. A class diagram in the Unified Modeling Language (UML) is a type of static structure diagram that describes the structure of a system by showing the system's:

* classes,
* their attributes,
* operations (or methods),
* and the relationships among objects.

We have Four classes :

* User
* Customer
* Owner
* Computer

The relationship between the user and Owner ,Customer Class is Inheritance. Its “is a” relationship. Every data member and method of user class is inherited by the owner and customer class.

The relationship between Customer and Computer class is Aggregation. Its “part of” kind of relationship. Its a weak coupling as when the computer class is contained by the customer class but if the customer is deleted the computer still remains to exist. So the bond is weak.

The relationship between Owner and computer is composition (tight Coupled). Its “has a” kind of relationship. Its called tightly coupled as the computer class is contained by the owner such that the owner owns the computers and the if the owner class doesn’t exits the computer class stops existing.