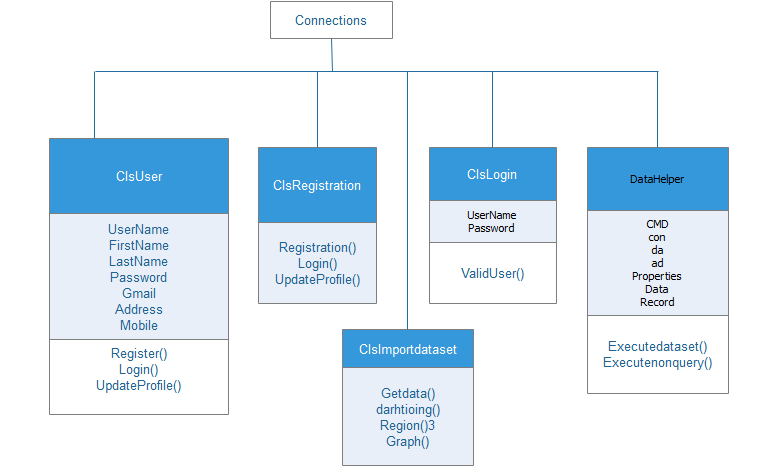
**Class Diagram:**

A class diagram is an illustration of the relationships and [source code](http://searchsoa.techtarget.com/definition/source-code) dependencies among classes in the Unified Modeling Language (UML). In this context, a [class](http://whatis.techtarget.com/definition/class) defines the [method](http://searchcio-midmarket.techtarget.com/definition/method)s and [variable](http://whatis.techtarget.com/definition/variable)s in an [object](http://searchsoa.techtarget.com/definition/object), which is a specific entity in a program or the unit of code representing that entity. Class diagrams are useful in all forms of object-oriented programming (OOP). The concept is several years old but has been refined as OOP modeling paradigms have evolved.

In a class diagram, the classes are arranged in groups that share common characteristics. A class diagram resembles a [flowchart](http://whatis.techtarget.com/definition/flowchart) in which classes are portrayed as boxes, each box having three rectangles inside. The top rectangle contains the name of the class; the middle rectangle contains the [attribute](http://searchsoa.techtarget.com/definition/attribute)s of the class; the lower rectangle contains the methods, also called operations, of the class. Lines, which may have arrows at one or both ends, connect the boxes. These lines define the relationships, also called associations, between the classes.

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