

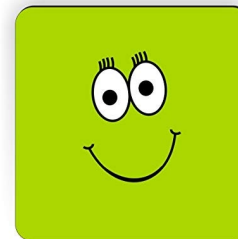
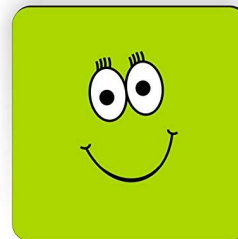
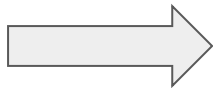
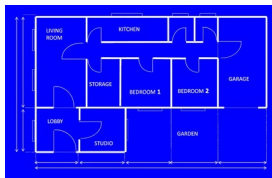
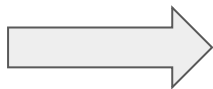
Introduction To Classes

What is a class?

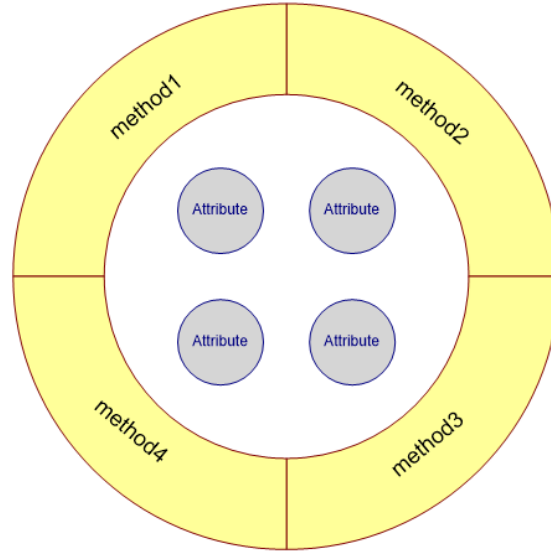
A class is a **user-defined** data type that provides a **template** for the **data** and **behavior** for an object of the class.

- **user-defined** - not included in the C# or Java core definition.
- **template** - a model / example.
- **data** - variables / attributes / properties
- **behavior** - methods

A class is description of what an object of the class will contain (data) and how it will behave (methods).



An Object



An object is an instance of a class

Data and the ways to access that data are wrapped in a single structure, **a class**.

The only way to access class member data is through class member methods.

Encapsulation: information hiding / data protection

Object Oriented Roles

Class Designer

- Design classes others use
- Decides what an object of the class looks like and can/cannot do
 - Attributes - Data members
 - Behaviors - Method Members
 - Access - public / private

Class User

- Application User (from classes point of view)
- Instantiate and use objects of classes
- Use ***object.method()*** -or- ***classname.method()*** to invoke behavior