

Lesson 4: Data Structure

Objects and Classes

When you define a class, you define a blueprint for a data type. This does not actually define any data, but it does define what the class name means. That is, what an object of the class consists of and what operations can be performed on that object. Objects are instances of a class. The methods and variables that constitute a class are called members of the class.

Defining a Class

A class definition starts with the keyword `class` followed by the class name; and the class body enclosed by a pair of curly braces. Following is the general form of a class definition:

```
<access specifier> class class_name
{
    // member variables

    <access specifier> <data type> variable1;
    <access specifier> <data type> variable2;
    ...
    <access specifier> <data type> variableN;

    // member methods

    <access specifier> <return type> method1 (parameter_list)
    {
        // method body
    }
}
```

```
}  
  
<access specifier> <return type> method2(parameter_list)  
  
{  
    // method body  
}  
  
...  
  
<access specifier> <return type> methodN(parameter_list)  
  
{  
    // method body  
}  
  
}
```