Object Oriented Programming Notes

1. Member data
   1. Considered “private”
   2. Also considered instance data, because each instance (object) of the class will contain its own unique copy of this date.
2. Member Method
   1. Considered “public”
3. Getter Methods
   1. Usually named “get” plus the name of the instance variable they are returning
      1. ex: GetTitle, GetAuthor
   2. Getters take no parameters
   3. Getters always return something
4. Setter Methods
   1. Usually named “Set” plus the name of the instance variable they are returning
      1. ex: SetTitle, SetAuthor
   2. Setters always take a parameter
   3. Setters never return anything
5. Data Manipulation Methods
   1. They usually take no parameters
   2. They work on the data inside the object and do some calculation
   3. They usually return something
6. Creating Objects
   1. Book nextBook = new Book();
      1. This statement takes the Book class definition and uses it to create the object “nextBook”
      2. When creating the object, storage is allocated for each of the data members defined in the class, each data member is initialized to a standard default value.
7. Sending messages to Objects
   1. nextBook.SetTitle(“C# for Everyone”);
   2. Object name\_.\_Method name (parameters)
      1. The parameters are the message sent to the object to do the defined method
8. Constructors
   1. Constructors don’t create objects, they are used to **initialize data in an object**.
   2. Constructor Definitions
      1. It is a member method of a class
         1. It must have the same name as the class
         2. It has no return type (not even void)





