C – Starting Classes

# Overview

This topic introduces some of the basic syntax and grammar surrounding Object-Oriented Programming in C#. The following keywords are introduced. (Note that additional keywords from previous topics may also be present.)

* private
* this
* bool
* true
* false
* DateTime

This topic will also introduce the following grammars, syntax and language constructs. (Note that additional concepts from previous topics may also be present.)

* Private fields (encapsulation)
* Public properties (encapsulation)
* Constructor syntax
* Object instantiation with parameterized constructors
* Overriding the Object's ToString() method

**Daily LOGs**

The following daily LOGs are covered in this package.

**OOP Basics**

* Define the term "encapsulation" as used in OOP
* Explain why encapsulation is a good design principle
* Define the term “access specifier” and identify where it occurs in the code for a class
* List the two access specifiers that are used in this course
* Describe the difference between “private” and “public” members of a class
* Describe the concepts of "properties" as used in OOP
* Define the term "backing store" as it applies to properties and fields
* Describe and explain the purpose and function of a constructor for a class
* Describe the syntax of a class constructor
* Identify when a class constructor is “called”
* Define the term "class scope" as used in OOP
* Define the term "local scope" as used in OOP
* Define the term "state" as applied to objects used in OOP
* Define the term “override” as used in OOP
* Explain the purpose and function of the ToString() method and why we sometimes want to change its default behaviour when we create classes
* Create simple class diagrams to represent classes

**General Programming Concepts and Terms**

* List three levels of scope