Glossary

https://csci-1301.github.io/about#authors

September 19, 2023 (05:10:30 PM)

Contents

Keywords/Reserved Words[1]**:** words defined by the C# language and used for one thing
Datatypes[2]**:** categories in C# used to define types of values, such as strings
Variable[3]**:** values that be changed
Constant[4]**:** values that can not be changed
Identifier[5]**:** words defined by the programmer to refer to an object or variable.
Operations:
Operators[6]**:** symbols used to perform operations
Modulo[7]**:** the `%` used to divide two numbers and return the remainder
Escape Sequence[8]**:** used to represent a non-printable character
Reference Types (Objects and Strings)[9]**:** a variable of a class object holds a reference to the address of the object on the managed heap.
Value Types (all other reserved words)[10]**:** a variable of a class object stores the exact data value held by the variable
Numeric Types[11]**:**
Booleans[12]**:** a binary datatype that can only be true or false

Decision Structures (`if`/`else`/`switch`)[13]:

Control Structures (loops)[14]:

Instantiation (instance of a class)[15]**:** the act of creating a object, an instance of a C# class
Initialization[16]**:** the act of both declaring a variable's datatype and identifier and assigning it value
Declaration[17]**:** the act of creating a variable's datatype and identifier
Assignment[18]**:** the act of giving a value to an identifier
Implicit Conversion[19]**:** the act of automatically storing the value of one identifier into another identifier that differs from its own
Explicit Conversion (casting)[20]**:** the act of storing the value of one identifier into another identifier that differs from its own using additional syntax
Rules[21]**:** are required syntactical ways to write a program for it to function Conventions[22]:
are not required for the program to function, but are heavily encouraged for the readability and comprehension of other programmers
Format Specifiers (C, N, P, E)[23]**:** added to variable calls in strings to format the numeric variable in various ways (see link for specifics)
Constructor[24]**:** a method used to instantiate an object and assign it's attributes
Parameter[25]**:** any variable declared within a method
Argument[26]**:** any value that must passed to a method in order for it to be called

[13] https://csci-1301.github.io/book.html#decisions-and-decision-structures
[14] https://csci-1301.github.io/book.html#loops-increment-operators-and-input-validation
[22] https://csci-1301.github.io/book.html#conventions-of-c-programs

Attribute[27]**:** the variables declared within a class to act as the characteristics of any of its instantiated object

Method[28]**:** a code block that contains a series of statements

Class Member (attributes and methods)[29]**:** anything defined within a class that can be access within and outside of the class

Scope[30]**:** Time and place in program where the variable exists

Iterator: an object that traverses an array or list

Sentinel Value[31]**:** a special value in the context of an algorithm which uses its presence as a condition of termination, typically in a loop or recursive algorithm.

Guard Condition: boolean expressions (predicates) found at the top of a method or function that determine whether the function should continue to execute.

Accumulator[32]**:**

Counter[33]**:** a variable used to count the number of times a certain condition is met

Complex Condition[34]**:** a condition consisting of multiple conditions

Method Signature[35]**:** the way a computer reads a method by its name and the datatype of its parameters

Method Overloading[36]**:** the act of creating multiple methods with the same signature

Return Type[37]**:** the datatype of any value returned from a called method

UML Diagram[38]**:** a written diagram used to display a class and all of its members

Input Validation[39]**:** whenever a program checks if the user gave a usable input and responds accordingly to avoid errors implementation