C # program structure

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Create Hello World program in C #

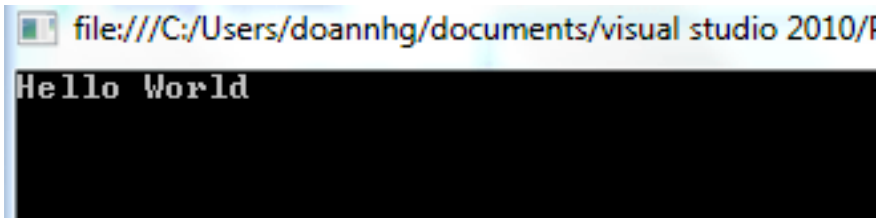
A C # program includes the following sections:

1. Declaring Namespace
2. A class
3. Class method
4. Properties of the class
5. A Main method
6. Commands and expressions
7. Comment

You follow the following simple code that will print "Hello World":

```
 using System ; namespace QTMCsharp { class TestCsharp { static void Main ( stri
? in ch?
 Hello World trong C# */ Console . WriteLine ( "Hello World" ); Console . ReadKe
```

Pressing **F5** to compile and run the above C # program will produce the following results:



Now we consider the parts of the program above:

- The first line **uses System** ; The **using** keyword is used to include the **System namespace** in the program. In general, a program has many **using** statements.

- The next line has a **namespace** declaration. A **namespace** is a set of classes. HelloWorldApplication namespace contains HelloWorld class.

- The next line has a **class** declaration, HelloWorld class contains data definitions and methods that your program uses. In general, the class contains many methods. Methods for defining class behavior However, the **HelloWorld** class has only one Main method.

- The next line defines the **Main** method, which is the **entry point** for all C # programs. The Main method represents the class state when executed.

- The next line / * . * / is ignored by the compiler and it is the comment for the program.

- Main method determines its behavior with **Console.WriteLine** command **("Hello World")** ;

- WriteLine is a method of the Console class defined in the System namespace. This command makes the message "Hello, World!" is displayed on the screen.

- The last line **Console.ReadKey ()** ; is for VS .NET Users. It makes the program wait for a key to be pressed and it prevents the screen from running and closing quickly when the program is launched from Visual Studio.Net.

You should keep in mind the following points:

1. C # is case sensitive.
2. All commands and expressions must end with a semicolon (;).
3. The execution of the program starts at the Main method.
4. Unlike Java, the program file name may be different from the class name.

Compile and execute C # programs

If you are using Visual Studio.Net to compile and execute C # programs, follow these steps:

1. Open Visual Studio.
2. On the menu bar, select **File -> New -> Project** .
3. Select Visual C # from the Template, and then select Windows.
4. Select Console Application.
5. Specify a name for the project and click the OK button.
6. This creates New Project in Solution Explorer.
7. Write code in the Code Editor.
8. Click the **Run** button or press **F5** to execute the **project** . A Command Prompt window appears that contains the Hello World line.

You can compile a C # program using command-line instead of Visual Studio IDE:

1. Open a **Text Editor** and add the above code.
2. Save the file as **helloworld.cs**
3. Open the Command Prompt tool and go to the folder where you saved the file.
4. Compose **csc helloworld.cs** and press **Enter** to compile your code.
5. If there are no errors in the code, the Command prompt takes you to the next line and creates the file **helloworld.exe** that can execute (executable).
6. Create **helloworld** to implement your program.

You can see that the output is Hello World printed on the screen.

Follow tutorialspoint

Old post: Installing C # environment

New lesson: Basic C # syntax