

CE103 Algorithms and Programming I

C# Functional Console Programming

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1 CE103 Algorithms and Programming I

2 Week-7

2.0.0.1 Fall Semester, 2021-2022 Download DOC¹, SLIDE², PPTX³

3 C# Functional Console Programming

We will follow the following topics

- Learn C# Programming⁴

Books

Free C# Programming Book⁵

free-programming-books/free-programming-books-langs.md at master · EbookFoundation/free-programming-books · GitHub⁶

¹ce103-week-7-csharp.en.md_doc.pdf

²ce103-week-7-csharp.en.md_slide.pdf

³ce103-week-7-csharp.en.md_slide.pptx

⁴<https://www.programiz.com/csharp-programming>

⁵<https://goalkicker.com/CSharpBook/>

⁶<https://github.com/EbookFoundation/free-programming-books/blob/master/books/free-programming-books-langs.md#c-sharp>

3.1 Extras

[Creating a Simple Dynamic-Link Library - Win32 apps | Microsoft Docs](#)⁷

[Dynamic-Link Library Creation - Win32 apps | Microsoft Docs](#)⁸

[Exporting from a DLL | Microsoft Docs](#)⁹

[Exporting from a DLL Using DEF Files | Microsoft Docs](#)¹⁰

[How to create a DLL library in C and then use it with C# - CodeProject](#)¹¹

[DLL - How to Write](#)¹²

[DLL - Dynamic Link Library in C - Steps to Create and Use](#)¹³

https://www.codementor.io/@a_hathon/building-and-using-dlls-in-c-d7rrd4caz

[DLL Injection - free code corner](#)¹⁴

[GitHub - dennisbabkin/InjectAll: Tutorial that demonstrates how to code a Windows driver to inject a custom DLL into all running processes. I coded it from start to finish using C++ and x86/x64 Assembly language in Microsoft Visual Studio. The solution includes a kernel driver project, a DLL project and a C++ test console project.](#)¹⁵

[Coding Windows Kernel Driver - InjectAll - Making the Visual Studio solution for DLL injection into all running processes.](#)¹⁶

3.2 Others

[std::dec, std::hex, std::oct - cppreference.com](#)¹⁷

[std::setbase - cppreference.com](#)¹⁸

[C++ Tutorial: Multi-Threaded Programming - Thread for Win32 - 2020](#)¹⁹

1. Csharp Programming
 - a. Introduction
 - b. C# Hello World
 - ii. C# Keywords & Identifiers
 - iii. C# Variables
 - iv. C# Operators
 - v. C# Basic I/O
 - vi. C# Expressions & Statements
 - vii. C# Comments
 - b. Flow Control
 - c. C# if..else

⁷<https://docs.microsoft.com/en-us/windows/win32/dlls/creating-a-simple-dynamic-link-library>

⁸<https://docs.microsoft.com/en-us/windows/win32/dlls/dynamic-link-library-creation>

⁹<https://docs.microsoft.com/en-us/cpp/build/exporting-from-a-dll?view=msvc-170&viewFallbackFrom=vs-2019>

¹⁰<https://docs.microsoft.com/en-us/cpp/build/exporting-from-a-dll-using-def-files?view=msvc-170>

¹¹<https://www.codeproject.com/Articles/9826/How-to-create-a-DLL-library-in-C-and-then-use-it-w>

¹²https://www.tutorialspoint.com/dll/dll_writing.htm

¹³<https://www.interviewsansar.com/dll-dynamic-link-library-in-c/>

¹⁴<https://sites.google.com/site/freecodecorner/technologies/process-info/dll-injection>

¹⁵<https://github.com/dennisbabkin/InjectAll>

¹⁶<https://dennisbabkin.com/blog/?i=AAA10800>

¹⁷<https://en.cppreference.com/w/cpp/io/manip/hex>

¹⁸<https://en.cppreference.com/w/cpp/io/manip/setbase>

¹⁹https://www.bogotobogo.com/cplusplus/multithreading_win32A.php

- ii. C# for loop
- iii. C# while loop
- iv. C# foreach loop
 - v. C# switch statement
- vi. C# ternary operator
- vii. Exception Handling
- viii. Other Topics
 - ix. C# Bitwise Operators
 - x. C# Preprocessor Directives
 - xi. C# Namespaces
 - xii. C# Partial Class & Method