

A decorative graphic on the left side of the slide. It consists of a blue parallelogram and a light green parallelogram, both tilted at an angle. The blue shape is in the foreground, and the green shape is partially behind it. They are set against a dark blue background with diagonal stripes.

# Install GStreamer on Windows

A guide by Zobair



## Official documentation

Gstreamer installation official guide is too old and is not updated properly with current technologies.

Official doc:

<https://gstreamer.freedesktop.org/documentation/installing/on-windows.html?gi-language=c>



## Download

Download both **runtime installer** & **development installer** from **MSVC 64-bit** from below link

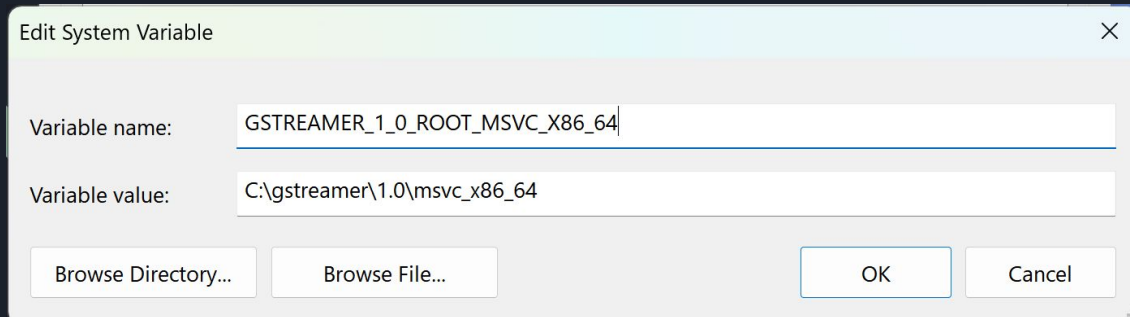
<https://gstreamer.freedesktop.org/download/#windows>

## Add Environment Variable to system

Add your installed location to **ENV variable**.

Variable name: `GSTREAMER_1_0_ROOT_MSVC_X86_64`

Variable value: `C:\gststreamer\1.0\msvc_x86_64`



Edit System Variable

Variable name:

Variable value:

Note: Your variable value could be different.



## Add Environment Variable Path

Add `%GSTREAMER_1_0_ROOT_MSVC_X86_64%\bin` to  
environment variable path

Then restart PC

# Check Environment Variable Path

Check if your variable path is added successfully

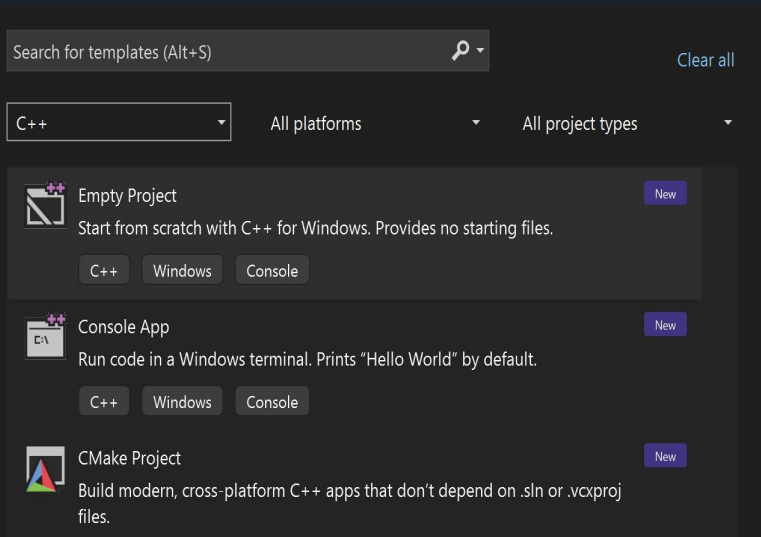
```
Command Prompt
Microsoft Windows [Version 10.0.26100.2605]
(c) Microsoft Corporation. All rights reserved.

C:\Users\zobai>echo %path%
C:\Python312\Scripts\;C:\Python312\;C:\windows\system32;C:\windows;C:\w
indows\System32\Wbem;C:\windows\System32\WindowsPowerShell\v1.0\;C:\win
dows\System32\OpenSSH\;C:\Program Files (x86)\NVIDIA Corporation\PhysX\
Common;C:\Program Files\NVIDIA Corporation\NVIDIA NvDLISR;C:\Program Fi
les (x86)\Windows Kits\10\Windows Performance Toolkit\;C:\Program Files
\Microsoft SQL Server\150\Tools\Binn\;C:\Program Files\Microsoft SQL Se
rver\Client SDK\ODBC\170\Tools\Binn\;C:\Program Files\dotnet\;C:\Progra
m Files\nodejs\;C:\ProgramData\chocolatey\bin;C:\WINDOWS\system32;C:\WI
NDOWS;C:\WINDOWS\System32\Wbem;C:\WINDOWS\System32\WindowsPowerShell\v1
.0\;C:\WINDOWS\System32\OpenSSH\;C:\Program Files\Git\cmd;C:\gstreamer\
1.0\msvc_x86_64\bin;C:\Users\zobai\AppData\Local\Programs\Python\Python
311\Scripts\;C:\Users\zobai\AppData\Local\Programs\Python\Python311\;C:
\Users\zobai\AppData\Local\Microsoft\WindowsApps;C:\Users\zobai\AppData
\Local\Programs\Microsoft VS Code\bin;C:\Users\zobai\AppData\Local\Goog
le\Cloud SDK\google-cloud-sdk\bin;C:\Users\zobai\.dotnet\tools;C:\Users
\zobai\AppData\Local\Microsoft\WinGet\Links;C:\Users\zobai\AppData\Roam
ing\npm;C:\Users\zobai\AppData\Local\Android\Sdk;

C:\Users\zobai>
```

# Create New Project

## Create new Visual Studio C++ **Console App** named **basic-tutorial-1**



### Configure your new project

#### Console App

C++ Windows Console

Project name

basic-tutorial-1

Location

C:\Users\zoba\source\repos

Solution name ⓘ

basic-tutorial-1

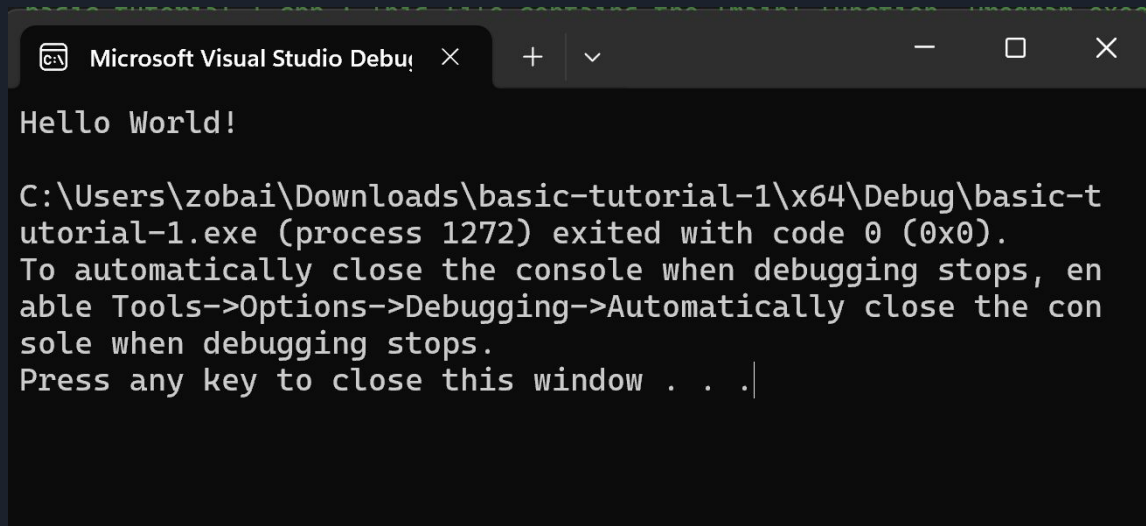
☐ Place solution and project in the same directory

Project will be created in "C:\Users\zoba\source\repos\basic-tutorial-1\basic-tutorial-1"



## Run Hello World

Check if your hello world project is running successfully



```
Microsoft Visual Studio Debug Console
Hello World!

C:\Users\zobai\Downloads\basic-tutorial-1\x64\Debug\basic-tutorial-1.exe (process 1272) exited with code 0 (0x0).
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .|
```





## Basic Tutorial 1

Copy `basic-tutorial-1.c` full code from here and paste to your project  
<https://gstreamer.freedesktop.org/documentation/tutorials/basic/hello-world.html?gi-language=c>



Add properties

Go to Property Manager and add


E:\gstreamer\1.0\msvc\_x86\_64\share\vs\2010\libs\gstreamer-1.0.props  
to existing property sheet



Fix error

Error: argument of type "int" is incompatible with parameter of type "GstMessageType"

Fix: Try replacing `GST_MESSAGE_ERROR | GST_MESSAGE_EOS` with `(GstMessageType)(GST_MESSAGE_ERROR | GST_MESSAGE_EOS)`



Run the project

Run the project.  
It will play a video from net.