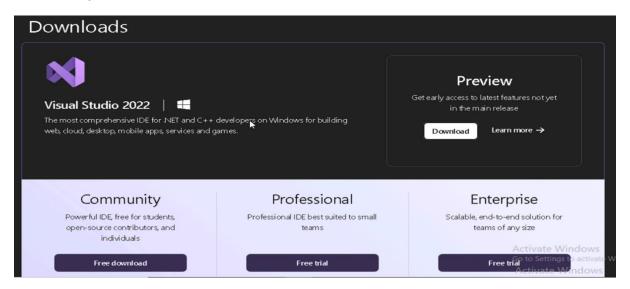
VISUAL STUDIO DOCUMENTATION

VISUAL STUDIO DOWNLOAD SITE LINK

Download Visual Studio Tools - Install Free for Windows, Mac, Linux

Step 1: Click the above link to download visual studio

According to the usage choose the versions of it . For free version use Community version.



Step 2: Open Visual Studio Installer to install the required components and features.

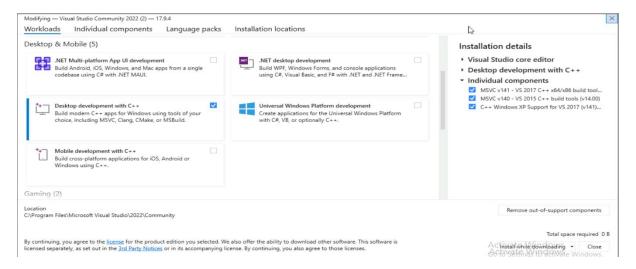
| Update available. | Developer News | | |
|---|--|--|--|
| Visual Studio Community 2022 (2) 17.9.4 Update available 17.13.6 View.details | Modify Launch Have you ever struggled with integrat 09 April 2025 More Multi-Process CPU Usage Analysis in Streamlined Performance Insights Acr 08 April 2025 | NET Aspire and Azure Functions Integration preview. Have you ever struggled with integrating serve 09 April 2025 Multi-Process CPU Usage Analysis in Visual Studenth of the Communication of Performance Insights Across Proce 08 April 2025 Your Distribution State of the Communication of Performance Insights Across Proce 08 April 2025 Your Distribution Renefit Aust Got Better | |
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Then select modify to make changes.

| Update available. | | | | |
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| 0() | Visual Studio Community 2022 (2) 17.9.4 | <u>M</u> odify | | |
| | Update available 17.13.6 <u>View details</u> | More ▼ <u>U</u> pdate | | |

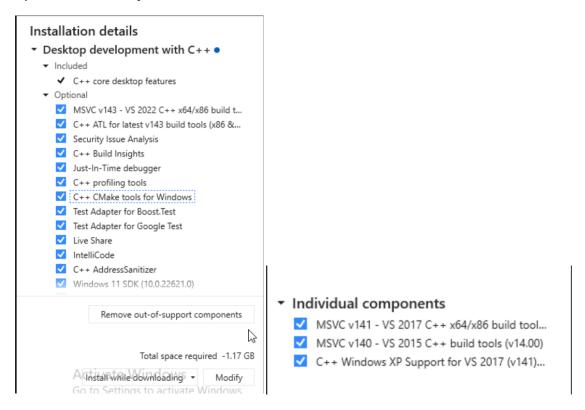
Step 3: Select Desktop development with C++ on Workloads.

which provides the tools needed for developing Windows desktop applications that can run on Windows.

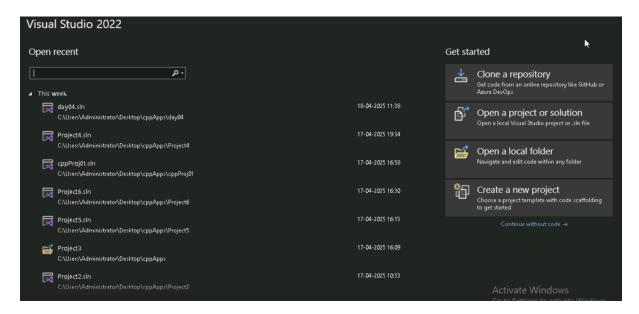


When setting up the C++ Windows desktop workload, you can proceed the installation by choosing specific tools, Windows SDKs, and additional features to suit your needs.

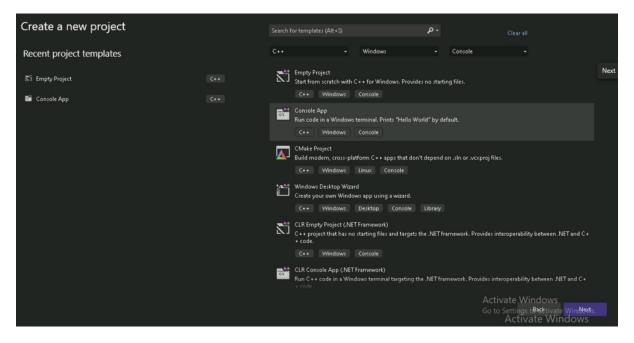
->After selecting the required features and components ->select Install to update and modify.



Step 4:Open Visual Studio->Select Create a new project->Console App/Empty project->select next

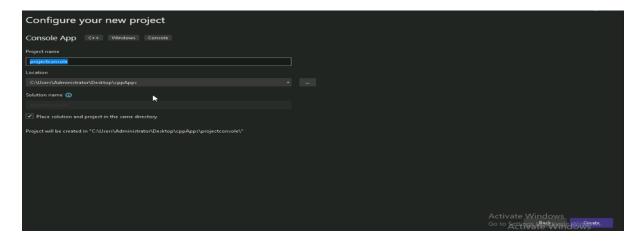


Console App-It consist of a basic structure of a CPP file

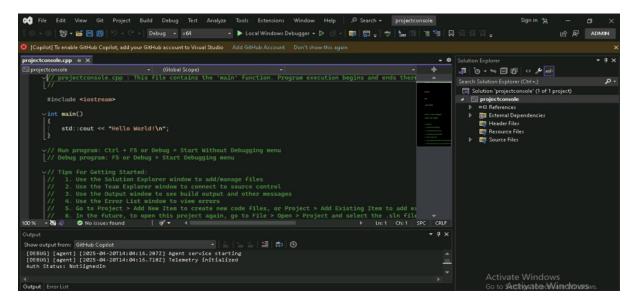


Step 5: Configure your New Project

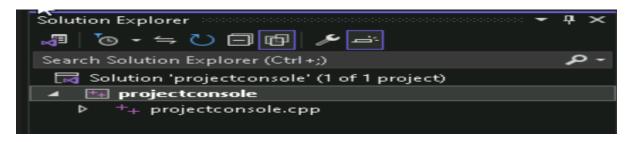
Add Project name->Add location ->Add Solution Name->select create.



The below image Shows the basic structure of cpp file and the look of visual Studio.



Step 6:Add a CPP file to the project and type the code.



Step 7:Compile the code using Build Solution/using command prompt using the below commands

- g++ filename.cpp(To create an executable file(.exe)
- a.exe(To compile the executable file)

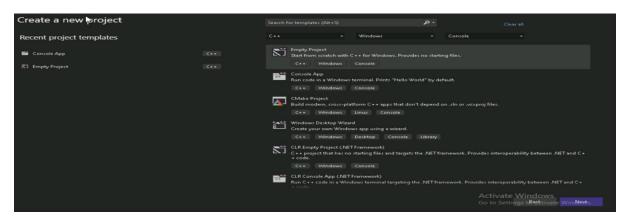
```
MicrosoftVisual Studio Debug Console

Hello World!

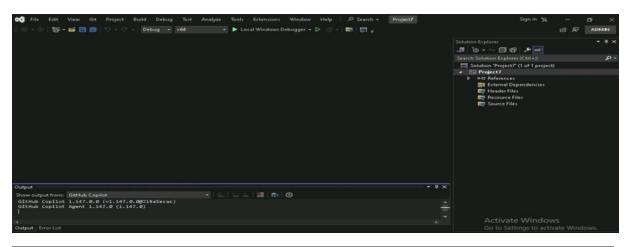
C:\Users\Administrator\Desktop\cppApps\projectconsole\x64\Debug\projectconsole.exe (process 1216) exited with code 0. To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.

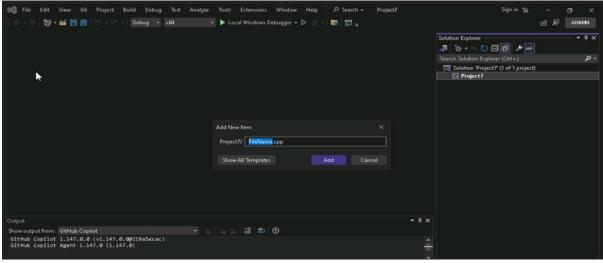
Press any key to close this window . . .
```

To Create an Empty project



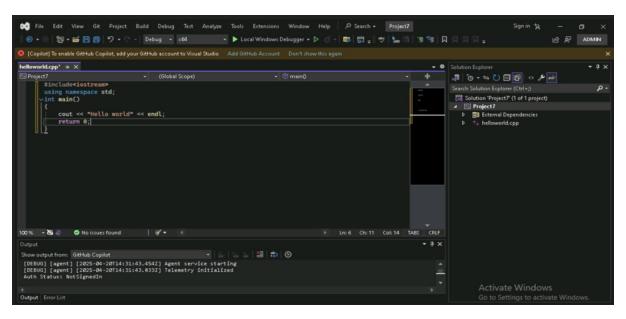
Add Project name->Add location ->Add Solution Name->select create-> Add a CPP file





How to create a Project

Step 1:Create a Empty project



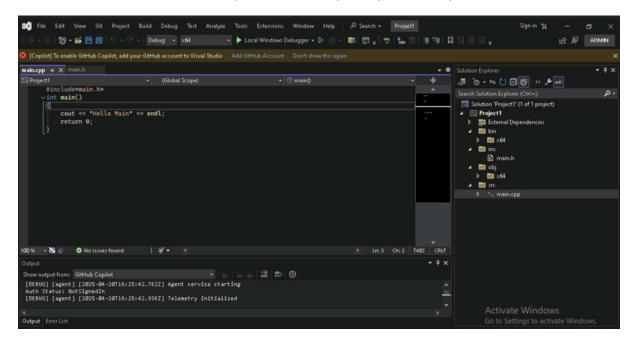
Step 2:Add different Folders inside the project as src, lib, bin and inc

src – Store the Source file (.cpp)

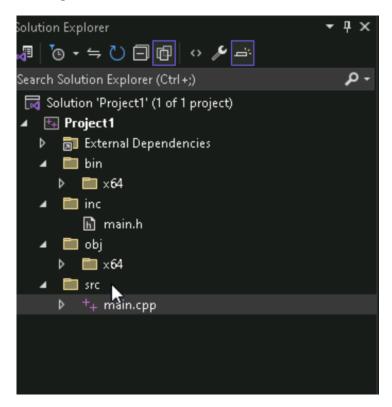
bin – Used to store the binary file or executable files(a.exe)

inc - Used to store the header files(.h)

lib - It is used to store object files, library files(.o, .s, .lib)

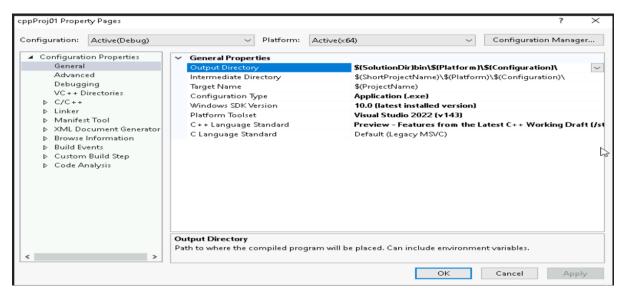


The below image illustrates how it is been created



Step 3: To modify the build output directory for a specific C++ project:

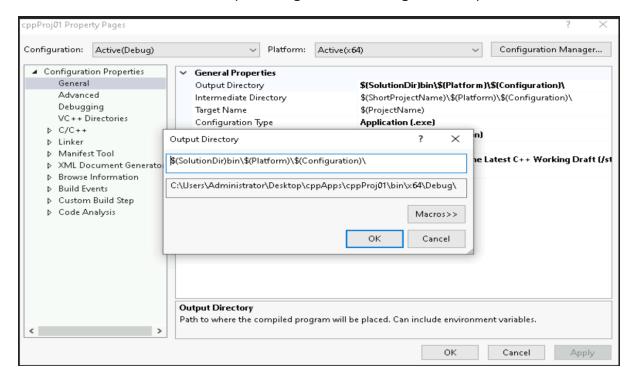
- Begin by cleaning the project to remove any existing output files (navigate to Build > Clean Solution).
- In Solution Explorer, right-click on the project node and select Properties.
- Go to the General tab.
- Using the configuration drop-down menu at the top, select the configuration for which you wish to change the output file location (such as Debug, Release, or All Configurations).



- To Add bin to Output Directory use the drop-down menu and select macros and edit it
- Next select ok ->Select Apply to make changes

Why Bin directory is used?

It is used to store the output files generated during the build process.



TO HANDLE OR TO IGNORE WARNINGS

To ignore the warnings there are two ways:

- Copy the Warning/error number then,
 In Solution Explorer, right-click on the project node -> select Properties->C/C++->Advanced->Disable specific warnings->paste the copied error id ->Select Apply to make changes.
- Copy the Warning(macro) then,
 In Solution Explorer, right-click on the project node -> select Properties->C/C++->PreProcessor->PreProcessor Definitions->Paste the copied Warning(macro).

