Create a C++ console app project

The usual starting point for a C++ programmer is a "Hello, world!" application that runs on the command line. That's what you create in Visual Studio in this step.
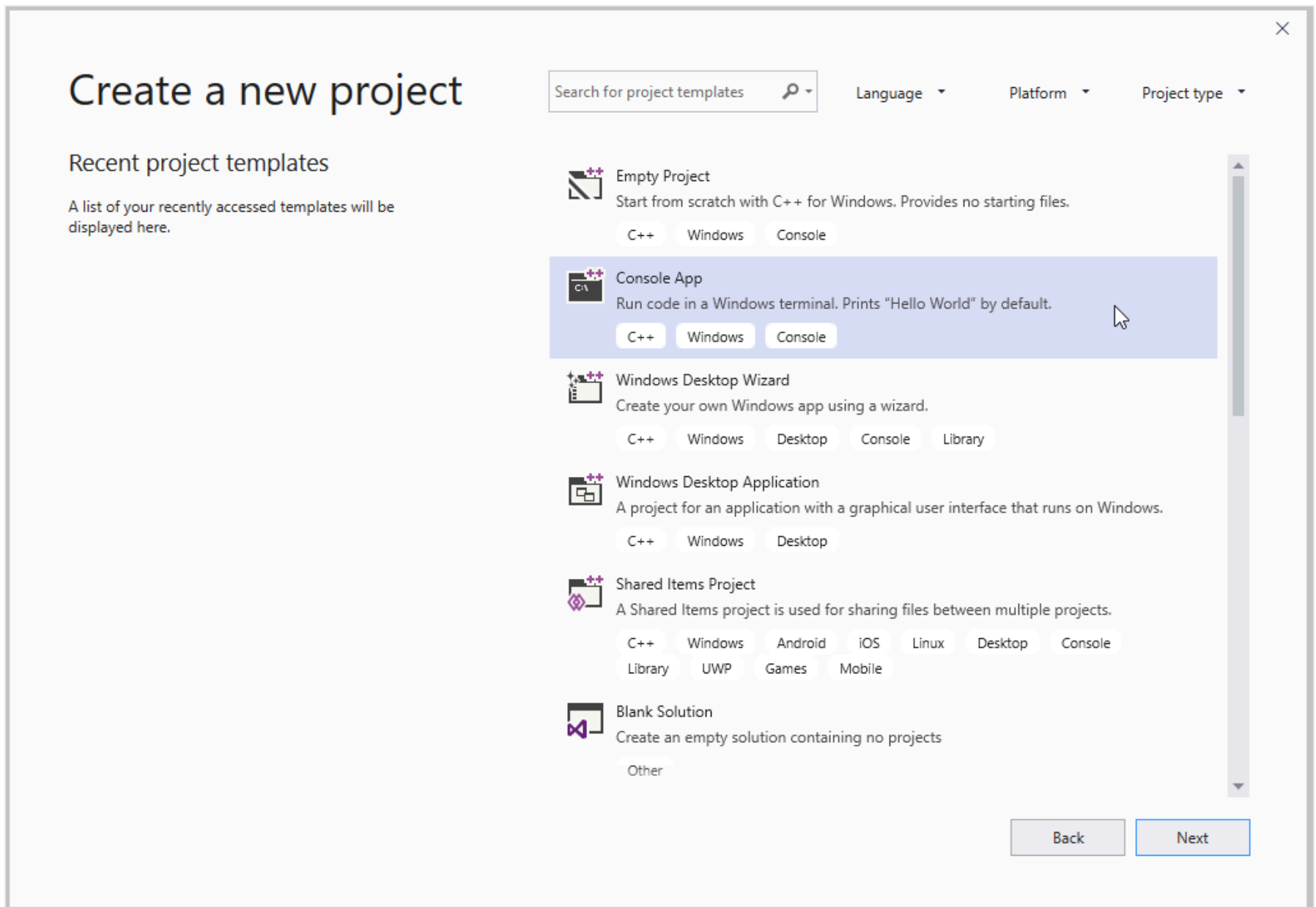
Prerequisites

- The **Desktop development with C++** workload must be installed to make the **Console App (C++)** project type available. If it's not installed, see Install C++ support in Visual Studio.

Create your app project

Visual Studio uses *projects* to organize the code for an app, and *solutions* to organize your projects. A project contains all the options, configurations, and rules used to build your apps. It manages the relationship between all the project's files and any external files. To create your app, first, create a new project and solution.

1. In Visual Studio, open the **File** menu and choose **New > Project** to open the **Create a new Project** dialog. Select the **Console App** template that has **C++**, **Windows**, and **Console** tags, and then choose **Next**.

Create a new project

Search for project templates   Language ▾   Platform ▾   Project type ▾

Recent project templates

A list of your recently accessed templates will be displayed here.

Empty Project
Start from scratch with C++ for Windows. Provides no starting files.

   C++   Windows   Console

Console App
Run code in a Windows terminal. Prints "Hello World" by default.

   C++   Windows   Console

Windows Desktop Wizard
Create your own Windows app using a wizard.

   C++   Windows   Desktop   Console   Library

Windows Desktop Application
A project for an application with a graphical user interface that runs on Windows.

   C++   Windows   Desktop

Shared Items Project
A Shared Items project is used for sharing files between multiple projects.

   C++   Windows   Android   iOS   Linux   Desktop   Console
   Library   UWP   Games   Mobile

Blank Solution
Create an empty solution containing no projects

   Other

Back   Next

The **Desktop development with C++** workload must be installed for the C++ Console App template to show up. See Install C++ support in Visual Studio if you haven't already installed it.

2. In the **Configure your new project** dialog, enter *HelloWorld* in the **Project name** edit box. Choose **Create** to create the project.

Configure your new project

Console App C++ Windows Console

Project name

HelloWorld

Location

C:\Users\username\source\repos
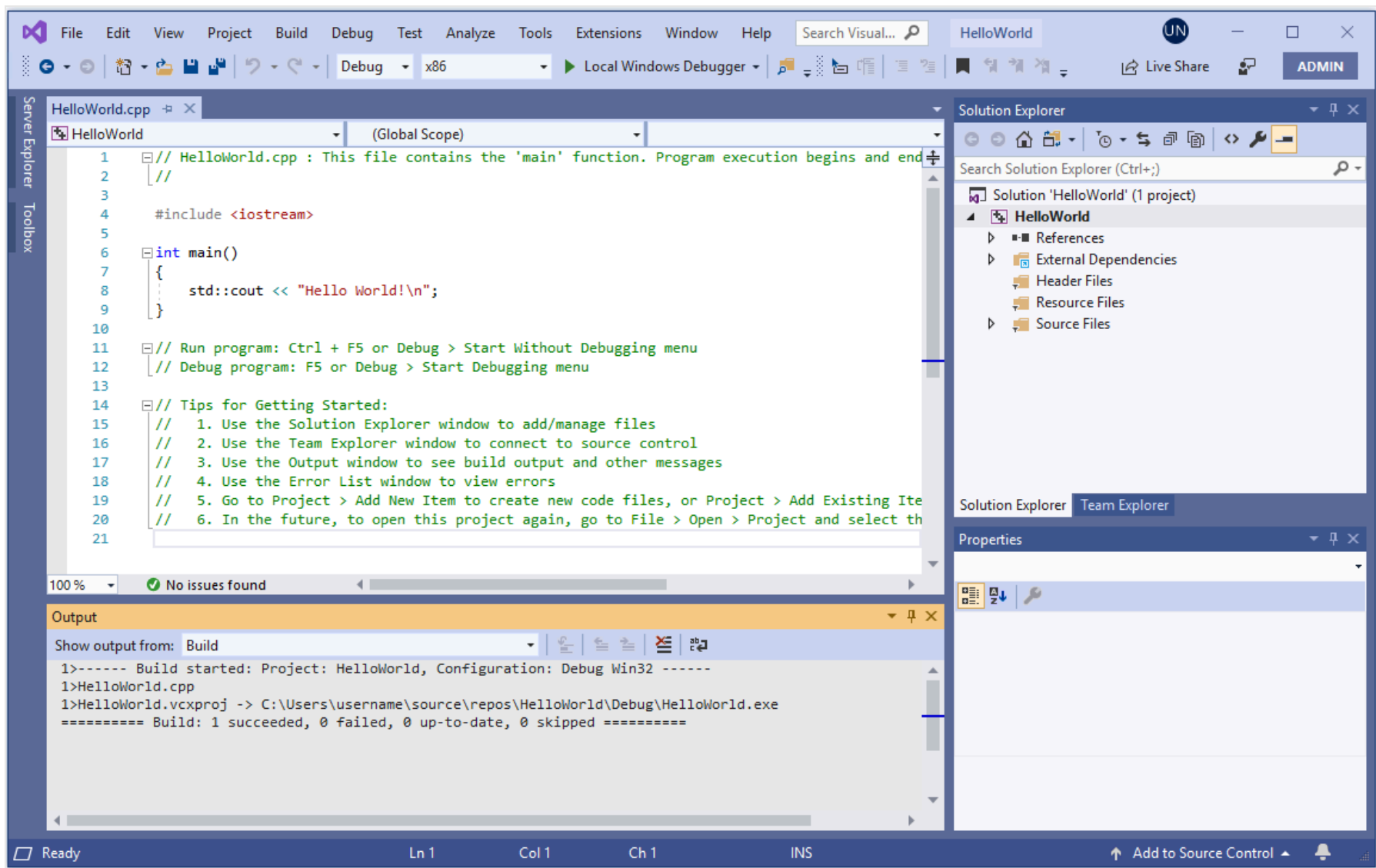
Solution name ⓘ

HelloWorld

☐ Place solution and project in the same directory

Back   Create

Visual Studio creates a new project. It's ready for you to add and edit your source code. By default, the Console App template provides source code for a "Hello World" app, like this:

When the code looks like this in the editor, you're ready to go on to the next step and build your app.

I ran into a problem.

Next steps

Troubleshooting guide

Come here for solutions to common issues when you create your first C++ project.

Create your app project: issues

The **New Project** dialog should show a **Console App** template that has **C++**, **Windows**, and **Console** tags. If you don't see it, there are two possible causes. It might be filtered out of the list, or it might not be installed. First, check the filter dropdowns at the top of the list of templates. Set them to **C++**, **Windows**, and **Console**. The C++ **Console App** template should appear; otherwise, the **Desktop development with C++** workload isn't installed.

To install **Desktop development with C++**, you can run the installer right from the **New Project** dialog. Choose the **Install more tools and features** link at the bottom of the template list to start the installer. If the **User Account Control** dialog requests permissions, choose **Yes**. In the installer, make sure the **Desktop development with C++** workload is checked. Then choose **Modify** to update your Visual Studio installation.

If another project with the same name already exists, choose another name for your project. Or, delete the existing project and try again. To delete an existing project, delete the solution folder (the folder that contains the `helloworld.sln` file) in File Explorer.

Go back.