Stuck getting C++ and VS Code to work together?

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Your C++ Dev Environment

The Two Key Pieces

Development Environment

An Editor (where you write code) and a Compiler (what turns your code into a runnable program).

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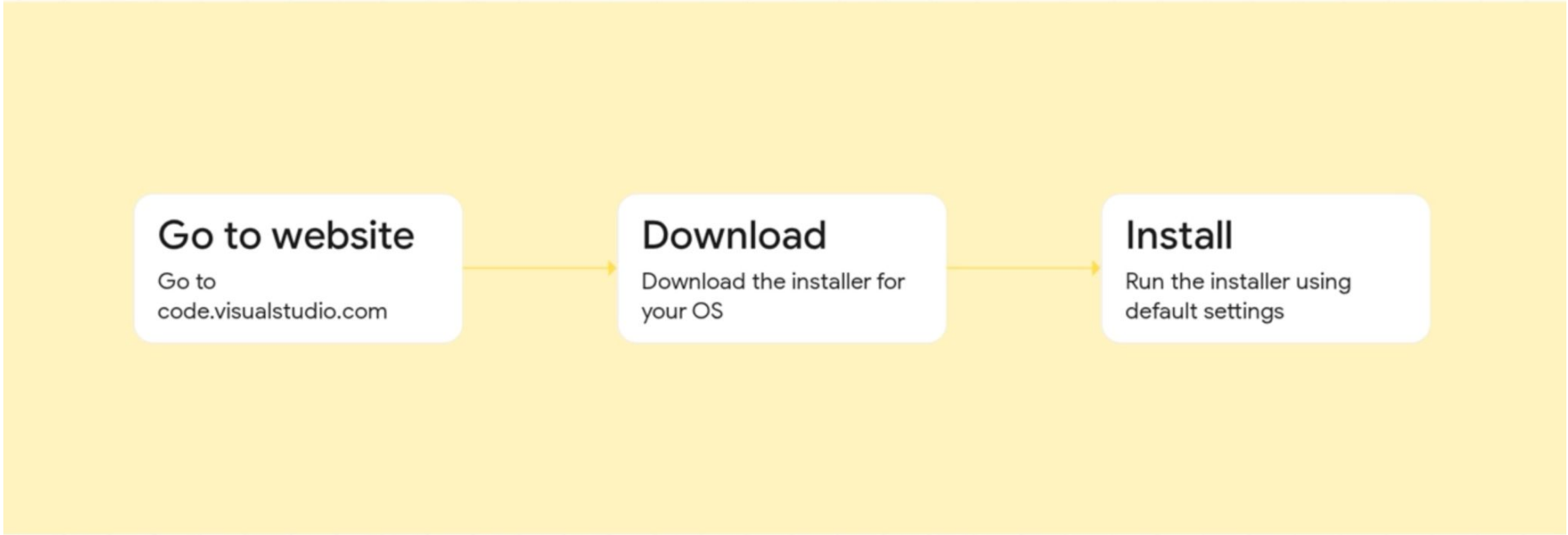
Step 1: The Editor

Installing VS Code

Visual Studio Code. The lightweight code editor. We want this one!

Visual Studio IDE. A full development environment. Not what we need.

Install VS Code



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Step 2: The Compiler

The Path Divides

Windows Path: Install MinGW, which provides the GCC Compiler.

Mac Path: Install Xcode Tools, which provide the Clang Compiler.

Let's install the MinGW compiler using a tool called MSYS2.

Install MinGW

Download MSYS2

Follow the C++ link on the VS Code setup page and install MSYS2.

Open Shell

Open the MSYS2 shell after installation.

Paste Command

Paste the `pacman` command to install the toolchain.

Update Path Variable

Find Variables

Open 'Edit the system environment variables'.

Edit Path

Select the 'Path' variable and click 'Edit'.

Add New Path

Add the path to your MinGW bin folder (e.g., C:\msys64\mingw64\bin).

“Check your work! Open Command Prompt and type `gcc <mark>--version</mark>`. You **should** see version info.

Let's install the Clang compiler via the Xcode Command Line Tools.

Install Clang

Open Terminal

First, open the Terminal application.

Check Version

Type `clang --version` to see if it's already installed.

Install if needed

If not, run `xcode-select --install` and follow the prompts.

“Check your work! Run `clang <mark>--version</mark>` again. You **should** see 'Apple clang version...'

“Check your work! Run `clang <mark>--version</mark>` again. You **should** see 'Apple clang version...'

Step 3: Inside VS Code

Powering Up The Editor

Essential Extensions

- C/C++ Extension Pack: From Microsoft for IntelliSense and debugging.
- Code Runner: Adds a simple 'Play' button to run your code.

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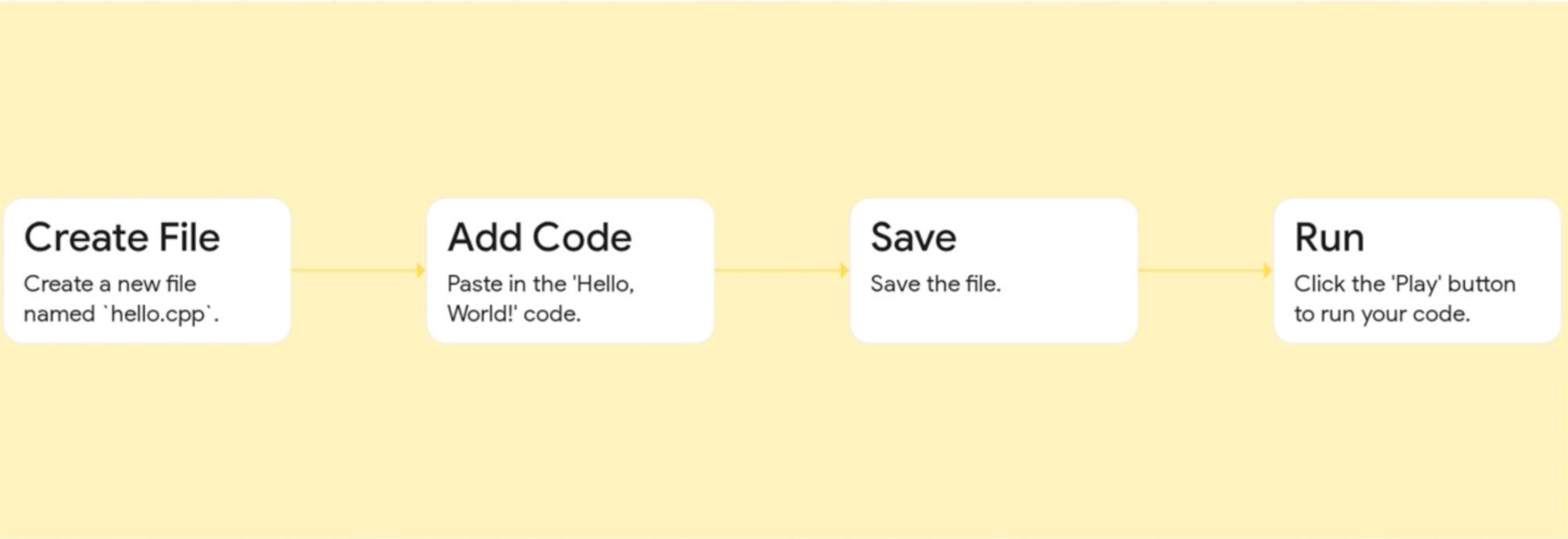
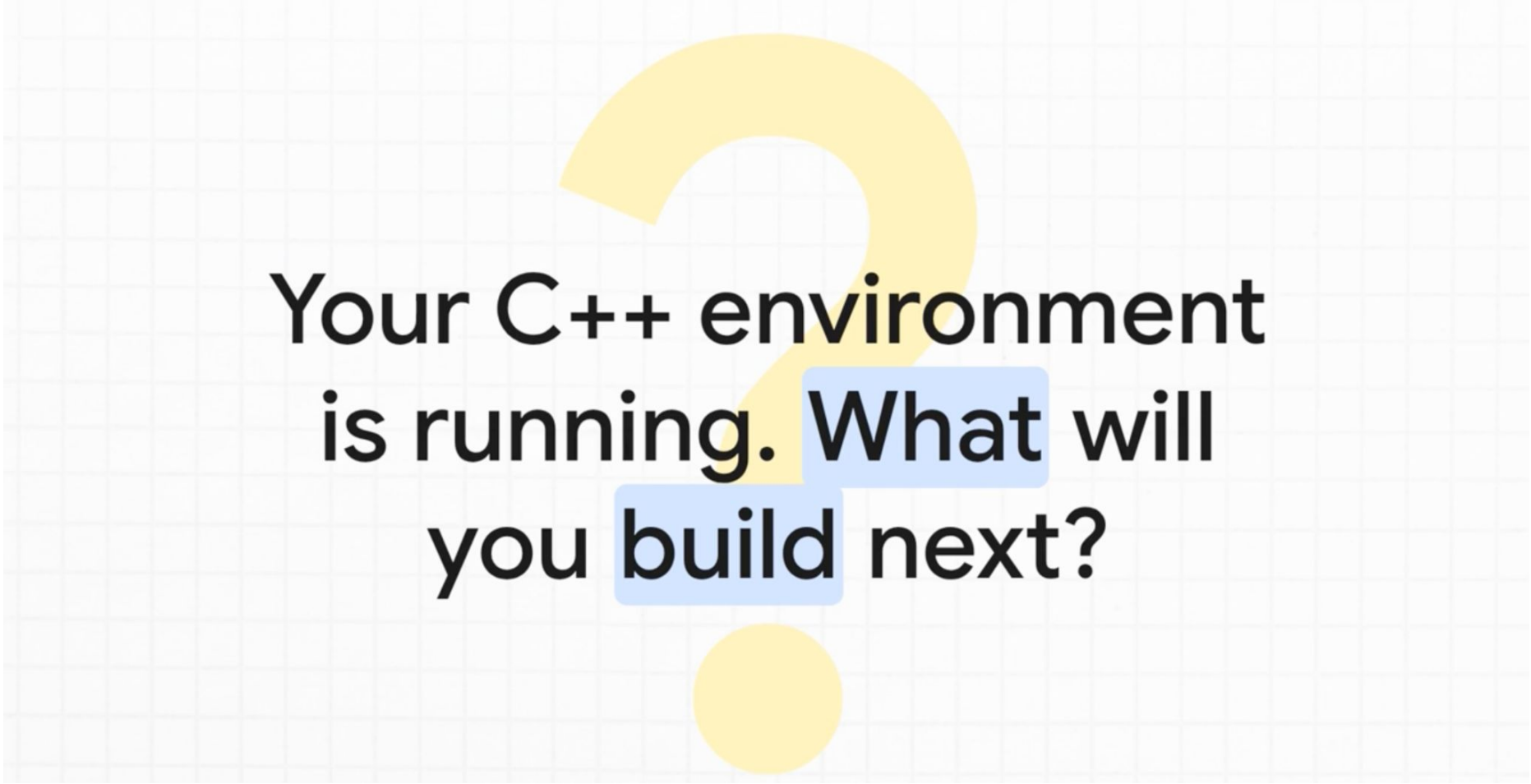
Running Your First Code

The Payoff!

Hello, World!


Create File
Create a new file named `hello.cpp`.
Add Code
Paste in the 'Hello, World!' code.
Save
Save the file.
Run
Click the 'Play' button to run your code.


Your C++ environment
is running. What will
you build next?