To write unit and integration tests, you need a testing framework. There are several testing frameworks out there but the most popular ones are: NUnit: which is one of the earliest frameworks out there, we've got MSTest, which is Microsoft's testing framework built into Visual Studio, and Xunit, which has gained more popularity over the past couple of years. All these frameworks give you a utility library to write your tests and a test runner which runs your tests and gives you a report of

passing and failing tests. Which framework is better? It depends who you ask and what their definition of better is. Different people like different tools. So, here is my suggestion: Don't get hung up on the tooling.

In this course, our focus is on the fundamentals of writing quality tests that give you value. That's what matters. You can always use a different framework as you move from one project or team to another. In this course, you're going to start with MSTest because that's built into Visual Studio and doesn't require any additional steps. But shortly after, I'm gonna show you how to install NUnit and run NUnit tests

in Visual Studio. You may use either of these frameworks, that's

purely your personal decision. But for the majority of this course, I'll be using

NUnit because it has a longer history than MSTest and I personally find it a more elegant testing framework. Now, an optional tool that I highly recommend is ReSharper because it has a faster and more powerful test runner than the one built into Visual Studio. Just to let you know,

ReSharper is a commercial product, and I'm not their affiliate! You may

decide to buy a license or not. That's entirely your choice. What I wanna

emphasize is that you do not need ReSharper to write or run tests.

But I use ReSharper because it's a huge productivity booster. Another optional tool is Rider… If you like Visual Studio + ReSharper

but you think Visual Studio is too slow for you, then I highly recommend

you to try Rider. Rider is basically a cross-platform IDE built by JetBrains, the same company that has made ReSharper. So you have a super fast IDE+ ReSharper with the exact same shortcuts you use in Visual Studio. In this course, I'm gonna record the first few videos with Visual Studio because that's the default IDE for the majority of you, but later I'm gonna switch to Rider because that's a lot faster. You can use Visual Studio with or without ReSharper. That's perfectly fine. Your focus should be on the fundamentals of writing good tests, and not the tooling.