



C# Test Automation

A basic introduction to C# software testing methodologies and techniques.



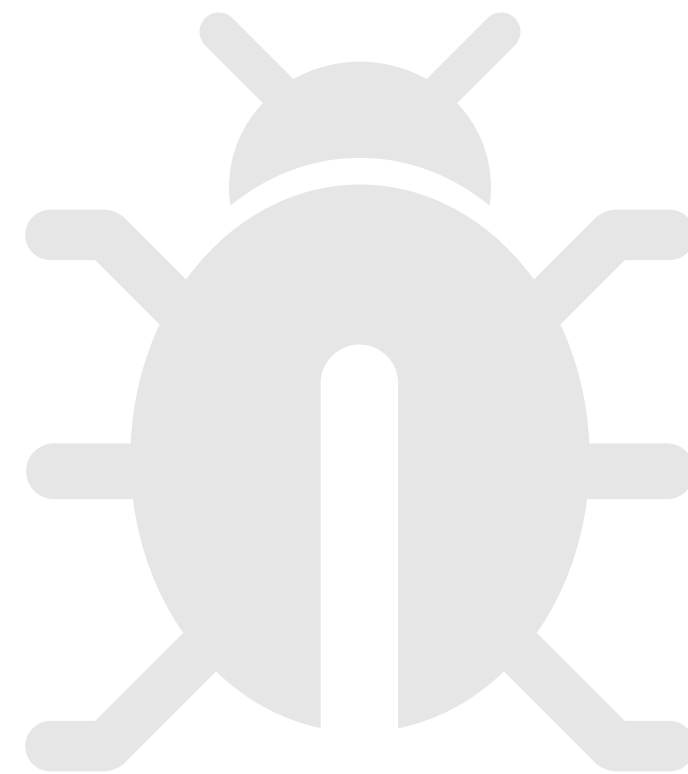
Why is Testing Important

Because we are professional programmers and testing our work is a part of our professional oath.

Without proper testing techniques we put the quality of code we produce at risk.

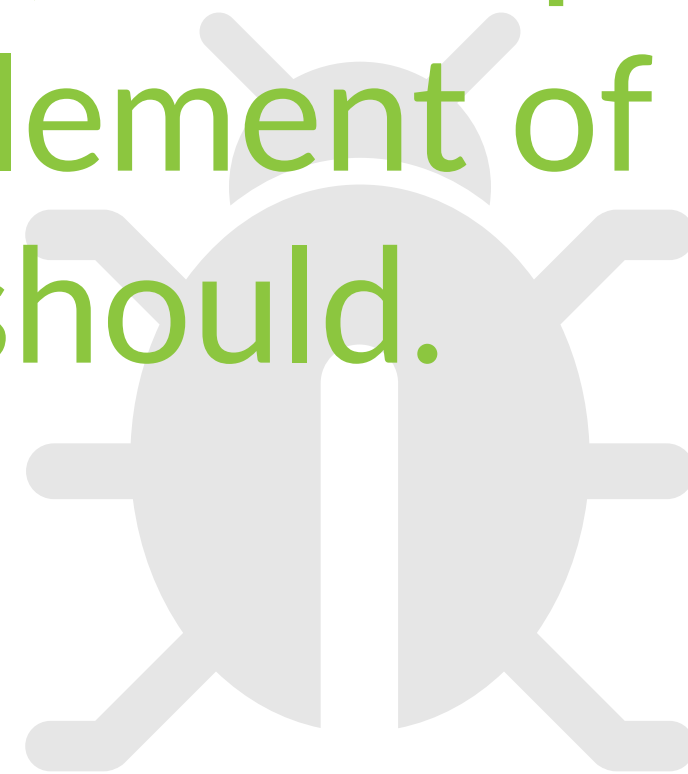
In order to defend and preserve the honor of the profession of computer programmers, I promise that, to the best of my ability and judgement:

I will not produce harmful code.

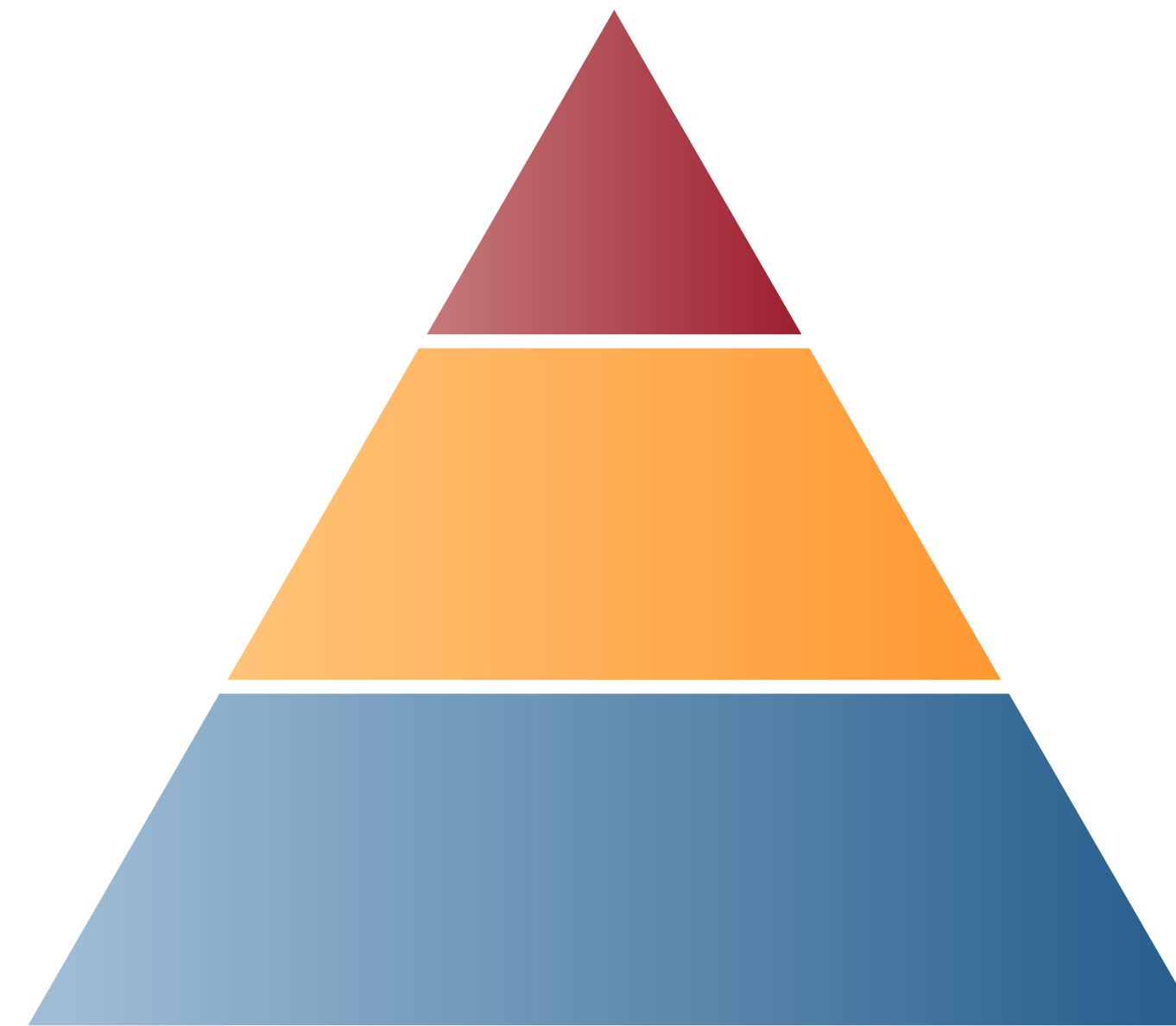


In order to defend and preserve the honor of the profession of computer programmers, I promise that, to the best of my ability and judgement:

I will produce, with each release,
a quick, sure, and repeatable proof
that every element of the code
works as it should.



What are the types of tests?



End-to-End Tests

Integration Tests

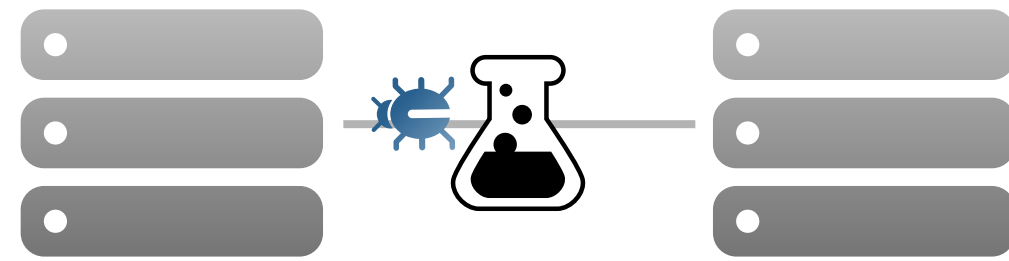
Unit Tests

Types of Tests



End-to-End Tests

Integration tests are automated tests written and run by software developers to test whether the flow of an application is performing as designed from start to finish.



Integration Tests

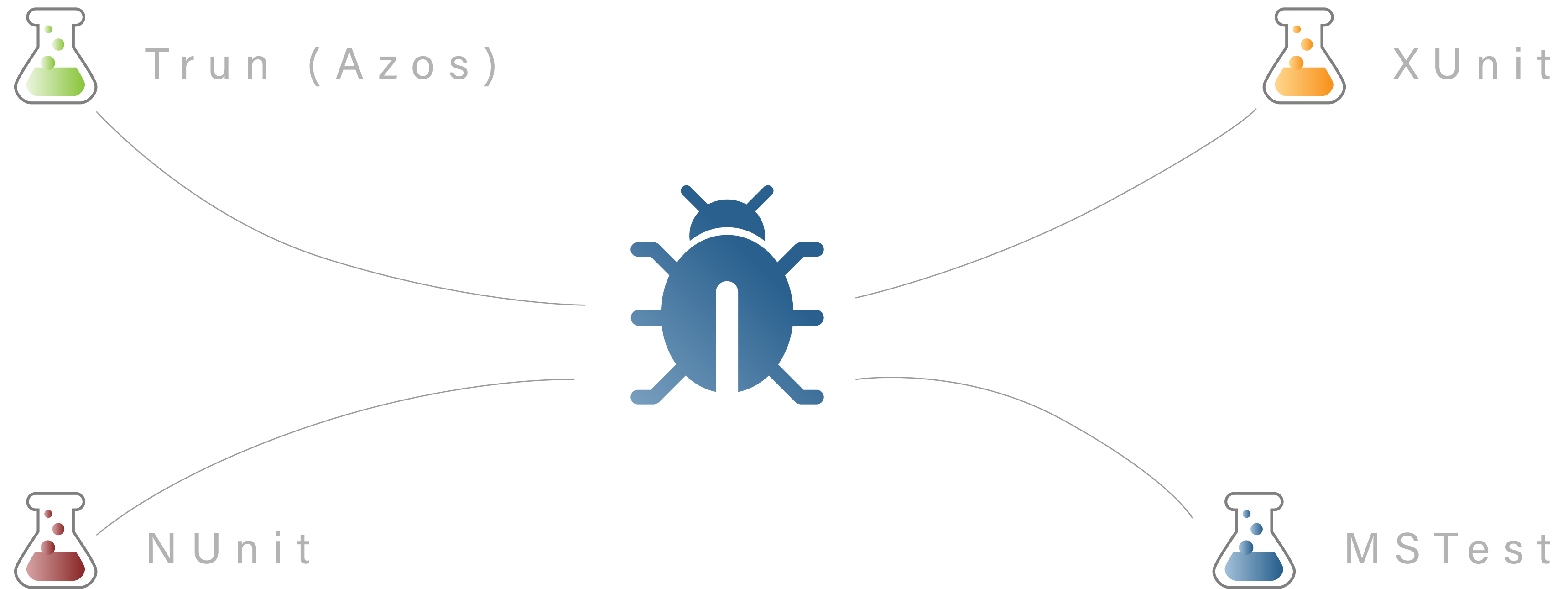
Integration tests are automated tests written and run by software developers in which individual software modules are combined and tested as a group.

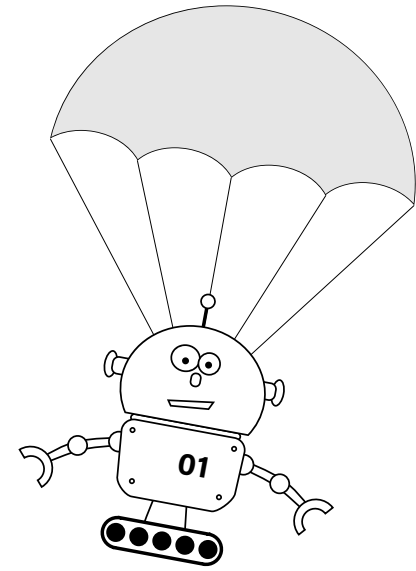


Unit Tests

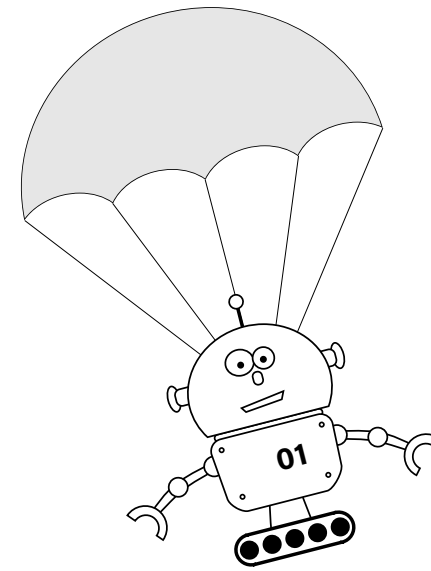
Unit tests are automated tests written and run by software developers to ensure that a section of an application (known as the "unit") meets its design and behaves as intended.

.Net Testing Options

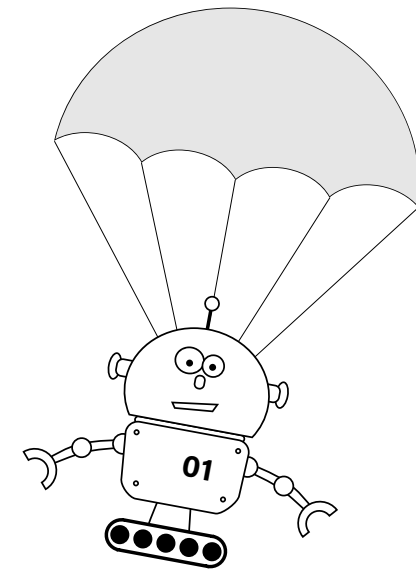




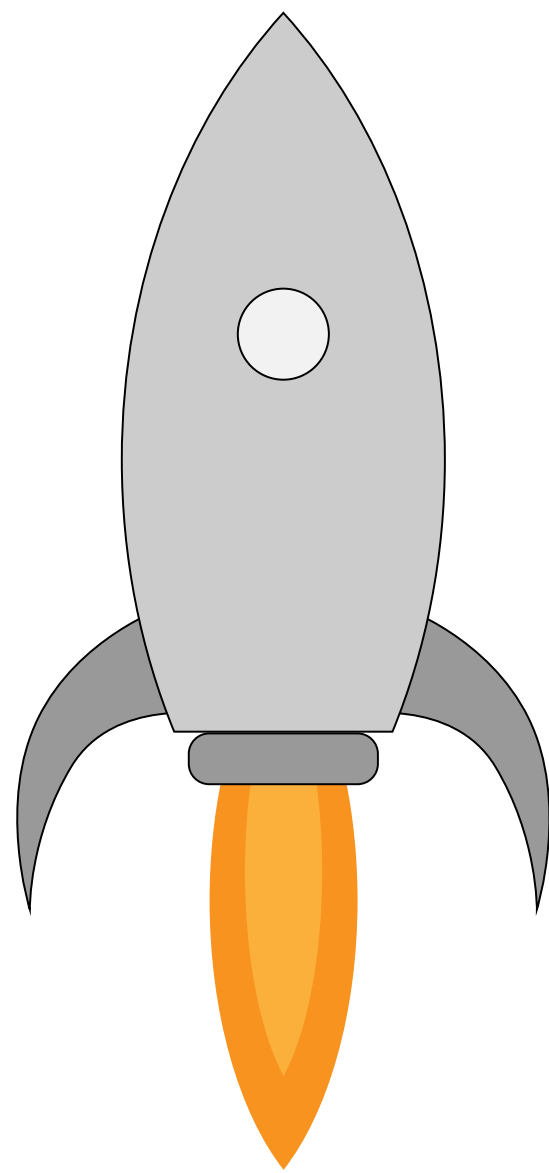
/* Arrange */



/* Act */



/* Assert */



Resources & Samples

github.com/JohnPKosh/TestRocket

xunit.net/docs/getting-started/netcore/cmdline

xunit.net/docs/getting-started/netfx/visual-studio

www.bugsnap.com/blog/bug-day-460m-loss

docs.microsoft.com/en-us/visualstudio/test/getting-started-with-unit-testing?view=vs-2019