

# Test-Driven Development

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# Test-Driven Development

# Unit Tests

What is a test?

Given	
When	I add 2 and 3
Then	The sum is 5

Back to TDD

```
public void UnitTest()  
{  
    int[] inputs = new[] {2, 3};  
    int expectedOutput = 5;  
  
    int actualOutput = Add(inputs);  
  
    bool passed = actualOutput == expectedOutput;  
}
```



Code Demo

Write a  
failing  
test

Make the  
test pass

Refactor

Nat Pryce

Why do TDD?

# Executable Specification

# Living Documentation

TDD is a design tool

Automated regression testing

In a single phrase? TDD increases productivity because the hard part of programming is thinking, and TDD makes thinking faster.

- Michael Hill (GeePawHill)



TDD like satellite navigation

# TDD is **NOT** about testing

1. Specification
2. Living documentation
3. Design
4. Automated testing

# More Resources

- TDD by Example – Kent Beck
- Katas
- Code Retreats

# TDD Recap

Red Green Refactor

Simplest possible thing