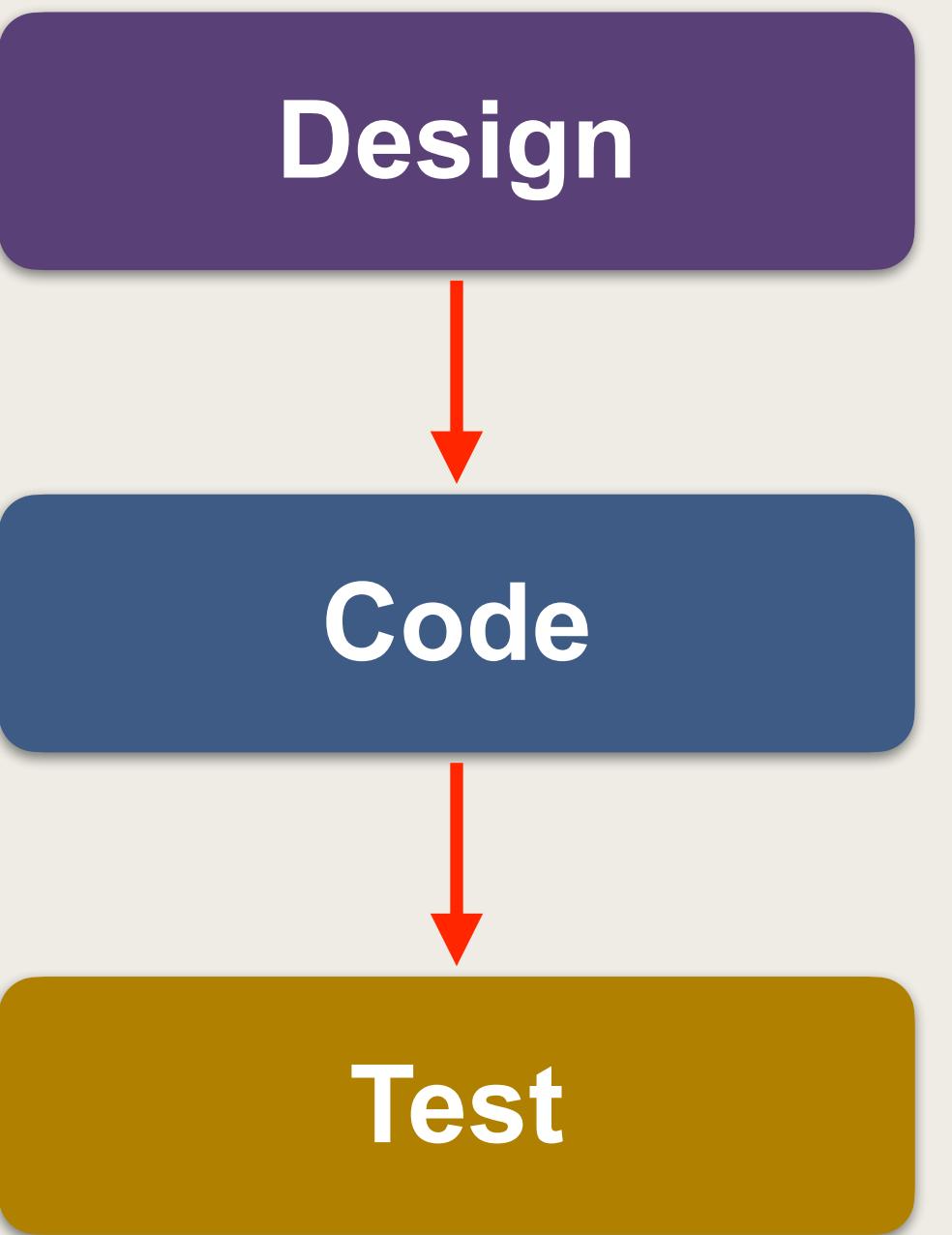


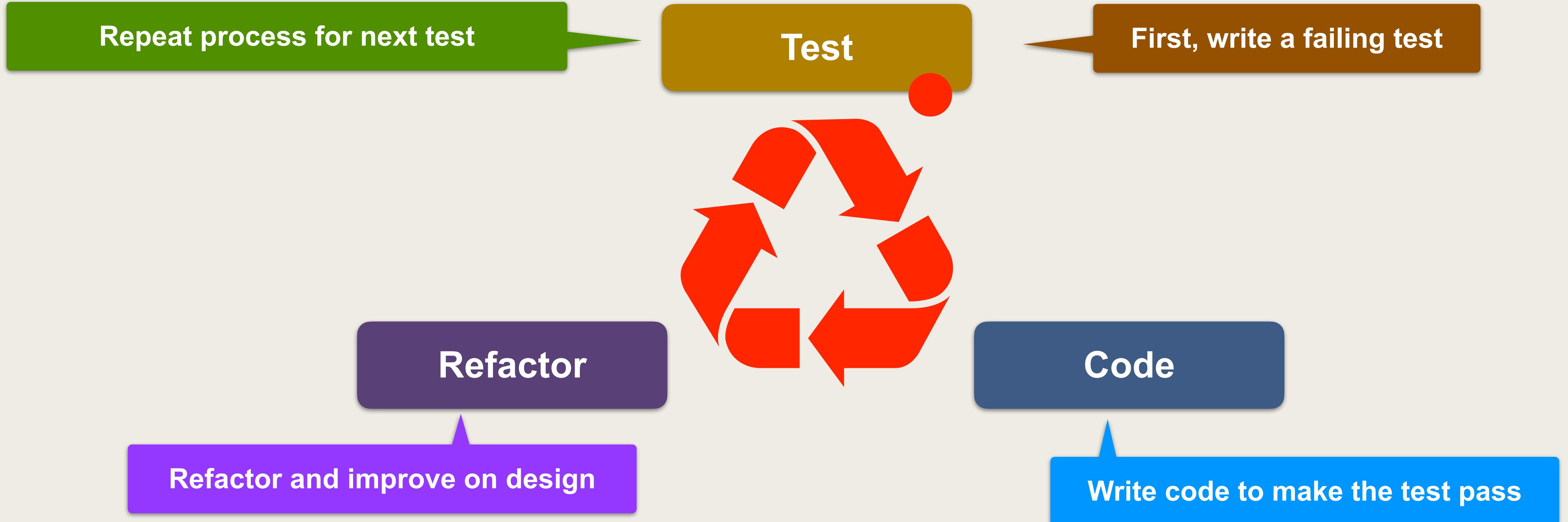
Test Driven Development (TDD)



Traditional Development



Test Driven Development (TDD)



Benefits of Test Driven Development (TDD)

- Clear task list of things to test and develop
- Tests will help you identify edge cases
- Develop code in small increments
- Passing tests increases confidence in code
- Gives freedom to refactor ... tests are your safety net ... did I break anything??

Our Project

- We will apply what we've learned so far for a TDD project
- Use the FizzBuzz project as an example

What Is FizzBuzz?

- Coding problem used in technical interviews
- Problem
 - Write a program to print the first 100 FizzBuzz numbers. Start at 1 and end at 100.
 - If number is divisible by 3, print Fizz
 - If number is divisible by 5, print Buzz
 - If number is divisible by 3 and 5, print FizzBuzz
 - If number is not divisible by 3 or 5, then print the number

FizzBuzz Sample Output

- Write a program to print the first 100 FizzBuzz numbers. Start at 1 and end at 100.
- If number is divisible by 3, print Fizz
- If number is divisible by 5, print Buzz
- If number is divisible by 3 and 5, print FizzBuzz
- If number is not divisible by 3 or 5, then print the number

1	1
2	2
3	Fizz
4	4
5	Buzz
6	Fizz
7	7
	...

FizzBuzz ... on the web

- FizzBuzz Wiki

<https://wiki.c2.com/?FizzBuzzTest>

- Has solutions in various programming languages
- Basic solutions and advanced solutions (minimum lines of code)

- FizzBuzz Book

www.fizzbuzzbook.com

- Yes ... there is a book dedicated to FizzBuzz solutions LOL!

Development Process

Step-By-Step

1. Write a failing test
2. Write code to make the test pass
3. Refactor the code
4. Repeat the process