Test driven development TDD

TDD rules RED -> GREEN -> (REFACTOR?)

1. You are not allowed to write any production code unless it is to make a failing unit test pass.

2. You are not allowed to write any more of a unit test than is sufficient to fail; and compilation failures are failures.

3. You are not allowed to write any more production code than is sufficient to pass the one failing unit test.

Approaches To A Failing Test

- Obvious implementation.
- Fake implementation.
- Triangulation

A Good Test Naming Convention

Avoid mention of method names and other implementation details

```
class ShoeShould
{
    [Test]
    public void StayOnWhenLacesAreTied(){}
}
```

Some Habits

- Test only one behavior at a time.
- Make sure test fails for right reason
- Extract duplicates in refactoring phase when you see them 3 times
 Keep your code DRY (Do not Repeat Yourself)
- Write test with arrange, act and assert sections.
 Given when then
- Keep tests isolated and repeatable
 Avoid flaky tests that might fail or pass.