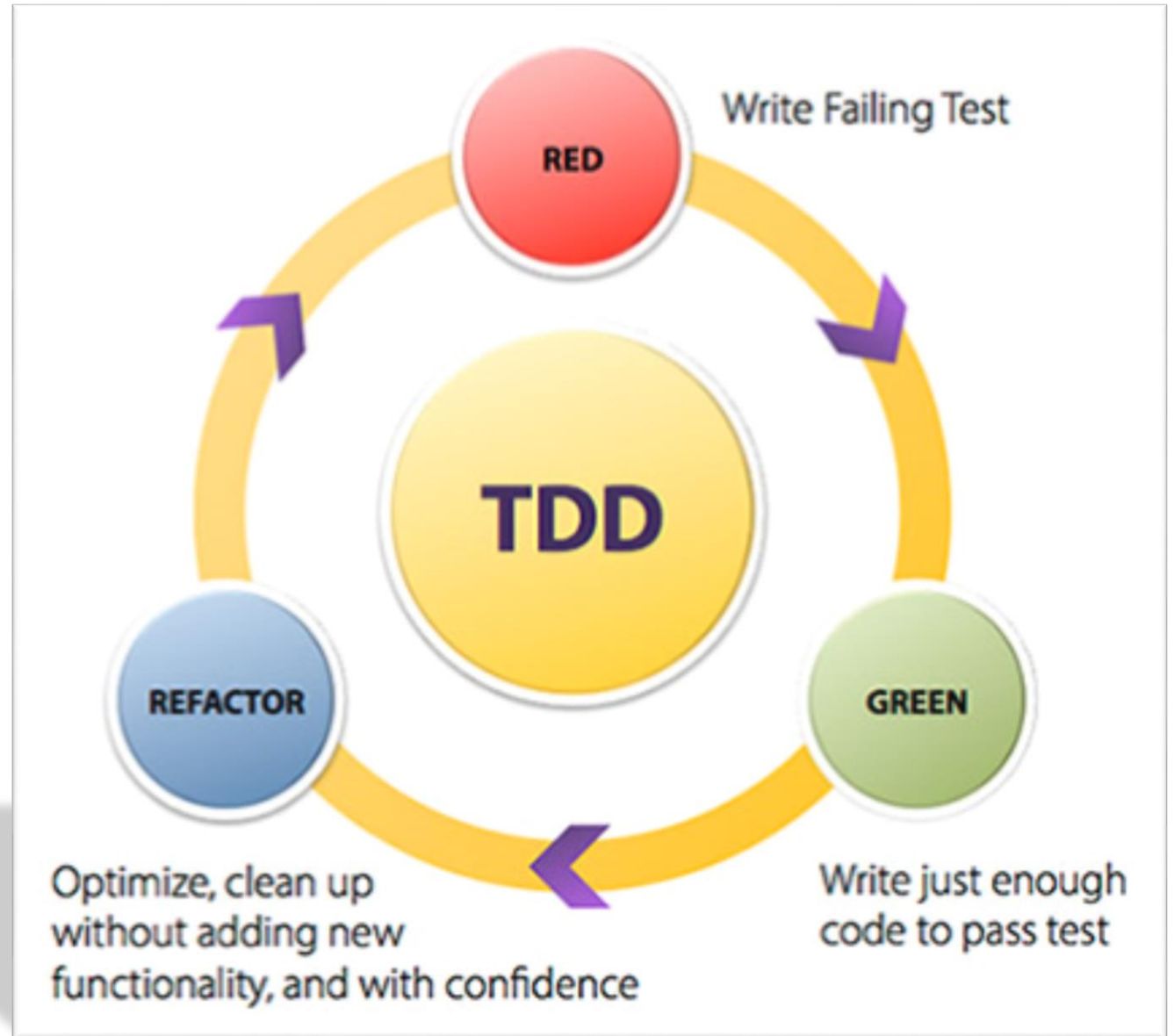


# TDD

Test Driven Development



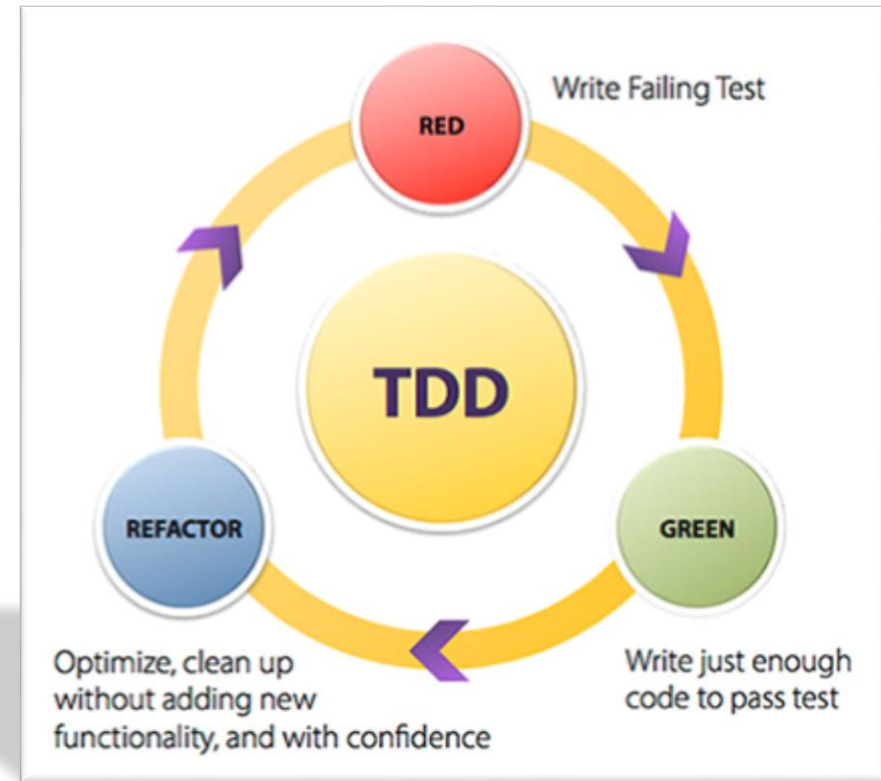
# What is TDD?

- A way of testing
- Tests have an important role
- Continuous testing
- Automatic testing



# TDD is a repeating process

1. Write Tests
2. Make tests pass  
(Write code)
3. Refactor written code
4. Repeat to infinity



# Step 1: Write Tests

- What is your Scenario?
- What is expected to happen?
- Create a specific Test scenario
- Write a Test for that Scenario
- Test it



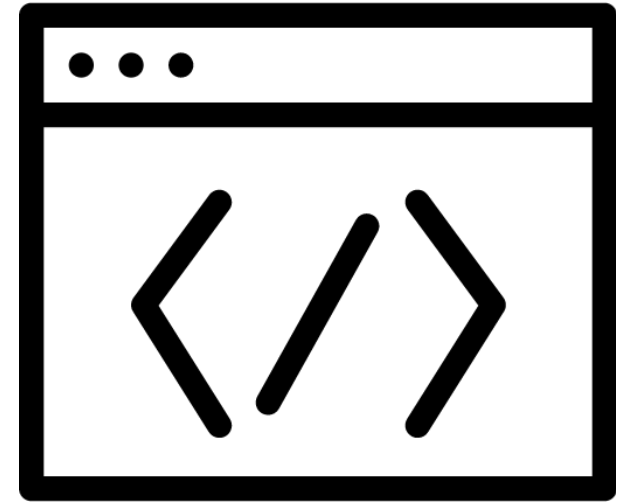
# Step 1: Write Tests

- Tests failed
- What now?
- Tests should fail!



## Step 2: Write Code

- Write Code 'against' the Tests
- Write that much code to let the Test pass
- Be Lazy!
- But never stop at that point!



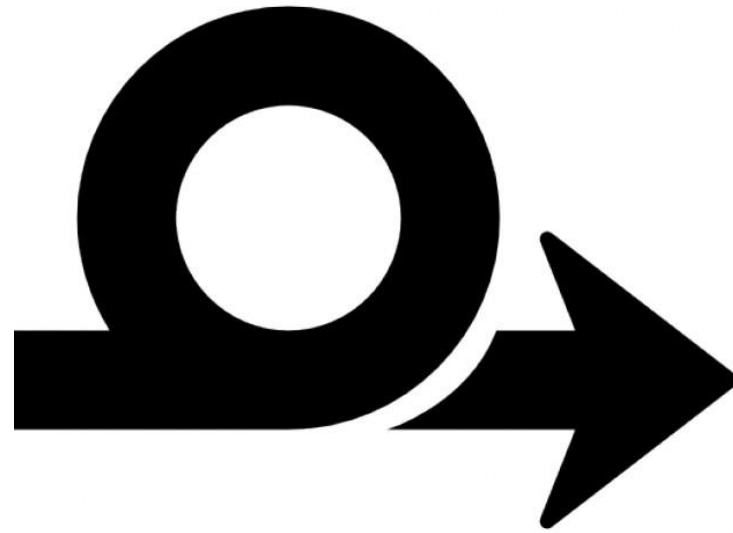
# Step 3: Reformat Code

- Clean your code
  - Remove redundancies
  - Abstract
  - Code-Conventions?
  - XML-Comments
- Goal:
  - Simple
  - Understandable
- Now could be a good time to commit



# Next Step: Repeat

- Choose another Scenario – about same feature
- Repeat steps in given order





# Final: Bring it together



- Tests for specific Features: Unit Tests
  - Concentrates at one part of code
- Combine with other Tests
  - BDD
  - ...

# Run it automatically

- Run all Tests with one click
- Run Tests on every build
  - Real Life example: Travis



# What else to say?

- Tests should run fast
- Mocking “difficult” interfaces

