



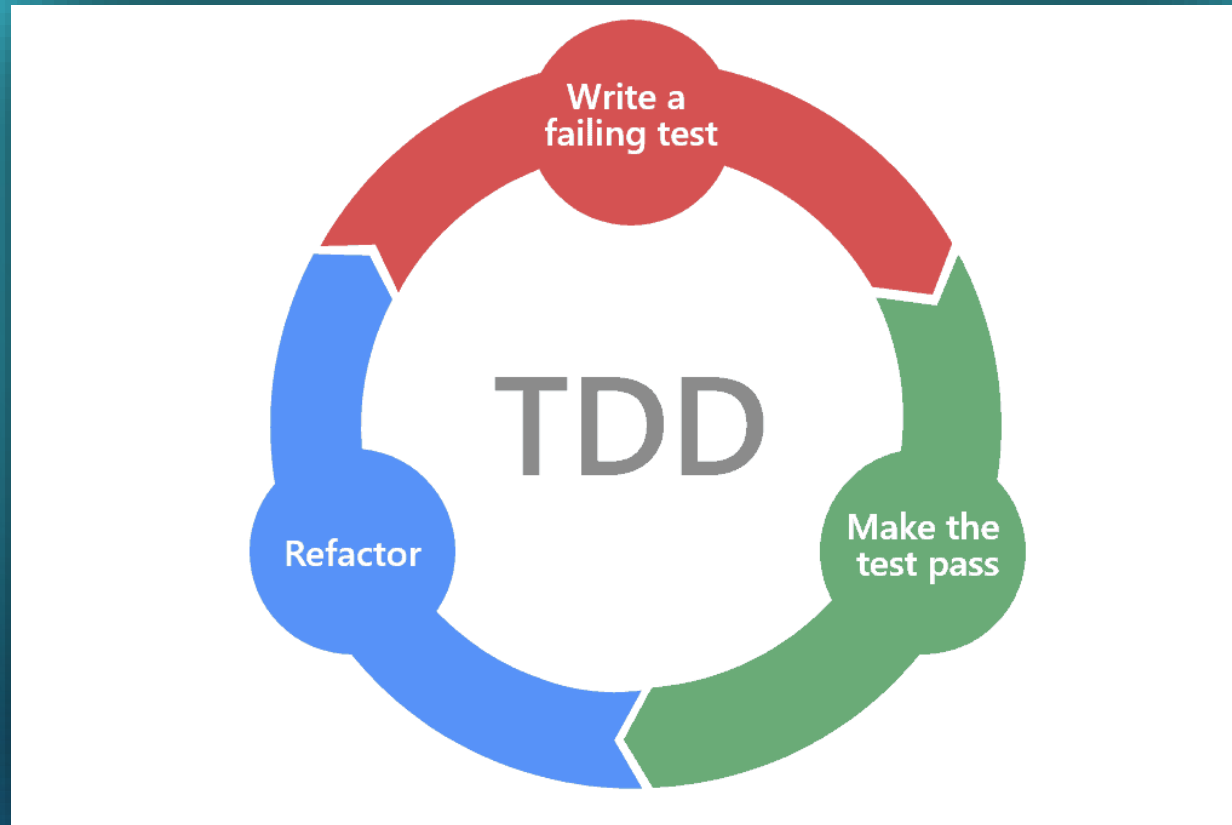
# TEST-DRIVEN DEVELOPMENT

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# STRUCTURE

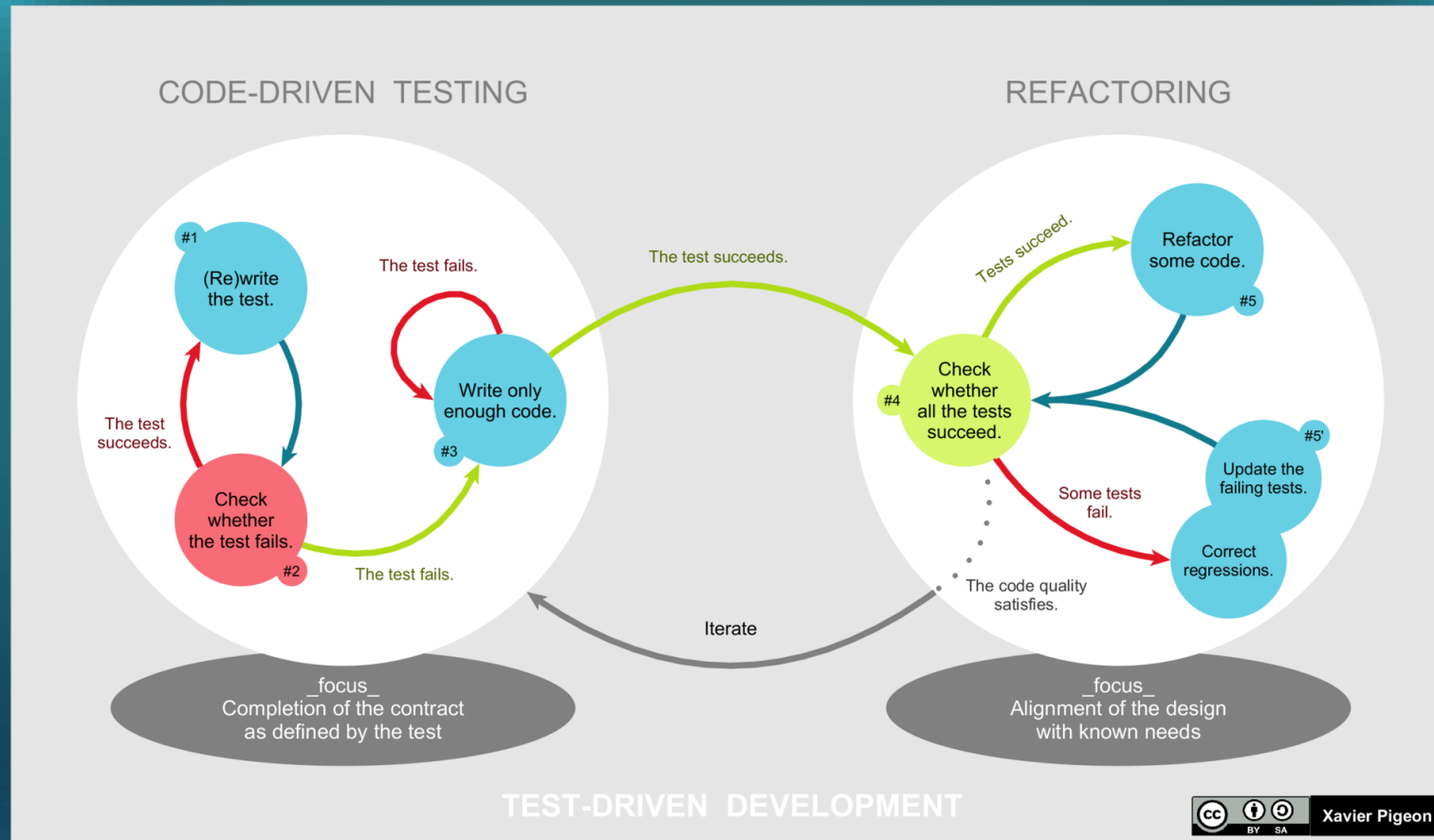
- What is Test-driven development?
- advantages/disadvantages
- Example

# WHAT IS TEST-DRIVEN DEVELOPMENT?



<https://marsner.com/blog/why-test-driven-development-tdd/>

# WHAT IS TEST-DRIVEN DEVELOPMENT?



[https://en.wikipedia.org/wiki/Test-driven\\_development#/media/File:TDD\\_Global\\_Lifecycle.png](https://en.wikipedia.org/wiki/Test-driven_development#/media/File:TDD_Global_Lifecycle.png)

# ADVANTAGES / DISADVANTAGES

Advantages	Disadvantages
<ul style="list-style-type: none"><li>• automated tests for the whole code</li></ul>	<ul style="list-style-type: none"><li>• much practice is necessary</li></ul>
<ul style="list-style-type: none"><li>• easier to find problems</li></ul>	<ul style="list-style-type: none"><li>• more time → more budget</li></ul>
<ul style="list-style-type: none"><li>• better code structure quality</li></ul>	<ul style="list-style-type: none"><li>• tdd does not replace all tests</li></ul>
<ul style="list-style-type: none"><li>• more discipline</li></ul>	
<ul style="list-style-type: none"><li>• better test cases (no white box tests)</li></ul>	
<ul style="list-style-type: none"><li>• less effort</li></ul>	



# EXAMPLE

- Calculator class
- Two simple methods
  - `power(double base, int exponent)`
  - `isPositive(double i)`