Coding Dojo: String Calculator

vienna.rb Dojo#1, Nov. 2013

Peter Kofler, 'Code Cop'
@codecopkofler
www.code-cop.org

Copyright Peter Kofler, licensed under CC-BY.

Peter Kofler

• Ph.D. (Appl. Math.)

 Professional Software Developer for 14 years



- "fanatic about code quality"
- I help development teams

Expectations?

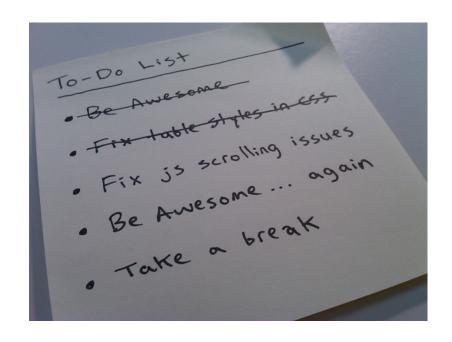
Coding Dojo Mindset

- Safe place outside work
- We are here to learn
- Need to slow down
- Focus on doing it right
- Collaborative Game



Dojo Structure

- Introduction 15'
- Coding 30'
- Interim (Retrospective) 15'
- Break
- Coding 45'
- Retrospective 15'



TDD Skills

- Driving Development with Tests <
- Designing Test Cases
- Designing Clean Code
- Refactoring Safely

TDD should be...

- Add a test
- See it fail
- Add code to make all tests pass
- Refactor mercilessly
- Repeat

... but often is

- Think up design
- Write some tests that verify the design
- Write full implementation
- Test, debug, test, debug, test, debug, ...
- Add TODO to refactor later

String Calculator



Requirements

- Create a String calculator (class) with a method **Add** that accepts a string and returns a number
 - The string contains 0, 1, or 2 numbers.
 - It returns their sum.
 - An empty string will return o.
 - Example inputs are "", "1", or "1,2".
- Start with simplest test (empty string)

Don't Focus on Getting it Done. Focus on Doing It Perfectly.

→ Practice

More Requirements

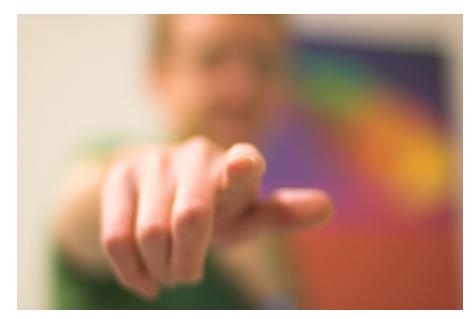
- Now change the **Add** method to handle an unknown number of arguments (numbers inside string).
 - e.g. "1,2,3" should return 6.
- Allow the **Add** method to handle also new lines between numbers (instead of commas).
 - e.g. " $1\n2,3$ " should return 6.

Closing Circle

• What did you learn today?

What surprised you today?

• What will you do differently in the future?



Global Day of CodeRetreat

#gdcr13

(14.12.2013)

http://coderetreat.org/events/global-day-of-coderetreat-vienna-2014



Peter Kofler

@codecopkofler

www.code-cop.org

Kata by

Roy Osherove

@RoyOsherove

http://osherove.com/tdd-kata-1/

CC Images

- Dojo http://www.flickr.com/photos/49715404@Noo/3267627038/
- Todos http://www.flickr.com/photos/kylesteeddesign/3724074594/
- Calculator http://www.flickr.com/photos/7271689@No5/2209497074
- Wants you http://www.flickr.com/photos/shutter/105497713/