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## #phptek

WELCOME TO  
THE TESTING  
TRACK

EGO-CENTRIC  
INTRODUCCION  
GOES HERE

# FIVE FACTORS OF TESTING

# THE ROLE OF TESTS

5 FACTORS COURTESY OF SARAH MEI

[HTTPS://WWW.DEVMYND.COM/BLOG/FIVE-FACTOR-TESTING/](https://www.devmynd.com/blog/five-factor-testing/)

# THE ROLE OF TESTS

VERIFY THE CODE IS WORKING CORRECTLY

**VERIFY THE CODE IS WORKING CORRECTLY**

**THINK OF TESTS AS A WAY TO VERIFY THAT  
THE BEHAVIOUR OF SOMETHING IS WHAT YOU  
EXPECT IT TO BE**

**VERIFY THE CODE IS WORKING CORRECTLY**

**THINK OF TESTS AS 'A PROOF FOR YOUR CODE'**



**VERIFY THE CODE IS WORKING CORRECTLY**

**WHEN USING TDD YOU ARE WRITING A TEST AS  
IF THE CODE ALREADY WORKS...**

**VERIFY THE CODE IS WORKING CORRECTLY**

**...AND THEN WRITING CODE UNTIL THE TEST  
PASSES.**

# THE ROLE OF TESTS

PREVENT FUTURE REGRESSIONS

# PREVENT FUTURE REGRESSIONS

AKA MAKING SURE NOTHING ELSE BREAKS WHEN  
YOU HAVE FIXED A BUG

# PREVENT FUTURE REGRESSIONS

BUGS SHOULD NOT BE ZOMBIES, COMING BACK  
TO LIFE AFTER YOU HAVE FIXED THEM!

# PREVENT FUTURE REGRESSIONS

TESTS CAN HELP ENSURE THAT NEW FEATURES  
OR REFACTORS DO NOT BREAK THINGS THAT  
ARE CURRENTLY WORKING AS EXPECTED

# THE ROLE OF TESTS

DOCUMENT THE CODE'S BEHAVIOUR

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THE ONLY REAL UNICORN IN PROGRAMMING  
IS THE DEVELOPER WHO WILLINGLY WRITES  
DOCUMENTATION THAT OTHERS CAN ACTUALLY  
USE.



# DOCUMENT THE CODE'S BEHAVIOUR

IF FOLKS ONLY LOOK AT YOUR TESTS, THEY SHOULD BE ABLE TO UNDERSTAND HOW TO USE THE CODE BEING TESTED.

**DOCUMENT THE CODE'S BEHAVIOUR**

**THE ROLE OF TESTS**

**PROVIDE DESIGN GUIDANCE**

**PROVIDE DESIGN GUIDANCE**

**SINCE TESTS ARE CODE THAT VERIFIES  
OTHER CODE WORKS...**

# PROVIDE DESIGN GUIDANCE

...A TEST CAN BE USED AS AN EXAMPLE  
OF HOW YOU 'DESIGN' THINGS

# PROVIDE DESIGN GUIDANCE

- > NAMING CONVENTIONS
  - > CODE STYLING
  - > API DESIGN
- > INTERFACE USAGE

# PROVIDE DESIGN GUIDANCE

- > HIGHLIGHTS BRITTLE CODE
- > SURFACES DEPENDENCY ISSUES
- > REVEALS POTENTIAL REFACTORING TARGETS
- > SHOWS OPPORTUNITIES TO CREATE HELPERS FOR TESTS

# THE TESTING SIEVE

# THE TESTING SIEVE

UNLEARN THE CONCEPT OF THE TESTING PYRAMID



# THE TESTING PYRAMID

- > LOWEST LEVEL IS UNIT TESTS
- > MIDDLE LAYER IS INTEGRATION TESTS
- > HIGHEST LEVEL IS FUNCTIONAL TESTS

# THE TESTING SIEVE

‘ANY BUG THAT GETS THROUGH YOUR SIEVES  
IS ONE THAT THE SIEVE ABOVE IT COULD NOT  
NOT DETECT’

# THE TESTING SIEVE

AT THE END OF SIFTING ALL YOUR CODE THROUGH  
THE SIEVES YOU SHOULD BE LEFT WITH BUGS THAT  
REPRESENT VERY WEIRD EDGE CASES

# THE TESTING SIEVE

OR BUGS FOR BEHAVIOUR THAT YOU DID NOT ANTICIPATE  
HAPPENING

# THE TESTING SIEVE

BY HAVING REALLY GOOD SIEVES YOU CAN INSTEAD USE  
YOUR MENTAL ENERGY TO SOLVE ALL THE REALLY UNEXPECTED  
PROBLEMS YOU FIND

# SLIDES

[HTTPS://GRUMPY-LEARNING.COM/PRESENTATIONS/TEK2019](https://grumpy-learning.com/presentations/tek2019)