Introducing Test Driven Development



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Why TDD?



Software Problems

How to design your code?

How to encourage Testing?

YAGNI

You Ain't Gonna Need It!





TDD helps to discourage over-design



How to Encourage Testing?





You can take a horse to water but you can't make it drink

With TDD developers naturally write tests



"Always implement things when you actually need them, never when you foresee that you need them."

Ron Jeffries



Goal

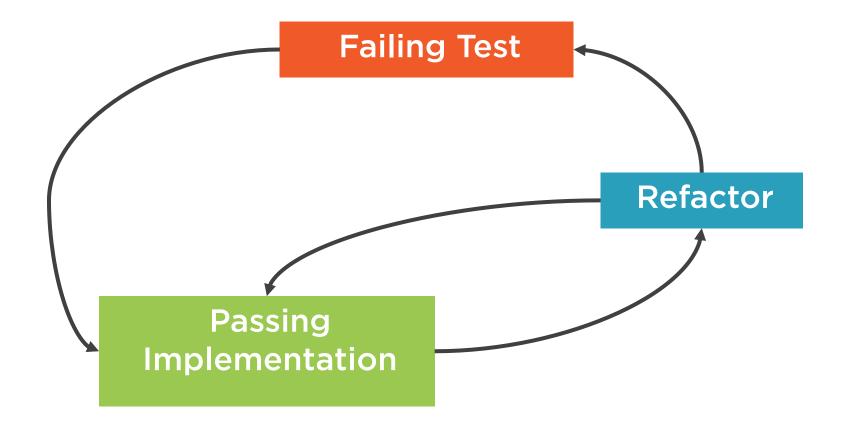
The incremental production of well designed and tested code.



What Is TDD?







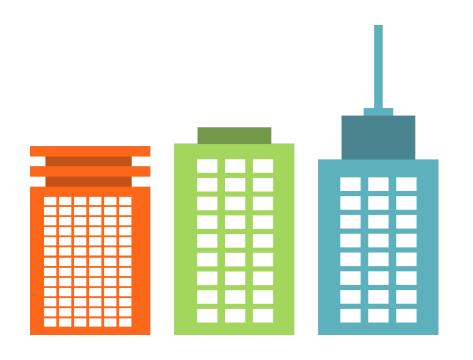
TDD Live Coding



Triangulating



Leap Year vs. the Real World



LeapYear had specific requirements

Normally requirements won't be that specific

How do you get from requirements to concrete implementation?



Triangulating: Live Coding



Conclusion



Practice Makes Perfect



Schools of TDD

Classical

Layer writing tests from the bottom up

Minimize assumptions about internal layers

Mockist

Outside-in design that incrementally tests an application

Verify interaction with internal layers



Summary



TDD isn't just testing before implementation

Red/Green/Refactor

Triangulation enables iterative design

