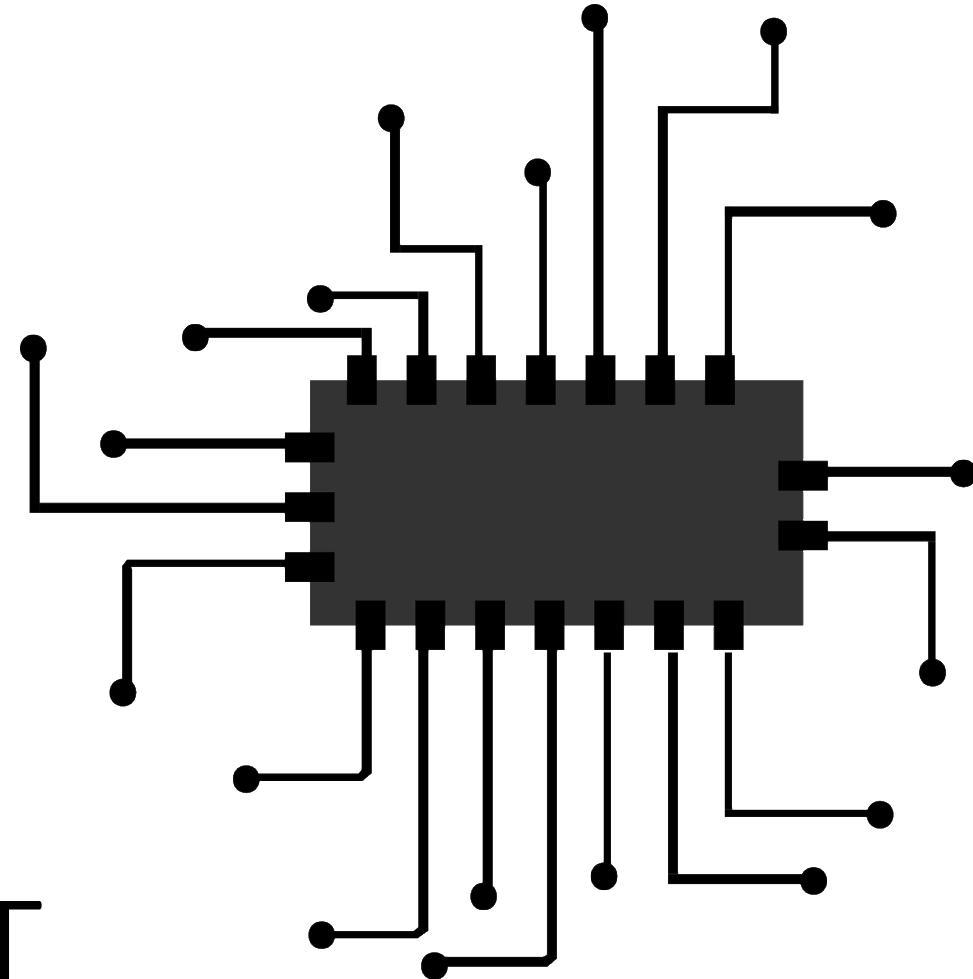


CI/CD
IT'S A **CULTURE SHIFT**



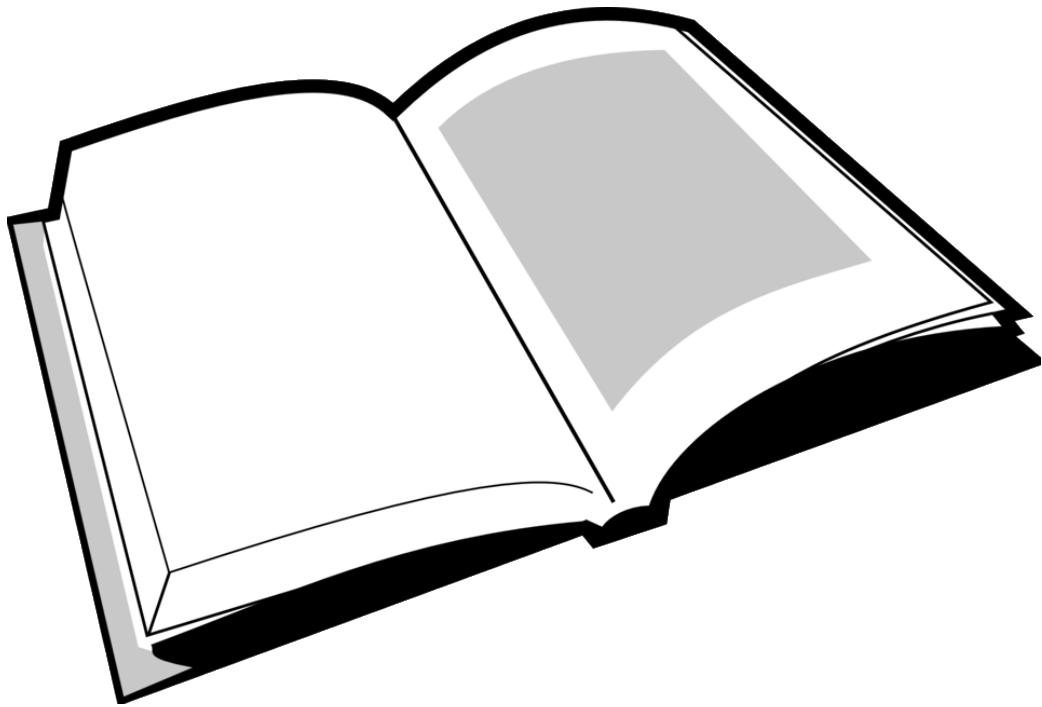
@JAMESQQUICK



**Developer.
Speaker.
Teacher.**

Here's how this is going to go...

- We **won't focus** on specific tech choices
- We **will focus** on principles and cultural expectations
- We **will focus** on real world examples
- Hopefully have time for questions at the end :)



**STORY
TIME**



WHAT IS CI/CD

Continuous Integration

“software development **practice** where developers **regularly merge** their code changes into a **central repository**, after which **automated builds** and **tests** are run”

Continuous Delivery/Deployment

“software development **practice** where code changes are **automatically built, tested**, and prepared for a release to production. It expands upon continuous integration by **deploying all code** changes to a **testing** environment and/or a production environment after the build stage”

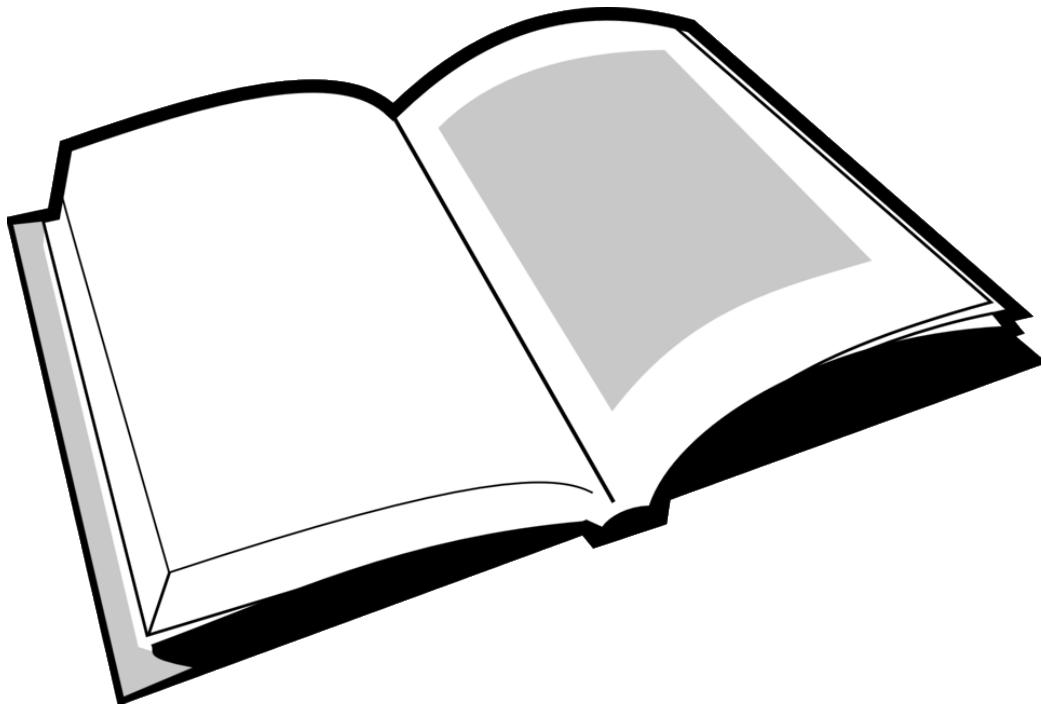
Dev Ops

“the combination of **cultural philosophies, practices, and tools** that increases an organization’s ability to deliver applications and services at **high velocity**”

Questions to ask yourself...



- Do you have the ability to **respond to change**?
- Do you **care**? Do you know why that's important?
- How do you know your code works?
- Can you **quickly** find out if it doesn't work?
- Are you **confident** when you push code to production?

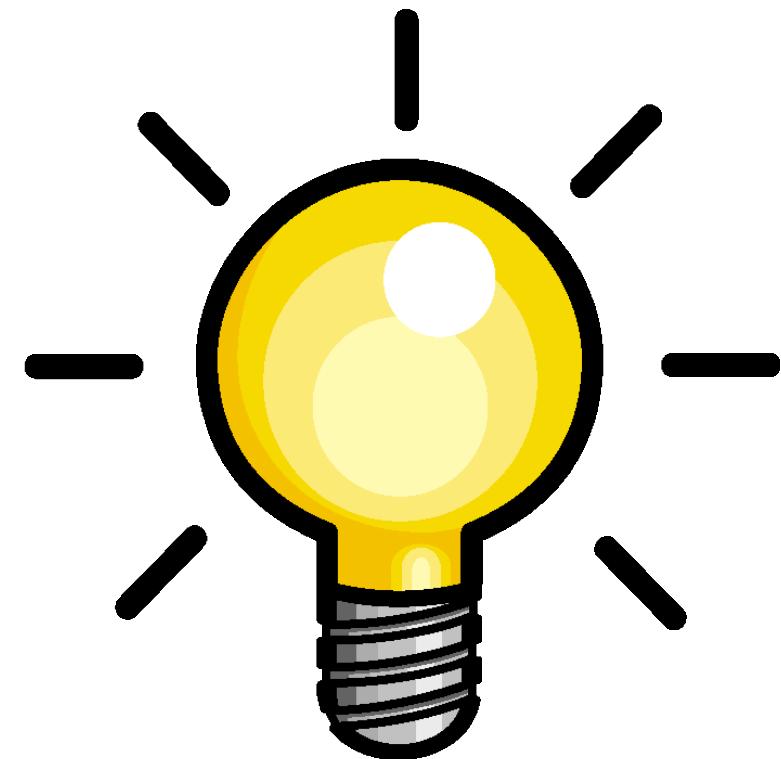


**STORY
TIME**

```
1 // Load the main class
2 require_once(ABSPATH . 'wp-blog-header.php');
3
4 // Set up the theme
5 add_theme_support('post-thumbnails');
6
7 // Add support for retina displays
8 add_theme_support('retina');
9
10 // Add support for post formats
11 add_theme_support('post-formats', array('image', 'video', 'audio'));
12
13 // Add support for custom header
14 add_theme_support('custom-header');
15
16 // Add support for custom logo
17 add_theme_support('custom-logo');
18
19 // Add support for custom background
20 add_theme_support('custom-background');
21
22 // Add support for custom menu
23 add_theme_support('custom-menu');
24
25 // Add support for post navigation
26 add_theme_support('post-navigation');
27
28 // Add support for post formats
29 add_theme_support('post-formats');
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31 // Add support for post formats
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98 add_theme_support('post-formats');
99
100 // Add support for post formats
101 add_theme_support('post-formats');
```

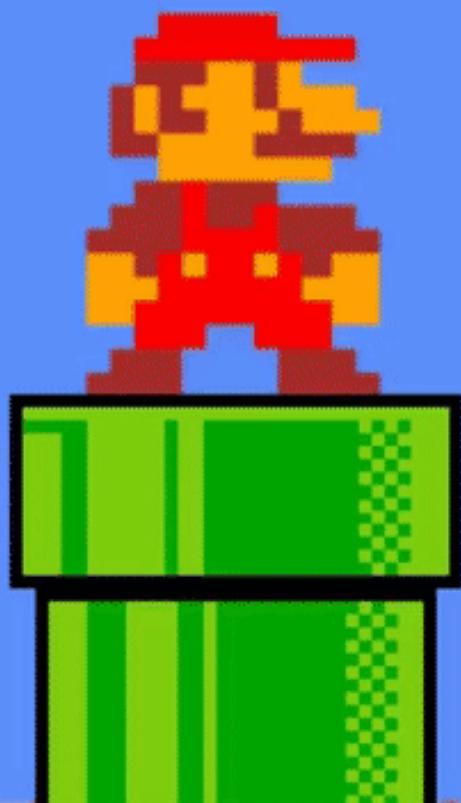
Hypothetical Scenario

- Let's say someone asked you for a new feature
 - Add a new link to get to an external resource
- Can you provide that value or feature quickly?





Do you have the
pipes?!



How Long Does it Take You

- A Day?

- A Week?

- A Month?

- A Year?



1985
Super
Mario
Bros.



1989
Super
Mario
Bros. 2



1991
Super
Mario
Bros. 3



1992
Super
Mario
World



1997
Super
Mario
64



2002
Super
Mario
Sunshine



2006
New Super
Mario
Bros.



2007
Super
Mario
Galaxy



2009
New Super
Mario
Bros. Wii

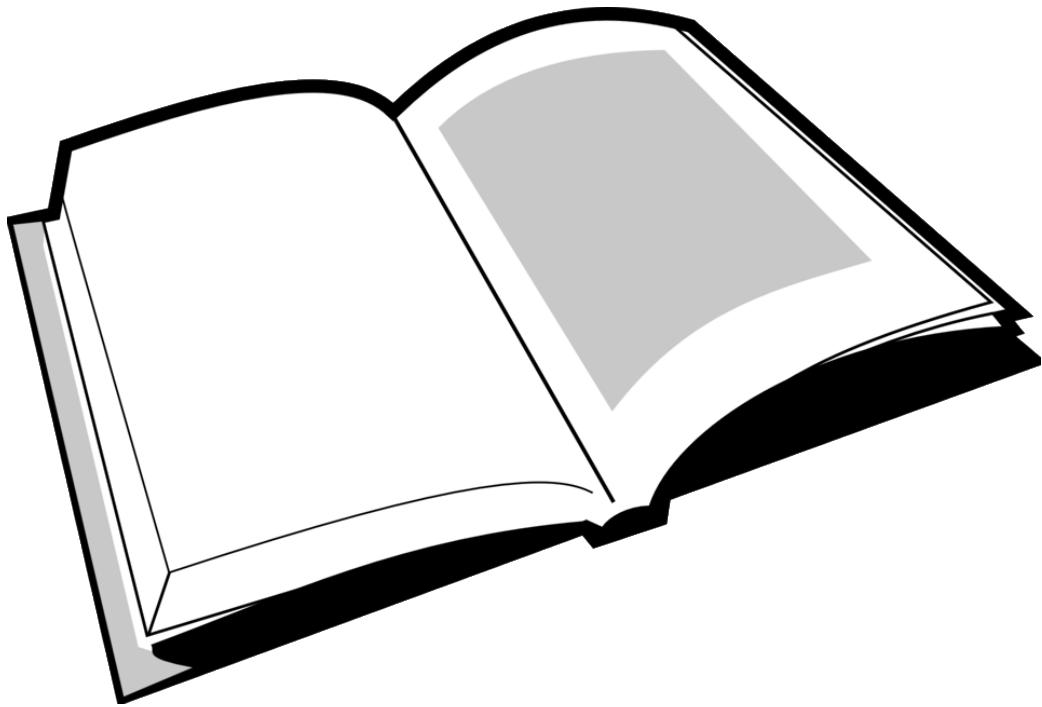


2010
Super
Mario
Galaxy 2

Fear of MTP

- So much can go wrong
- Calls on the weekend? NO THANKS!
- I'm ready to go home





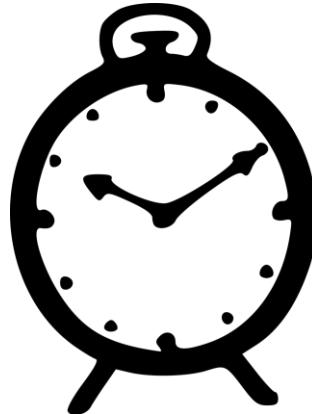
**STORY
TIME**

“Can you add a button to do x?”

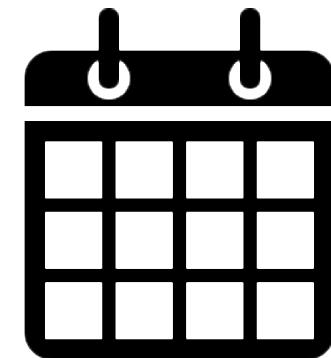
Request



15 min (dev)



2 Weeks (deploy)



Example - Amazing Agility

Visual Studio Code



Version 1.33 is now available! Read about the new features and fixes from March.

UPDATES

March 2019

February 2019

January 2019

November 2018

October 2018

September 2018

August 2018

July 2018

June 2018

May 2018

April 2018

March 2018

March 2019 (version 1.33)

Update 1.33.1: The update addresses these [issues](#).

Downloads: [Windows](#) | [Mac](#) | Linux 64-bit: [snap](#) [deb](#) [rpm](#) [tarball](#) | Linux 32-bit: [deb](#) [rpm](#) [tarball](#)

Welcome to the March 2019 release of Visual Studio Code. There are a number of updates in this version that we hope you will like, some of the key highlights include:

- [Easy Display Language selection](#) - Quick Pick to choose between installed locales.
- [Configurable IntelliSense display](#) - Filter out elements like keywords or remove displayed icons.
- [Choose default formatter](#) - Set default document formatter by project and language.
- [Go to Definition locations](#) - Open Peek view and/or navigate to primary location.
- [Convert to destructured parameters](#) - New TS refactoring to use named parameter objects.
- [Debugging support for subsessions](#) - See subprocesses displayed under main debug session.
- [Launch URI with debug session](#) - Automatically open a browser when debugging web server code.
- [Install missing extension dependencies](#) - Detect and offer to install missing dependencies.
- ["Remote Debugging for Node.js" topic](#) - Learn how to attach to Node.js apps running on Azure.

IN THIS UPDATE

Workbench

Editor

Integrated Terminal

Languages

Debugging

Extensions

Preview features

Extension authoring

Proposed extension APIs

Engineering

Contributions to extensions

New documentation

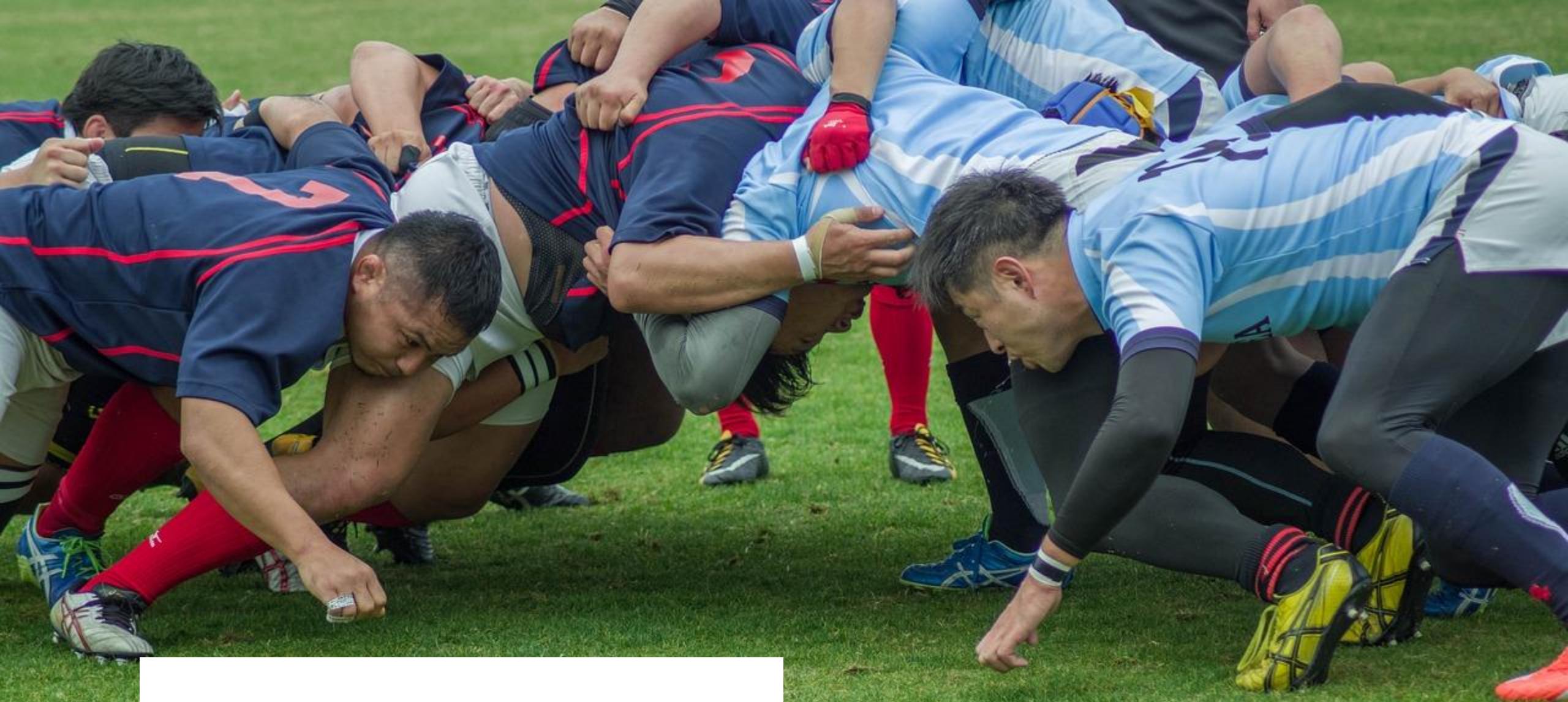
Notable fixes

Thank you

 Tweet this link



LET'S TALK AGILITY



not just scrum...

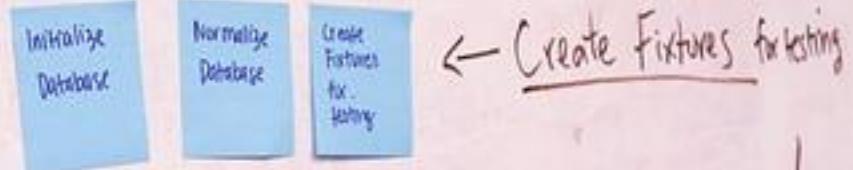
WEEK 3 : Design



Infrastructure Recs:
- Laravel + Backbone

WEEK 4 : Design

1



Create fixtures for testing

WEEK 5 : Design

2



Engineering

not just a planning board...

ADMIN

FYI

PLEASE DO NOT ERASE

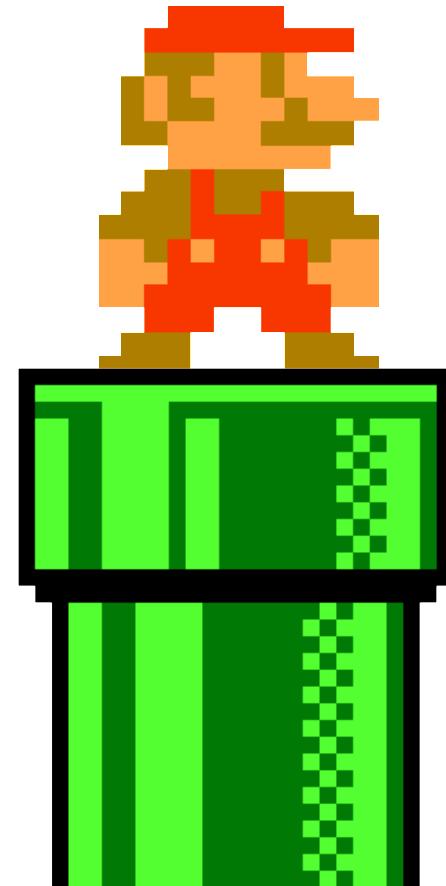


not just sprints...

Before you answer...

Things to Consider

- People structure?
- Infrastructure and Resources?
- Process?



Example – Approvals for MTP

How many approvals does it take?

Whose approvals do you
need?

**And are they really the right
people?**



July 10, 1968

A close-up, high-angle shot of a powerful waterfall cascading over dark, rocky ledges. The water is a deep, turbulent blue-green, creating a misty spray at the base. The falls are multi-tiered, with water falling from several levels. In the upper left foreground, the word "WATERFALL" is printed in a large, bold, white sans-serif font.

WATERFALL

Here's an alternative...

Lean Startup



You need the **ability to change** when
change is the only constant

A group of six business professionals in a meeting, smiling and shaking hands.

MANAGEMENT

Where I Fit In

“The middle man between developers and upper management to try and bridge the gap in communication”



Does upper management get it?

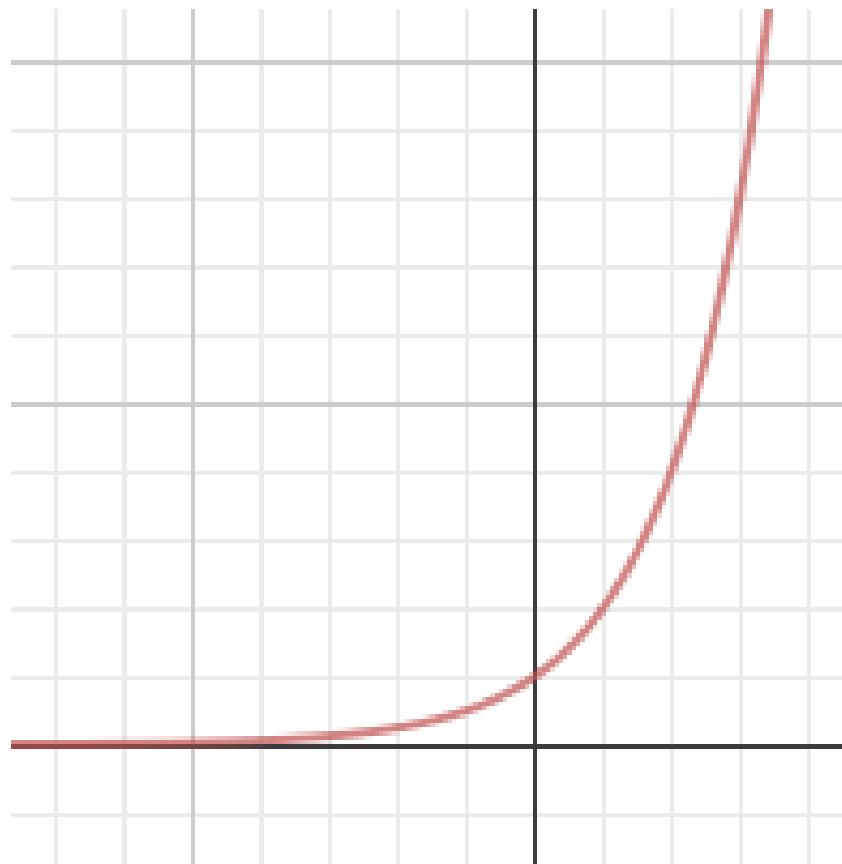
Before you answer...

Questions to ask yourself...

- Will they change the process?
- Will they instill trust in your teams?
- Do they understand the process?
- Do they get the **long term effects**?
- Do they understand the **short term effects**?



Short Term vs Long Term



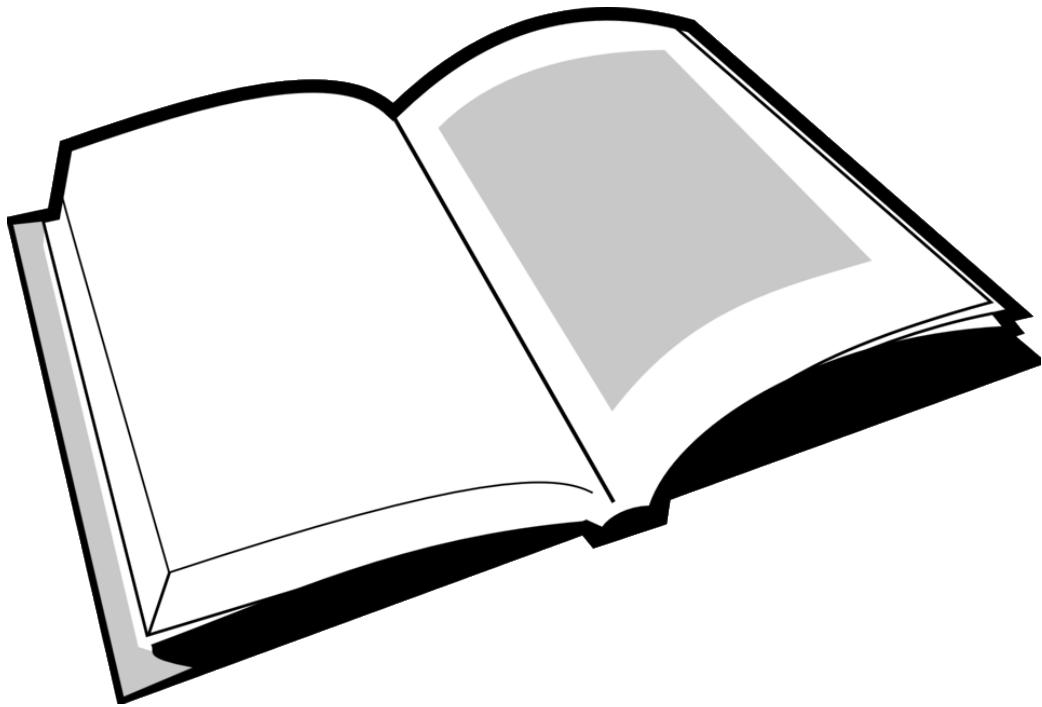
Questions to ask yourself...



- Can they take the hit now to reap the benefits later on?
- Do they really want to change the way things are done?

TIMELINES





**STORY
TIME**





TEAM STRUCTURE



WILL THEY FIGHT?

A group of five diverse professionals are gathered in a modern office environment, engaged in a collaborative discussion. In the foreground, a woman with long blonde hair, wearing a patterned blazer over a dark top, is gesturing with her hands while speaking. To her left, a man with glasses and a beard, wearing a blue and white plaid shirt, looks on attentively. Behind her, a man in a red sweater and grey scarf points towards something off-camera. On the far right, a woman with long brown hair, wearing a dark top, is also part of the conversation. In the background, another woman with dark hair, wearing a black blazer, stands observing the group. The office has large windows and a bright, airy feel.

YOUR TEAM

Does your team get it?

Before you answer...

Questions to ask yourself...



- Are you prepared to adopt new process
- Are you prepared to handle the responsibility of trust
- Are you prepared to stick up for yourself
- Are you prepared to learn... a lot
- Are you prepared to change the way you right code
- Are you prepared to change the way you work as a team



**WE NEED
YOU**



RESOURCES

HARDWARE



TIME



PEOPLE

The background of the image shows two silhouetted figures of people jogging from left to right against a warm, orange and yellow sunset sky. The horizon line is visible at the bottom.

TRAINING

MONEY





TESTING

**DO YOU EVEN
TEST**

BRO?!?!

memegenerator.net

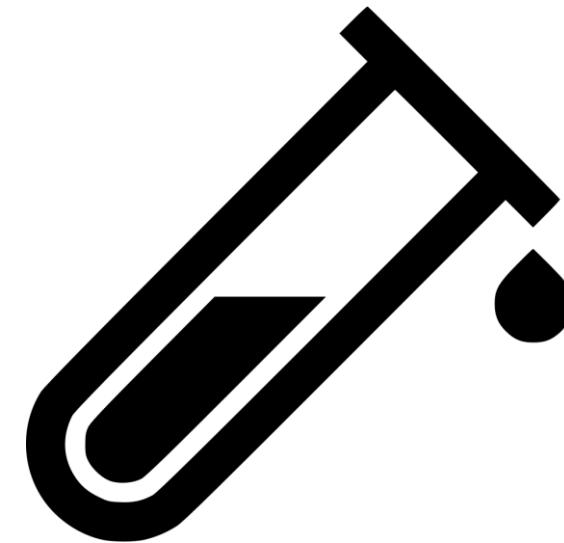
Testing is Hard

THERE'S SO MUCH TO LEARN

- Learn testing frameworks
- Learn how to write tests
- Learn how to automate them
- Learn how to write **good** tests

Tests don't mean anything...

GOOD TESTS DO



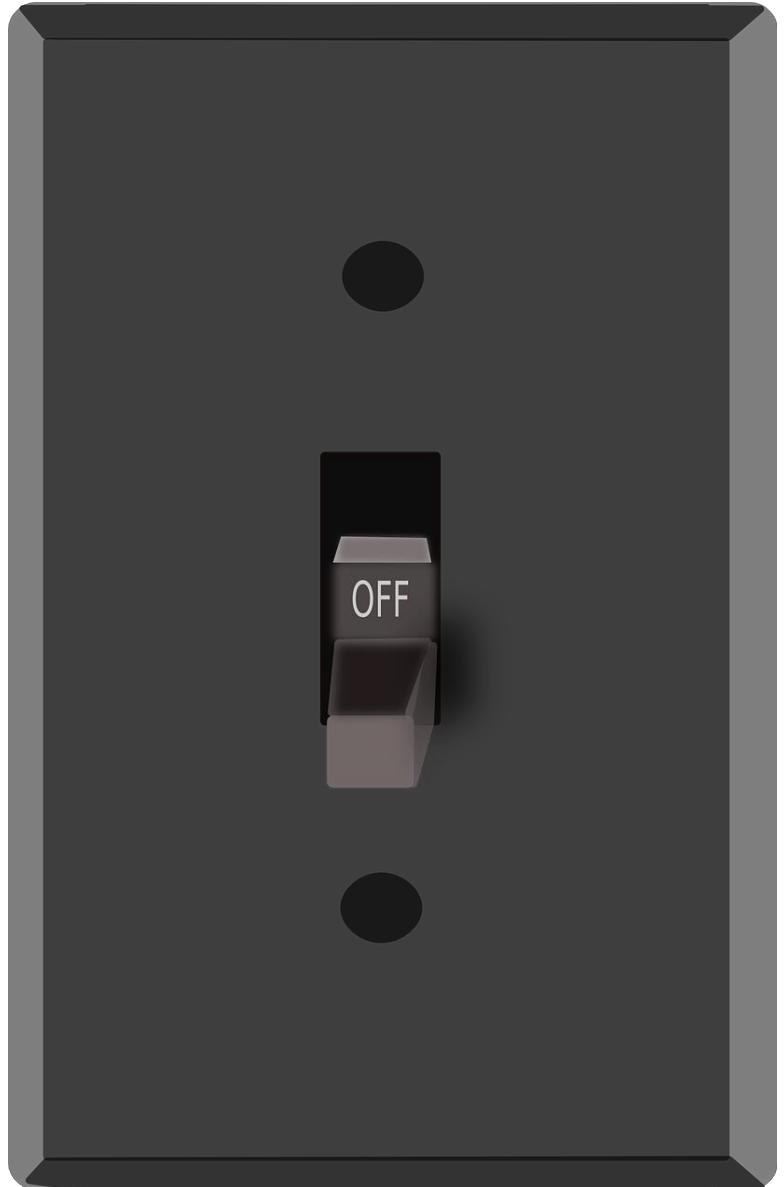
Consistency

- Tests for each new piece of code
- Tests need acceptance criteria
- Everyone participates!

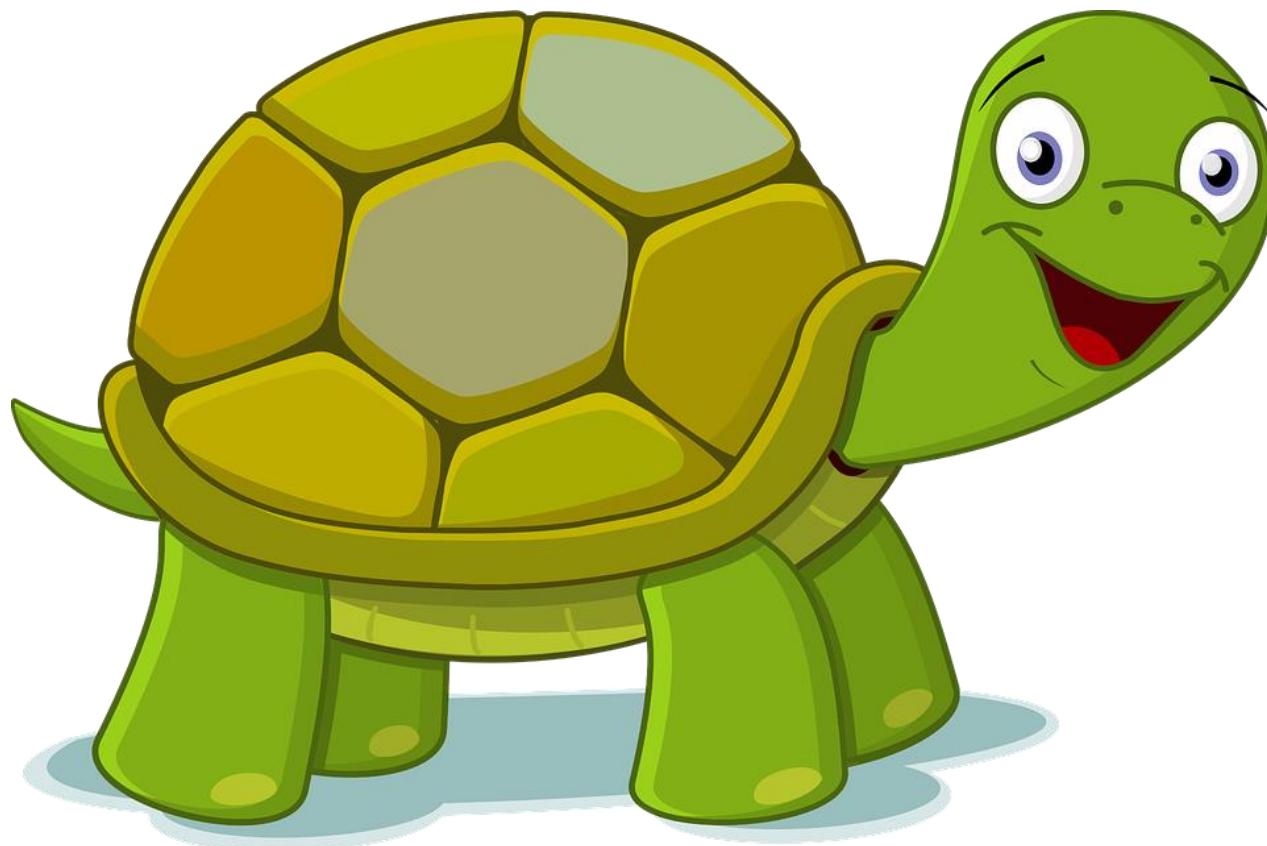
Tests have to be a priority!

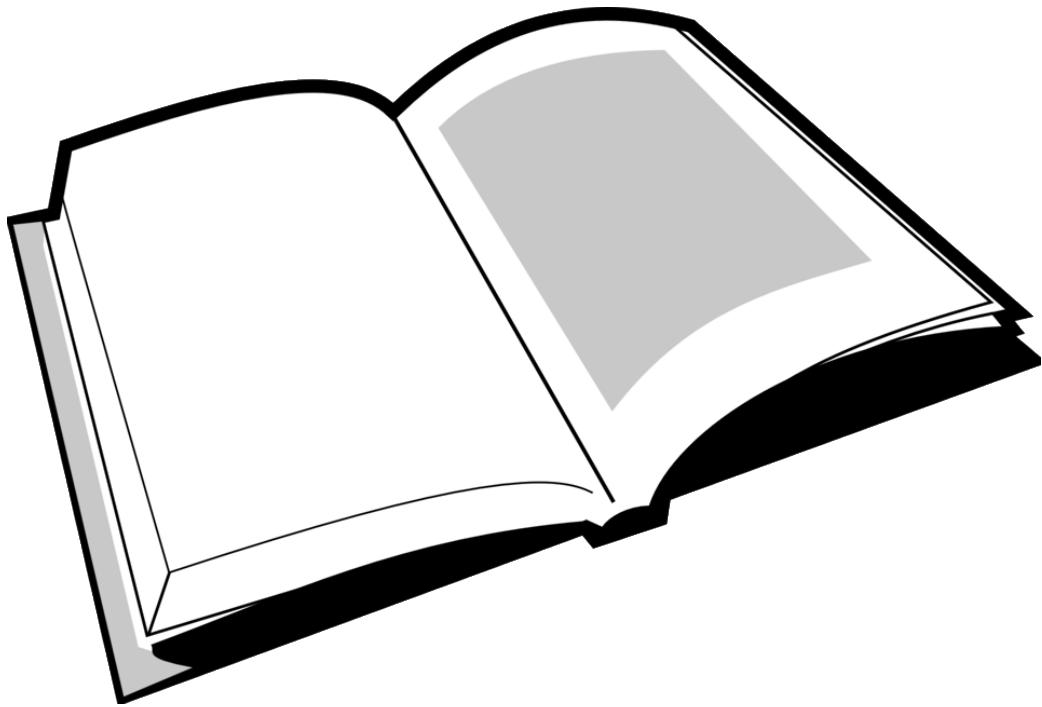
What if they don't work...

TURN THEM OFF?



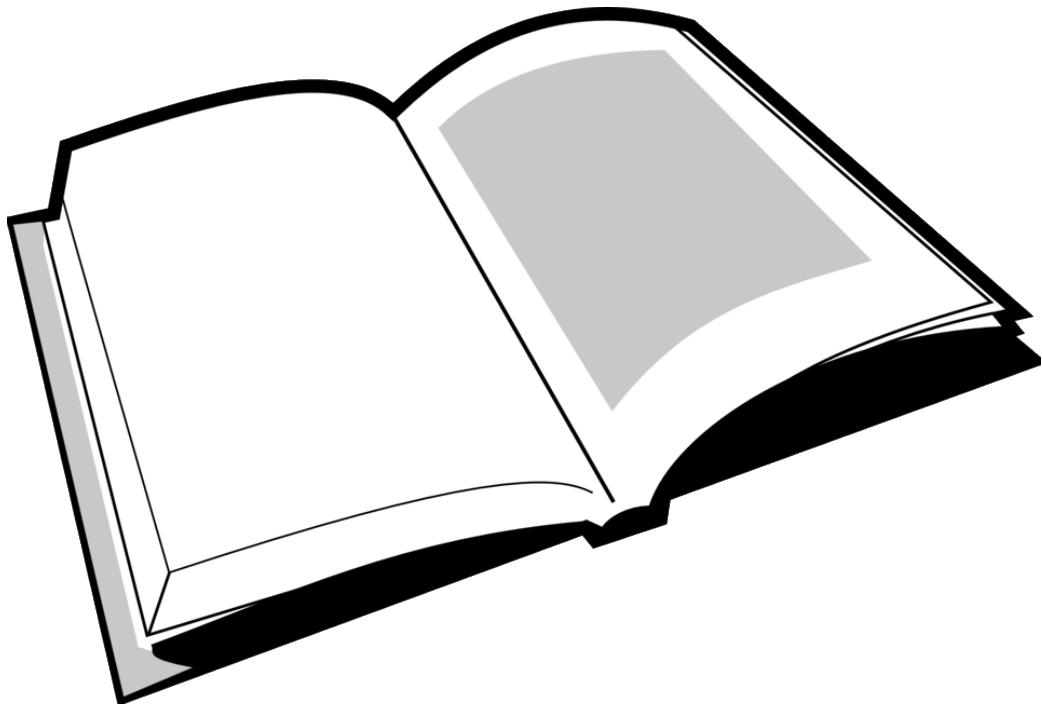
Learn To SLOOOOOOW DOOOOOWN!



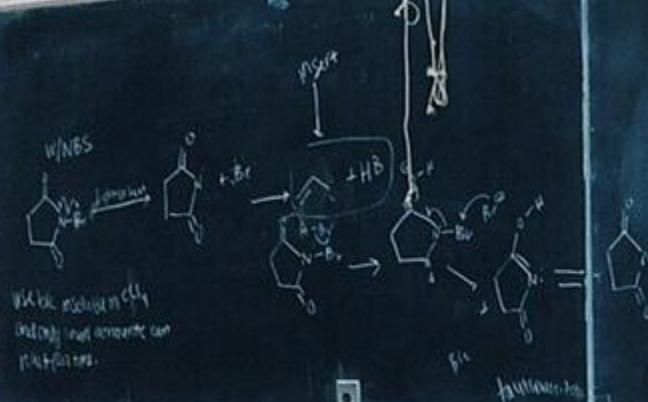


**STORY
TIME**





**STORY
TIME**





THE SWARM

Every pipeline issue ...

**IS A PRODUCTION
PROBLEM**



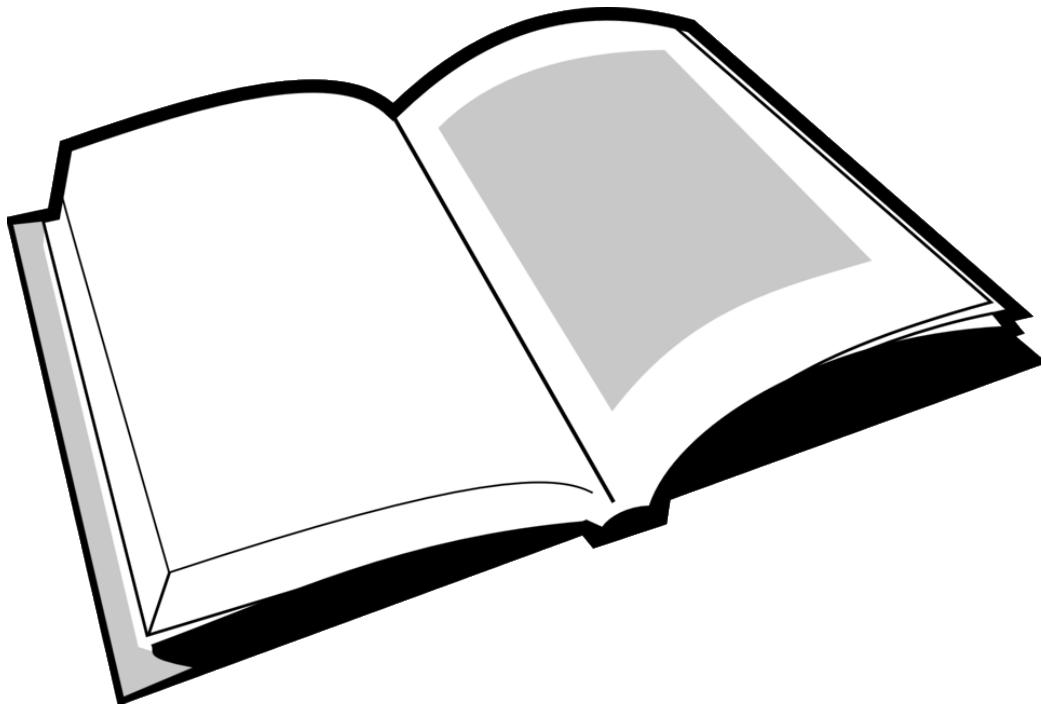
lawebloca.net

Stop Everything You're Doing



What About Alerts?





**STORY
TIME**



Questions to ask yourself...



- Are you prepared to immediately swarm issues?
- Will your manager/management support that?
- Will your team?

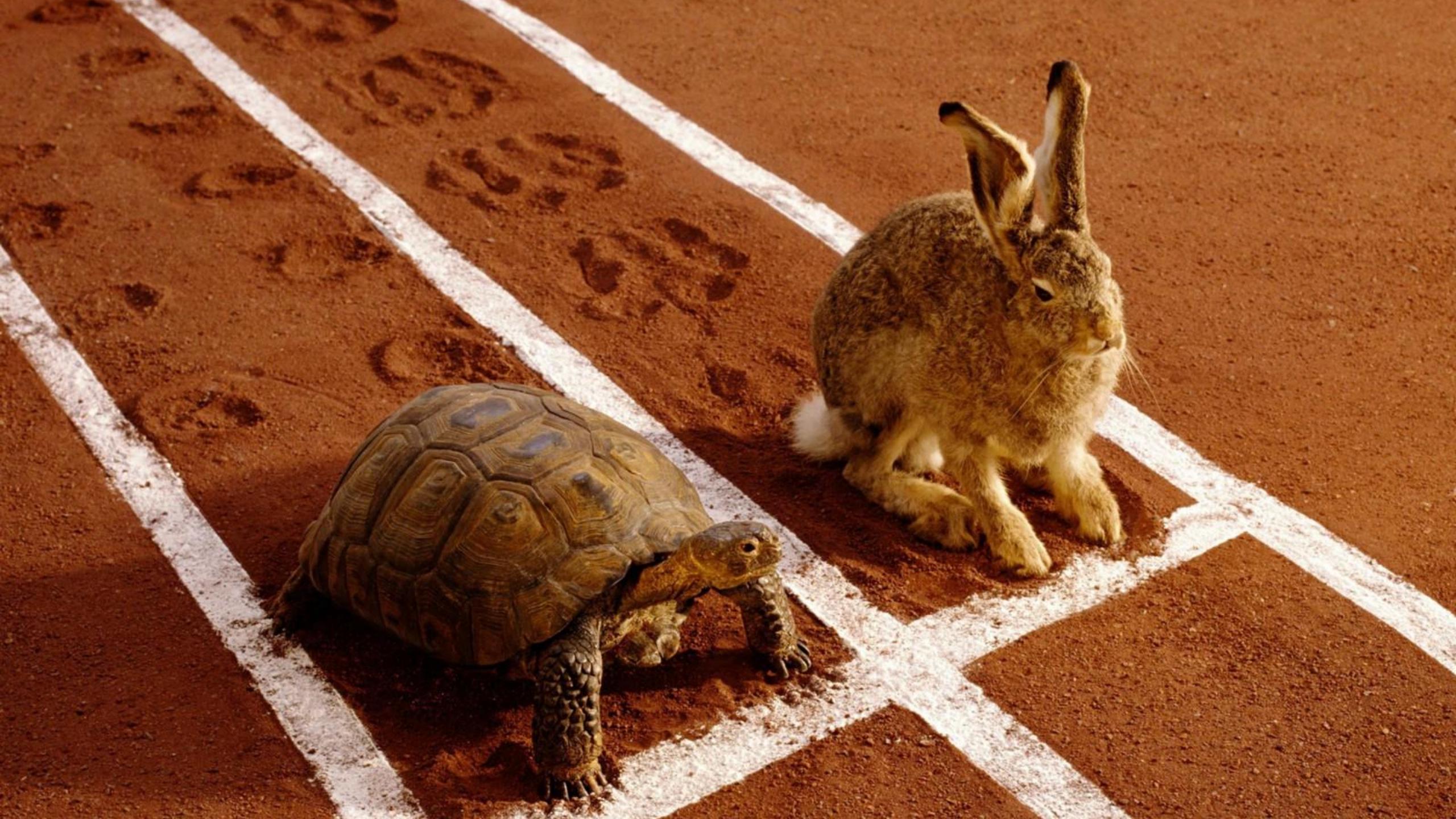
LET'S RECAP

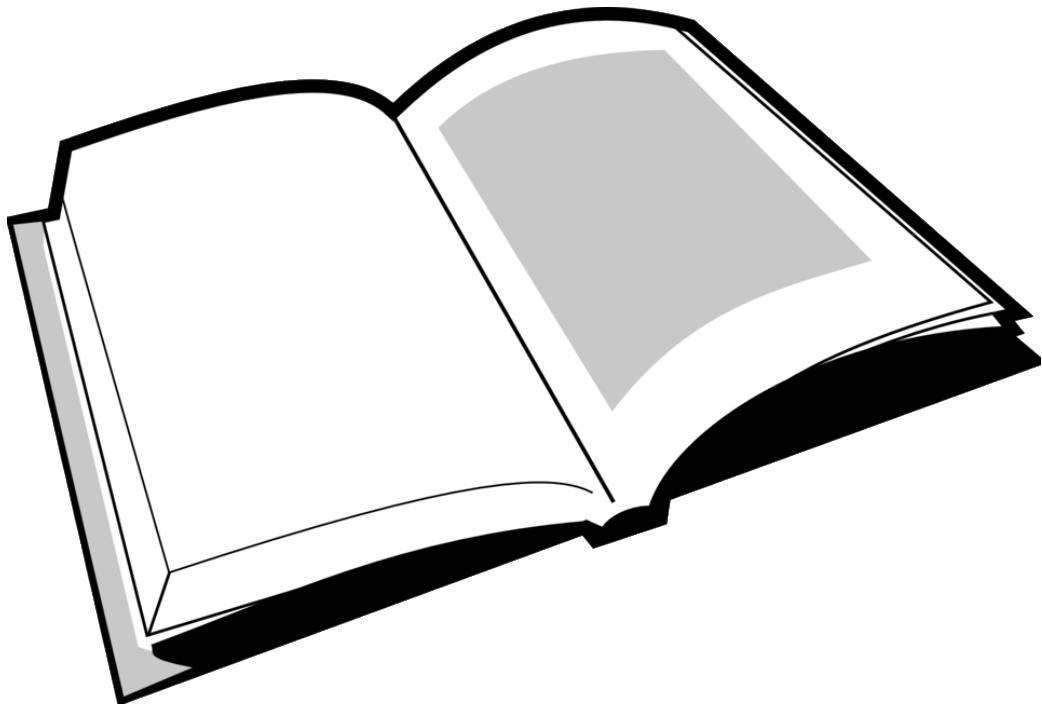


You've got a lot to learn, a lot to do,
and a lot to embrace...



The tortoise and the hare...



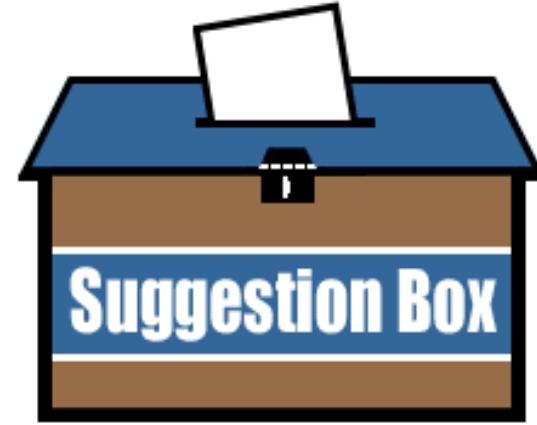


**STORY
TIME**



Suggestions

- Create a team to lead
- Communicate
- Plan time accordingly
- Take it one step at a time





THANK YOU!