Getting started with Continuous Integration

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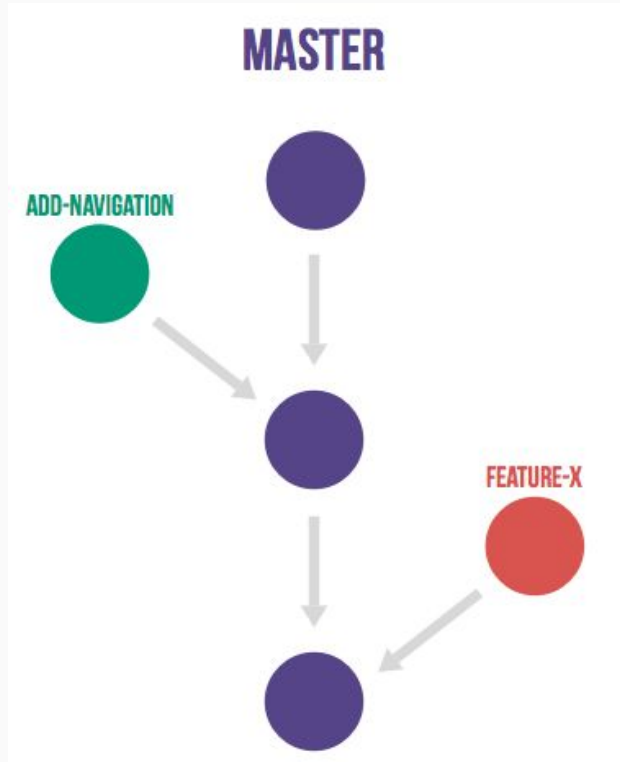
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What is Continuous Integration?

Continuous Integration is a software development practice where code is integrated frequently.

https://www.martinfowler.com/articles/continuousIntegration.html

Integrate frequently
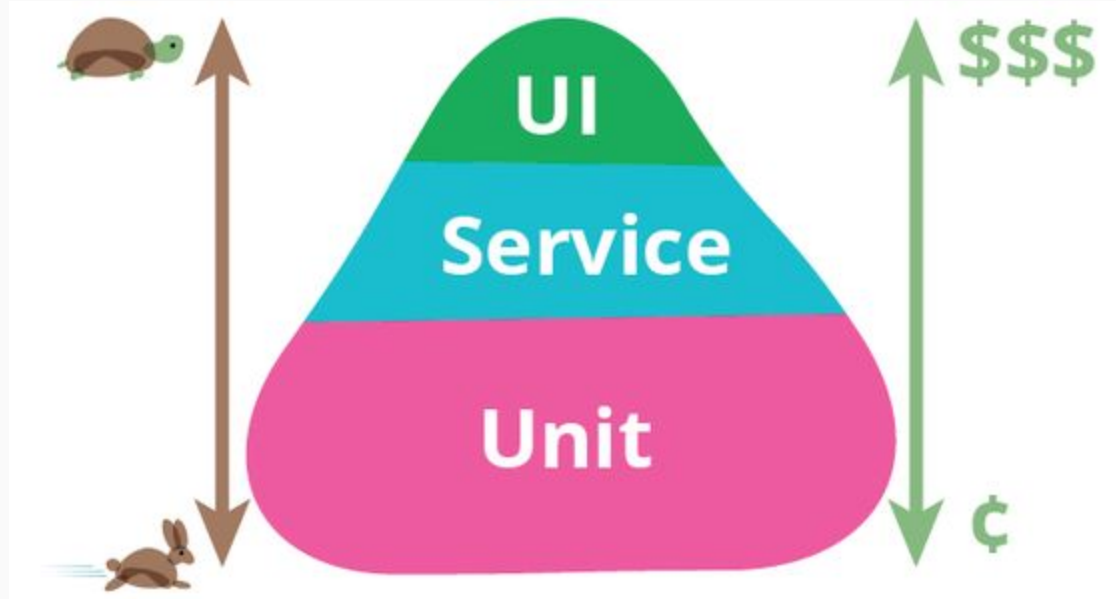
Simple UI test case

```
▼ 📄 spec/login/standard_spec.rb 0 → 100644                    📋

1  + require 'spec_helper'
2  +
3  + feature 'standard login' do
4  +   scenario 'user logs in using credentials', ce: true do
5  +     Page::Main.on do
6  +       sign_in_using_credentials
7  +     end
8  +
9  +     expect(page).to have_content('Signed in successfully.')
10 +   end
11 + end
```

Testing pyramid

https://martinfowler.com/bliki/TestPyramid.html

How often do we integrate?

See the integration result in your merge request widget

Merge request widget on gitlab.com

Does it help to find bugs?

Show correctness by failing to prove your application incorrect

Testing shows the presence, not the absence of bugs.

- Edsger W. Dijkstra
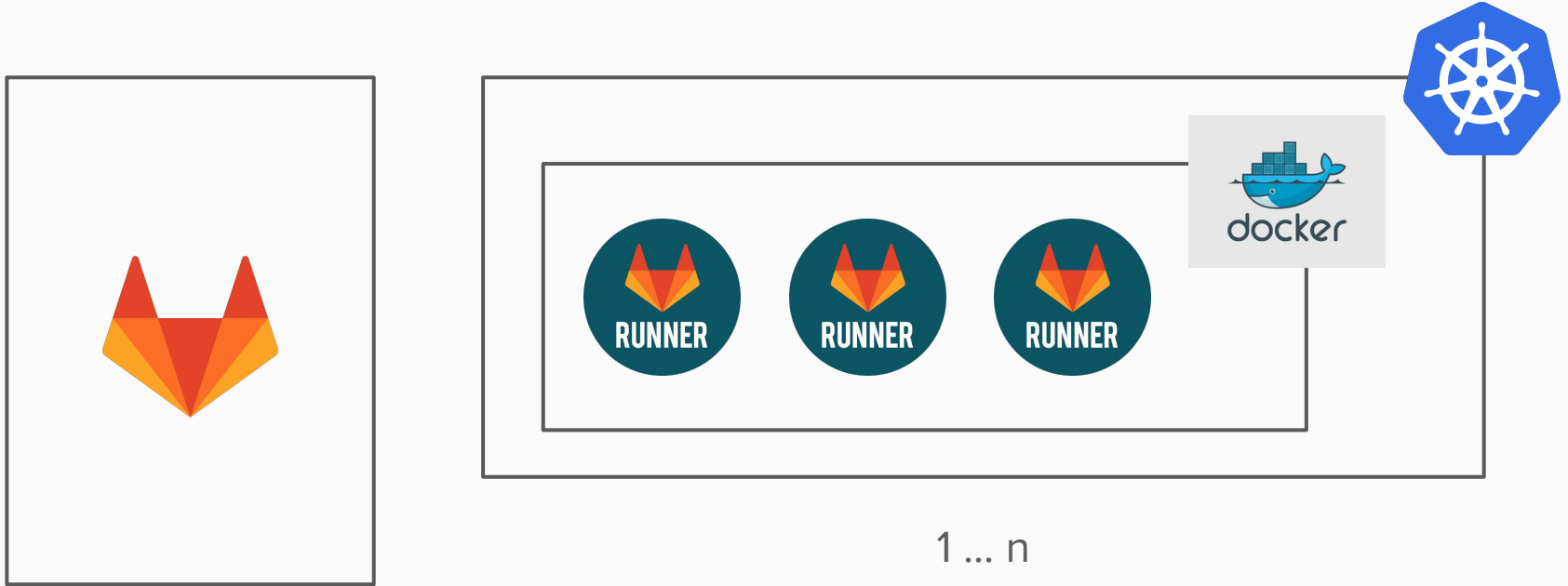
What is Continuous Integration?

"Continuous Integration doesn't get rid of bugs, but it does make them dramatically easier to find and remove."

— Martin Fowler

You just need a GitLab Runner

What lies beneath

1 ... n

What is GitLab CI/CD?

GitLab integrated Continuous Integration platform is
a free open source software.

Merge request widget on gitlab.com

Keep it simple

Live demo!

Demo!

Start simple.

Testing is like skiing, you need to learn and practice it first before you can go really fast.

Test Driven Development is a tool!
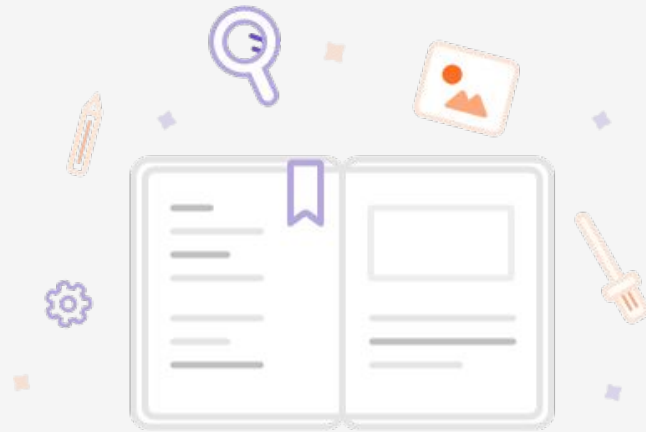
🚀 It is a learning tool.

🚀 It is a design tool.

🚀 It is productivity tool.

💜 It is a testing tool.

Question!

If testing cannot prove correctness of your program, how does it help to improve quality of your software?

QUESTIONS?