



Tales of Accessibility(A11y) on Grafana OS

Introducing Pa11y CI into our Pipeline

Grafana EMEA Virtual Meetup

05 October 2021



We have difficulties using your tools :(

Visual disabilities

Color blindness

Low Vision

Blindness

Physical disabilities

Arthritis

Repetitive stress injury



A11Y
Quest



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Why is A11y Important?

15%

Population that
have some
sort of
disability
([WHO](#))

80 Million
On Europe

Population
currently has
Disability
europarl.europa.eu

217
Million

People
worldwide with
moderate to
severe vision
Impairment
([WHO](#))

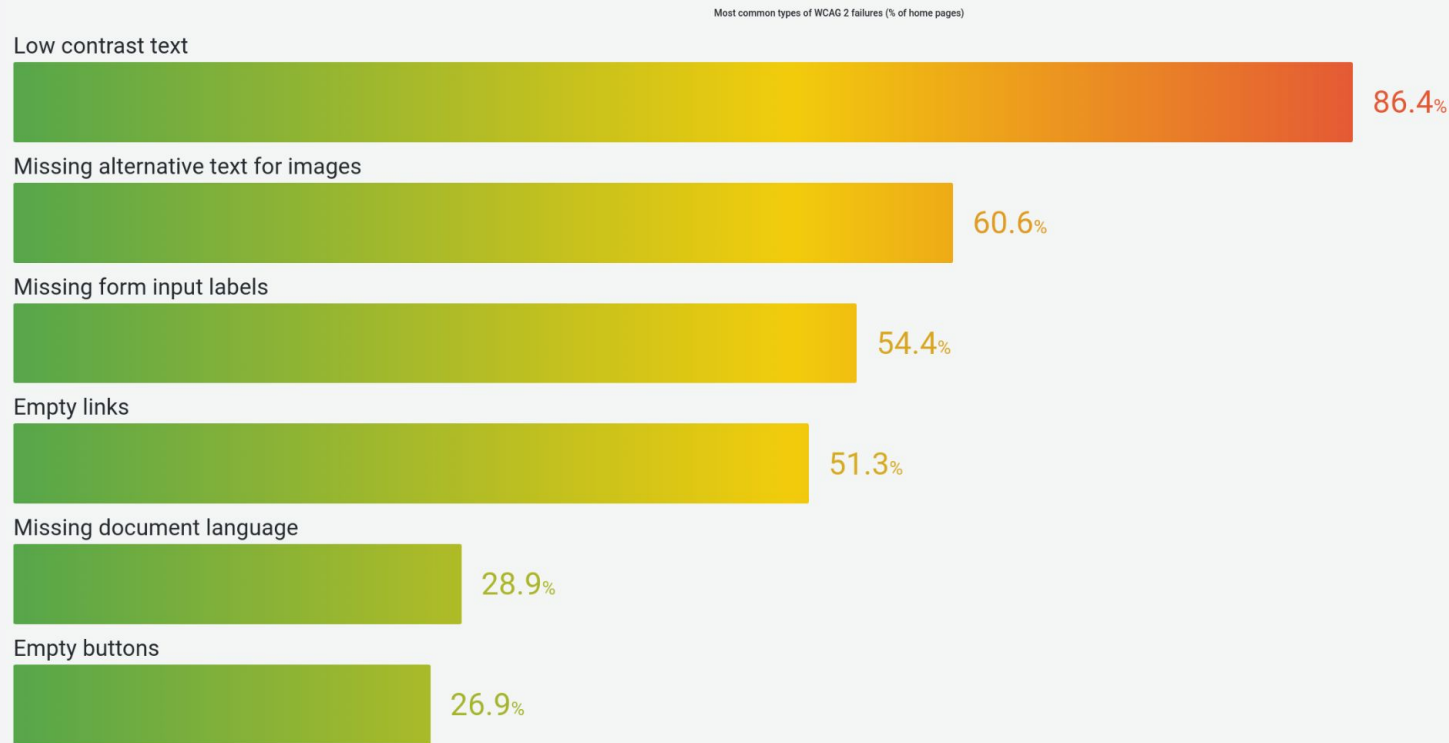
65 +
By 2060

People 65 or
older is
expected to
double to 98
million ([APA](#))



Alright, is the web following
WCAG (Web Content Accessibility Guidelines)?

Annual A11y analysis of the top 1,000,000 home pages



97.4% of home pages had detectable wcag failures [By: WebAIM](#)

A11y is a
Group
Effort



The Quest! What we are doing in Grafana



Access to
training/courses to
gain a11y skills



Use Automated
tools &
Work in the
Design System



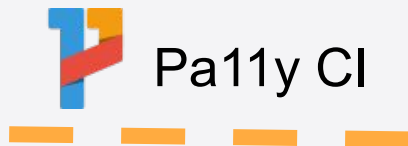
Usability test



Where we are?

How many
A11y issues
do we have?





to the rescue!

Pa11y CI vs Cypress Audit?

Pa11y CI

- + Fast (~ 1:30 min)
- + Configuration per pipeline stage
- Required CI knowledge
- Flakiness

Cypress Audit

- + Out of the box, we had already e2e written on cypress
- + One single configuration
- Slow (~ doubled e2e time, +15 min)
- Failure on CI if a11y fail

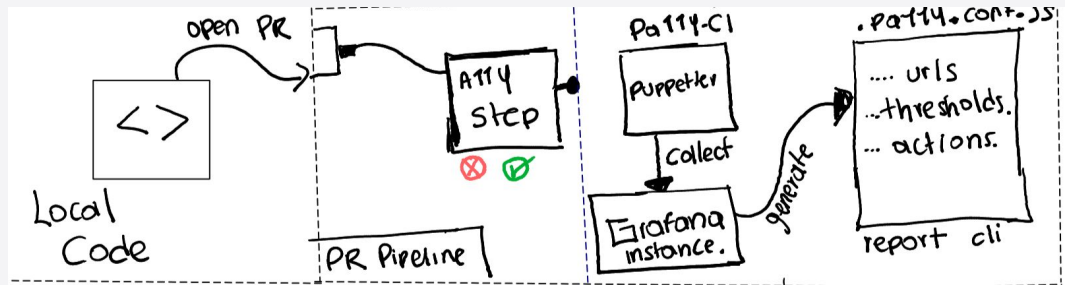
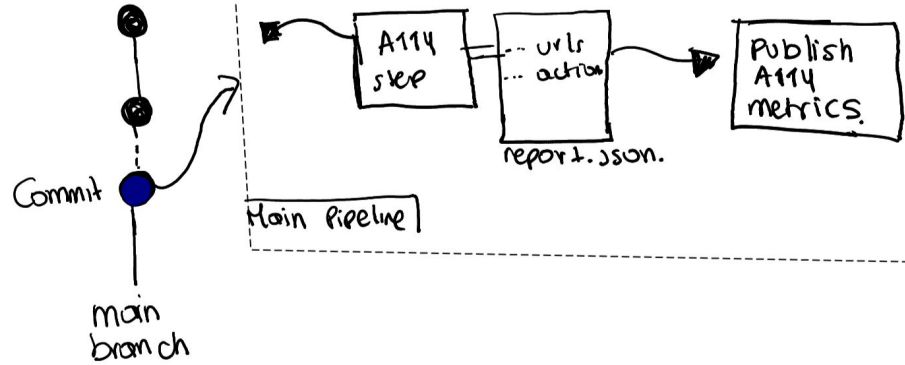


Objectives:

- Collect a11y metrics for the main pages and send it to the Grafana CI metrics

- Prevent a11y regressions when refactoring or introducing new code in the project

Continuous Integration (Drone)



Give me the Code

- Install Pa11y-Cl
- [Create config file to test your urls](#)
- [Add pa11y command to package.json](#)
- [Go to your PR pipeline configuration, create a new step and call the a11y command \(pass your host and port\)](#)
- Push your changes





DEMO

Pa11y CI - Collecting a11y issues

“If you can’t measure it,
you can’t improve it.”

Peter Drucker



A11y Errors - Stats on every merge on
main branch



Accessibility Report Summary

Generated at: Mon Oct 04 2021 21:34:10 GMT+0200 (Central European Summer Time)

Filter page results:

Pa11y Issues

No Issues

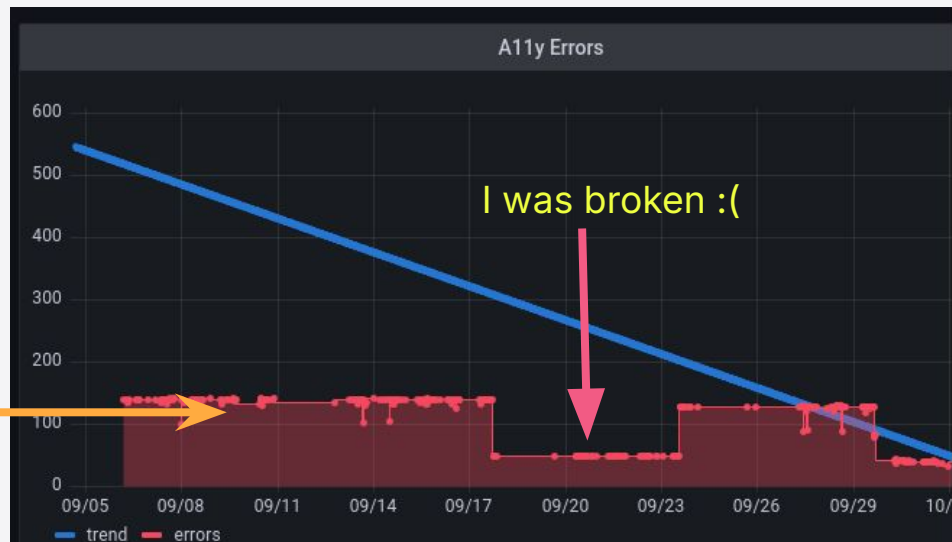
Page Errors

http://localhost:3001/login	1 errors	0 warnings	0 notices
http://localhost:3001/?orgId=1	7 errors	0 warnings	0 notices
http://localhost:3001/d/O6f11TZWk/panel-tests-bar-gauge?orgId=1	2 errors	0 warnings	0 notices
http://localhost:3001/d/O6f11TZWk/panel-tests-bar-gauge?orgId=1&editview=sett...	10 errors	0 warnings	0 notices
http://localhost:3001/?orgId=1&search=open	11 errors	0 warnings	0 notices
http://localhost:3001/alerting/list	1 errors	0 warnings	0 notices
http://localhost:3001/datasources	0 errors	0 warnings	0 notices
http://localhost:3001/org/users	0 errors	0 warnings	0 notices
http://localhost:3001/org/teams	0 errors	0 warnings	0 notices
http://localhost:3001/plugins	0 errors	0 warnings	0 notices
http://localhost:3001/org	0 errors	0 warnings	0 notices
http://localhost:3001/org/apikeys	1 errors	0 warnings	0 notices
http://localhost:3001/dashboards	5 errors	0 warnings	0 notices

Local HTML report

Struggles

1. Gap knowledge in technical CI topics
2. Flakiness on Pa11y



What's next ?



- Add more URL's to test using Pa11y
- Fix existing A11y issues
- Continuing working towards an A11y Culture



Is Pa11y CI going to catch all a11y issues?

No, it's estimated that automated tools only catch 20% of a11y errors are detectable

On A11y Quest make sure you bring:

- Make sure we measure where you are
- Work with an amazing team, you will need support
- Make sure you have an instance available on CI
- Don't have skills on how CI works? Dare to learn
- Start small, only few urls
- Be patience



Remember:

A11y is a
Group
Effort



Where you can find me,



axelavargas



axelav