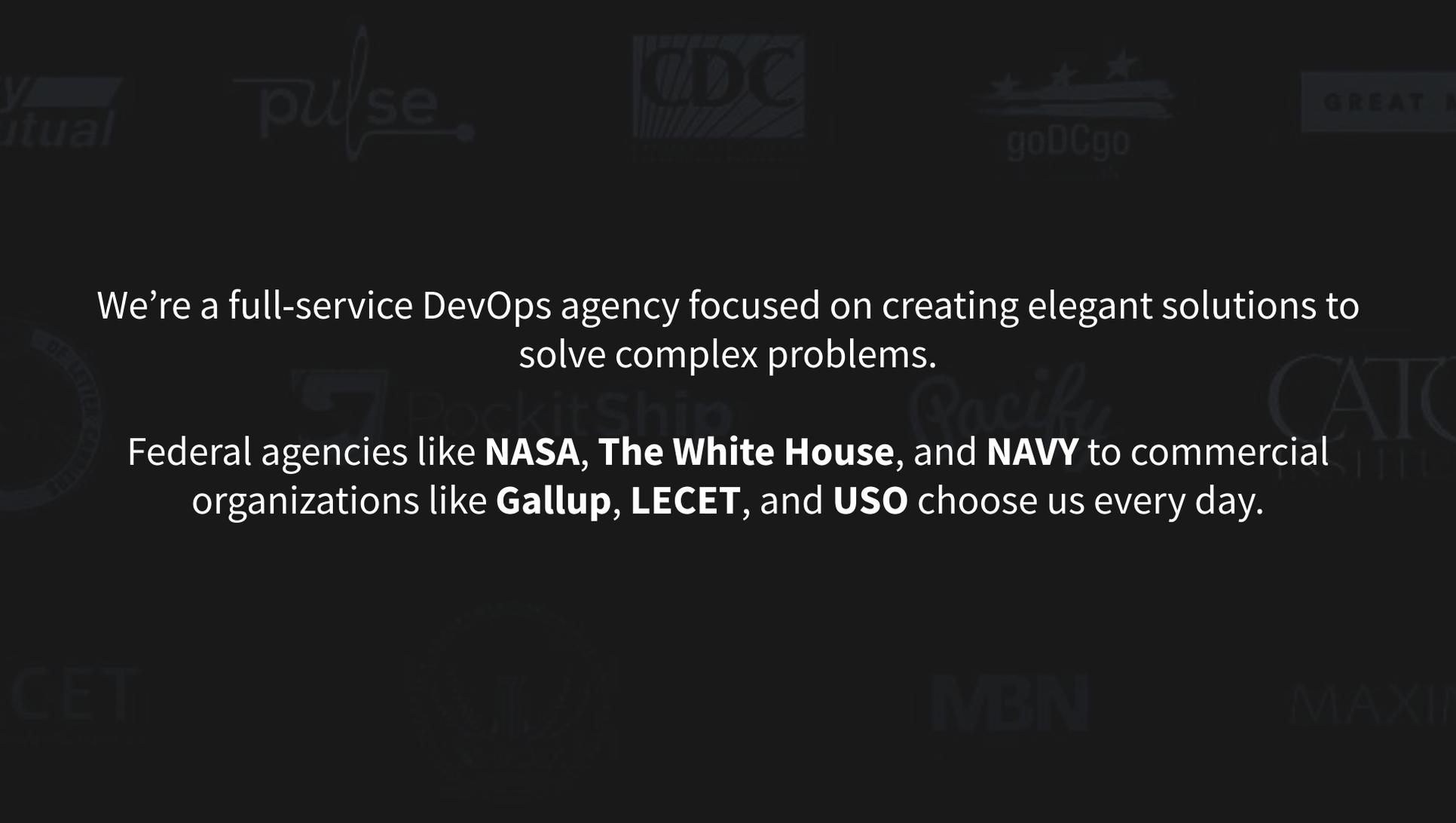


DRUPAL GOVCON 2020

Planning QA



We're a full-service DevOps agency focused on creating elegant solutions to solve complex problems.

Federal agencies like **NASA**, **The White House**, and **NAVY** to commercial organizations like **Gallup**, **LECET**, and **USO** choose us every day.

EDUARDO



- Quality Assurance Director
- Improving productive processes, pushing automation forward and raising QA Standards
- Dogs and Sports



PLANNING YOUR DRUPAL QA

How to tackle a Monster?



AGENDA

- Introduction
- Why is Drupal a Monster?
- Plan, plan, and then plan a bit more!
- OK: Now **do it!**
- Conclusion



INTRODUCTION



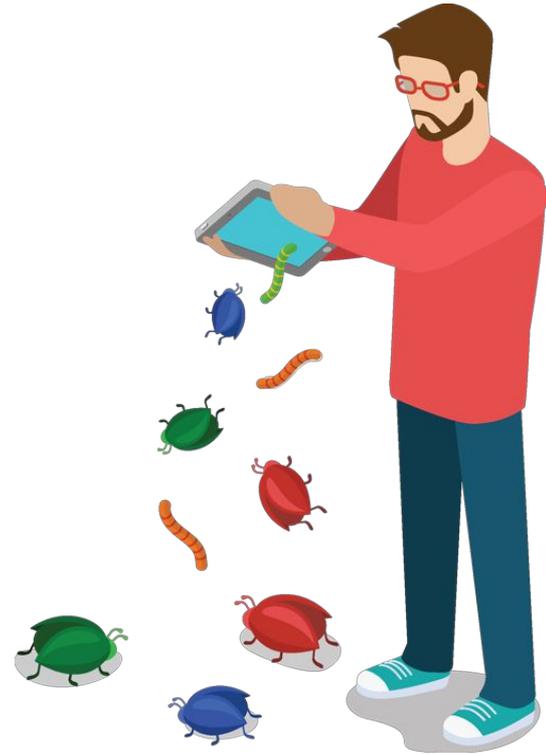
QA DUTIES

Outside of testing?

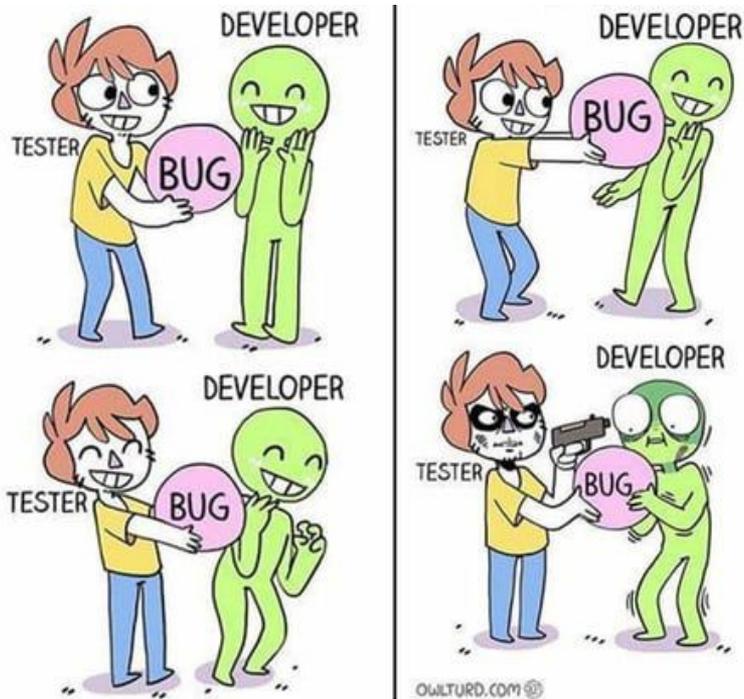
- Reporting:
 - Internal
 - To client
- Following up on Issues
- Demos
- Artifact Creation
- Handling UAT
- Keeping up with BRDs
- Being an Early Warning System
- Metrics
- Automation:
 - CI Integration



A DIFFICULT TASK INDEED!



A DIFFICULT TASK INDEED!



A DIFFICULT TASK INDEED!



DRUPAL

Mobomo

- Amazing Partners
- Experienced Clients
- Highly Skilled Assets



**EVEN WITH THOSE CIRCUMSTANCES,
PLANNING QA IS STILL NO JOKE!**



BUGS ARE NOT EVIDENT!

Requirement verification is **complex**

Select all squares with **bugs**
If there are none, click skip



```
function _(_0x2391x4) {
  return document[_0x6675[12]][_0x2391x4]
};

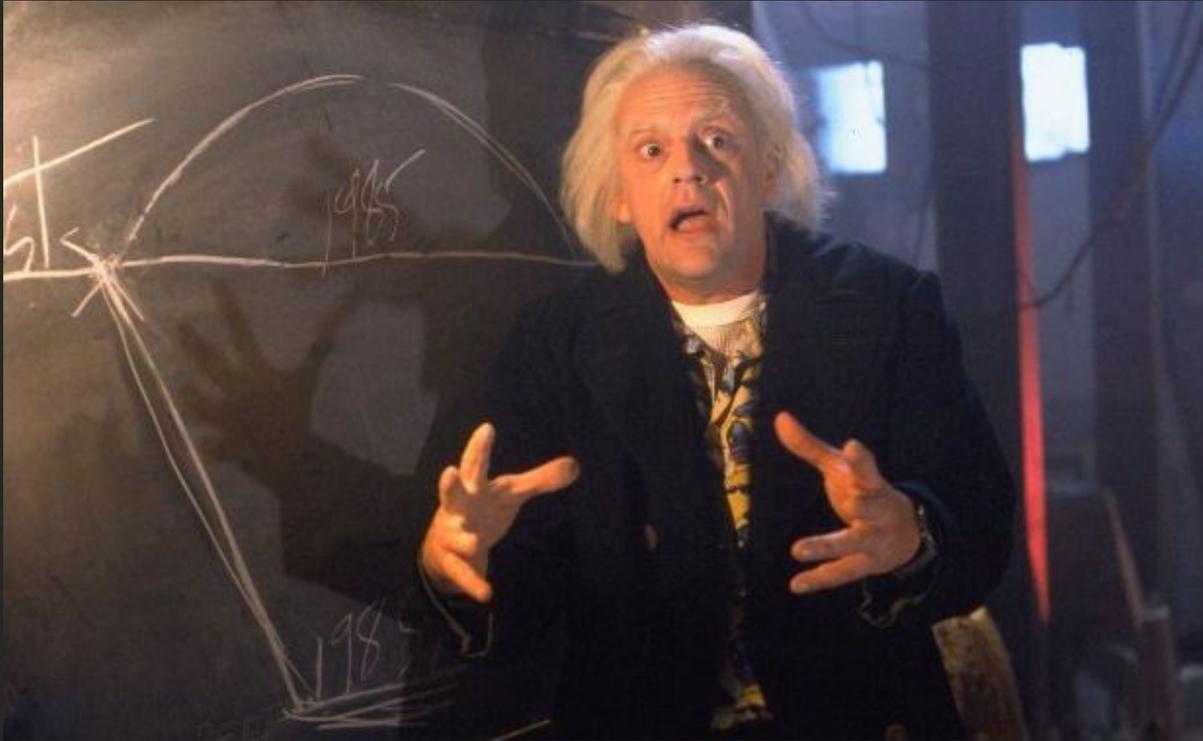
function launch() {
  var _0x2391x6 = 0;
  _(_0x6675[14]][_0x6675[13]] - _0x6675[15];
  _(_0x6675[14]][_0x6675[17]][_0x6675[16]] = _0x6675[19];
  _(_0x6675[21]][_0x6675[20]] - _0x6675[22] + file - _0x6675[23]
  prev = curr
  _(_0x6675[24]][_0x6675[13]] - _0x6675[11];
  setInterval(function () {
    if (_0x2391x6 == 0) {
      $[_0x6675[30]][_0x6675[22] + file + _0x6675[25], functi
      if (_0x2391x7 == _0x6675[26]) {
        _(_0x6675[14]][_0x6675[13]] = _0x6675[27];
        _(_0x6675[18]][_0x6675[17]][_0x6675[16]] = _0x6
        _(_0x6675[21]][_0x6675[20]] = _0x6675[11];
        _(_0x6675[21]][_0x6675[20]] = _0x6675[22] + fl
        _0x2391x6 = ;
        prev = _0x6675[11];
        clearInterval();
        _(_0x6675[24]][_0x6675[13]] = _0x6675[29]
      }
    }
  } else {
    clearInterval()
  }
}, 10000)

function showInfo(_0x2391x9) {
  prev = (_0x6675[31]][_0x6675[13]];
  _(_0x6675[31]][_0x6675[13]] - _0x6675[32] + _0x2391x9 + _0x6675
  curr = (_0x6675[31]][_0x6675[13]]
};
```



WHY IS DRUPAL A MONSTER?





ESTIMATING EFFORT



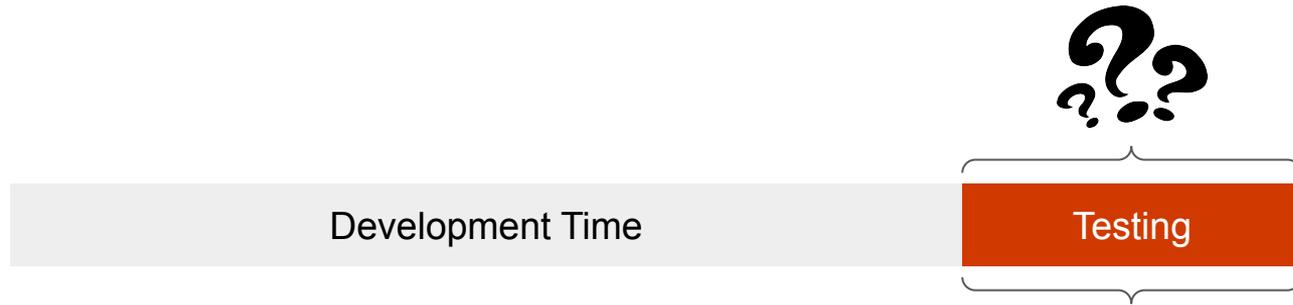
ESTIMATING EFFORT

Development Time

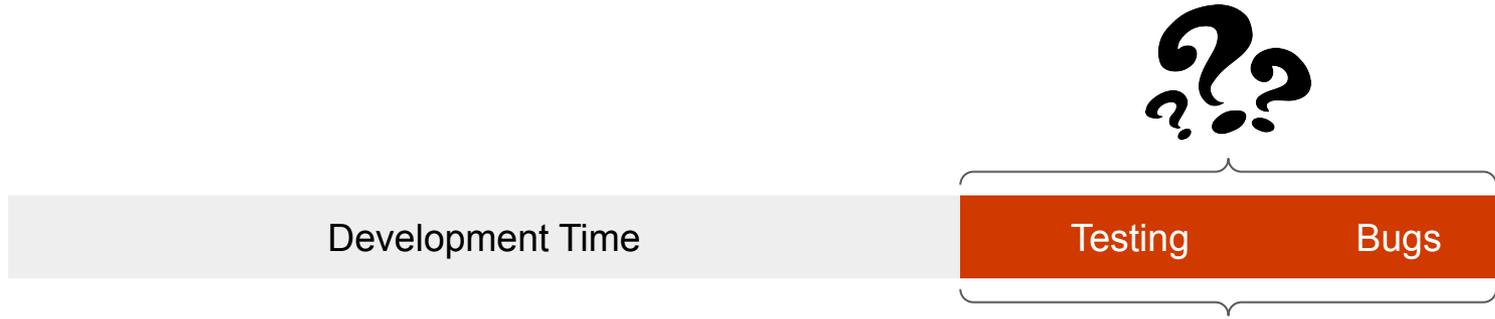
Testing



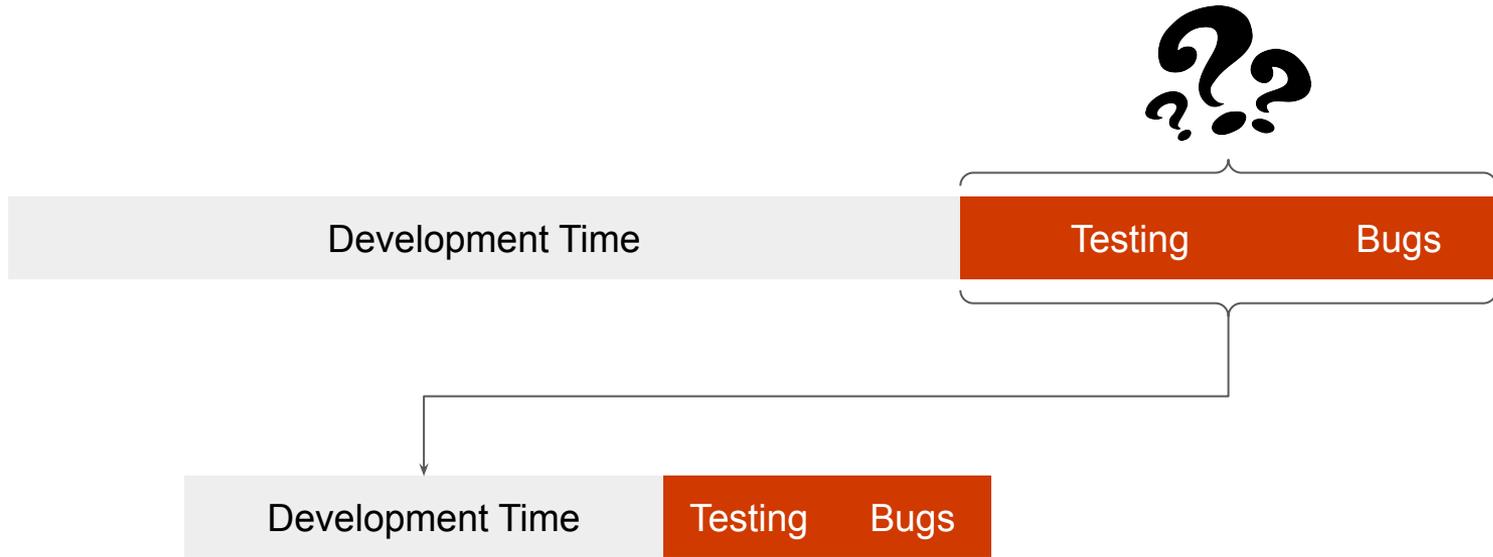
ESTIMATING EFFORT



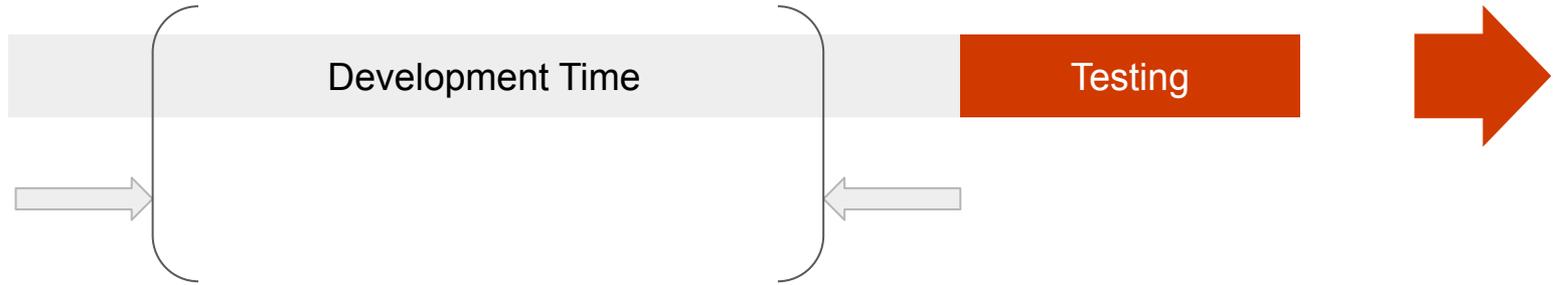
ESTIMATING EFFORT



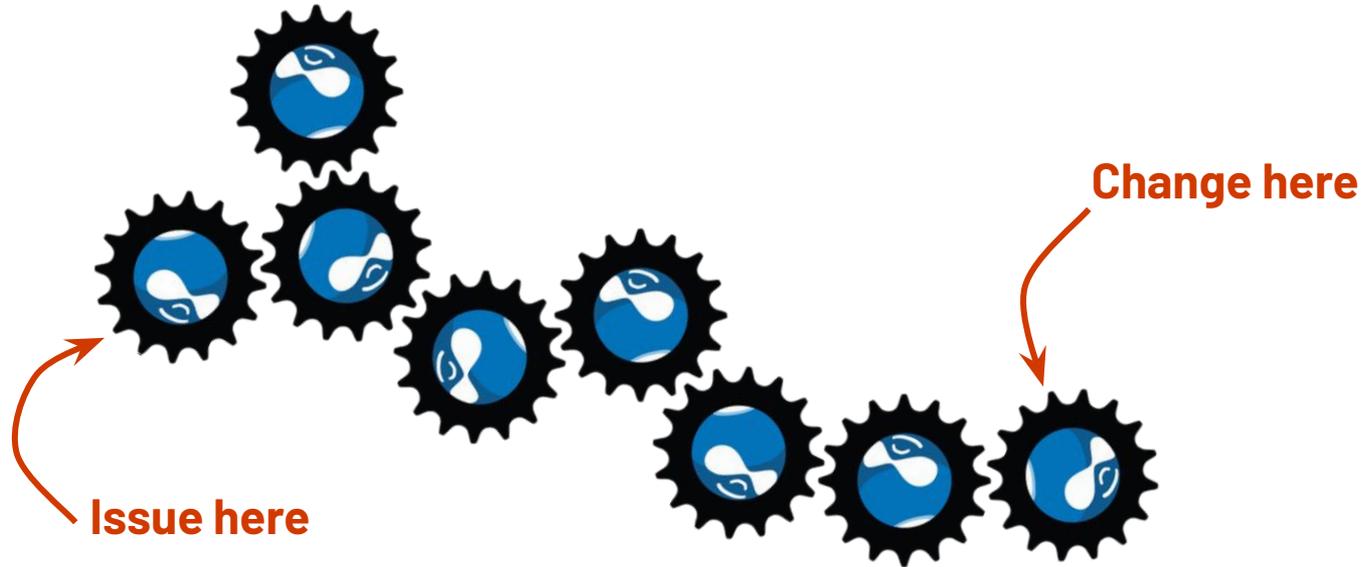
ESTIMATING EFFORT



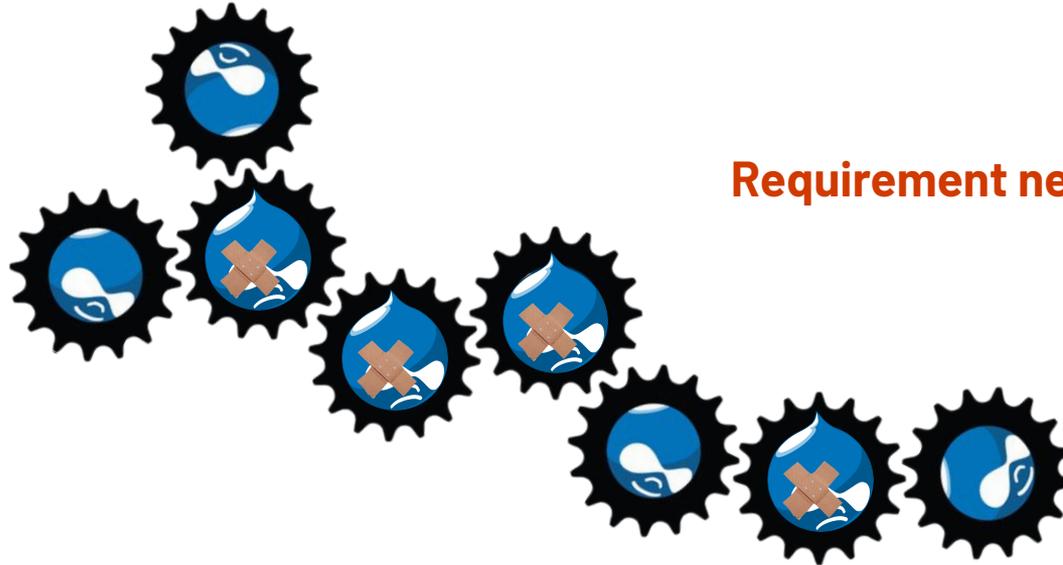
ESTIMATING EFFORT IN DRUPAL



ESTIMATING EFFORT IN DRUPAL



ESTIMATING EFFORT IN DRUPAL



Requirement needs to change



ESTIMATING EFFORT IN DRUPAL

Custom code can be a **nightmare** to keep stable.



ESTIMATING EFFORT

For QA

- Difficult task by itself
- Drupal increases the difficulty
- Estimate for the worst case scenario



ESTIMATING EFFORT

For QA

- Difficult task by itself
- Drupal increases the difficulty
- ~~■ Estimate for the worst case scenario~~



You'll never get it!



TESTING & DEVELOPMENT SUPPORT



SANITY TESTING

Making sure everything is still fine.

- Development has a fast Pace & requires more QA
- Increased Proximity Testing time
- Increased Regression Time



PLAN, PLAN, THEN PLAN A BIT MORE!



WHAT IS A TEST PLAN?

A test plan is a **comprehensive guide to your testing process** that defines the **strategy** that will be used to verify that the product or system is developed **according to its specifications and requirements.**



TEST PLAN

Why do we need one?

- Document and share the testing approach and scope
- Set expectations with your stakeholders
- Activities your team will NOT perform
- Delivery dates and process
- Uncover any missing elements
- Forecast and plan for adequate resource support



TEST PLAN

Start date?

Get involved with a project as early as possible.

- Understand the project's scope and high level requirements better
- The project itself and the challenges it faced will be better understood by the Tester.

Start with?

Start by creating a draft Test Plan

- Awareness of the Testing needs
- Risks, Issues and Dependencies
- Major impediments
- Feedback



TEST PLAN LIFE CYCLE

Creation

Create Test Plan

- SCOPE
- TIMELINE
- METRICS

Execution

Process Tracking

- Reports (daily weekly)
- Meetings
- Ticketing system

Reporting

Document the end result of the process:

- Test Report
- Known Issue & Bug Report

NOTE: Deliverables are stated in the Test Plan



TEST PLAN / TEST STRATEGY

One or both?

Depending on the **size** and **scale** of the project there might be a need to maintain a **separate** Test Strategy and Test Plan.



TEST PLAN / TEST STRATEGY

One or both?

- **Test Strategy** describes elements **common to all the Test initiatives** .

- **Test Plans** target **system or feature being tested**.



TEST PLAN AND/OR STRATEGY

Test Plan

Test Strategy

TEST STRATEGY

Test Plan

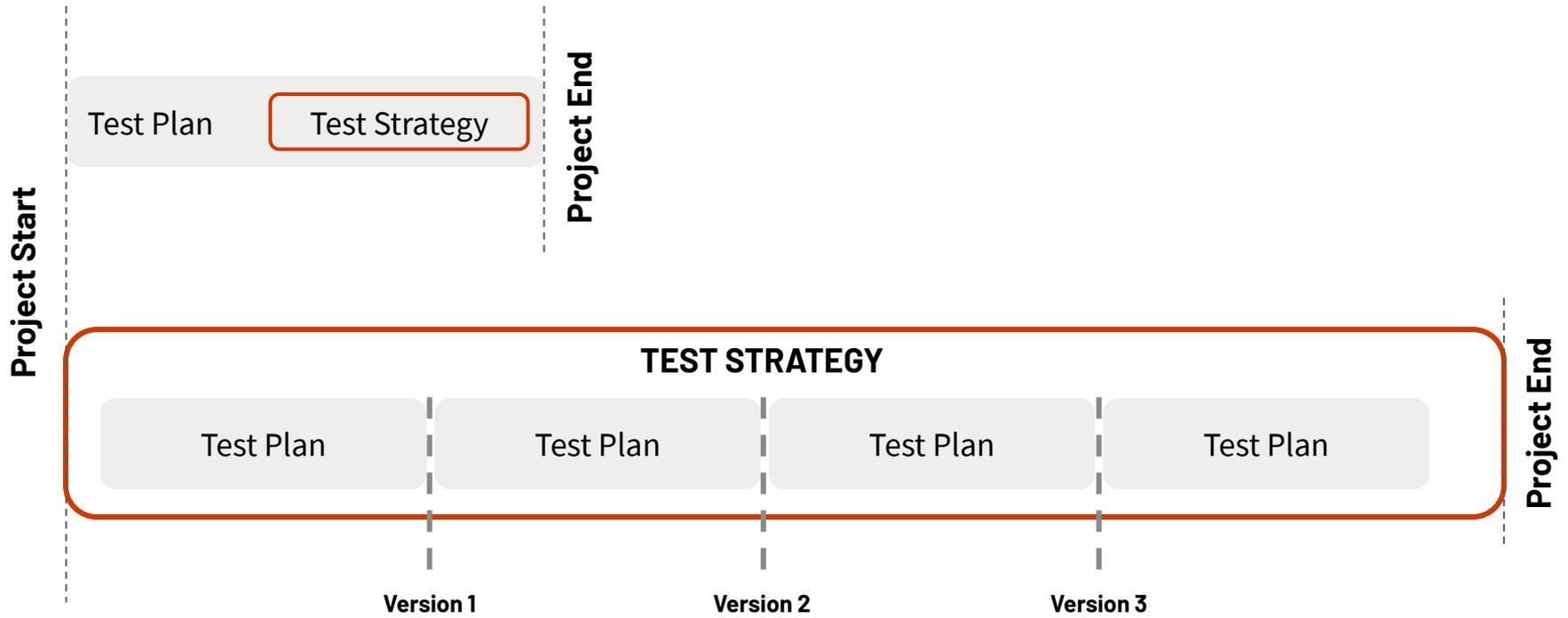
Test Plan

Test Plan

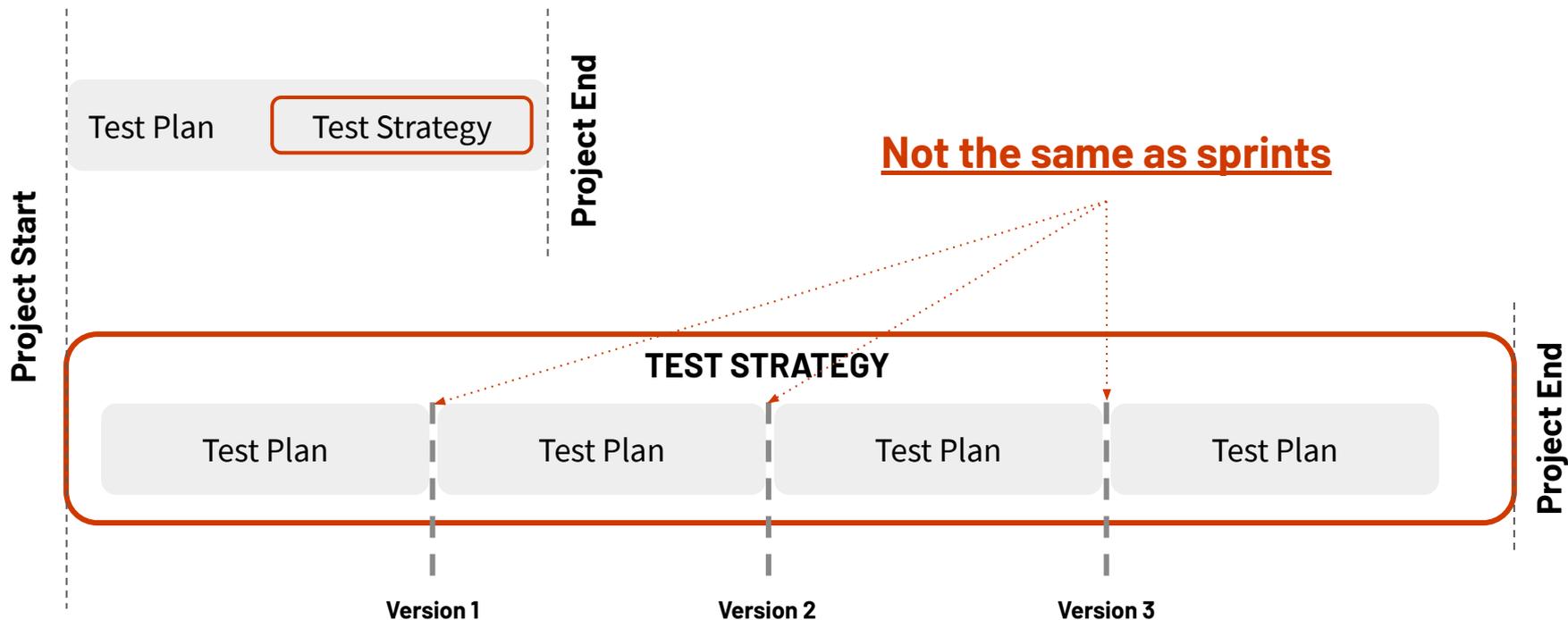
Test Plan



Test Plan and/or Strategy



Test Plan and/or Strategy



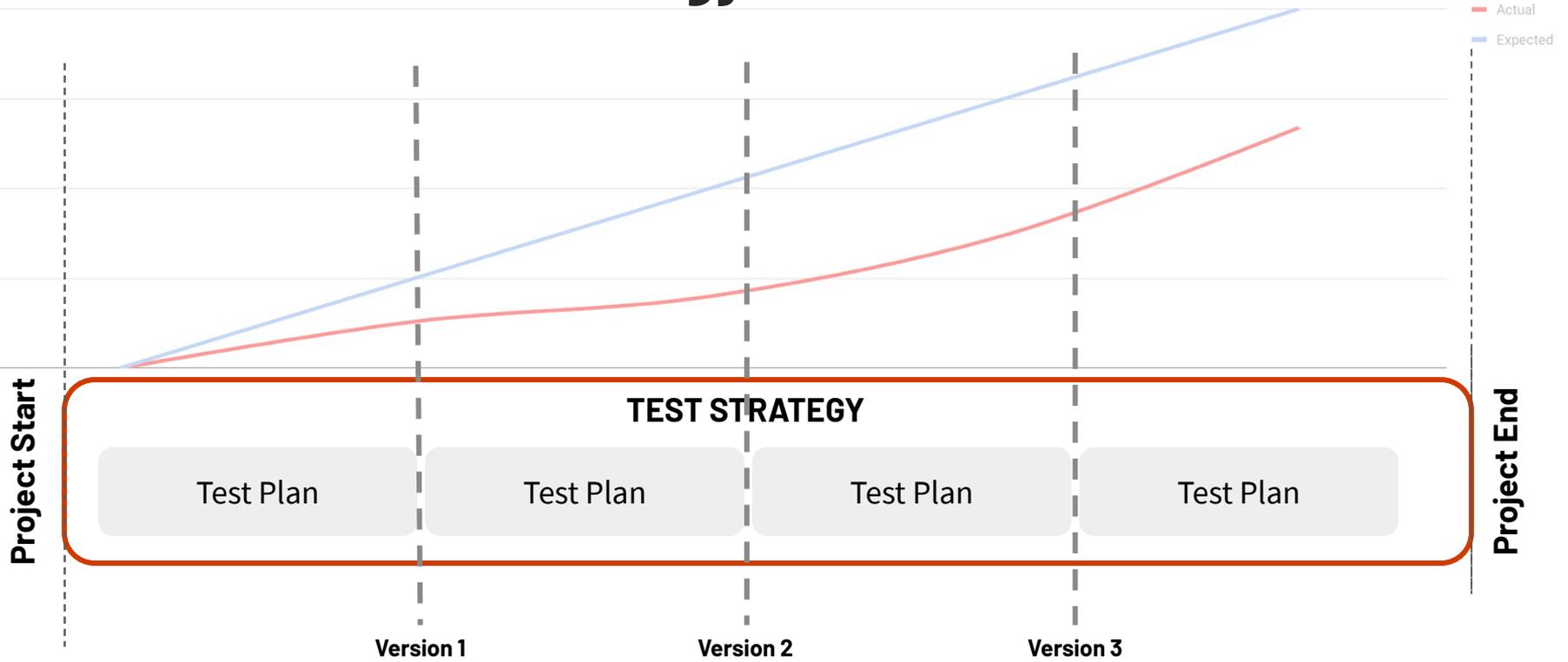
REGRESSIONS

Less regressions

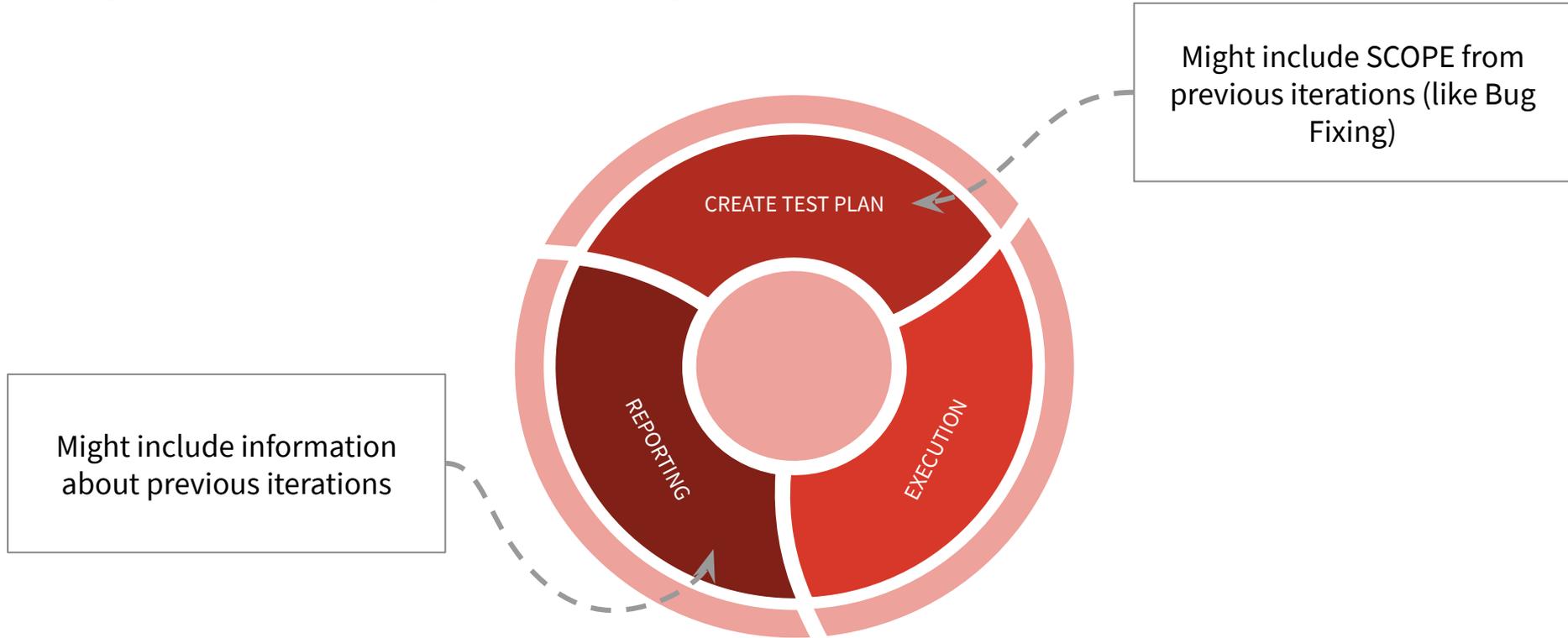
Reducing the amount of regressions helps make a more efficient use of QA time!



Test Plan and/or Strategy



MULTIPLE TEST PLANS



OK: NOW DO IT!

How to tackle a Monster?



WORK SMART, NOT HARDER



BUG FIXING

What NOT to fix (right away).

- Fixing things only once
- Targeting the essential early on



Prioritization

Use severity Ratings to push fixes forward!

- Severity 1 and 2
- Severity 3 and 4



Prioritization

Use severity Ratings to push fixes forward!

- Severity 1 and 2
(high priority)
- Severity 3 and 4
(low priority)



PAY SPECIAL ATTENTION TO BLOCKERS

QA SAYS:



YOU SHALL NOT PASS!



BUGS, DRUPAL AND CUSTOM CODE



CHANGE REQUESTS

Drupal's biggest headache.

- As usual try to Avoid them!
- Even in an agile environment
- Understand Risks



CHANGE REQUESTS

Risks.

- Module does not support it
- Might include refactoring to change module or worse...
- Custom Code



CHANGE REQUESTS



PREFERRED TESTING TYPES



DRUPAL BENEFITS

Supporting QA.

- Awesome Community
- Available modules
- Modules come tested out-of-the-box
- Stable base platform



TESTING FOCUS

Main sources of error.

- Requirement verification
- Regression
- User Flows
- Performance



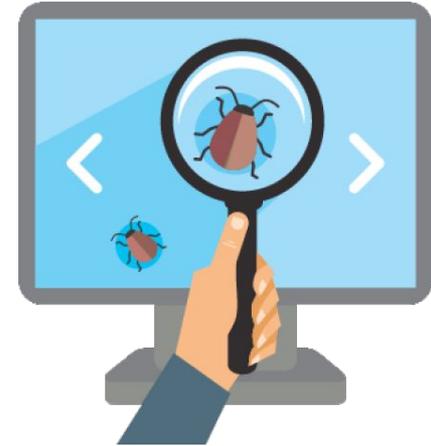
REQUIREMENT VERIFICATION

Sanity Testing

- Acceptance Criterias
- Ticket Writing Good practices

Proximity Testing

- Closely Related Functionality



REGRESSIONS

Reduce Stress by Automating early!

- Use a BDD Testing Framework
- Selenium based solution
- Content Creation
- Continuous support



USER FLOWS

Functional Testing

- Gherkin syntax
- User Story Syntax
- Currently industry standard
- Easy validation



PERFORMANCE

Make use of automation.

- Is caching enough?
- Front end load testing
- Backend concurrency
- Measure times to identify Impact
- Hardware deficiencies



DRUPAL MIGRATION



MIGRATION CHALLENGES

- Templates and Theming
- Taxonomy
- Media hosting
- Migration Times!
- Handling final Deployment



TESTING FOCUS

In addition.

- Visual Checks
- Content Checks



COMPARE CONTENT

- Compare text
- Compare elements
- Compare media (*Don't forget alt texts*)



AUTOMATION IS ESSENTIAL FOR LARGE SCALE DATA MIGRATION!



METRICS



METRIC FOCUS

Main aspects to consider.

- Presence of error is usually related to requirement definition
- Load & Performance testing is as good way of measuring impact
- Target Ticket Quality



CONCLUSION



DRUPAL IS NOT A MONSTER!

Just a challenge.

When it comes to QA effort planing is the way to go... **ALWAYS!**



DRUPAL ALSO HELPS A LOT IN AREAS THAT ARE INHERENTLY PROBLEMATIC FOR QA!

The problems is tackling it the same way you would target other non-CMS projects!

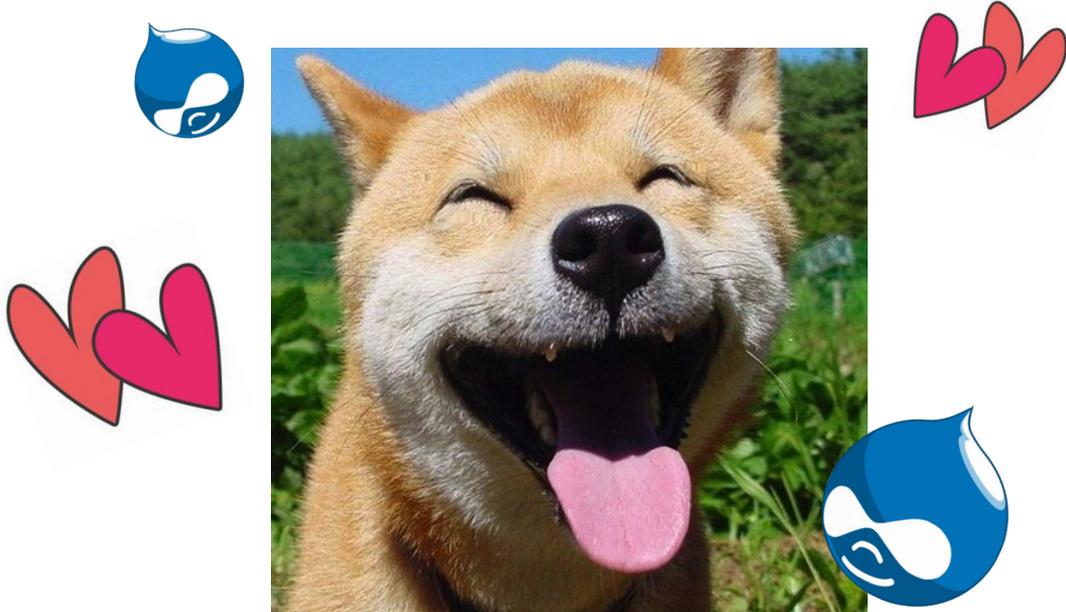
And take advantage of Drupal's Strengths.



AUTOMATION IS THE WAY TO GO!



DRUPAL ALSO HELPS A LOT IN AREAS THAT ARE INHERENTLY PROBLEMATIC FOR QA!



QUESTIONS?





THANK YOU



Thank You Gracias Merci Danke 谢谢 ありがとう

