Software Product Design and Development I

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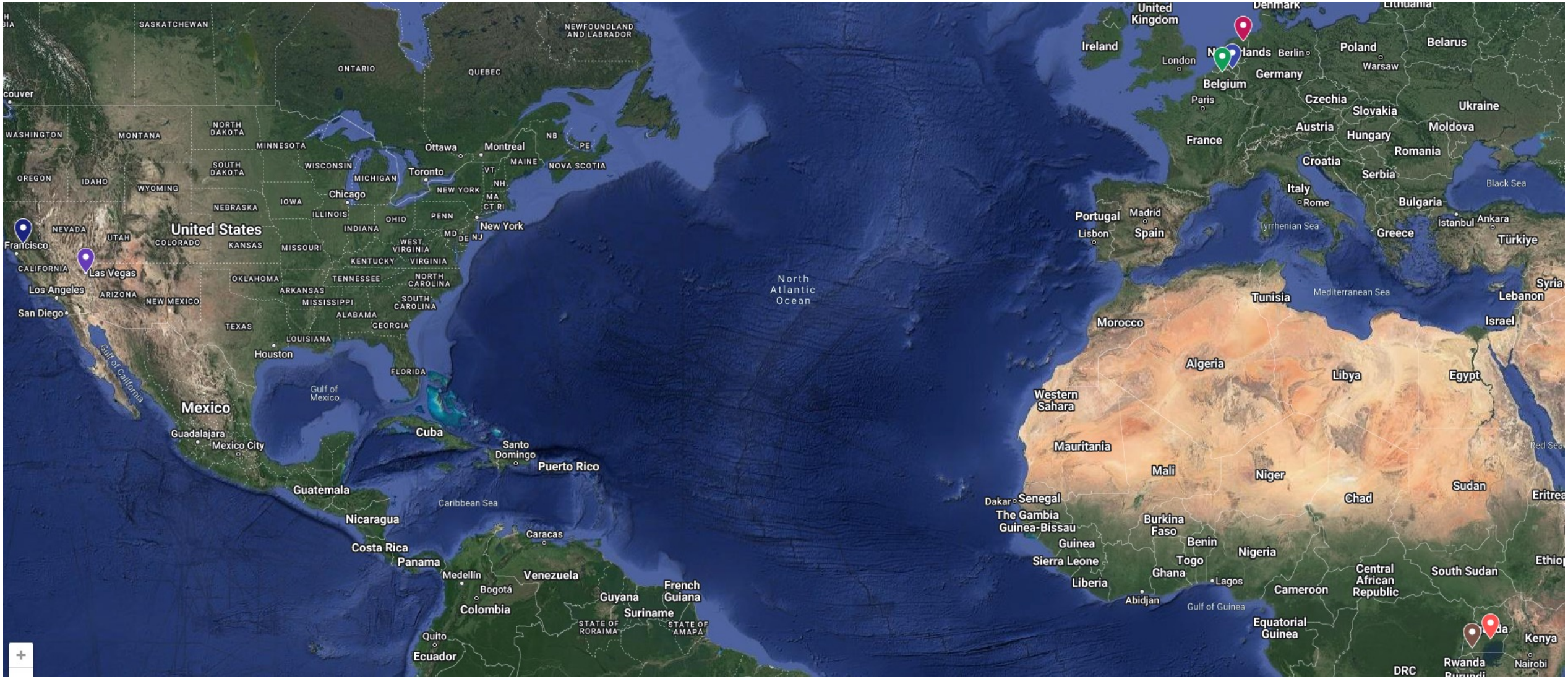
My Journey to UNLV



Administration

- Go to - https://johnxu21.github.io/teaching/CS472/

CSC 472/672 AND OTHER COURSES

- Prerequisites:
  - CS 326 - Programming Languages, Concepts and Implementation
  - CS 370 - Operating Systems
- Follow-up Class - CSC 473/673 – Optional class


2nd
TIME

Software Product Design and Development I

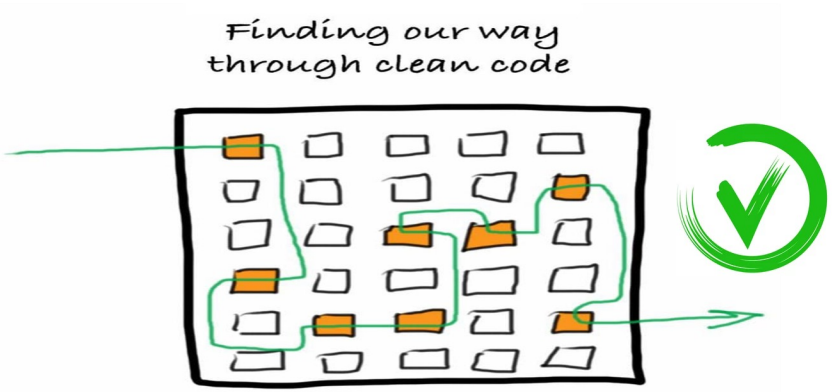
High Quality Software

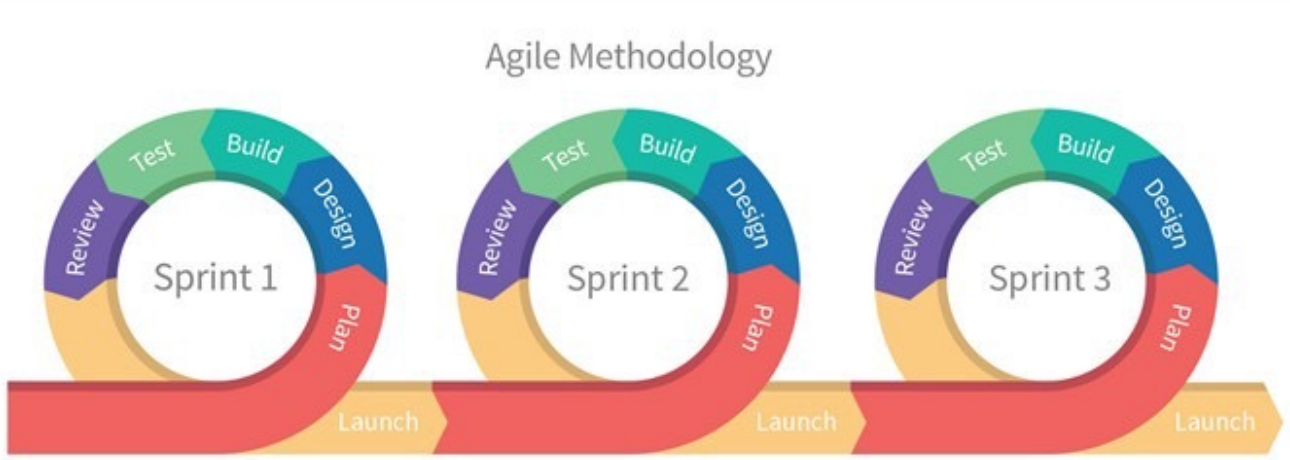
Flexible

Reusable

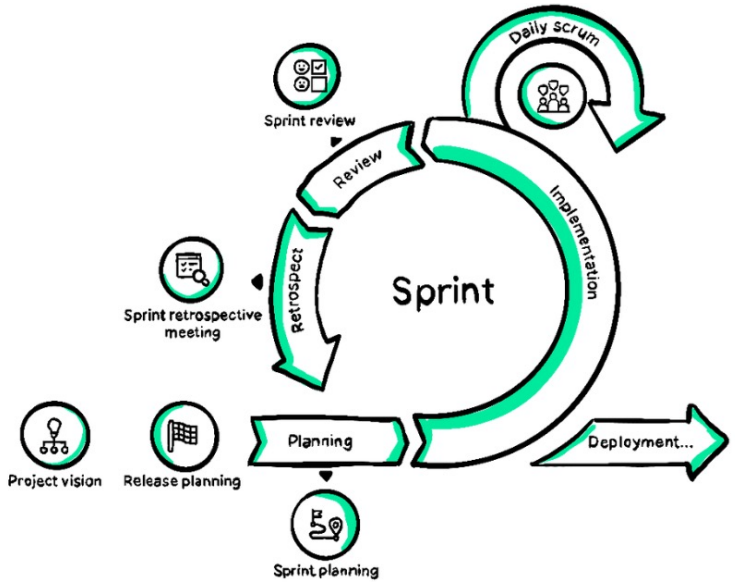
Maintainable

Collaboratively





Design Portfolio I Design Portfolio II Design Portfolio III



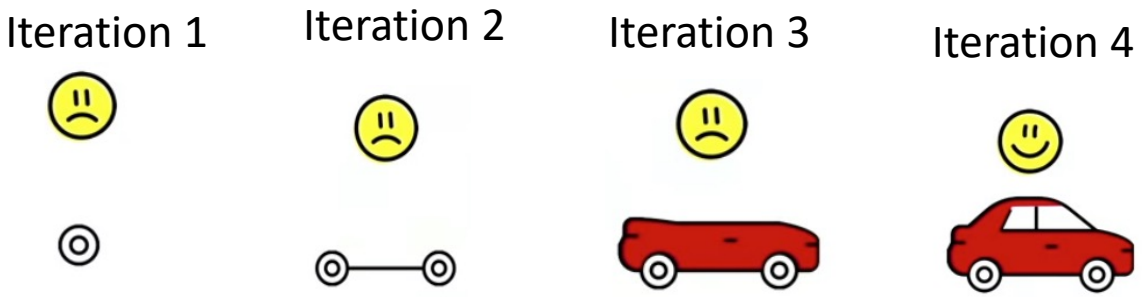
https://lvivity.com/how-to-write-good-code

Minimum Viable product (MVP)

- During the DP we will focus on developing a MVP
- An MVP is the minimal thing that you can do to test a value hypothesis and gain learning and understanding
- MVP is focust on learning, not delivery
- At the end of each MVP, you decide whether to pivot or persevere
- Let us explain this with an example

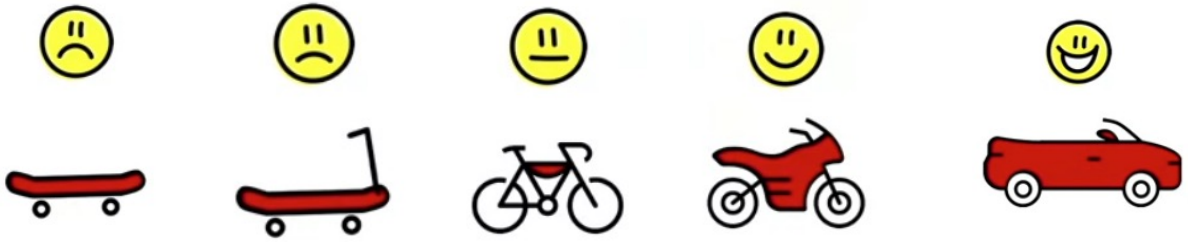
Minimum Viable product (MVP)

Custome wants a red car



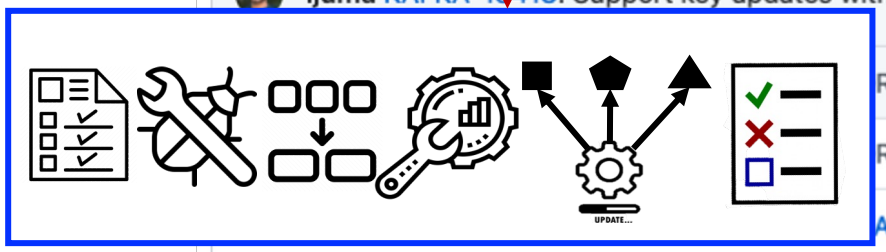
No feedback

- Customer got exactly what they asked for
  - the dev team was just following a plan.
- Team does not understand the value of MVP



Valuable feedback on every iteration

- Customer got what they desired
  - Worked iteratively with the dev team.
- developed something a little bit different but it's closer to what the customer really wanted.
- Giving the customer what they really want is the main purpose of delivering an MVP.
- A minimal viable product is a tool for learning.



apache / kafka Public

Watch 1.1k | Fork 11.3k | Star 21.5k

Pull requests 953 Open ✓ 11,016 Closed

ijuma KAFKA-1[illegible]418: Support key updates with TLS 1.3 (#11966) ... 5aed178 12 hours ago 9,874 commits

	R: Adding kafka-storage.bat file (similar to kafka-storage.sh) fo...	16 days ago
	R: Fix class comparison in `AlterConfigPolicy.RequestMetadata...	8 days ago
	[illegible]966)	12 hours ago
config	MINOR	nfiguration files...	last month
connect	KAFKA	dLog using older...	5 days ago
core	MINOR	hBufferedRecei...	21 hours ago
docs	KAFKA	3)	22 hours ago
examples		s in examples README (#855...	2 years ago
generator/src		agged string fields in messag...	7 months ago
gradle		(#11885)	14 days ago
jmh-benchmarks		(#11870)	19 days ago
licenses	MINOR: Add missing licenses and update versions in LICENSE-binary...		7 months ago

Contributors 884

+ 873 contributors

1.7k

Languages

Java 74.2% Scala 22.7%
Python 2.7% Shell 0.2%
Roff 0.1% Batchfile 0.1%

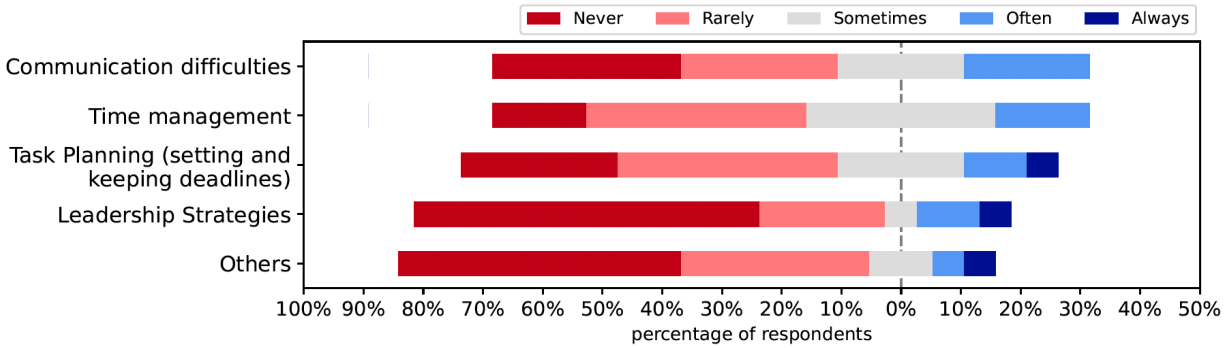
Apache Kafka is a distributed event store and stream-processing platform

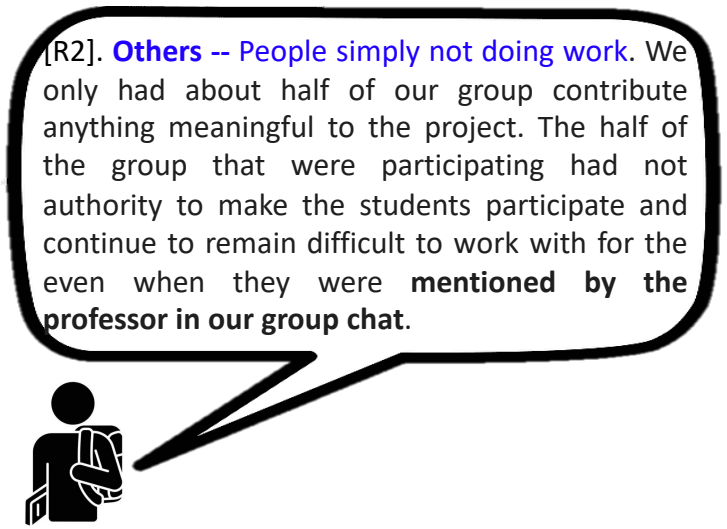
“People-related factors tend to be the greatest challenges—not technology.”

George Spafford,
Senior Director Analyst
at Gartner

Survey Results – Team Challenges

Qn.6: Please rank the following challenges that could have impeded effective teamwork.
Qn.7: If your ranking for "Others" in Qn.7 above was 4 or 5, kindly provide us what it represents.





Weekly tasks questions, answered with checkboxes in response to *This week I have:*
Q1: ☐ Designed a usecase (or a portion of one) ☐ Fixed a bug in the system ☐ Implemented a usecase (or a portion of one) ☐ Written black-box tests ☐ Written automated tests ☐ Other: _____
Q2: ☐ Completed all my assigned tasks ☐ Completed some of my assigned tasks ☐ Asked a teammate for help completing my tasks ☐ Helped a teammate complete a portion of their tasks
Q3: ☐ Met live with my team ☐ Participated in checkins with my team ☐ Opened a pull request and asked my team for feedback on my code ☐ Asked my team for feedback on my non-code work ☐ Reviewed technical artifacts for my teammates

Planning questions, answered with a five-point Likert scale: ○ **Much less** ○ **Less** ○ **About as much as** ○ **More** ○ **Much more**
Q4: This week, I have gotten done __ than I think I should have
Q5: This week, my team overall has gotten done __ than I think we should have
Q6: Next week, I intend to get done __ than I did this week

Collaboration satisfaction questions, answered with a five-point Likert scale: ○ **Strongly disagree** ○ **Disagree** ○ **Neither agree nor disagree** ○ **Agree** ○ **Strongly agree**
Q7: This week, I knew what I needed to get done
Q8: Overall, I think that everyone has been contributing adequately to the success of the project
Q9: In our team we relied on each other to get the job done
Q10: Team members kept information to themselves that should be shared with others
Q11: I am satisfied with the performance of my team
Q12: We have completed the tasks this week in a way we all agreed upon

Miscellaneous questions:
Q13: My progress this week has been impeded by:
☐ Difficulties with technologies or course materials ☐ Demands of other classes ☐ Other personal responsibilities or distractions ☐ Teammates who didn't complete their responsibilities ☐ Communication difficulties with my teammates ☐ Difficulty scheduling tasks so that I wasn't waiting for my team to complete their work ☐ Other: _____ ☐ None

Q14: How do you feel about your team's collaboration process in this project?

What is social coding?

- Open source practice - Open Source for Inner Source
- All repositories are public
- Everyone is encouraged to contribute
- Contribute back via Pull Requests

What problem is social coding solving?

- A component has 80% code of what you need, but 20% is missing features.
- How do you add the 20% missing features?
- You have a decision to make:
  - Do you make a feature request and depend on another team?
  - Do you rebuild 100% of what you need (no dependencies)

Many teams select

- This is a huge waste of resources for any company, but it happens all the time.
- How does adopting social coding principles solve this?

Social coding solution

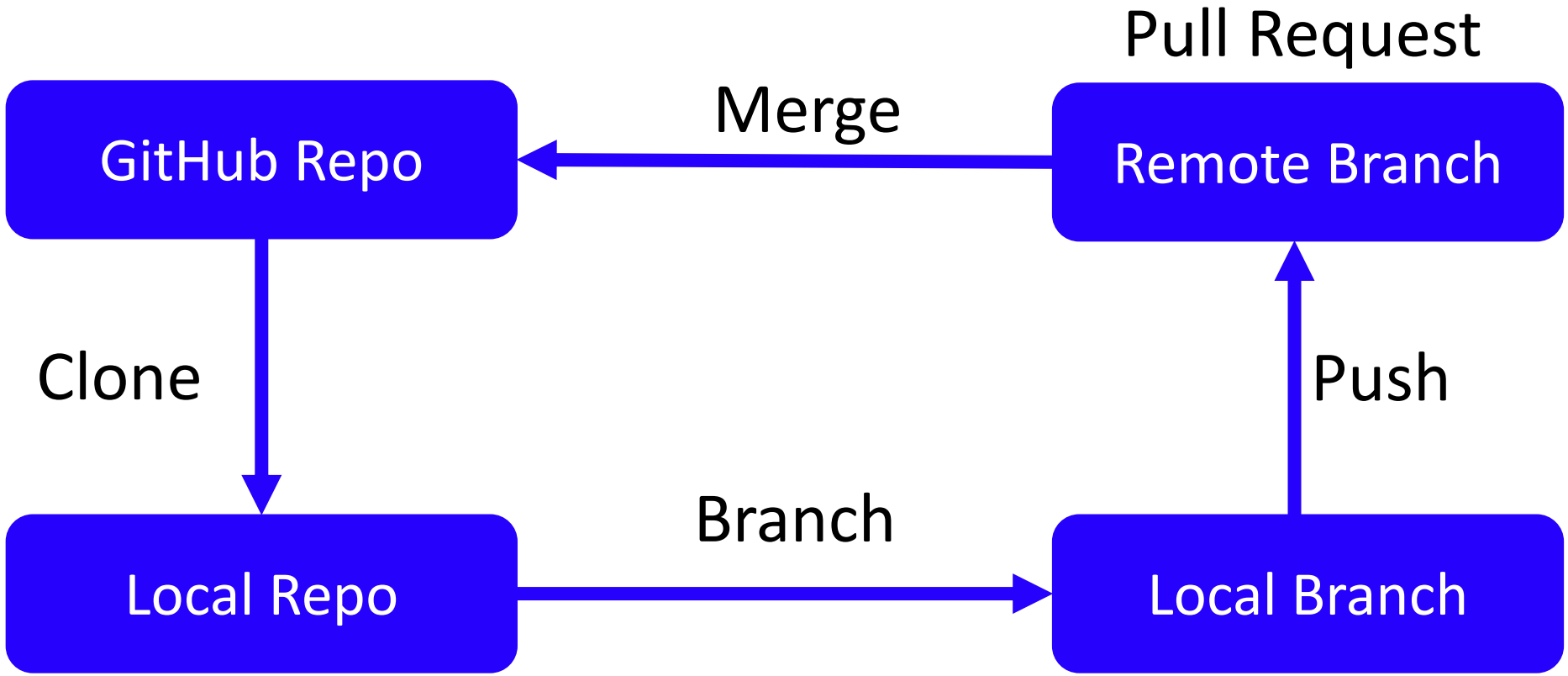
- Discuss with the repo owner
- Agree to develop it
- Open an issue and assign it to yourself
- Fork the code and make your changes
- Issue a Pull Request to review and merge back
- **This is how open source works and how we shall approach this team project**

Git repository guidelines

- Create a repository for a project
- Create a new branch for every issue
- Use a Pull Requests to merge to main
- Every Pull Request is an opportunity for code review

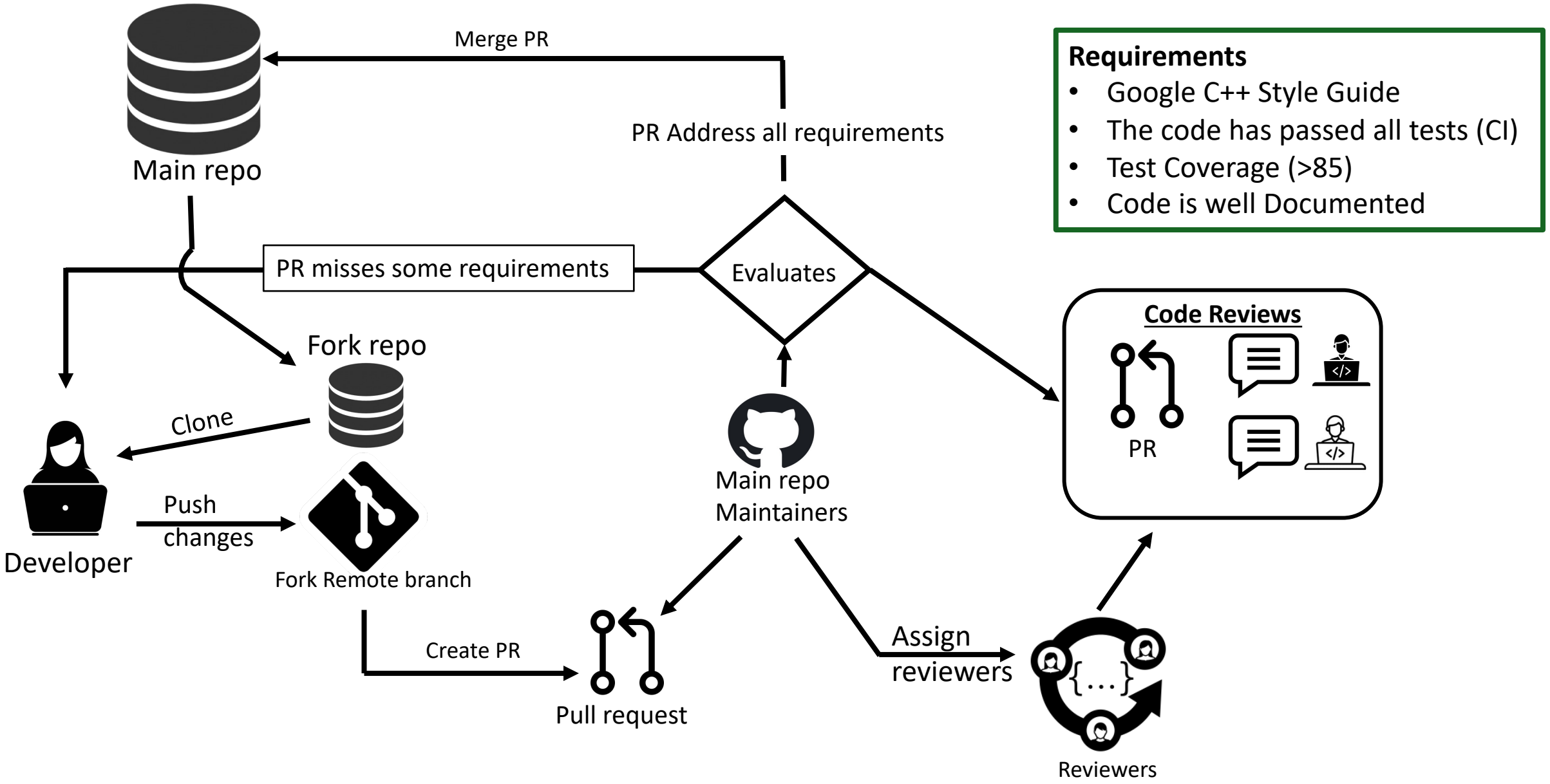
Git Feature branch workflow

Git feature branch workflow



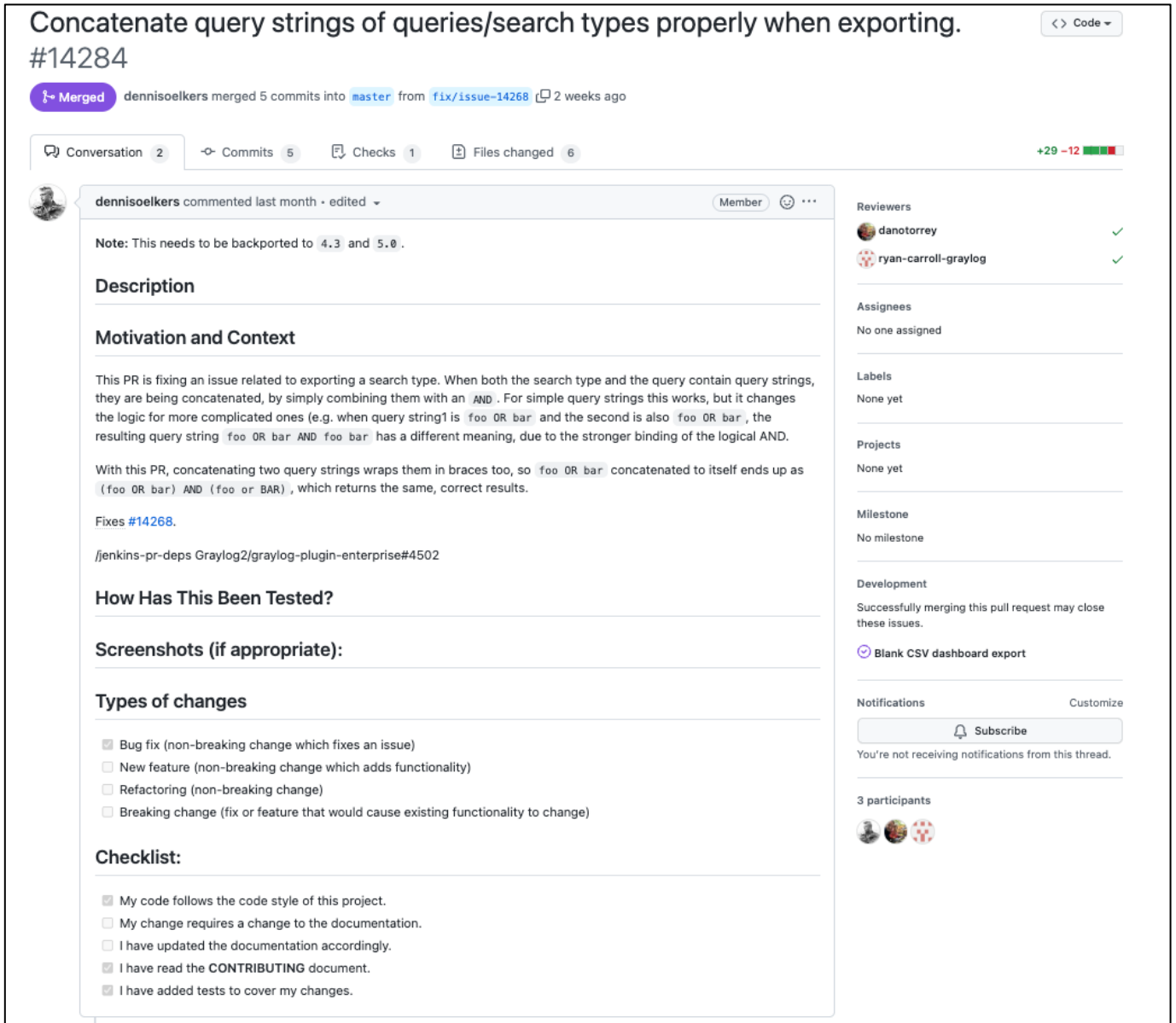
We will employ the git feature branch workflow in our team project

A simple Code Review Workflow



Best Practices Pull Requests Documentation

https://github.com/Graylog2/graylog2-server/pull/14284



Concatenate query strings of queries/search types properly when exporting. #14284

Code

Merged dennisoelkers merged 5 commits into master from fix/issue-14268 2 weeks ago

Conversation 2 Commits 5 Checks 1 Files changed 6 +29 −12

dennisoelkers commented last month • edited Member

Note: This needs to be backported to `4.3` and `5.0`.

Description

Motivation and Context

This PR is fixing an issue related to exporting a search type. When both the search type and the query contain query strings, they are being concatenated, by simply combining them with an `AND`. For simple query strings this works, but it changes the logic for more complicated ones (e.g. when query string1 is `foo OR bar` and the second is also `foo OR bar`, the resulting query string `foo OR bar AND foo bar` has a different meaning, due to the stronger binding of the logical AND.

With this PR, concatenating two query strings wraps them in braces too, so `foo OR bar` concatenated to itself ends up as `(foo OR bar) AND (foo or BAR)`, which returns the same, correct results.

Fixes #14268.

/jenkins-pr-deps Graylog2/graylog-plugin-enterprise#4502

How Has This Been Tested?

Screenshots (if appropriate):

Types of changes

- [ ] Bug fix (non-breaking change which fixes an issue)
- [ ] New feature (non-breaking change which adds functionality)
- [ ] Refactoring (non-breaking change)
- [ ] Breaking change (fix or feature that would cause existing functionality to change)

Checklist:

- [x] My code follows the code style of this project.
- [ ] My change requires a change to the documentation.
- [ ] I have updated the documentation accordingly.
- [x] I have read the **CONTRIBUTING** document.
- [x] I have added tests to cover my changes.

Reviewers
danotorrey ✓
ryan-carroll-graylog ✓

Assignees
No one assigned

Labels
None yet

Projects
None yet

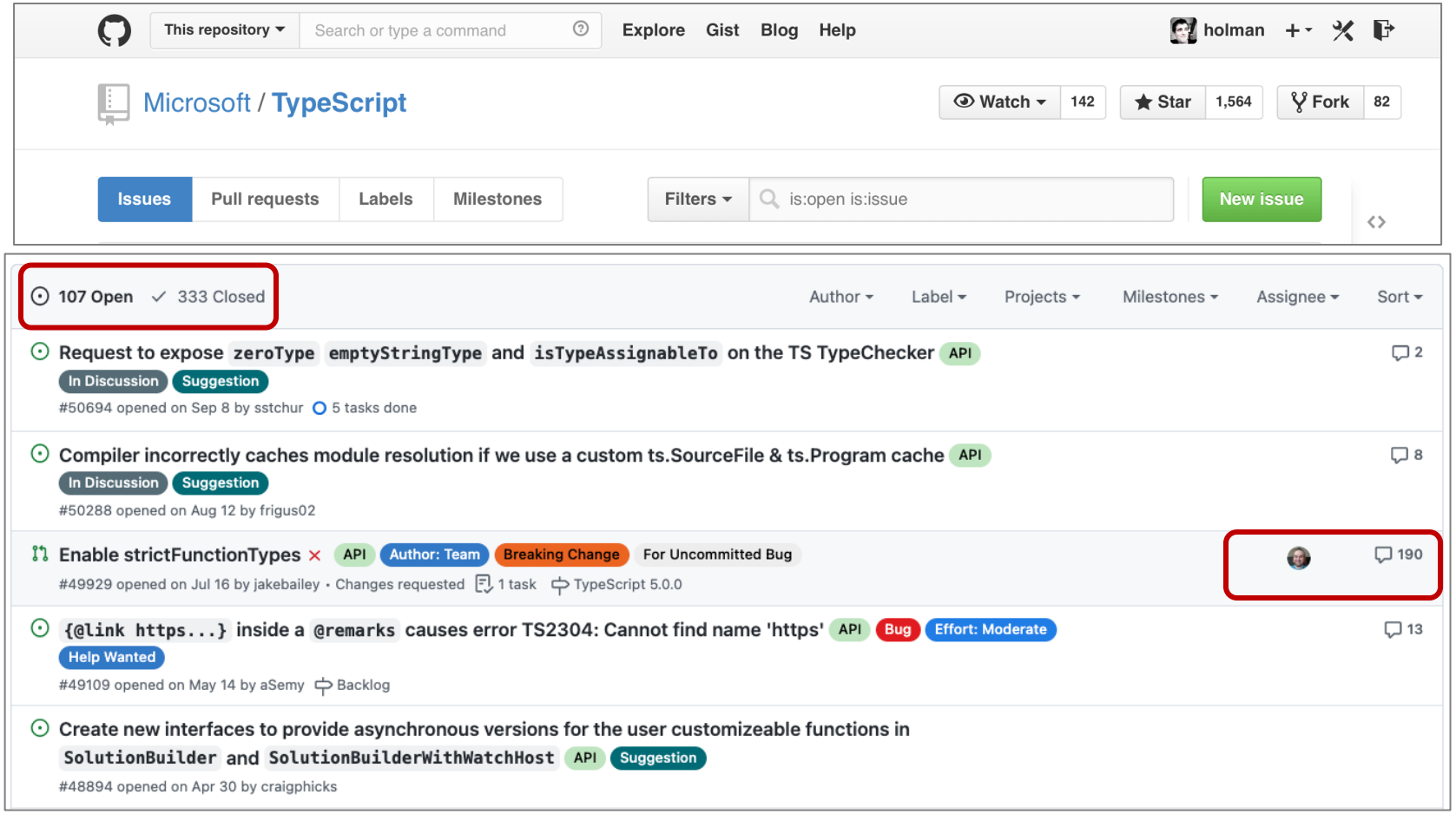
Milestone
No milestone

Development
Successfully merging this pull request may close these issues.
Blank CSV dashboard export

Notifications Customize
Subscribe
You're not receiving notifications from this thread.

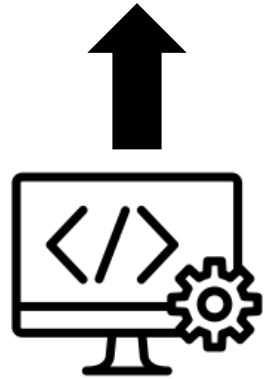
3 participants

Issue Tracker - GitHub



Issues

- Use cases
- Problems to solve
- Features to add
- Documentation to add



Software Project

Testing

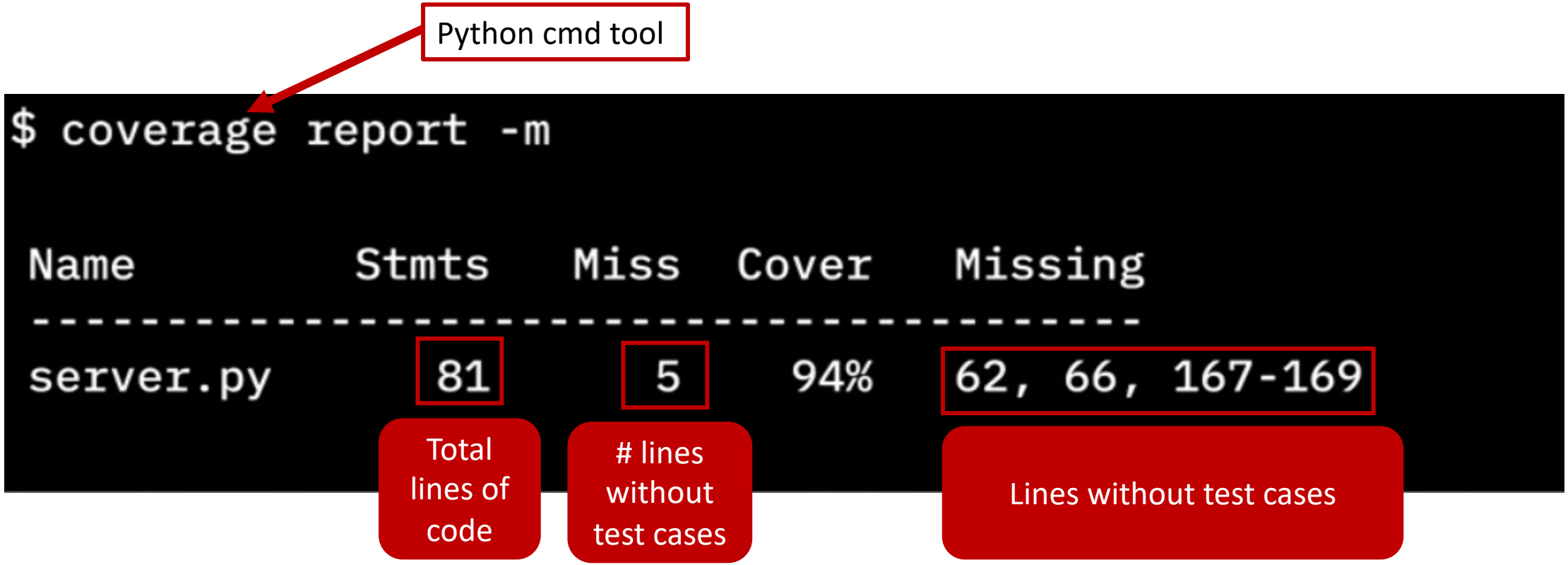
“If it is worth building, it is worth testing.

If it is not worth testing, why are you wasting your time working on it?”

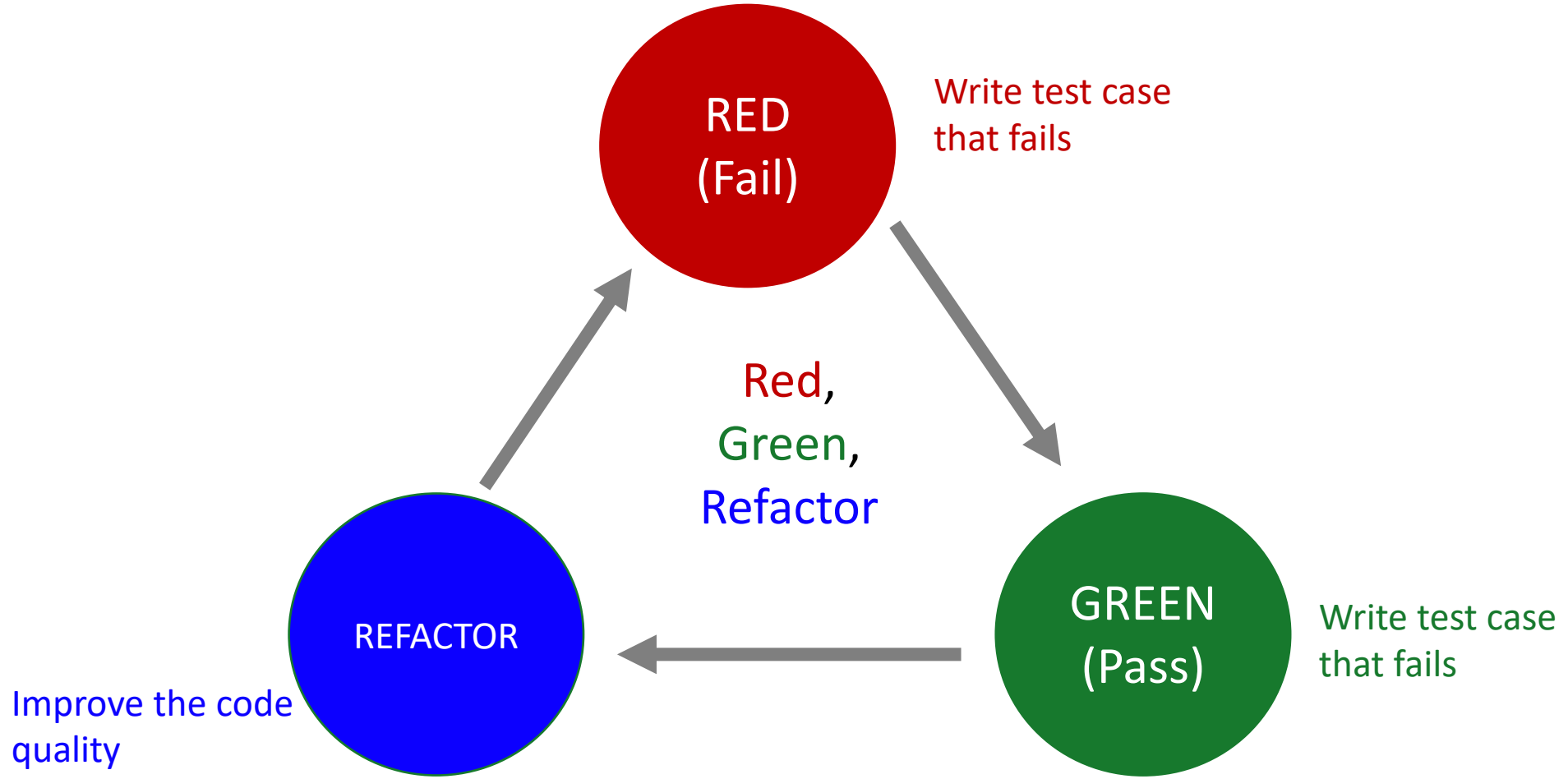
Scott Ambler, agiledata.org

Importance of test coverage

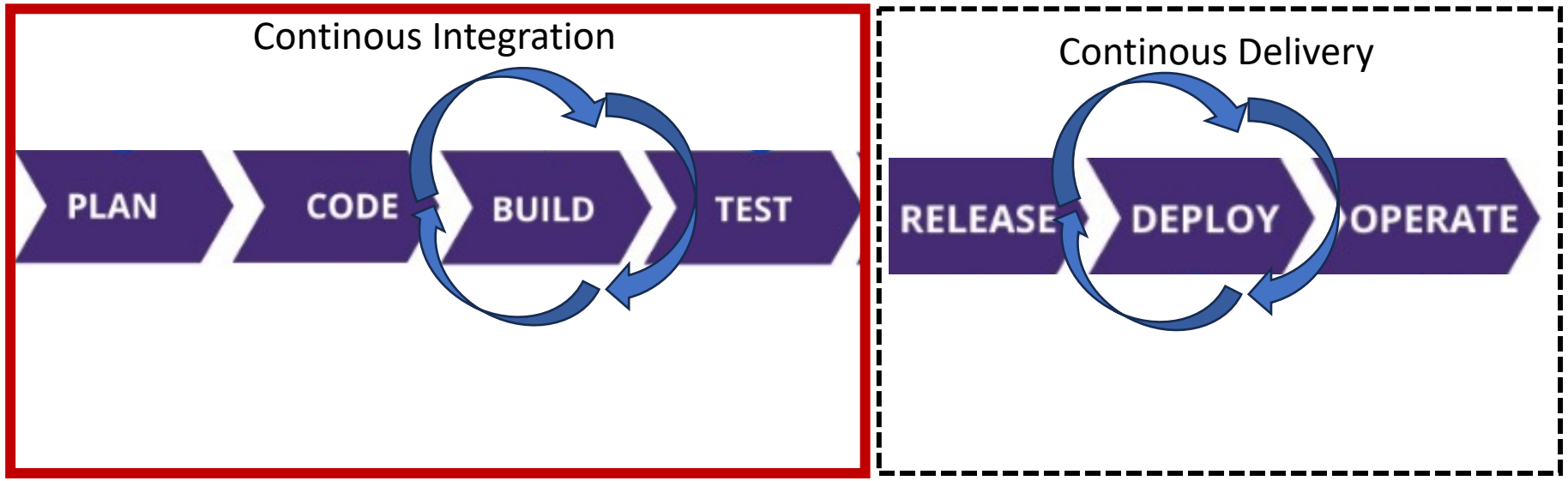
- High test coverage gives you confidence that your code works as expected
- Test coverage reports can reveal which lines of code were not tested



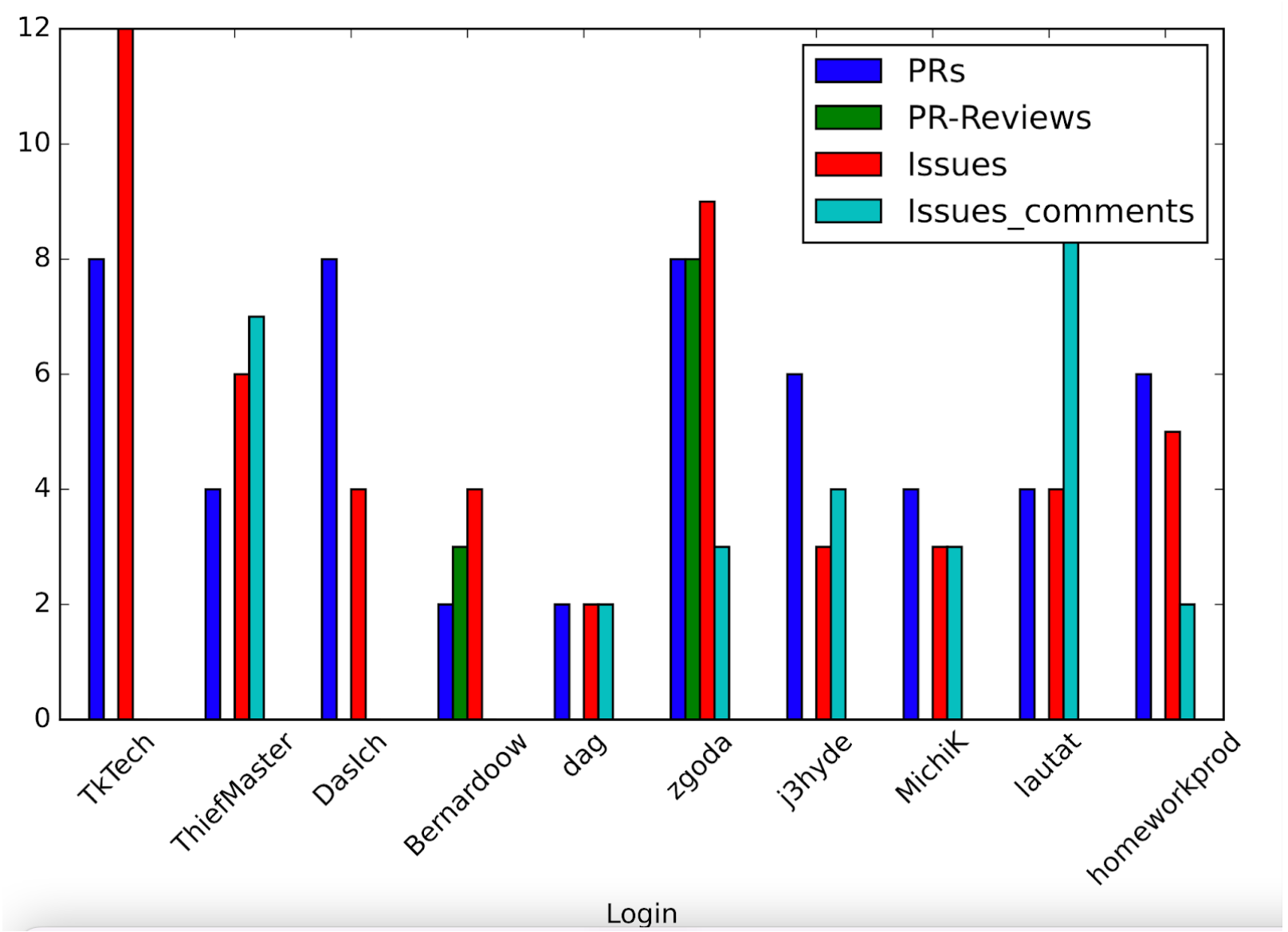
TDD workflow



CI/CD pipeline



Assessment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PR-Reviews
Issues
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