

Lecture 7

Wrapping Up

17 March 2017

Week 10-13

yes, you can continue to
code..

Week 10-13

But, it is expected that major features are done by now. The focus is on evaluation and documentation.

Week 10-13

Ensure:

- good SE principles
- robustness
- efficiency
- usability
- security

Week 10-13

Documentation and showcase

- report
- video
- website
- repo
- poster
- demo

Software Engineering

- Ensure that your requirements and what you implemented are consistent
- Ensure that your code base and your software architecture / ER diagrams are consistent

Robustness

- Write test case, fix bugs, repeat
- Stress test:
 - many tools exist. E.g.,
 - Apache Bench (ab)
 - Apache JMeter

num of requests at one time



```
ab -n 1000 -c 50 http://localhost:3000
```



num of requests

Apache JMeter

- Powerful and steep learning curve
- Test Plan, Thread Group, Sampler, Listener

Efficiency

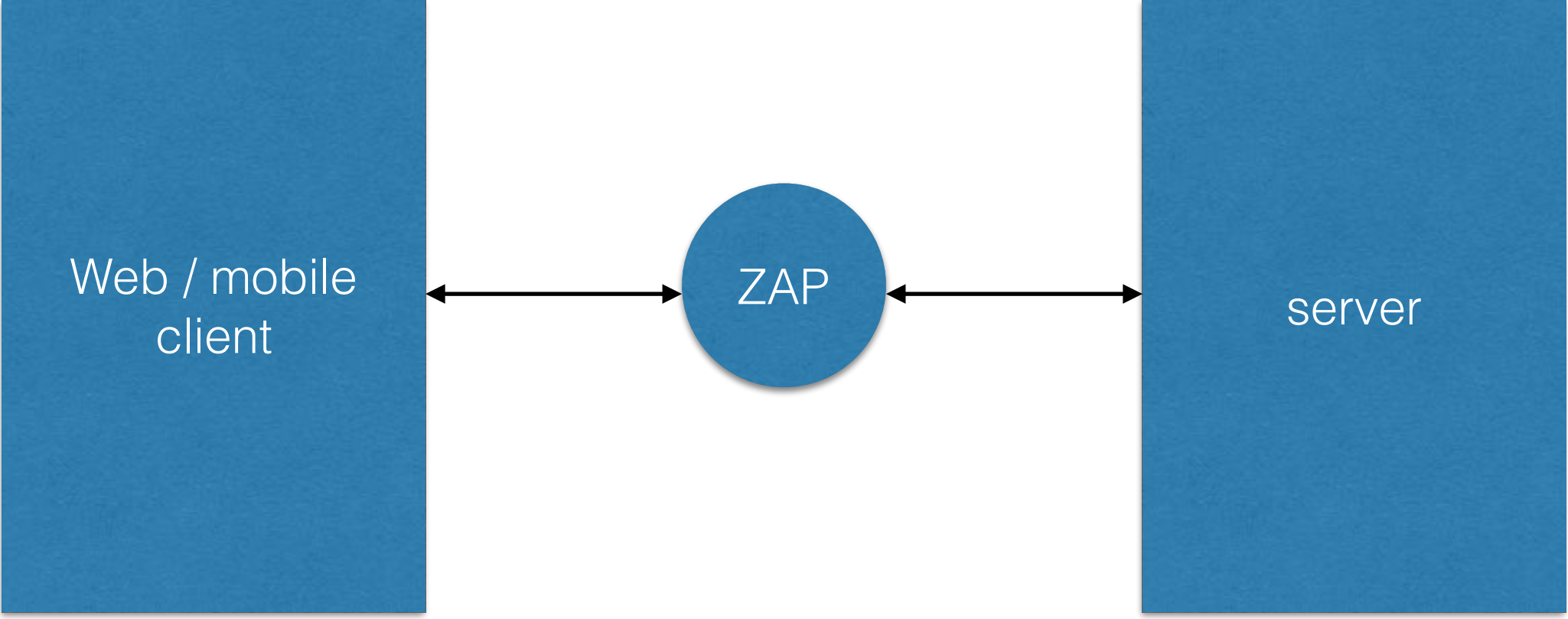
- Needs realistically-sized data
- Lecture 6:
 - Measure, identify bottleneck, optimize

Usability

- Need real users
- Lecture 5:
 - Nielsen's Heuristic Evaluation
 - System Usability Scale (15-20 users)
 - Think-aloud Protocol (2-3 users)

Security

- Many tools exist
- Example:
 - Zed Attack Proxy (ZAP)



Week 10-13

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Report

- Write on Github Wiki
 - Final software requirements
 - Final software architecture, ER diagrams, UI design
 - Software requirement gathering process (survey questions, results, etc)

Report

- Performance evaluation and improvement
- Usability evaluation and improvement
- Security evaluation and improvement

Demo

- Need realistic data (example)
- Don't demonstrate list of features, show how your app solves problems and meet users need
- Make a 2-minute demo video for website
- Demo to your class on Week 12

Website

- <https://<project>.github.io>
- Explain the goals and features
- Explain how to download / install / run
- Explain how to contribute
- Demo video
- Information about you

Github Repo

- Repo name, description, etc.
- README.md
- LICENSE
- INSTALL.md
- CONTRIBUTING.md
- CHANGELOG.md

STePS Poster

- Goals of the project
- Key features (and what problems they solve)
- Screenshots
- Software stack
- Your information

CA2 Deadline

19 March (Sunday), 23:59

CA3 Deadline

Week 13

14 April (Friday), 23:59

To help grading

- Please include:
 - URL to a vagrant box to run your app
 - Include a Vagrantfile in the repo