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Keeping Up with Software Development Industry Trends in Software Engineering Course

DAAD Workshop
Primošten 2018

Software Engineering

- Department: Computing and Informatics
- Third year undergraduate studies

  Undergraduate students already work or will start working after graduation.
- Number of students: ~100

  Group 5-8 students = 12 – 14 projects.
- Course Duration: 14 weeks

Teaching Assistant

- Experience

  Student ≠ Colleague

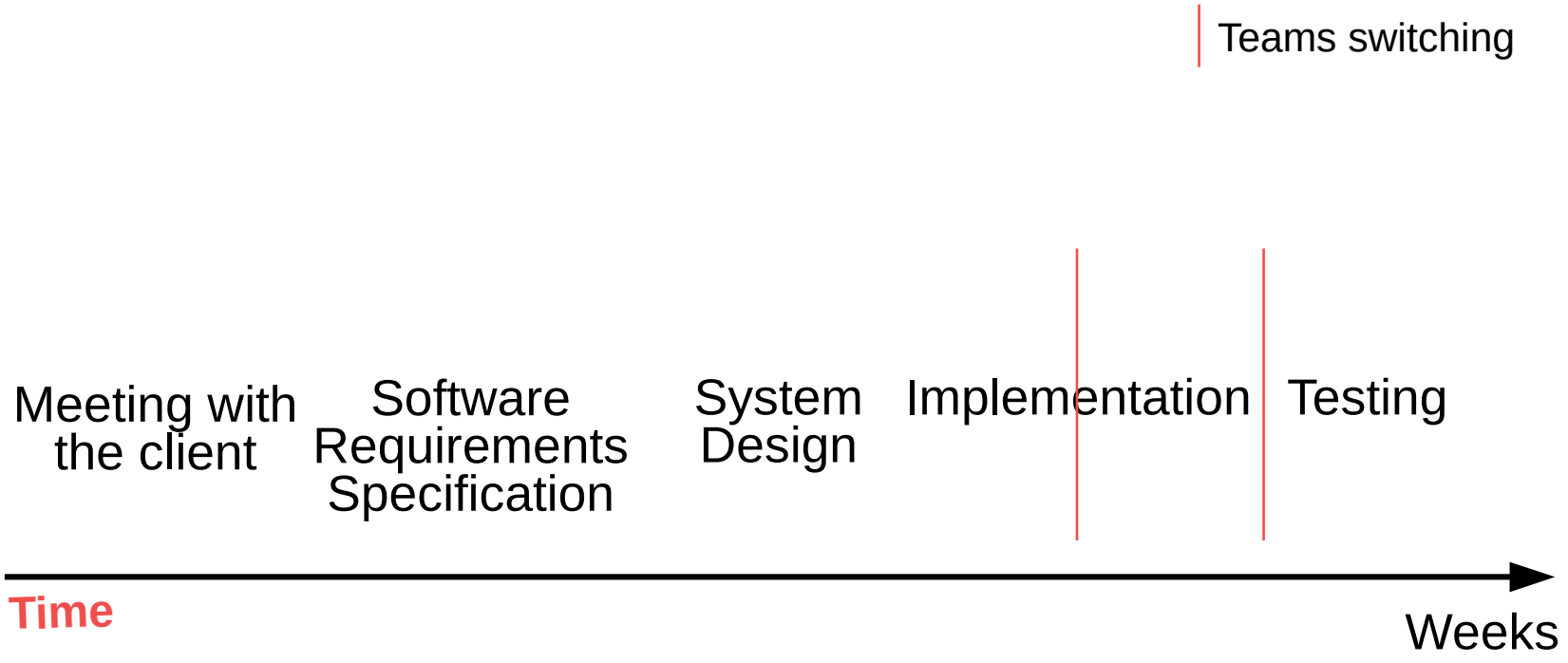
- Accepting Advice

  Industry does not always *play by the book*.

- Student opinions

But… Others always think they know better.

Student Projects



Student Projects

Perspective
Complexity

Laboratory Equipment List

Classroom Reservation

Conference Organization and Management

Police Control

Water Supply Breaks and Damages

PDF Reader

Video Surveillance

Image Filter

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Advice

Students choose always the same projects within all courses. Most of them are systems for libraries, hospitals… Think of something different.

Technologies

Student Projects

Advice

I need a programmer who already has experience in certain technologies.

Opinion

There should be a basic example of an application. Teaching assistant should give us more documentation regarding technologies we use.

I think that the technology stack should be the same for all projects.

Projects were interesting. The technologies are similar to those I’m working with. I think that code review would be a good practice but I don’t think it’s possible with this number of students.

Technologies Initiative

Student Projects

Opinion

TA should check if all requirements can be implemented in given technology.

The opportunity to change something

The change suggestion

Google Docs Like – ReThinkDB, NodeJS

Advice

Sometimes we cannot choose but when we can we need to know how. Students have to learn how to decide about tech stack.

Documentation

Student Projects

What I say: Two weeks for software requirements

What students hear: Two weeks with no assignment

Problems become real in testing phase.

Opinion

Students are not motivated since we start implementing our projects rather late.

Model

Student Projects

Students want to *play* agile because …

… they use it at work and/or they have heard local companies use it.

Opinion

I know we use Waterfall, but it would be good to use Gitlab, Jira or TGS for keeping track of our tasks.

Student Projects

Grading

Advice

Students have to learn to lose, they will never learn unless they lose points.

Opinion

I think that the teaching assistant should have higher standards when grading. There should be a level each team has to reach before switching projects with another team.

Thank you for your attention
Q?