### Thesis Topics

Sommersemester 2016 Prof. Dr. Barbara Kleinen



### My main interests

- Web Engineering
- Software Engineering, Agile Software Development,
   Software Design, Infrastructure Automation
- Learning and Social Web
- External Thesis: Love them, but won't sign a NDA!



### Topic Areas

- 1. Social Media @ IMI
- 2. Supporting Agile Development @ IMI
- 3. Learning Tools @ IMI
- 4. Improving former Projects

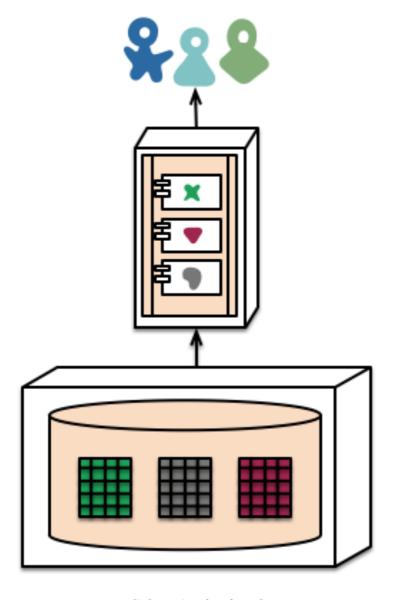


### What you should know...

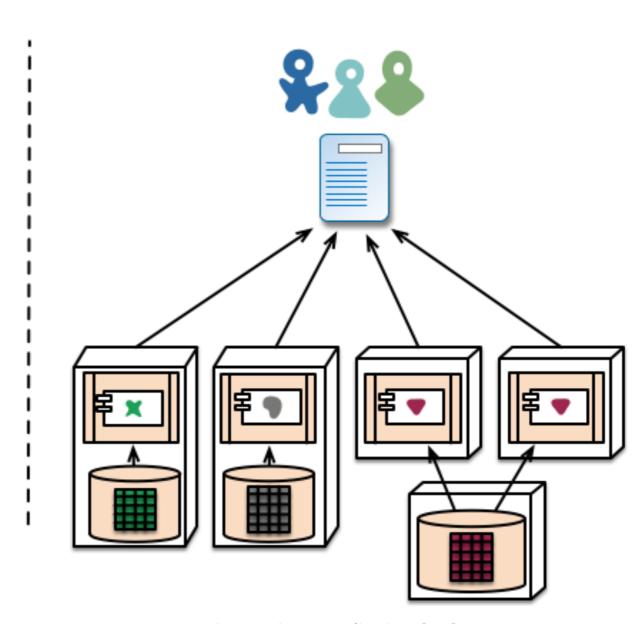
- Basics of Web Development (e.g. Mean-Stack, Rails)
- Agile Development:
  - Working Software, High Quality
  - Working in Iterations, Welcoming Change
  - Practices like Automated Testing, Infrastructure Automation, Refactoring



#### Microservices



monolith - single database



microservices - application databases



http://martinfowler.com/articles/microservices.html

# Working on existing projects...

- Working with Legacy Code
- Usability Evaluations: could be own Thesis Topics!
- Potential Architectural/Meta Topics:
  - Backend for Scrum-Tools/other Integration Topics
  - Authentication Concept & Server (Ldap/Oauth)





#### 1. Social Media @ IMI

- IMI-Dashboard: Identify relevant Information and present it on one page (for different roles)
- (Social Media Platform: Bachelor's Project)
- Further Ideas?



# 2. Supporting Agile Development @ IMI

Bacholor/Master Thesis:

Supporting The Scrum Backlog, Estimation Meetings and

• Bacholor/Master Thesis:

Scrum Board, Daily Standups and Sprint Reviews



### 3: Learning Tools @ IMI

- Continue Work on:
  - "Grasp"-Development: Q&A Tool
  - Automated Tests for Teaching and Assessment
  - Supporting Personal Learning Networks



# 4. Improving former Projects



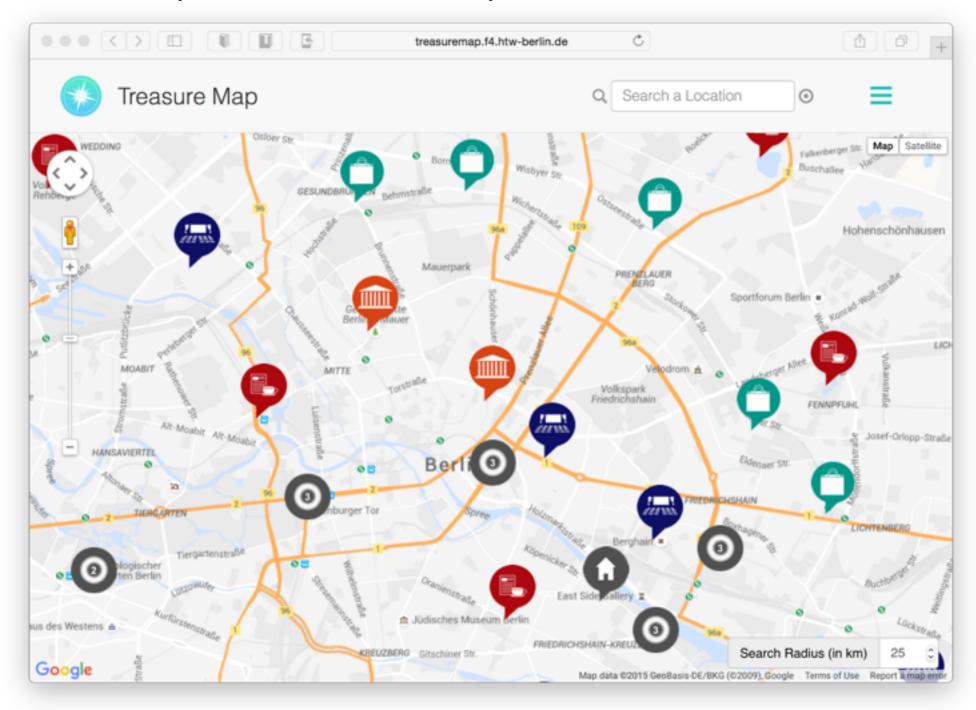
## IMI-Map http://imi-map.f4.htw-berlin.de





### Treasure Map

http://treasuremap.f4.htw-berlin.de





#### Contact

- bkleinen.github.io/thesis
- Office Hours: (WH-C 645)
- Tue 11:30-12:30 (often changing, check above!)

