WIE VIEL ARCHITEKTUR BRAUCHEN WIR (MIT AGILEN TEAMS)?
Mike Wiesner
Architecture?
Architecture?
TOGAF® ADM (simplified)
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Business- / IT- Architecture
Mission

- Holiday Request (PTO) Web Application
- Features:
  - Login
  - Request PTO
  - View all employees PTOs
  - Ability to cancel own PTOs
  - PTO approval process
Architektur

IAM

UI

Backend

DB

HR
Architektur
Story Mapping

PTO Request
  - Login
  - Request
  - Approval

Show PTOs
  - Own PTOs
  - All PTOs

Cancel PTO
  - Cancel

Change PTO
  - Change
  - Approval
Story Mapping

PTO Request
- Login
- Request
- Approval
- UX
- Employee data

Show PTOs
- Own PTOs
- All PTOs

Cancel PTO
- Cancel

Change PTO
- Change
- Approval
Hamburger Methode

- Login
- Form
- PTO logic
- Determine Line Manager
- Approval mail
## Hamburger Methode

<table>
<thead>
<tr>
<th>Login</th>
<th>App Login</th>
<th>No Login</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>curl</td>
<td>Simplified form</td>
</tr>
<tr>
<td>PTO logic</td>
<td>Number of days</td>
<td>No logic</td>
</tr>
<tr>
<td>Determine Line Manager</td>
<td>No manager</td>
<td>Line Manager as input</td>
</tr>
<tr>
<td>Approval mail</td>
<td>Already approved</td>
<td></td>
</tr>
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Hamburger Methode

- Login
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- Form
- Simplified form
- PTO logic
- Number of days
- No logic
- Determine Line Manager
- Line Manager as input
- Approval mail
- Already approved
Hamburger Methode

- Login
- Form
- PTO logic
- Determine Line Manager
- Approval mail
- App Login
- Simplified form
- Number of days
- Line Manager as input
- No Login
- No logic
- Already approved
### Hamburger Methode

**Login**
- App Login
- No Login

**Form**
- Simplified form

**PTO logic**
- Number of days
- No logic

**Determine Line Manager**
- Line Manager as input

**Approval mail**
- Already approved
User Story #1
Already approved PTO without Authentication

No Login
Simplified form
No logic
Line Manager as input
Already approved
Ablauf

Manuel

Employee gets line manager approval

Application

Employee enters PTO
Hamburger Methode

- Login
- App Login
- No Login
- Form
- Simplified form
- Number of days
- No logic
- PTO logic
- Determine Line Manager
- Line Manager as input
- Approval mail
- Already approved
A Walking Skeleton is a tiny implementation of the system that performs a small end-to-end function. It need not use the final architecture, but it should link together the main architectural components. The architecture and the functionality can then evolve in parallel.

– Alistair Cockburn
**Hamburger Methode**

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<td>Line Manager as input</td>
<td></td>
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<tr>
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<td>Simplified approval mail</td>
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Happy Case

1. Login
2. New PTO
3. Request approval from line manager

Yes: approved

No: Notify employee

Notify employee

No approval

1. Notify employee
2. Change PTO
3. Request approval from line manager
4. Notify employee
Ports & Adapters

Diagram showing the following components:
- Browser
- Controller
- Services
- Domain
- Repos
- GW
- Stub
- DB
- E-Mail

Dependencies are indicated with arrows pointing to the center.
Conway’s Law

“... organizations which design systems ... are constrained to produce designs which are copies of the communication structures of these organizations.”

— M. Conway
Inverse Conway Maneuver

The 'Inverse Conway Maneuver' recommends evolving your team and organizational structure to promote your desired architecture.

Ideally your technology architecture will display isomorphism with your business architecture.
Architecture

- IAM
- UI
- Backend
- DB
- HR
Architecture

- IAM
- UI
- Backend
- DB
- HR
Architecture

authN & authZ
UI
Backend
DB

IAM

HR
Architecture

diagram showing components:
- authN & authZ
- UI
- Backend
- DB
- IAM
- HR
“Designate with an explicit boundary some subset of the domain model that the teams agree to share.

Keep this kernel small.”

– Eric Evans

Architecture

authN & authZ
UI
Backend
DB

IAM
HR
Messaging
Herzlichen Dank für Ihre Aufmerksamkeit!

Mike Wiesner