

# COZY

Final exam presentation

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# Outline

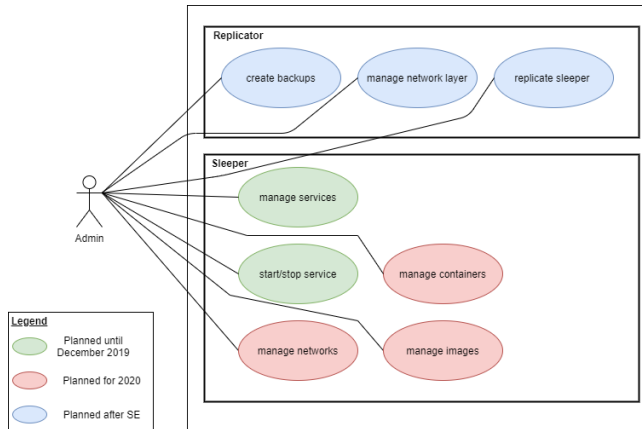
1. Vision
2. Project Methodology
3. Project Management
4. Architecture
5. Risk Management
6. Quality assurance
7. Technical ability

# Vision

- Easy to use hosting service
- Super flexible deployments, enabled through Docker
- Deployments are very cost efficient

# Use cases

## Overall use case diagram



# Project Methodology

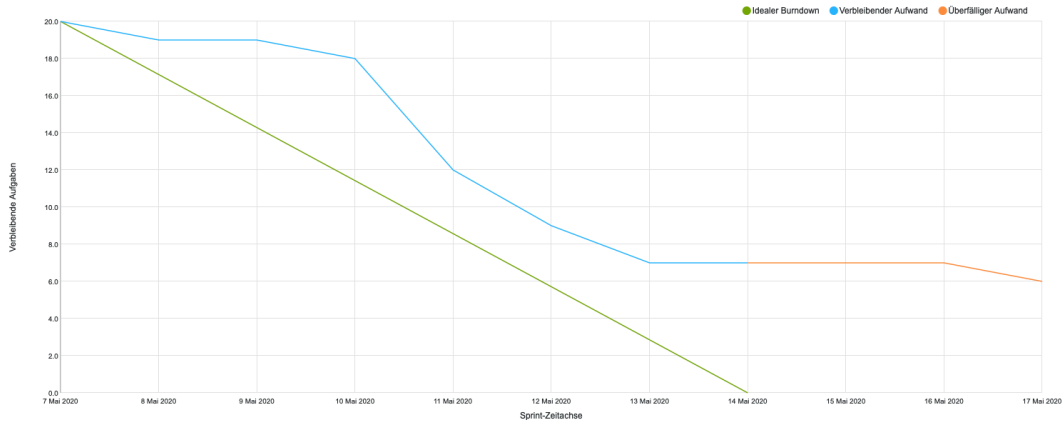
- Quickly adapt the product to requirement changes
- Involve feedback of everybody on the team
- Always focus on a functional product, whilst balancing function & form

# AGILE

Scrum process, weekly sprints.

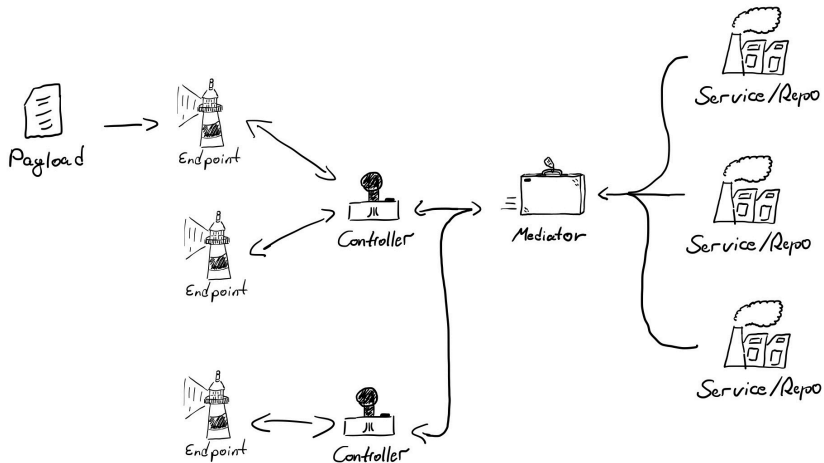


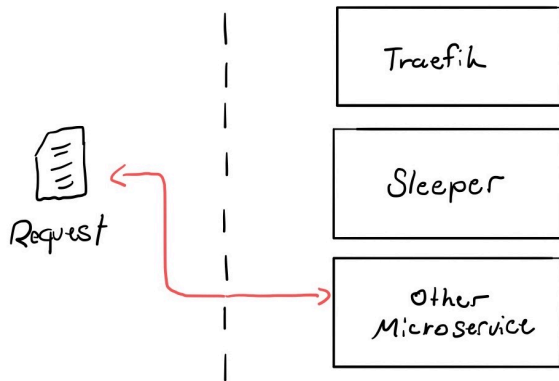
# Project Management

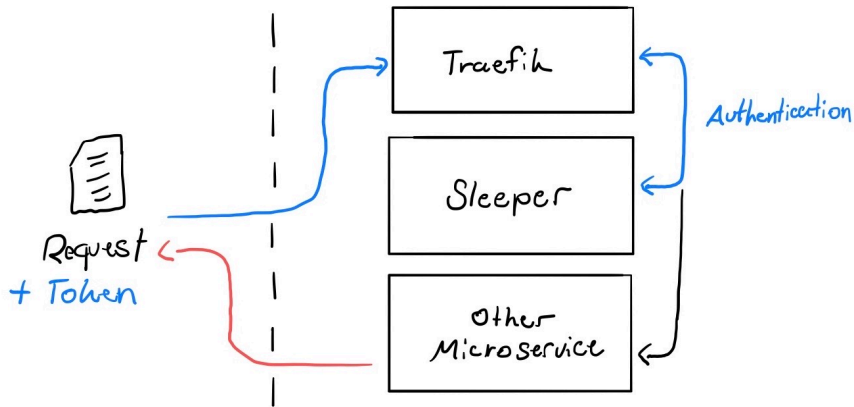


# Architecture

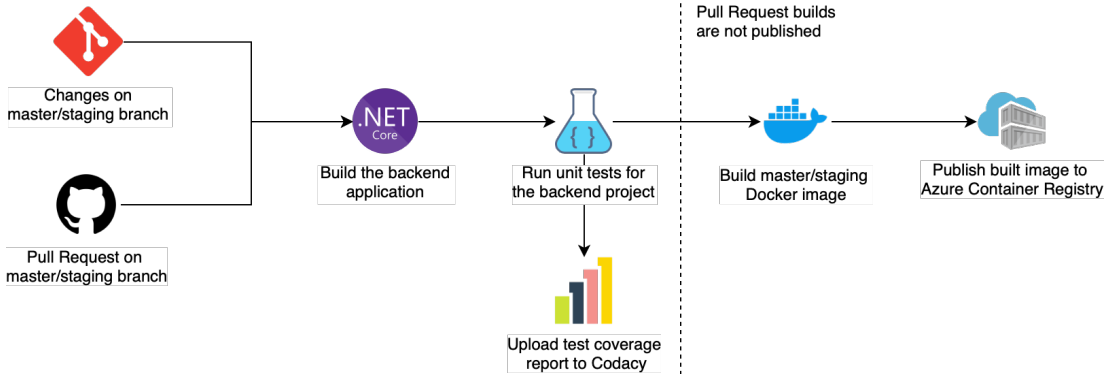
- MVC architecture provided through ASP.Net Core
- Service layer and dependency injection
  - ▶ Improved testing of first party components and external dependencies
- Extended modularity due to using mediator Pattern (MediatR)
  - ▶ Slims down Requests into easily maintainable pieces of code
  - ▶ Validation alongside the Request instead of the data model
- Extensible due to the ability to smoothly integrate other micro-services
  - ▶ Allows for re-using instead of re-implementing functionality







# Continuous Integration Backend



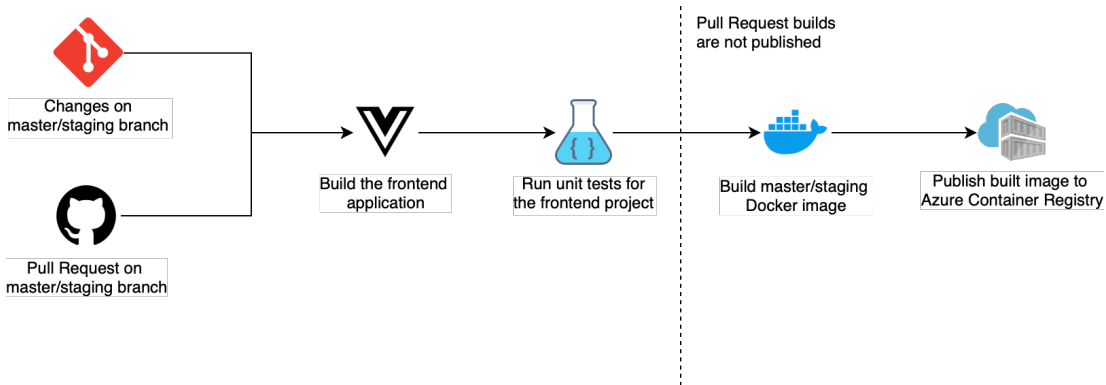


### ■ Single page application using Vue.JS

- ▶ Modern way of designing and implementing frontend
- ▶ Consumes REST endpoints from the backend and various other micro-services

# Continuous Integration

Frontend



# Risk Management

# Risk Management

The important ones

## Time

No enough time to implement all features

## Complexity

Features are to complex to implement

## Missing organization

Losing overview about the project

# SMOOTH

We did not encounter any planed risks!

# Quality assurance

## ■ Backend

- ▶ Unit tests using NUnit
- ▶ Functional testing using Specflow
- ▶ Integration Tests planned to improve test coverage

## ■ Frontend

"Not intended for end users, thus untested and low priority"



\$ oechsler merged commit **613af05** into `master` 27 days ago

[Hide details](#)[Revert](#)

### 3 checks passed

- |   |   |                         |
|---|---|-------------------------|
| ✓ | <b>Codacy/PR Quality Review</b> Up to standards. A positive pull request. | <a href="#">Details</a> |
| ✓ | <b>continuous-integration/travis-ci/pr</b> The Travis CI build passed     | <a href="#">Details</a> |
| ✓ | <b>continuous-integration/travis-ci/push</b> The Travis CI build passed   | <a href="#">Details</a> |

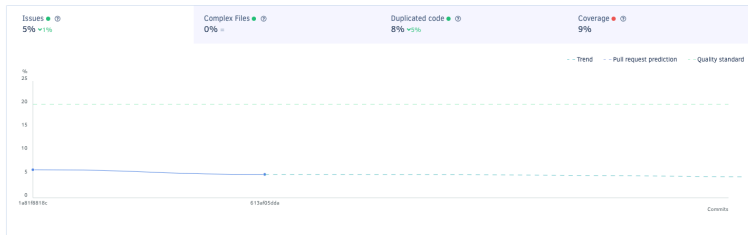


sleeper master ▾

[🔗 Badge](#)**A** Repository certification

Quality evolution

Last 8 commits



Issues breakdown

27 total issues

Category	Total
Security	2
Error Prone	6
Code Style	7
Compatibility	0
Unused Code	1
Performance	11

[See all issues](#)

Coverage

9% LoC covered

Quality settings: 60% coverage

Files without coverage 50

Files not up to standards 94

Files up to standards 15

[See all files](#)

Technical ability

# DEMO

Let us show you what COZY has in store.