

**COZY**

Final exam presentation

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# Overview

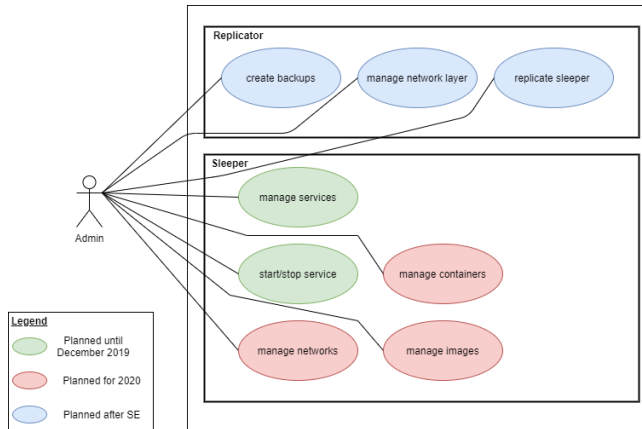
- 1 Vision
- 2 Project Methodology
- 3 Project Management
- 4 Architecture
- 5 Risk Management
- 6 Quality assurance
- 7 Technical ability

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

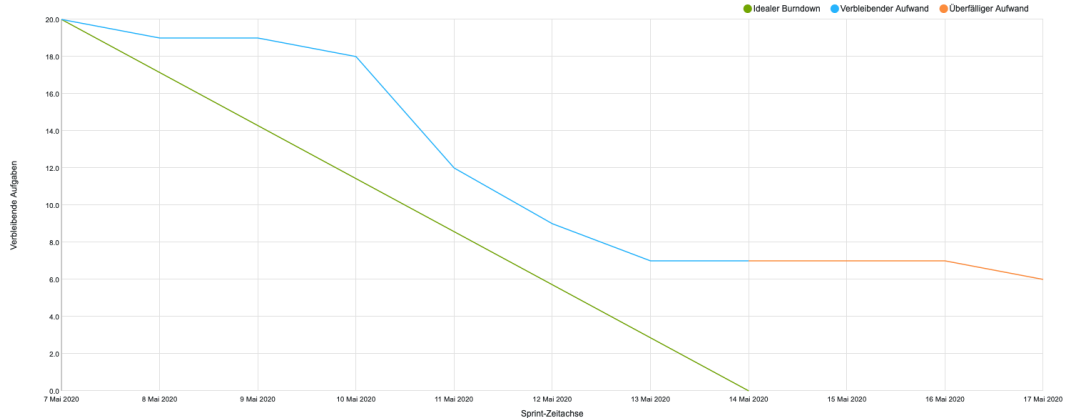
- Quickly adapt the product to requirement changes
- Involve feedback of everybody on the team
- Always focus on a functional product, whilst balancing function & form

# AGILE

Scrum process, weekly sprints



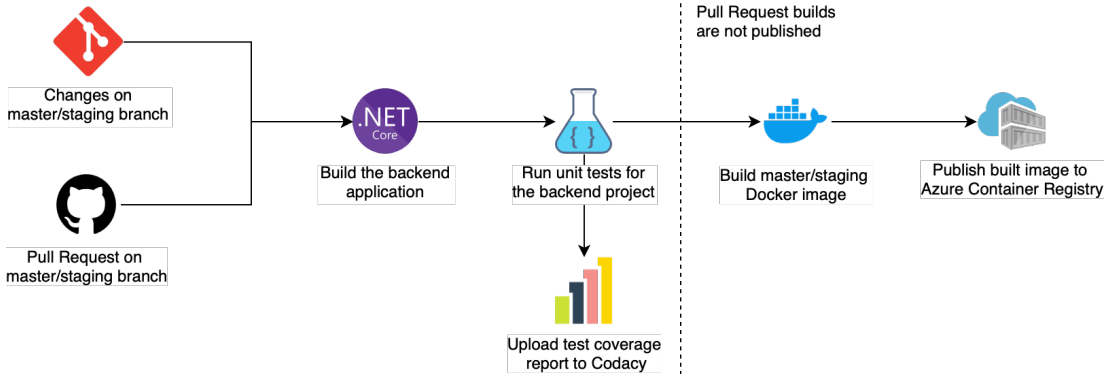
# Project Management



# 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

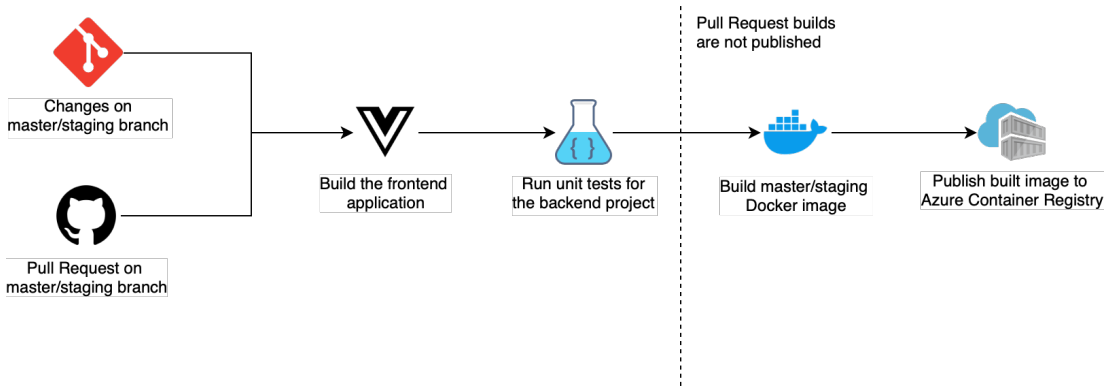
# Continuous Integration Backend



## ■ 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

Unused do to the backend relying mostly on external services

- ▶ Integration Tests possible to improve test coverage

## ■ Frontend

"Not ready for end-user deployment, thus untested and low priority"

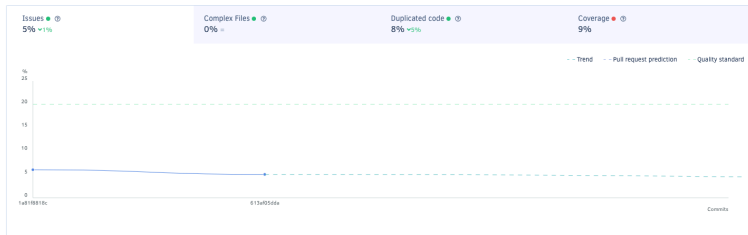
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[Badge](#)

### 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

Lets us show you what cozy can do