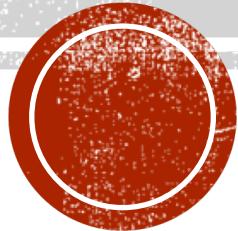


BOOKLY

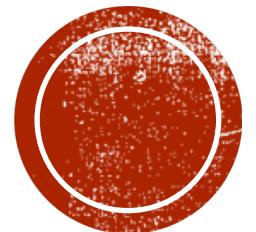
final presentation



OUTLINE

- Use Cases
- Demo
- Project Management
- Architecture
- Quality

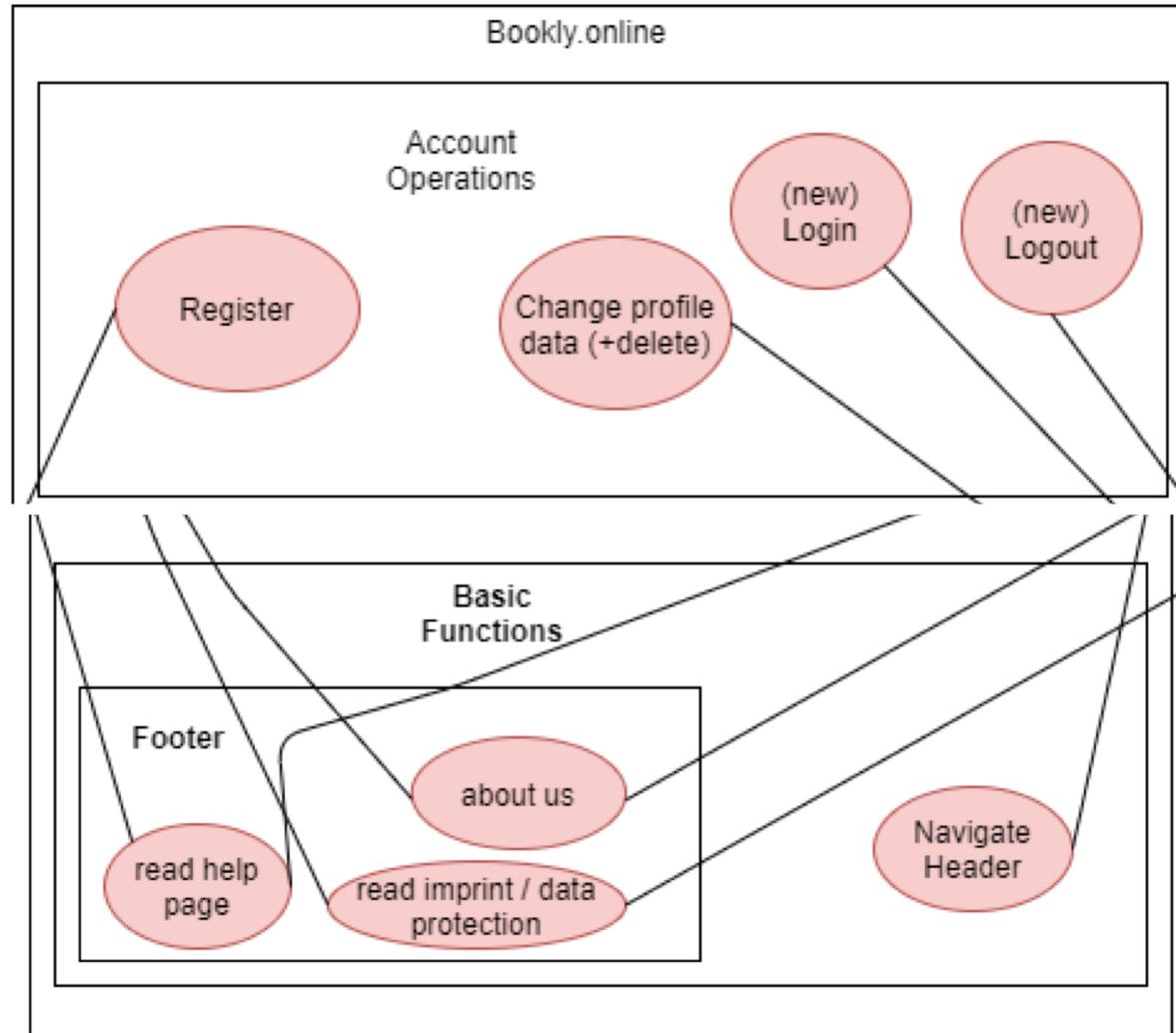




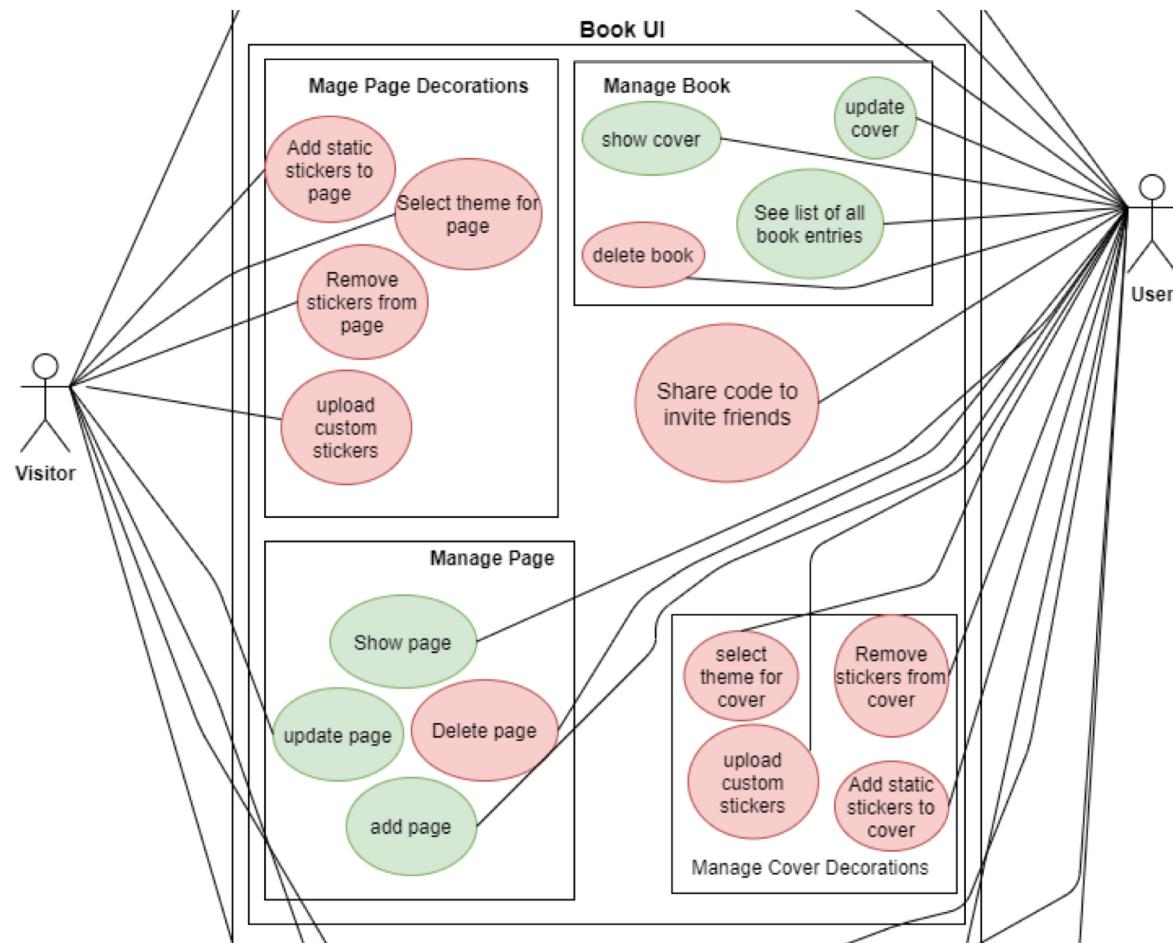
USE CASES



EXTEND OF FUNCTIONALITY



EXTEND OF FUNCTIONALITY



USE CASES

- Manage page
 - **C: create page entry (UC 1)**
 - **R: read an entry (UC 2)**
 - **U: update/edit an entry (UC 3)**
 - **D: delete an entry (part of account)**
- Manage book
 - **C: create a book (UC 4)**
 - **R: show cover/title (UC 5)**
 - **U: update cover/title (UC 6)**
 - **D: delete (part of account)**

Green

Red

Bold

implemented in 2019

implemented in 2020

Use Case



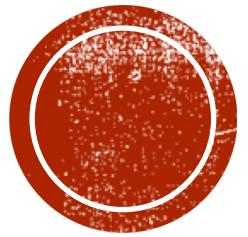
USE CASES

- **Share code to invite friends (UC 7)**
- **Manage Page Decorations (UC 8)**
 - C: create sticker
 - R: read sticker
 - U: update sticker
 - D: delete sticker
- **Navigate Footer (UC 10)**
- **Navigate Header (UC 11)**
- **Operate Account (UC 12)**

- **Manage Cover Decorations (UC 9)**
 - C: create sticker
 - R: read sticker/theme
 - U: update sticker/theme
 - D: delete sticker

Green	implemented in 2019
Red	implemented in 2020
Bold	Use Case



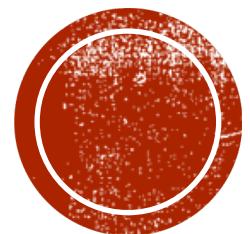


DEMO

► [Video](#)

BOOKLY - friendship book





PROJECT MANAGEMENT



RUP- RATIONAL UNIFIED PROCESS

- **Alexandra**

- **Requirements Specifier:** Describe and phrase the features / design of the website with the team
- **Project Manager:** Phrase acceptance criteria of the features + Coordinate sprints + Manage YouTrack + Assign Tags

- **Jeanne**

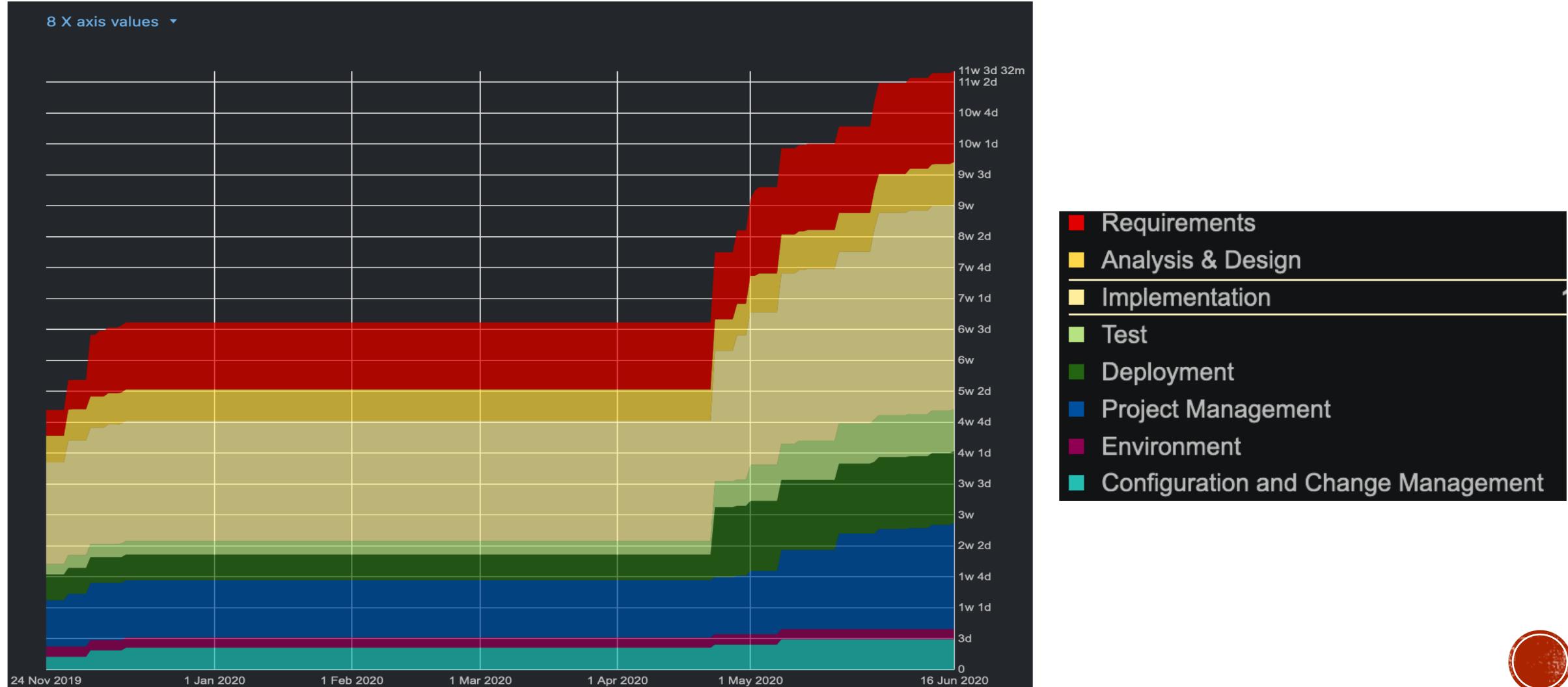
- **Implementer:** Create database structure, logic, and interfaces (API)
- **Tester:** Test the interfaces (APIs) between Frontend, Backend, Database and the functionality of the Frontend

- **Nico**

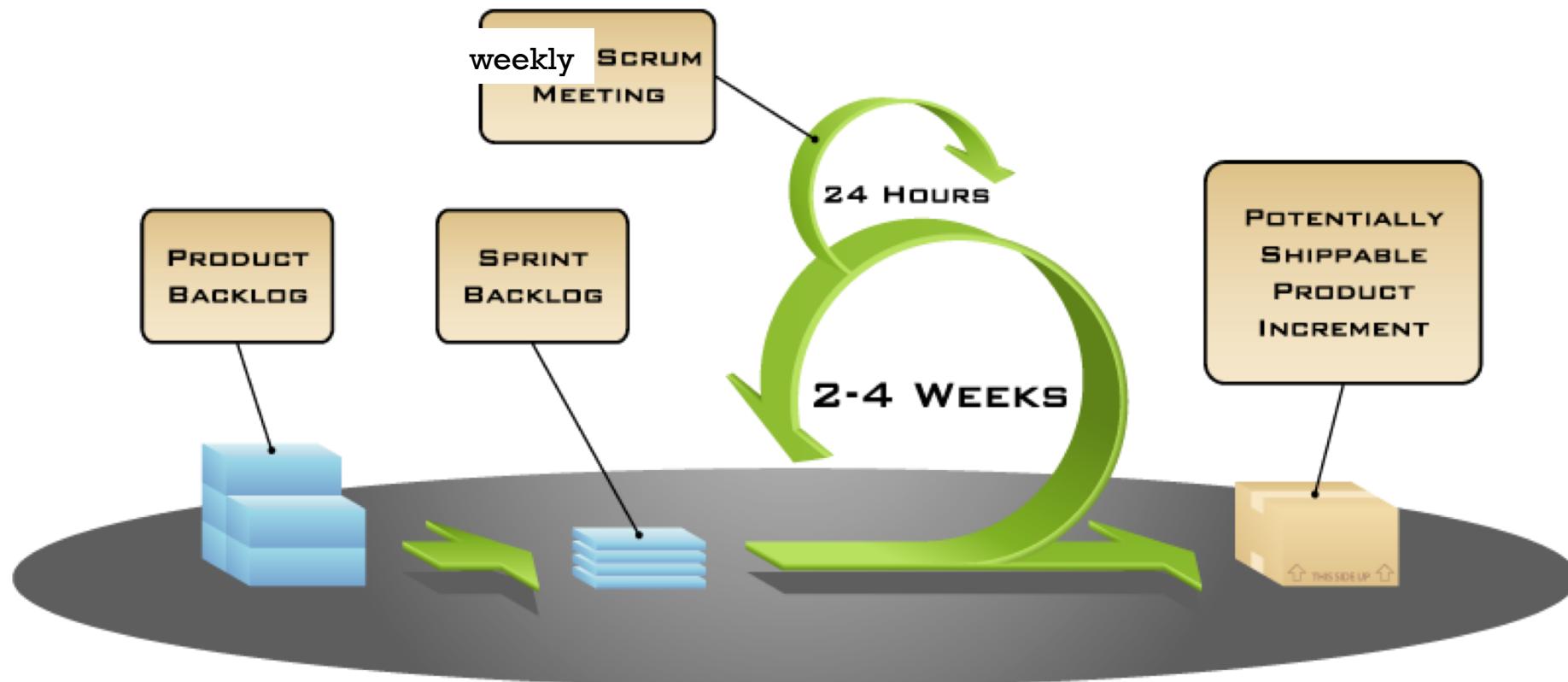
- **Deployer:** Host domain and integrate CI (and Docker)
- **Designer:** Implement the design described in the Use-Cases + Web tests



RUP- WORKFLOW - COMPLETE



SCRUM AND YOUTRACK



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SCRUM AND YOUTRACK

The screenshot shows the YouTrack Agile Boards interface. At the top, there is a navigation bar with links for Issues, Dashboards, Agile Boards, Reports, Projects, Create, and a user icon. Below the navigation is a search bar with the placeholder "Filter cards on the board" and a search icon. The main area displays a Scrum board for the project "bookly Project Develop...". The board has three columns: "Sprint 1" (14 — 28 Nov), "Code Review", and "Testing". The "Code Review" column has a progress bar with one blue segment and one green dot. Below the columns are status filters: Open, In Progress, Code Review, Testing, and Done. The "Done" status shows a green circle with the text "1w2d1h10m". The "Uncategorized Cards" section is expanded, showing three empty columns with plus signs for adding new cards. To the right, two cards are listed: "BOOKLY-45 Update use case diagramm" and "BOOKLY-14 create Read.md". Each card includes a user icon (JH), a green dot (Normal), a blue dot (Task), a red dot (Not estimated), and an estimated time (10m for the first, 1h for the second). A red circular badge is visible in the bottom right corner.

Issues | Dashboards Agile Boards Reports Projects Create

bookly Project Develop... Filter cards on the board

Sprint 1 14 — 28 Nov

Open In Progress 0m Code Review 0m Testing 0m Done 1w2d1h10m

Uncategorized Cards 14 cards

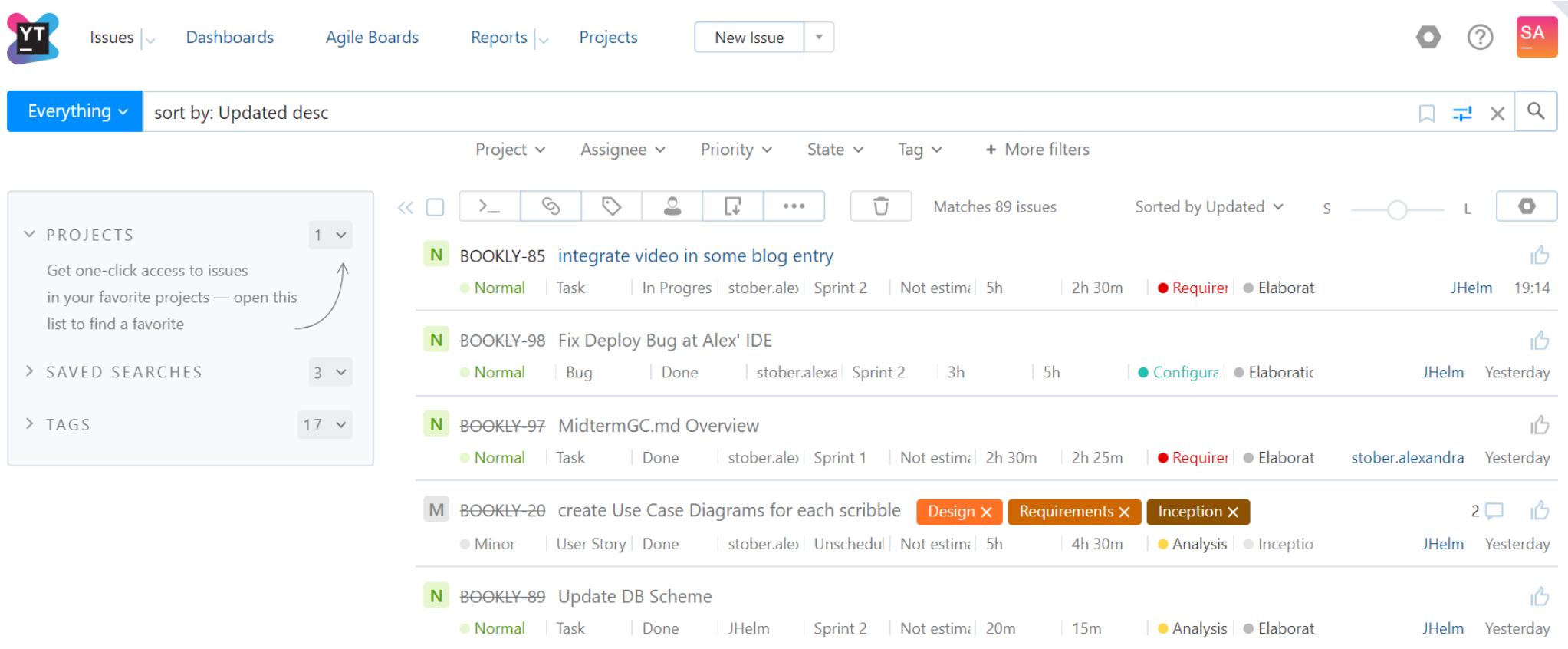
BOOKLY-45 Update use case diagramm

JH Normal Task Not estimated 10m

BOOKLY-14 create Read.md

JH Normal Task Not estimated 1h

SCRUM AND YOUTRACK



The screenshot shows the YouTrack interface with the following details:

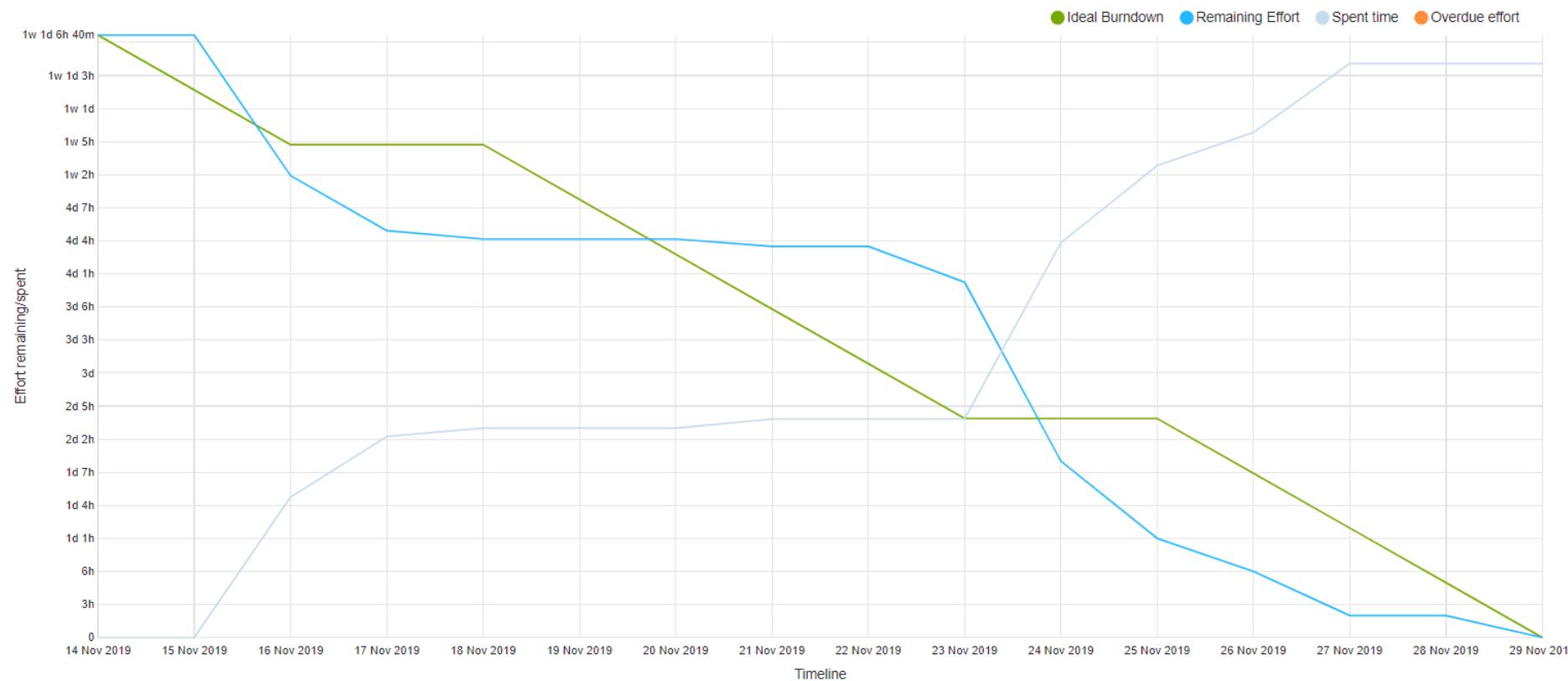
- Header:** Issues, Dashboards, Agile Boards, Reports, Projects, New Issue, and various icons for settings and help.
- Search Bar:** Everything (selected), sort by: Updated desc, and a search icon.
- Filter Bar:** Project, Assignee, Priority, State, Tag, and More filters.
- Project Sidebar:** Shows PROJECTS (1), SAVED SEARCHES (3), and TAGS (17).
- Issue List:** Matches 89 issues, Sorted by Updated. The list includes the following items:

 - BOOKLY-85** integrate video in some blog entry: Normal Task, In Progress, stober.alex, Sprint 2, Not estimated, 5h, 2h 30m, Requirer, Elaboration, JHelm, 19:14.
 - BOOKLY-98** Fix Deploy Bug at Alex' IDE: Normal Bug, Done, stober.alex, Sprint 2, 3h, 5h, Configura, Elaborative, JHelm, Yesterday.
 - BOOKLY-97** MidtermGC.md Overview: Normal Task, Done, stober.alex, Sprint 1, Not estimated, 2h 30m, 2h 25m, Requirer, Elaboration, stober.alexandra, Yesterday.
 - BOOKLY-20** create Use Case Diagrams for each scribble: Minor User Story, Done, stober.alex, Unscheduled, Not estimated, 5h, 4h 30m, Analysis, Inception, JHelm, Yesterday. Labels: Design X, Requirements X, Inception X.
 - BOOKLY-89** Update DB Scheme: Normal Task, Done, JHelm, Sprint 2, Not estimated, 20m, 15m, Analysis, Elaboration, JHelm, Yesterday.



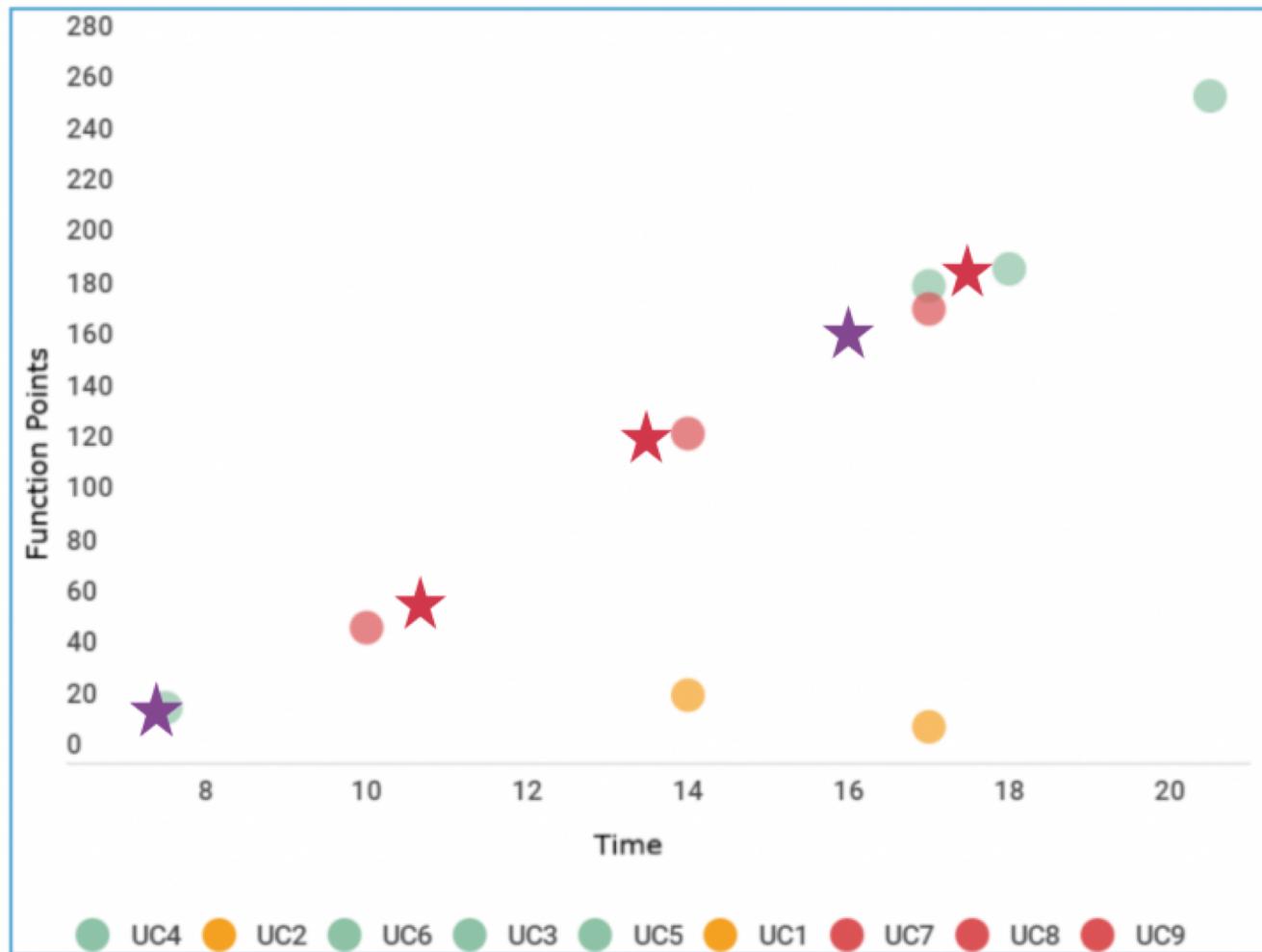
BURN-DOWN-CHART

► [more](#)



COST ESTIMATION

- ★ Real time spent on new UCs without estimated FPs
- ★ Real time spent on new UCs with estimated FPs
- UCs 2020
- disregarded UCs
- UCs 2019

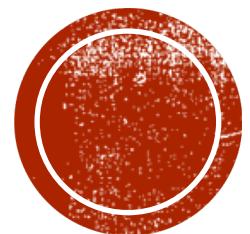


RISK MANAGEMENT

		1 to 100	1 to 10			
Risk Name	Risk Description	Risk Probability of Occurrence	Risk Impact	Risk Factor	Risk Mitigation	Person in Charge of Tracking
Time	not enough time to fullfill every task	50%	9	4,5	finish work ahead of time for the next week; keep up to date with team members	Everyone
Technical difficulties	difficult bugs or laptop gets lost	65%	6	3,9	back up laptop/ code; get support from team members; look for alternative implementation	Everyone
Code quality	bad coding slows or breaks the application	30%	4	1,2	Code reviews; Ide code checks; Testing	Nico
Internet Provider	no internet connection due to unitymedia	25%	3	0,75	conntact Internet Provider to fix issue	Alexandra
Corona	2 Weeks of sick leave because of quarantine	10%	2	0,2	stay at home; team picks up tasks of sick person	Everyone
Hacked Server	server gets hacked by third party	9%	6	0,54	HTTPS; secure passwords	Jeanne
Database Corruption	Database gets accessed by third party	5%	4	0,2	Secured by strong password; setup new database if data gets corrupted	Alexandra

Risk Management ► [here](#)

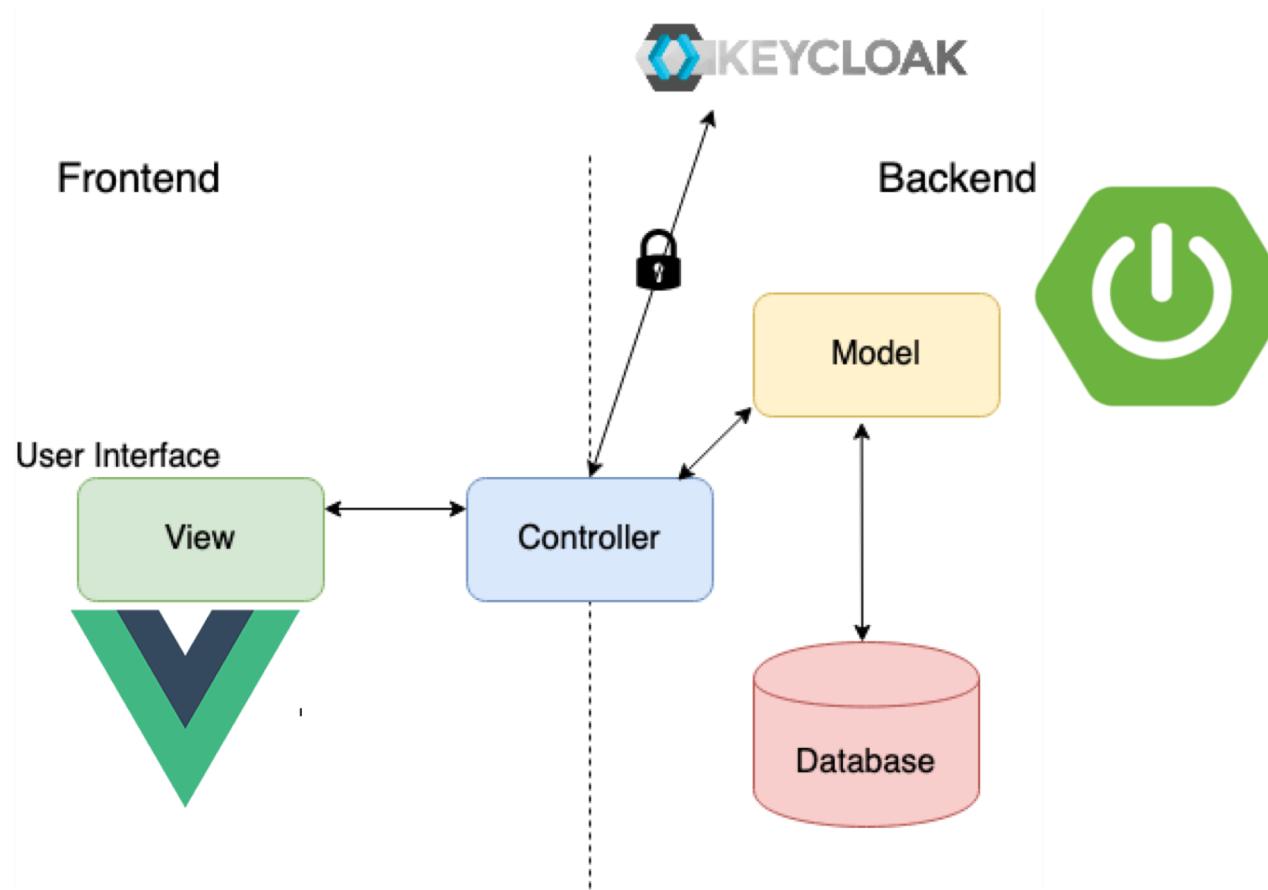




ARCHITECTURE



OVERVIEW



TECHNOLOGY

Backend



PostgreSQL



HIBERNATE



SWAGGER



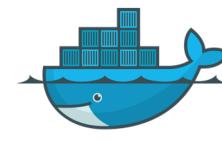
Frontend



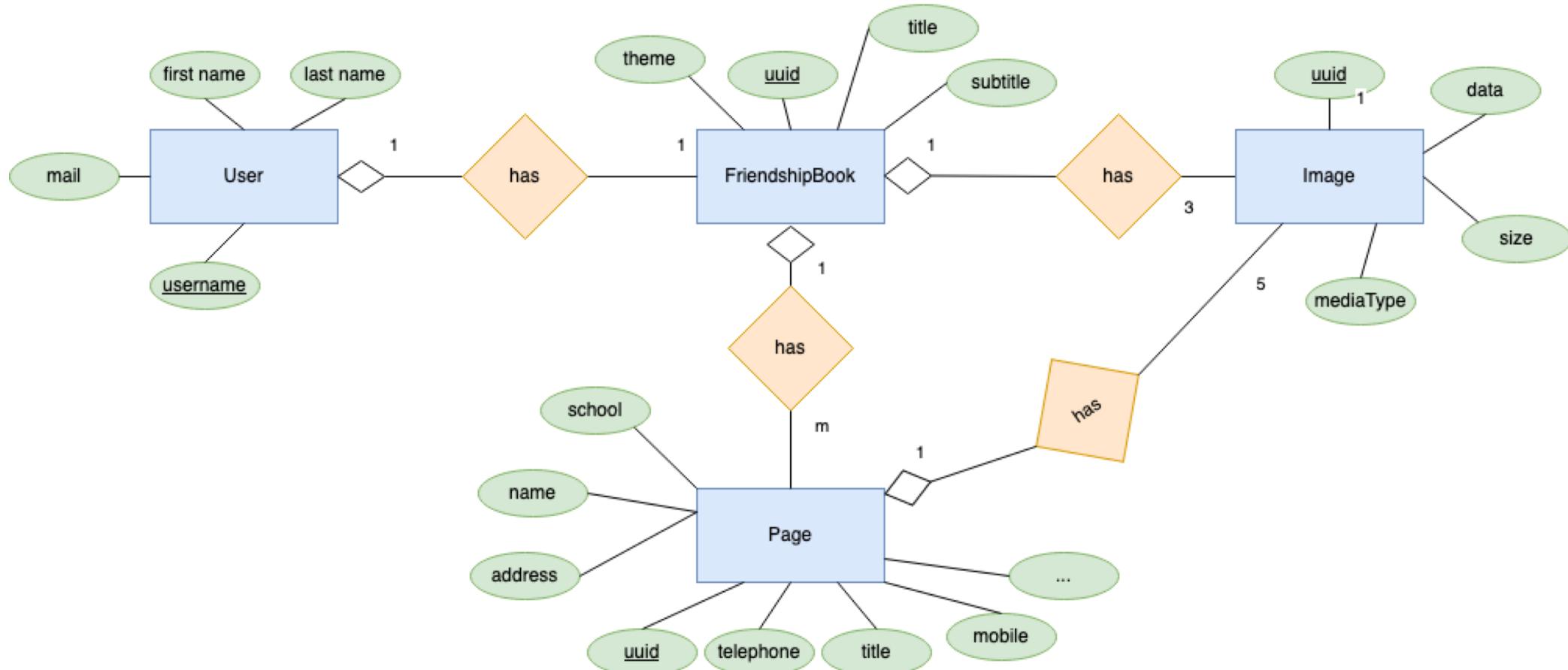
Testing



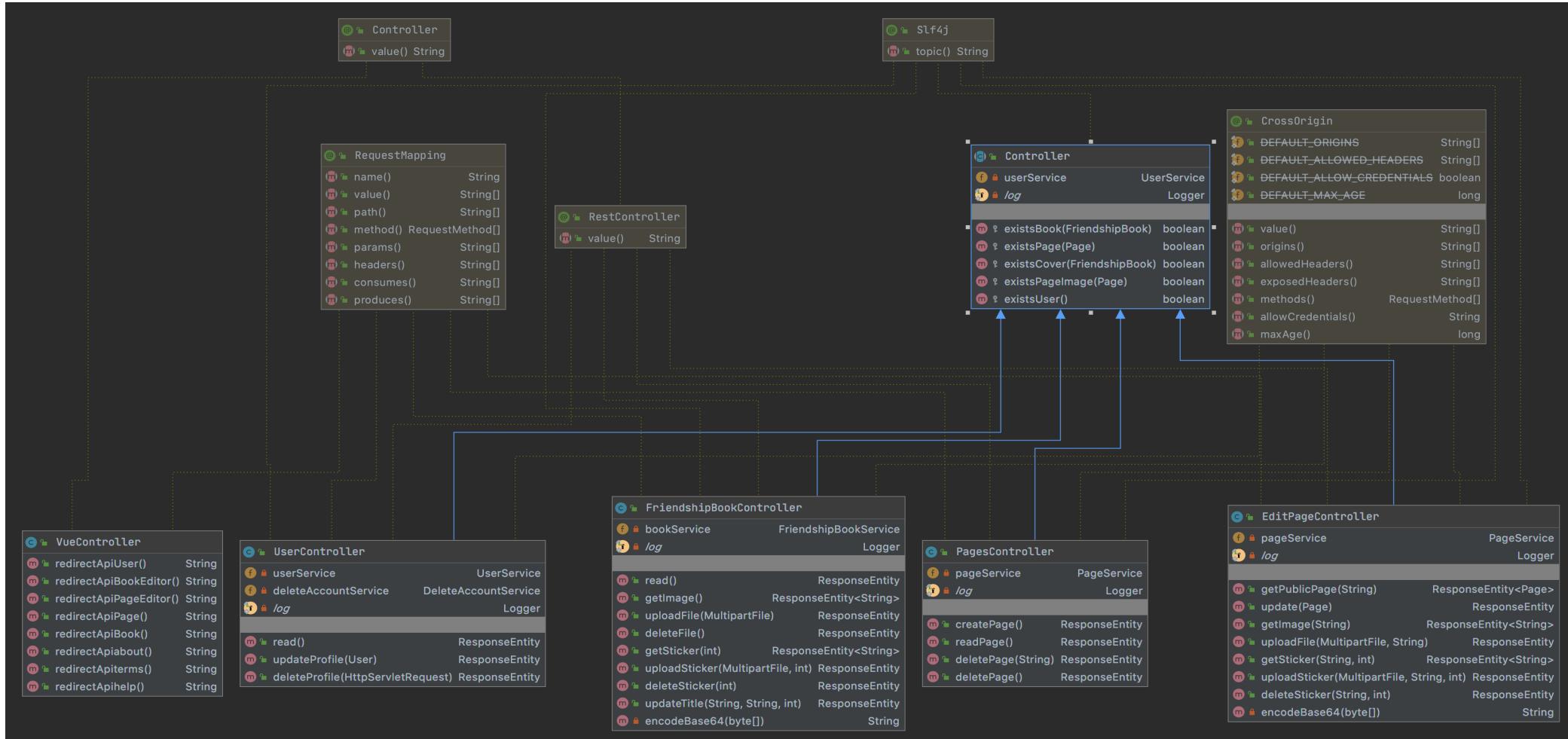
Deployment



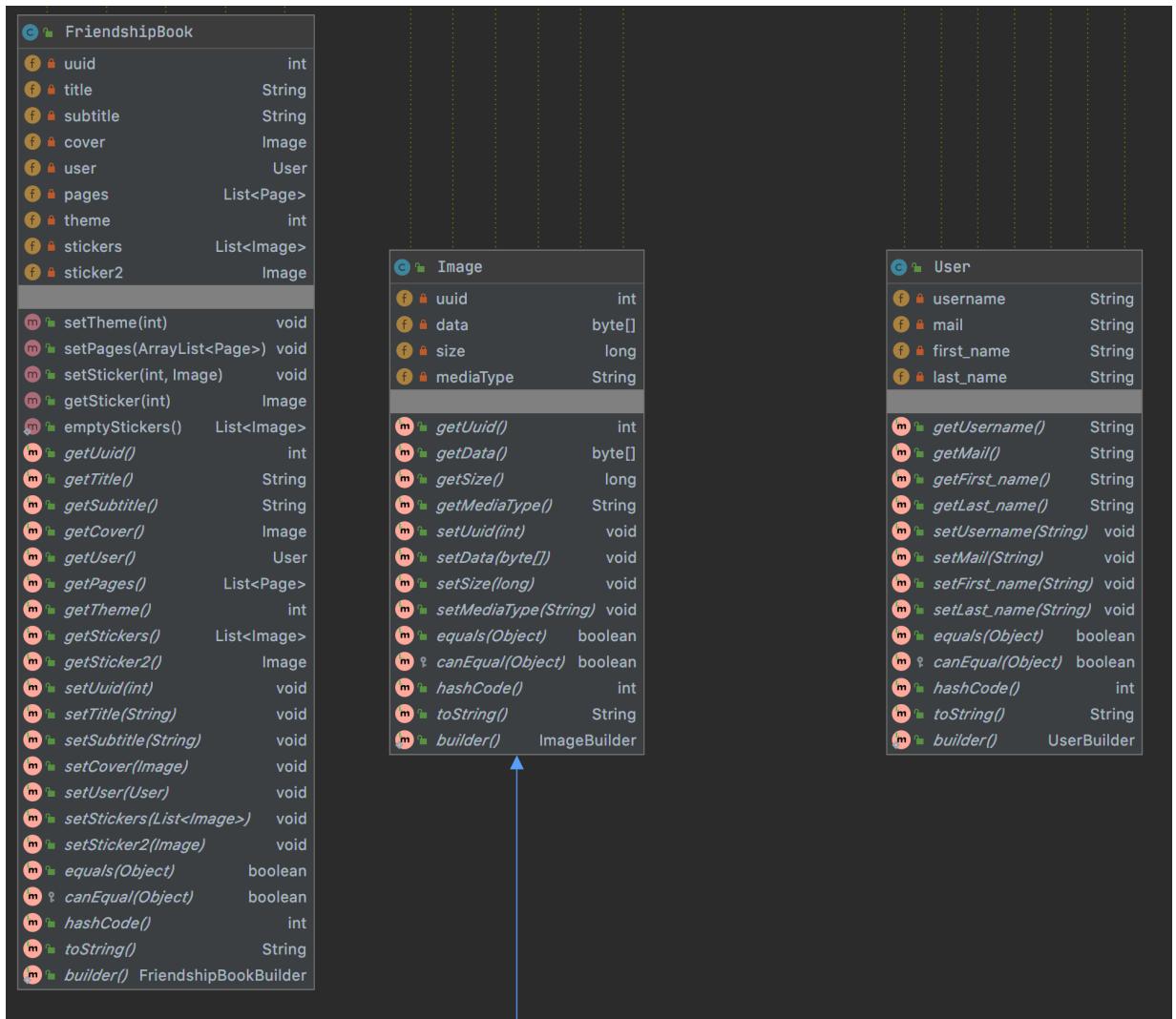
DATABASE SCHEME



CLASS DIAGRAM - CONTROLLER



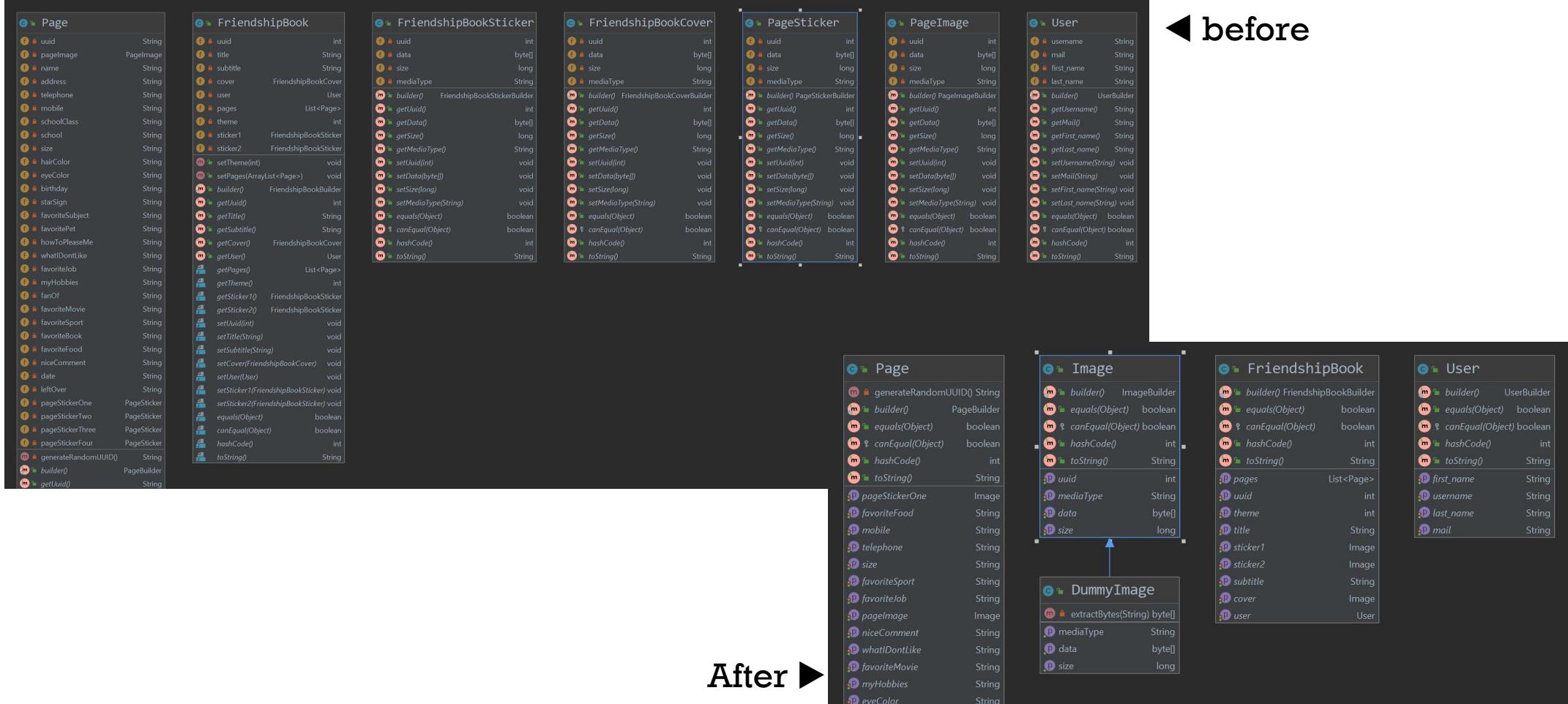
C D M
 L I O
 A A D
 S G E
 S R L
 A
 M



► Whole view



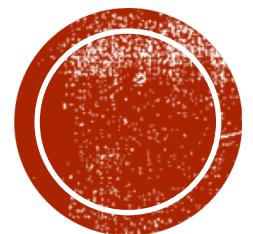
DESIGN PATTERNS: NULL OBJECT



CONTINUOUS INTEGRATION

What	Code	Push to GitLab	Test Application	Metrics	Build Application	Deploy to Server
When	continuously	Code is ready	after	after	after	after + we decide
Where			    	   	dev-system or stage-system	





QUALITY



TESTING

- Automatic testing
- Test results visible on GitLab per commit
- BDD tests with cucumber
- JUnit tests
- Database tests
- Field Test
- **Test Coverage**

coverage 30.00%

```
Feature: As a registered User
  I want to manage my friendship book

  Scenario: successfully logged in and getting user data
    When I login with "test-user""resu"
    Then The response is the test user

  Scenario: Delete friendship book cover
    When I login with "test-user""resu"
    And I navigate to friendship book
    When User friendship book cover is loaded
    Then I delete friendship book cover

  Scenario: Browse through friendship book
    When I login with "test-user""resu"
    And I navigate to friendship book
    When User friendship book cover is loaded
    Given User pages are loaded

  Scenario: Create new friendship book cover
    When I login with "test-user""resu"
    And I navigate to profile
    When I can create a friendship book cover

  Scenario: Edit friendship book cover
    When I login with "test-user""resu"
    And I navigate to friendship book
    When I can create a friendship book cover
```

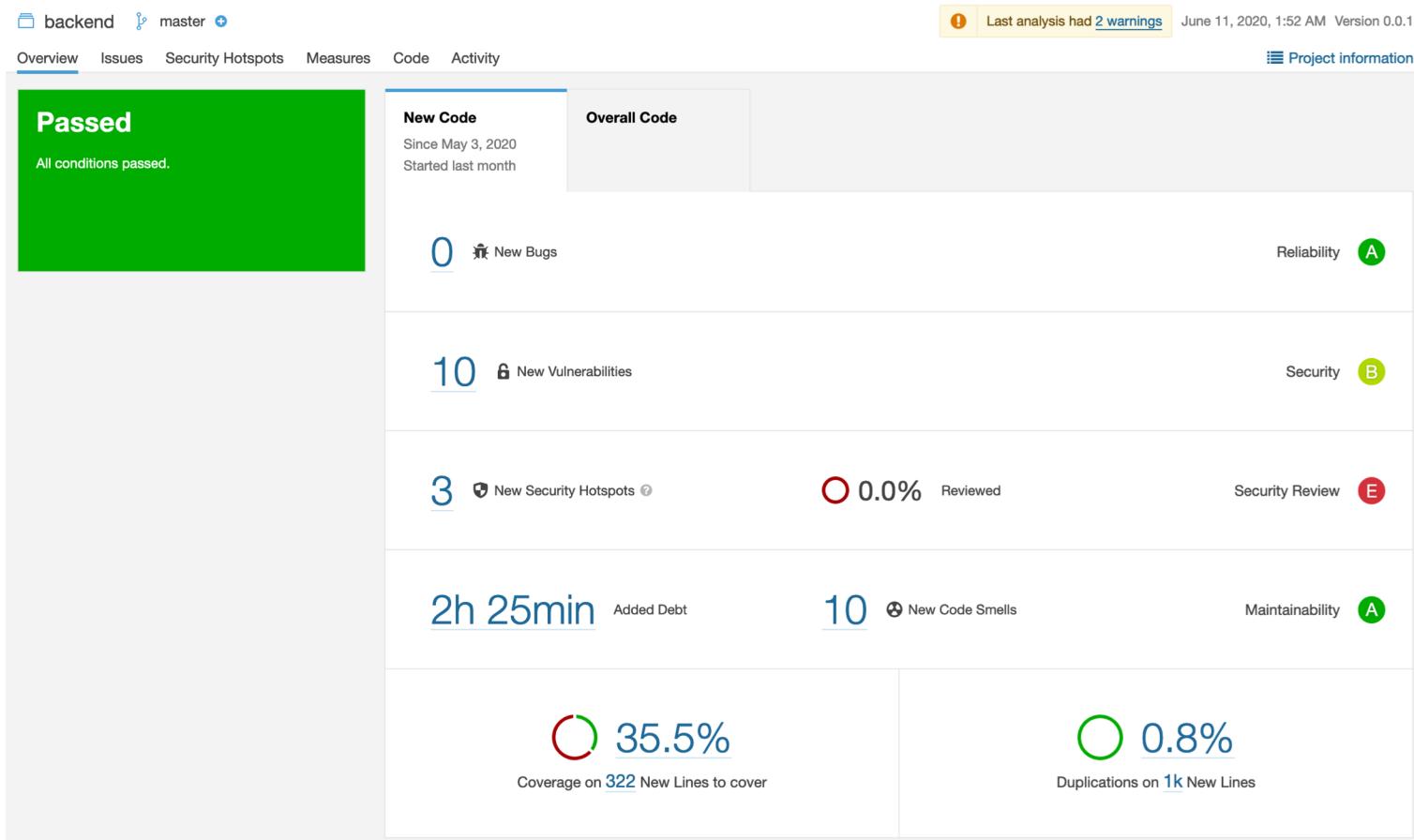


METRICS

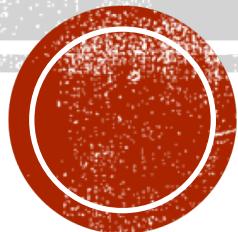


Project Overview

- > Reliability
- > Security
- > Security Review
- > Maintainability
- > Coverage
- > Duplications**
 - Overview
 - On new code
 - Density 0.8%
 - Duplicated Lines 8
 - Duplicated Blocks 2
 - Overall
 - Density 1.0%
 - Duplicated Lines 22
 - Duplicated Blocks 2
 - Duplicated Files 1
- > Size
- > Complexity**
 - Cyclomatic Complexity 178
 - Cognitive Complexity 107
- > Issues



FURTHER QUESTIONS?



BOOKLY DOCUMENTATION

- Stage System
 - bookly.online
- Documentation
 - [SRS](#)
 - [SAD](#)
 - [Swagger](#)
 - [Testplan](#)
- Project Management and Quality
 - [YouTrack](#)
 - [Blog](#)
 - [GitLab](#)
 - [SonarQube](#)
 - [Gantt Chart Time Estimation](#)
- [Demo](#)
- [Test Video](#)

