To-Do List Web Application

SDET week 8

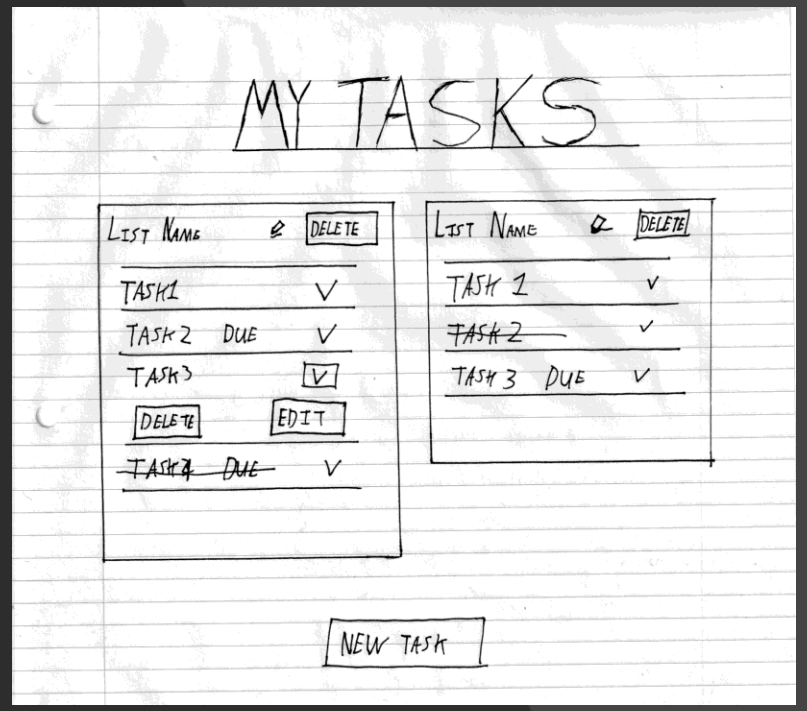
Design Specification

To create an OOP-based web application, with utilisation of supporting tools, methodologies, and technologies, that encapsulates all fundamental and practical modules covered during training.

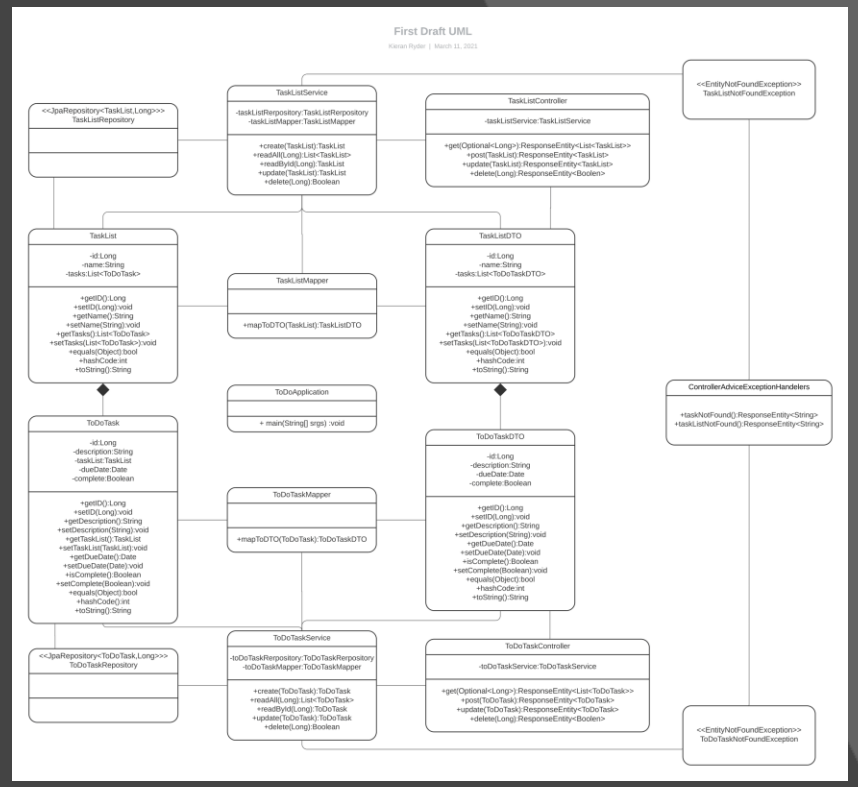
- **Simple webpage using bootstrap, Create tasks organised into lists.**
- **Spring boot application handles from API to Database**
- **Keep it simple, focus on getting the testing right.**

Planning - Design

Wireframe webpage

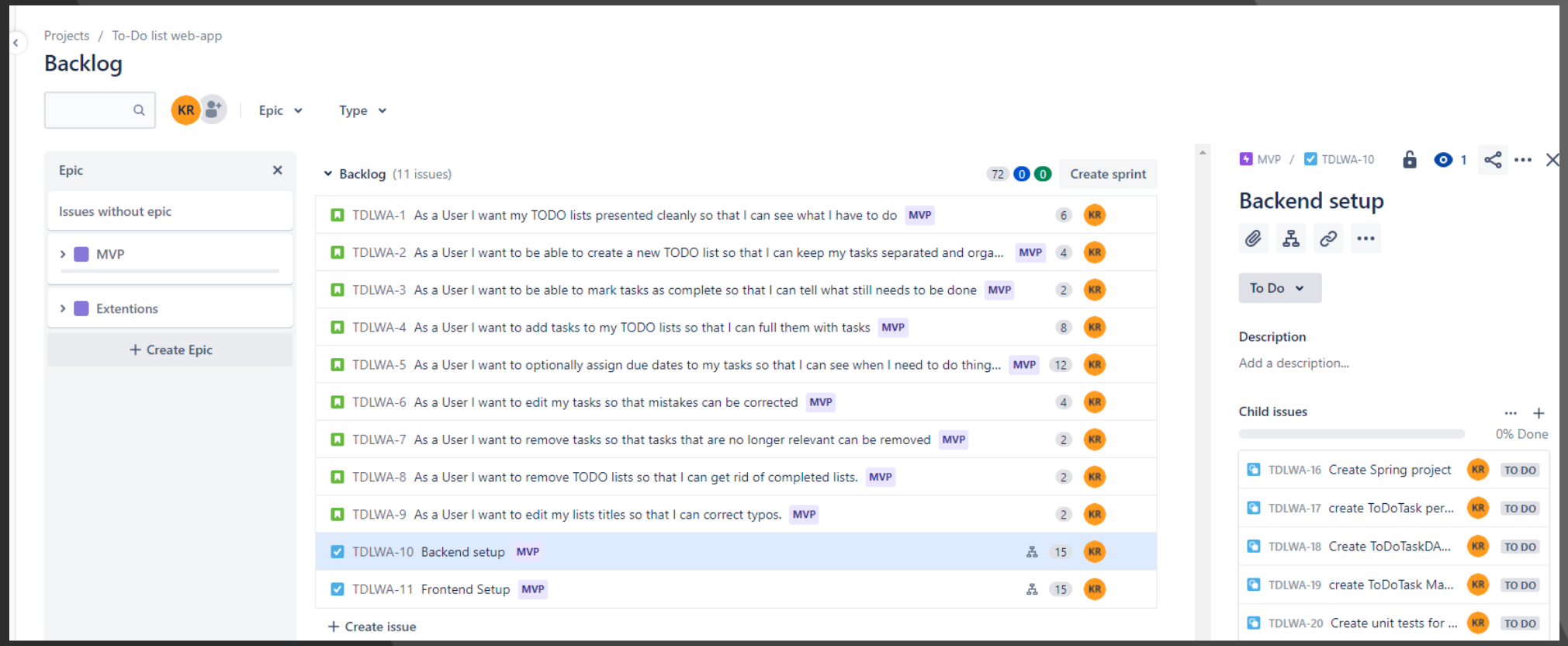


UML



Planning – Sprint Tools

- Build task backlog on jira
- Setup git integration with Jira



Technologies Used

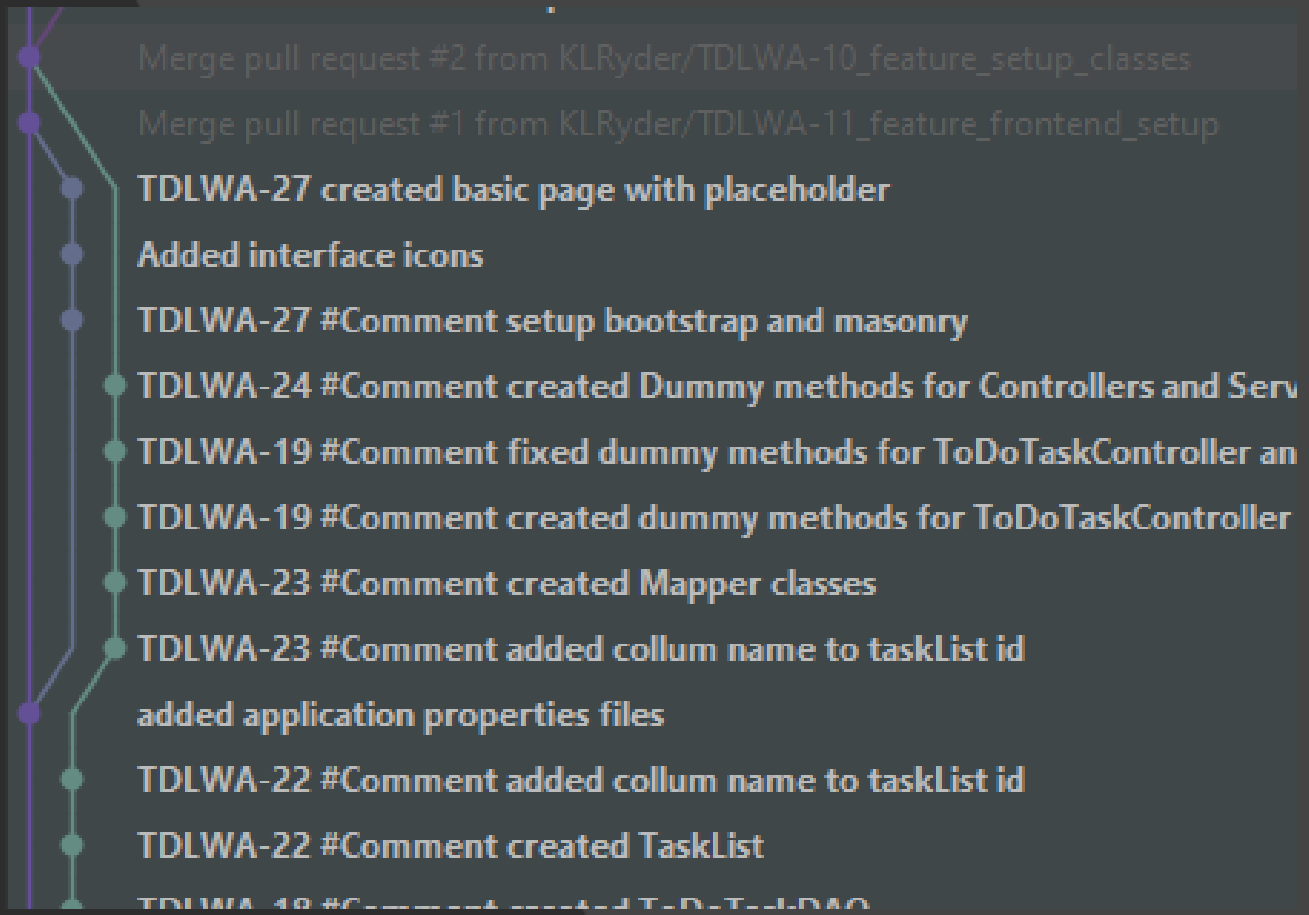
Old/Proven

- Git
- Java
- JUnit5
- JavaScript
- Mockito
- Maven
- MySQL

New/Less-experienced

- Spring
- HTML/CSS
- Selenium
- SonarQube

Version control



- All code stored on github:
- https://github.com/KLRyder/TDLWA_project2
- Using a standard main-dev-feature branching model.
- Feature branches named after corresponding Jira story

Testing

todo_lists

todo_lists

Element	Missed Instructions	Cov.	Missed
com.qa.todo_lists.data.dto		81%	
com.qa.todo_lists.exceptions		33%	
com.qa.todo_lists		15%	
com.qa.todo_lists.data.model		97%	
com.qa.todo_lists.service		100%	
com.qa.todo_lists.controller		100%	
com.qa.todo_lists.mappers		100%	
Total	100 of 1,046	90%	0 of 74

Created

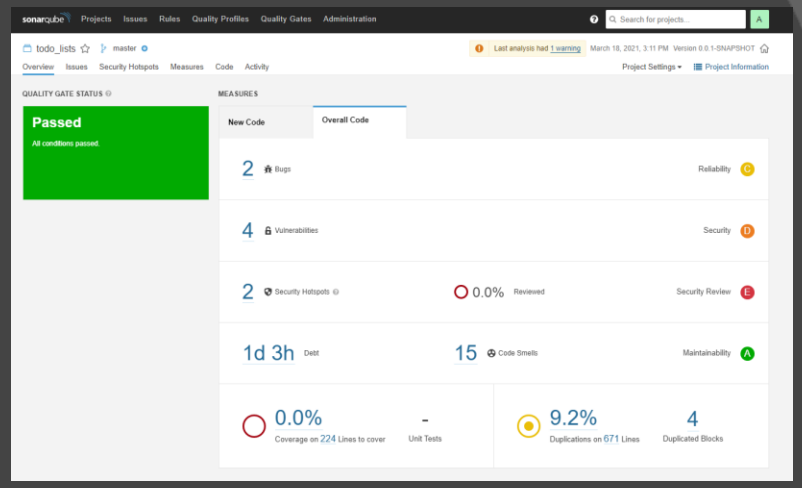
- Coverage: 90% in src/java according to JaCoCo/EclEmma
- Unit tests for all classes with JUnit5
- Intergration tests for Controllers and Service classes with JUnit5
- Acceptice testing Webpage with Selinium

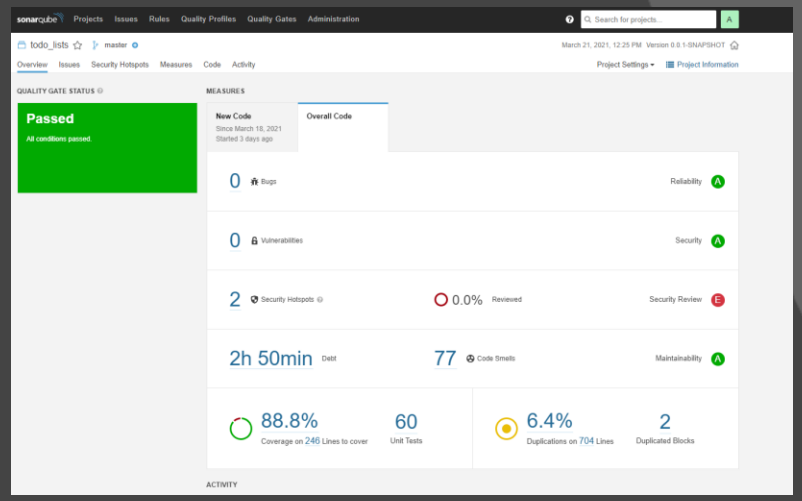
Static Analysis

Using SonarQube

Examples of fixes and comments on them in directory "static a" on github.

Most code smells are just the use of "public" in JUnit 5





Quick Demonstration

Self-Evaluation

Sprint Review

Positives

- Full MVP completion

Negitives

- Not enough time to moake website look good

Sprint Retrospective

Positives

- Managed time well – Low stress
- Frontend went far better than expected
- Minor – UML was nearly perfect on first pass. Was also satisfingly symmetrical.
- Project did not need to change much from conception to completion

Negitives

- Still awful at actualy estimating time taken on tasks
- Didn’t keep up with documenting workflow very well

Closing Remarks

- Overall resonably happy with outcome considering initial reservations
- Spring is a powerful tool, but the loss of control inherint to inversion of control is not something that I am a fan of.
- Masonry is a fantastic tool, but it did hilight how much nice building this kind of app would be in jQuery.
- Future inprovements: make the website not look boring as sin.

Questions?