

TQS Delivery & LegoLiveries

Filipe Gonçalves, 98083
Gonçalo Machado, 98359
Catarina Oliveira, 98292

Teste e Qualidade de Software
DETI, UA
2021/2022



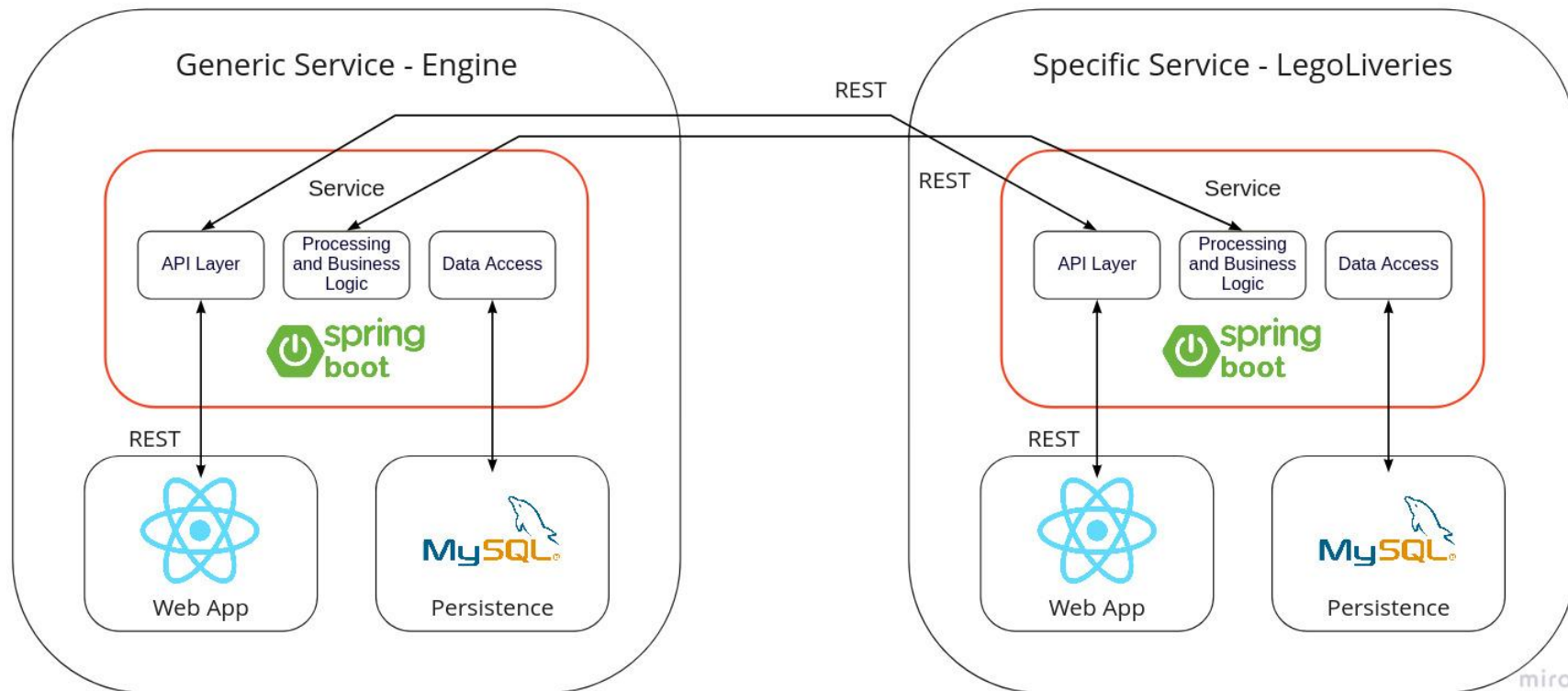
Product Concept



TQS Delivery is a platform that manages both riders and stores, with the possibility of inserting more riders, stores or addresses in the service.

LegoLiveries is a platform for clients to place orders of Lego sets, that joined this service.

Architecture



Coding Style



Import

Do not import full
libraries

Exceptions

Capture suitable
Exceptions

Tests

Have suitable name
for test



Code

Have coherent and
simple code

Comments

Create comments for
TODO or explanations

DTO

Use DTO pattern
instead of raw Model

SQA Strategy - Technology For Testing



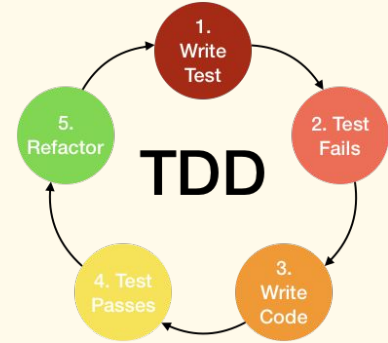
Web Testing

Selenium
Cucumber



Unit Test

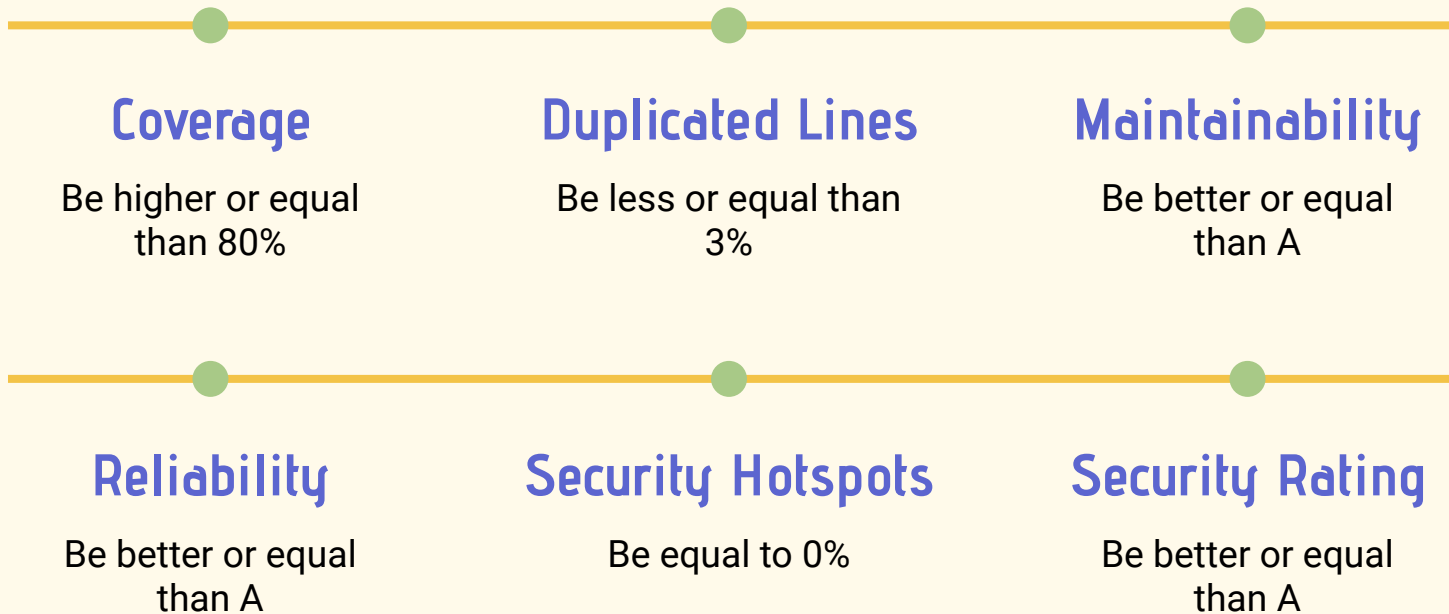
Mvc Testing (MockMvc, RestAssuredMockMvc)
Mockito
JUnit
@DataJpaTest



Strategy

Test Driven Development (TDD)

SQA Strategy - SonarQube Quality Gates



SQA Strategy - Epic

The screenshot displays the Jira Software interface for an Epic titled "SQA Strategy". On the left, a sidebar lists the Epic's components: "Report and Development", "QA testing", "Fully Implemented engine backend" (selected), "Fully Implemented LegoLiveries backend", and "Fully Implemented engine management board". The main area shows the "LEGO Sprint 4" with three issues: "LEGO-39 Selenium Testing", "LEGO-40 Engine Testing", and "LEGO-43 Engine Testing", all marked as "FULLY IMPLEMENTED ENGINE BAC...". Each issue has a status of "IN PROGRESS" and a priority icon (FG, GO, GM). Below the sprint, a "Backlog" section shows 0 issues. The interface includes a "Start sprint" button and a "Create sprint" button.

Epic ×

Issues without epic

- > ☐ Report and Development
- > ☐ QA testing
- > ☒ Fully Implemented engine backend
- > ☐ Fully Implemented LegoLiveries backend
- > ☐ Fully Implemented engine management board

+ Create Epic

LEGO Sprint 4 ✎ Add dates (3 of 7 Issues visible) 0 21 0 **Start sprint** ...

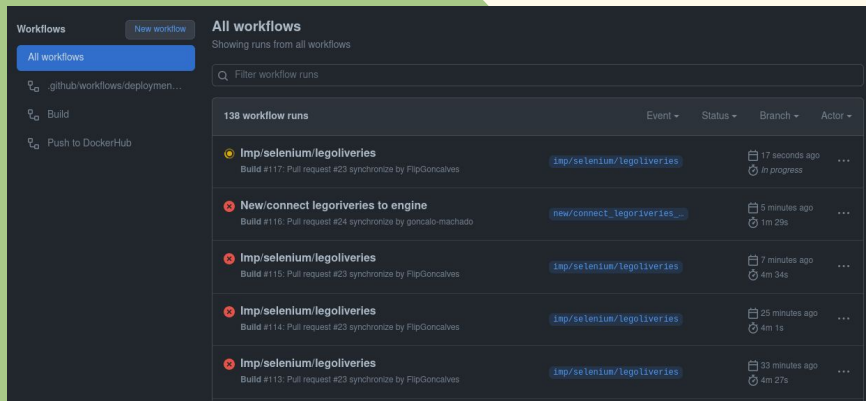
- LEGO-39 Selenium Testing **FULLY IMPLEMENTED ENGINE BAC...** 5 **IN PROGRESS** FG
- LEGO-40 Engine Testing **FULLY IMPLEMENTED ENGINE BAC...** 8 **IN PROGRESS** GO
- LEGO-43 Engine Testing **FULLY IMPLEMENTED ENGINE BAC...** 8 **IN PROGRESS** GM

+ Create Issue

Backlog (0 Issues) 0 0 0 **Create sprint**

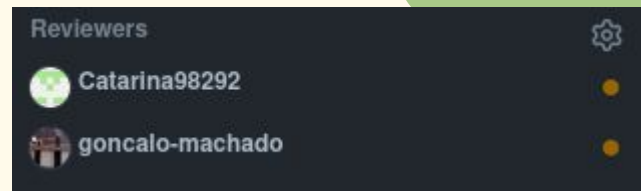
Jira Software Structure of an Epic

SQA Strategy – Workflow



GitHub Actions

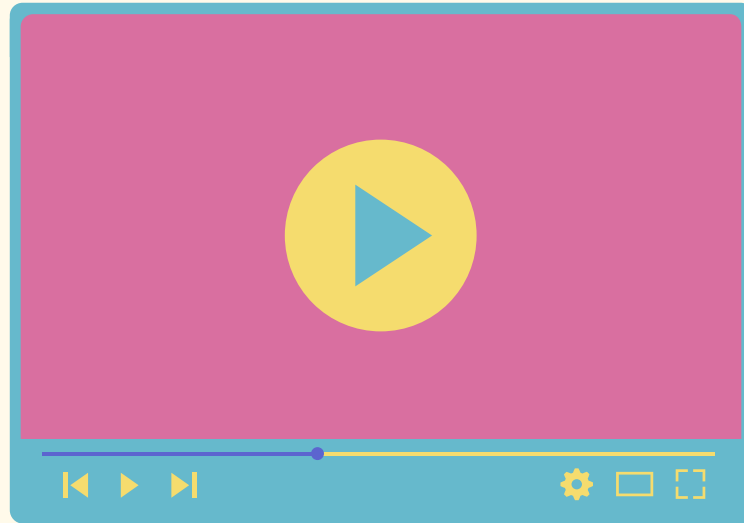
When created a Pull Request, the workflow will test the services and determine if it's okay to deploy



Pull Request Reviewers

At least half the team must review the Pull Request to be accepted

Product Demo



C1 / CD Pipelines

Continuous Integration

GitHub Actions connected with
SonarCloud



Continuous Deployment

GitHub Actions, GitHub workflow
and self-hosted runners



Limitations



Project:

- Functional Testing
- Number of team elements

LegoLiveries:

- Design
- Favourites tab
- All orders from a client

Thanks!



CREDITS: This presentation template was created
by **Slidesgo**, including icons by **Flaticon**,
infographics & images by **Freepik** and illustrations
by **Storyset**