# IMS PROJECT

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# Introduction

- BSc in Computer Science from Keele

- Review the specification

- Scope, Constraints, Minimum Viable Product

# Consultant Journey

- Java
- Eclipse
- Maven
- Junit and Mockito
- MySQL
- Git
- GitHub

# CI

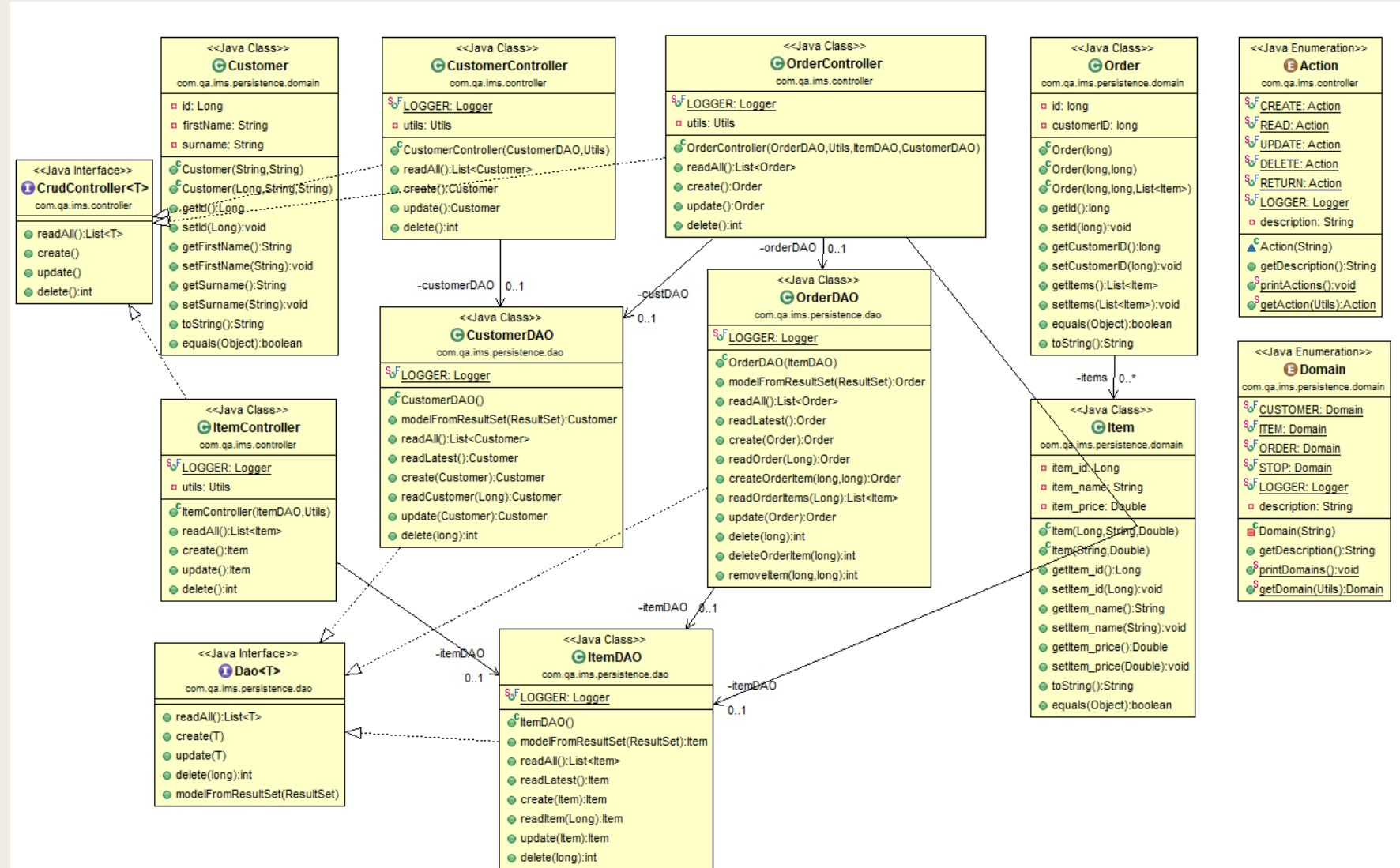■ Version control using git and GitHub utilising the dev<feature> branch model
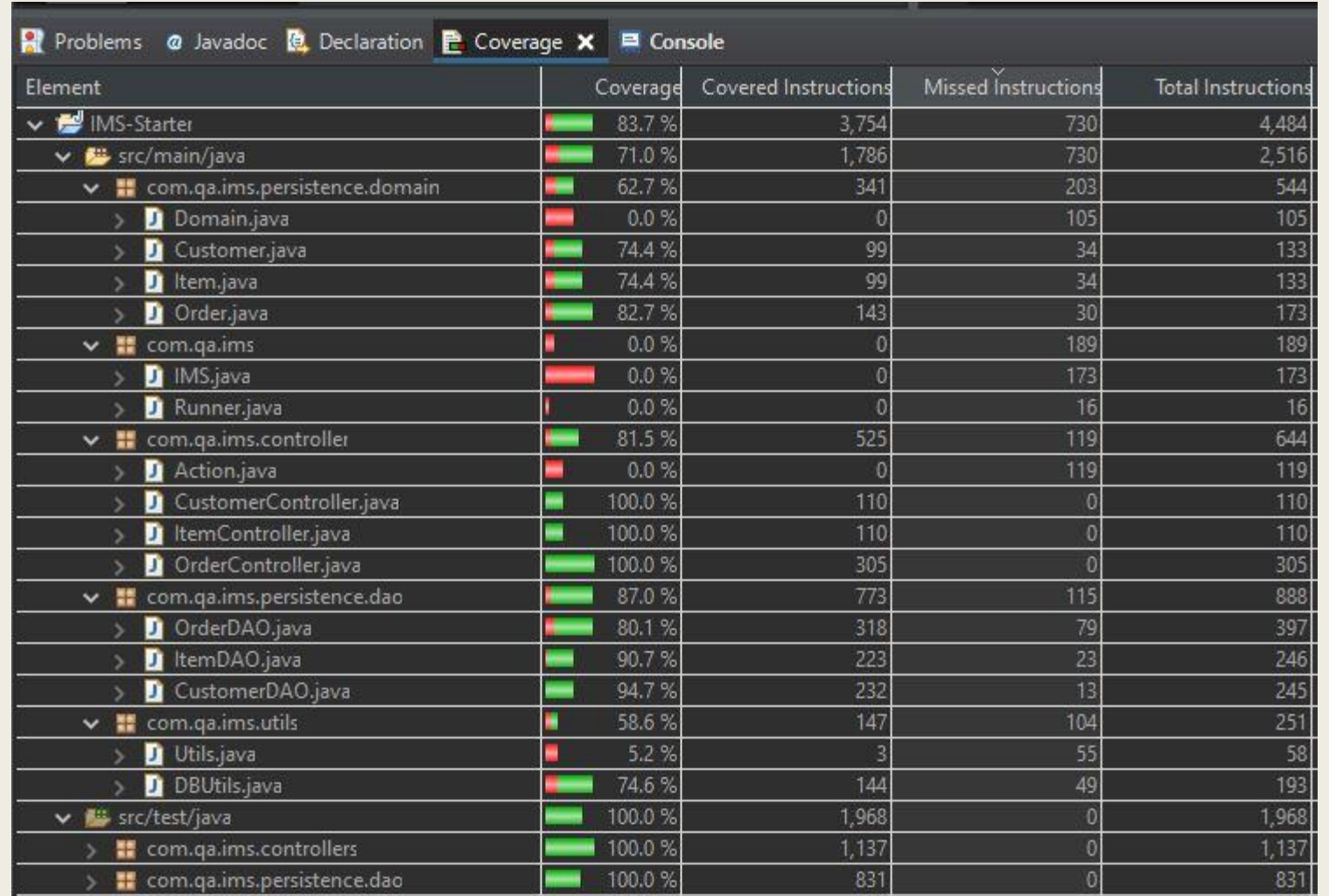
# UML

Multiplicity:

0..* Zero or More

1 . . * One or More

0..1 Zero or One

# Testing

- Junit tests for the Data Access Objects

- Mockito for Integration testing of the controllers

- 71% Coverage industry standard of 80%



| Element | Coverage | Covered Instructions | Missed Instructions | Total Instructions |
|---|---|---|---|---|
| IMS-Starter | 83.7 % | 3,754 | 730 | 4,484 |
| src/main/java | 71.0 % | 1,786 | 730 | 2,516 |
| com.qa.ims.persistence.domain | 62.7 % | 341 | 203 | 544 |
| Domain.java | 0.0 % | 0 | 105 | 105 |
| Customer.java | 74.4 % | 99 | 34 | 133 |
| Item.java | 74.4 % | 99 | 34 | 133 |
| Order.java | 82.7 % | 143 | 30 | 173 |
| com.qa.ims | 0.0 % | 0 | 189 | 189 |
| IMS.java | 0.0 % | 0 | 173 | 173 |
| Runner.java | 0.0 % | 0 | 16 | 16 |
| com.qa.ims.controller | 81.5 % | 525 | 119 | 644 |
| Action.java | 0.0 % | 0 | 119 | 119 |
| CustomerController.java | 100.0 % | 110 | 0 | 110 |
| ItemController.java | 100.0 % | 110 | 0 | 110 |
| OrderController.java | 100.0 % | 305 | 0 | 305 |
| com.qa.ims.persistence.dao | 87.0 % | 773 | 115 | 888 |
| OrderDAO.java | 80.1 % | 318 | 79 | 397 |
| ItemDAO.java | 90.7 % | 223 | 23 | 246 |
| CustomerDAO.java | 94.7 % | 232 | 13 | 245 |
| com.qa.ims.utils | 58.6 % | 147 | 104 | 251 |
| Utils.java | 5.2 % | 3 | 55 | 58 |
| DBUtils.java | 74.6 % | 144 | 49 | 193 |
| src/test/java | 100.0 % | 1,968 | 0 | 1,968 |
| com.qa.ims.controllers | 100.0 % | 1,137 | 0 | 1,137 |
| com.qa.ims.persistence.dao | 100.0 % | 831 | 0 | 831 |

# DEMO

# Sprint review

■ All User stories were completed

| TO DO | IN PROGRESS | DONE |
|---|---|---|
| as a user i want to be able create an order in the system | as a user i want to be able to add an item to the system | as a user i want to be able to add a customer |
| 3                                    IMS-9 | 2                                    IMS-5 | 1                                    IMS-1 |
| as a user i want to be able to view all orders in the system | as a user i want to be able to view all the items in the system | as a user i want to be able to view all customers in the system |
| 2                                    IMS-10 | 2                                    IMS-6 | 1                                    IMS-2 |
| as a user i want to be able to delete an order in the system | as a user i want to be to update an item in the system | as a user i want to be able to update a customers details |
| 4                                    IMS-11 | 2                                    IMS-7 | 1                                    IMS-3 |
| as a user i want to be able to add an item to an order | as a user i want to be able to delete a user in the sysgtem | as a user i want to be able to delete a customer from the system |
| 6                                    IMS-12 | 2                                    IMS-8 | 1                                    IMS-4 |
| as a user i want to be able to calculate the cost of an order | | |
| 8                                    IMS-13 | | |
| as a user i want to be able to delete a singular item from an order | | |
| 6                                    IMS-14 | | |

# Sprint Retrospective

- Worked in an organised manner

- Building blocks

- Full CRUD functionality

**IMPROVMENTS:**

- Follow Agile methodology

- Testing Coverage

- Add a front end

# Conclusion

- Good project to understand the concepts of Java and how everything interacts

- Read up more on SQL statements

- Plan better for less stress

- Read up more on Mockito

# Thank you for Listening