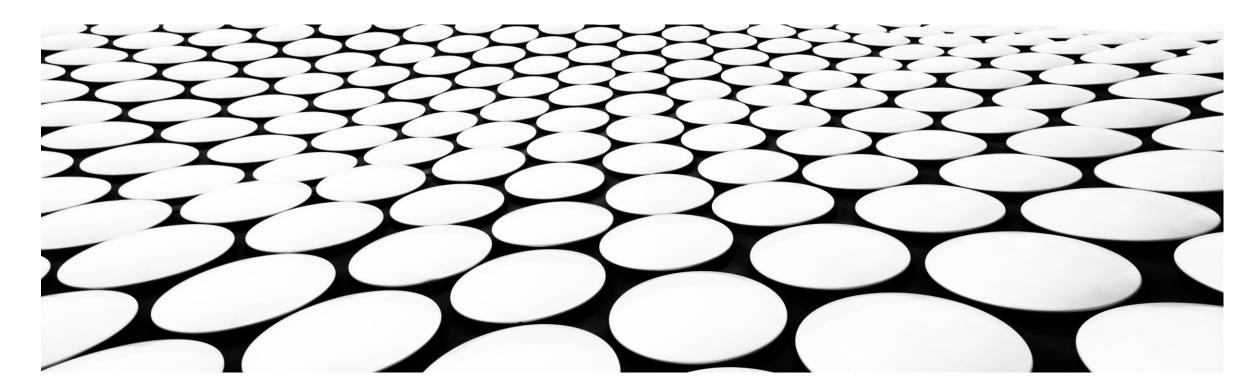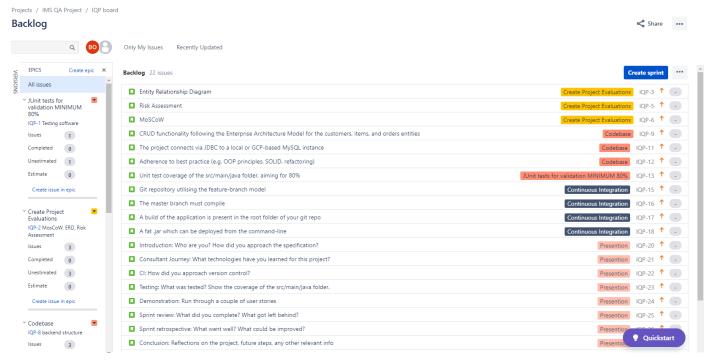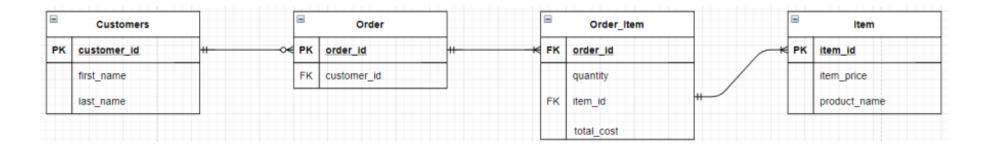# IMS PROJECT

BENJAMIN OLUYOMI

INTRODUCTION

I started by condensing the brief into digestible points/tasks that I could complete in bursts using sprints.

This was done using Jira, and the tasks were managed into separate epics to further clarify what tasks were related to each other.

This helped to efficiently manage the backlog.

ENTITY RELATIONSHIP DIAGRAM

The customers to order relation ship is a one to zero or many.

The relationship between order to order_item is one to many.

The order_item table connects the order and item table (here items can be added to removed from orders based on order id's). The total cost for each item to order interaction is also calculated here.

CONSULTANT JOURNEY

- Git as a Version Control System

- GitHub Source Code Management System

- Jira Project management

- GCP MySQL

- Java backend programming language

- Maven build tool

- JUnit to test the classes

CI

I used the repository for the IMS starter project to set up my own repo on my GitHub account. I then cloned it down to my personal machine and began working on the code from there.

This helped keep track of the progress I was making as well as keeping my work safe due to some of the recent pc issues I had.

TESTING

Element	Coverage	Covered Instructions	Missed Instructions
IMS prj QA	49.4 %	1,562	1,601
src/main/java	41.5 %	1,058	1,489
com.qa.ims.controller	21.8 %	116	415
com.qa.ims.persistence.dao	56.3 %	527	409
com.qa.ims.persistence.domain	43.5 %	251	326
com.qa.ims	0.0 %	0	183
com.qa.ims.utils	51.2 %	164	156
src/test/java	81.8 %	504	112

Element	Coverage	Covered Instructions	Missed Instructions	Total Instru
IMS prj QA	68.1 %	2,729	1,278	
src/main/java	62.9 %	1,602	945	
src/test/java	77.2 %	1,127	333	

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
IMS prj QA	71.9 %	2,990	1,166	4,156
src/main/java	65.1 %	1,673	896	2,569
src/test/java	83.0 %	1,317	270	1,587

DEMONSTRATION

SPRINT REVIEW - WHAT WENT WELL?

- Small daily sprints made it easier to keep track of everything that was required

- Majority of the tasks were completed

- The use of epics further helped to clarify which tasks need to be finished before others

SPRINT REVIEW - WHAT GOT LEFT BEHIND?

- 80% testing

  alter table order_items add cost decimal(10,2);

- Extra discount features

  update order_items set cost = (select item_price from items
  where order_items.item_id = items.item_id);

  alter table order_items add total_cost decimal(10,2);
- Cost functionality for total
  update order_items set total_cost = quantity*cost;

SPRINT RETROSPECTIVE

- I'm fairly happy with the way that I approached the sprints in terms or the short manageable bursts

- Should have used a priority system

- However I would in hindsight make the tasks far more specific to make sure I kept good track of the smaller details

CONCLUSION

- Despite achieving 71.6% coverage for the whole project, I was unfortunately unable to reach 80% test for the src/main folder, in hindsight I would've allocated more time for testing.

- Overall I think the project was successful in delivering the main functionality. However due to some delays in getting certain functions working, I was unable to make time to finish some of the extra features I wanted to include, Like features that apply discounts and so on.