




INVENTORY MANAGEMENT SYSTEM

QA IMS PROJECT
SALAH SALAH



INTRO

■ WHO ARE YOU?

My name is Salah, and I am a QA consultant trainee that has just completed my first QA project which was to create an inventory management system. Before joining QA as a trainee, I previously had no experience in creating an IMS project but after getting through this project, I feel much more confident in creating an IMS and all its technologies

■ APPROACH?

I started this project with creating my project management board through to add my user stories, acceptance criteria and briefly used the MoSCoW methodology aswell. After this, I moved onto making a UML and ERD so I had a rough understanding on how my code will look but I made sure I came back to update them. I then started to create my codebase and my database withs all its functionalities and began testing. At the end, I completed my README.md, sent all my work into the main branch of my github and built a fat.jar.

CONSULTANT JOURNEY

■ WHAT TECHNOLOGIES DID YOU LEARN FOR THIS PROJECT?

For this project, I used;

Git

GitHub

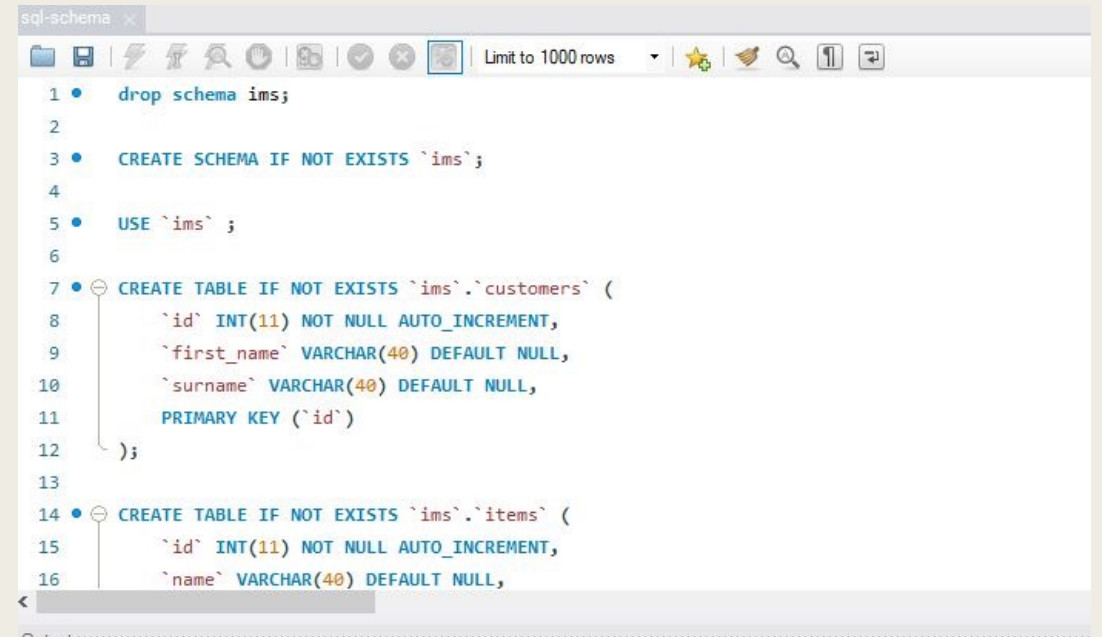
Jira

MySQL

Java

Maven

JUnit, Mockito



```
sql-schema x
Limit to 1000 rows
1 • drop schema ims;
2
3 • CREATE SCHEMA IF NOT EXISTS `ims`;
4
5 • USE `ims` ;
6
7 • CREATE TABLE IF NOT EXISTS `ims`.`customers` (
8     `id` INT(11) NOT NULL AUTO_INCREMENT,
9     `first_name` VARCHAR(40) DEFAULT NULL,
10    `surname` VARCHAR(40) DEFAULT NULL,
11    PRIMARY KEY (`id`)
12 );
13
14 • CREATE TABLE IF NOT EXISTS `ims`.`items` (
15     `id` INT(11) NOT NULL AUTO_INCREMENT,
16     `name` VARCHAR(40) DEFAULT NULL,
```

MySQL: One of the technologies I used

CONTINUOUS INTERGRATION (CI)

■ HOW DID YOU APPROACH VERSION CONTROL?

For version control I made sure I used GitHub to run commits to from my local database. I created many branches, such as my developer branch(dev), feature docu branch and a few feature branches that I ran commits on and pushed to GitHub. I started this project by forking an IMS Starter package and created my own branches off it, so it was well organized and precise. At the end, I merged all created branches back on to the main branch which is called the master branch.

```
MINGW32:/c/Users/guled/guled/eclipse-workspace/IMS-Project
$ git checkout dev
Switched to branch 'dev'
Your branch is behind 'origin/dev' by 3 commits, and can be fast-forwarded.
(use "git pull" to update your local branch)

guled guled@DESKTOP-AP6VVOG MINGW32 ~/eclipse-workspace/IMS-Project (dev)
$ git pull
Updating 35684fc..54ce119
Fast-forward
 Documents/UML Final.png | Bin 0 -> 171992 bytes
 Documents/UML.PNG       | Bin 0 -> 54957 bytes
 2 files changed, 0 insertions(+), 0 deletions(-)
 create mode 100644 Documents/UML Final.png
 create mode 100644 Documents/UML.PNG

guled guled@DESKTOP-AP6VVOG MINGW32 ~/eclipse-workspace/IMS-Project (dev)
$ git status
On branch dev
Your branch is up to date with 'origin/dev'.

nothing to commit, working tree clean

guled guled@DESKTOP-AP6VVOG MINGW32 ~/eclipse-workspace/IMS-Project (dev)
$
```

SalahS49 Merge pull request #9 from SalahS49/feature-documentation ... 54ce119 2 ho	
Documents	updated UML
src	updated sql schema
.gitignore	Initial commit
LICENSE.md	Initial commit
README.md	Initial commit
pom.xml	Initial commit

TESTING

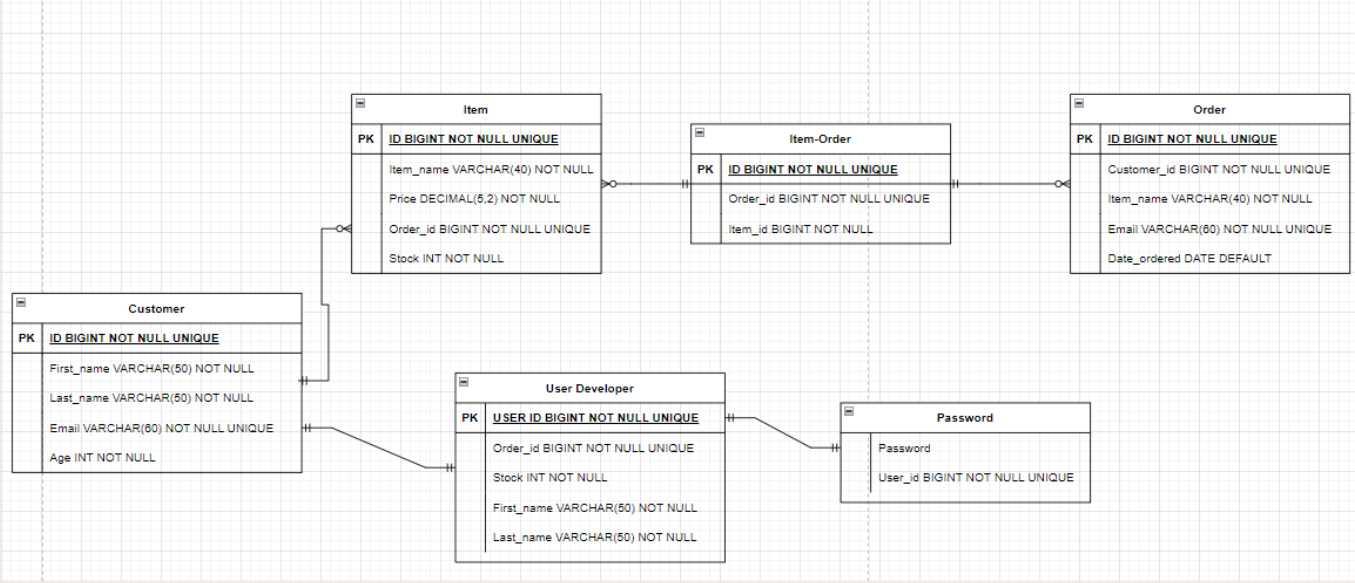
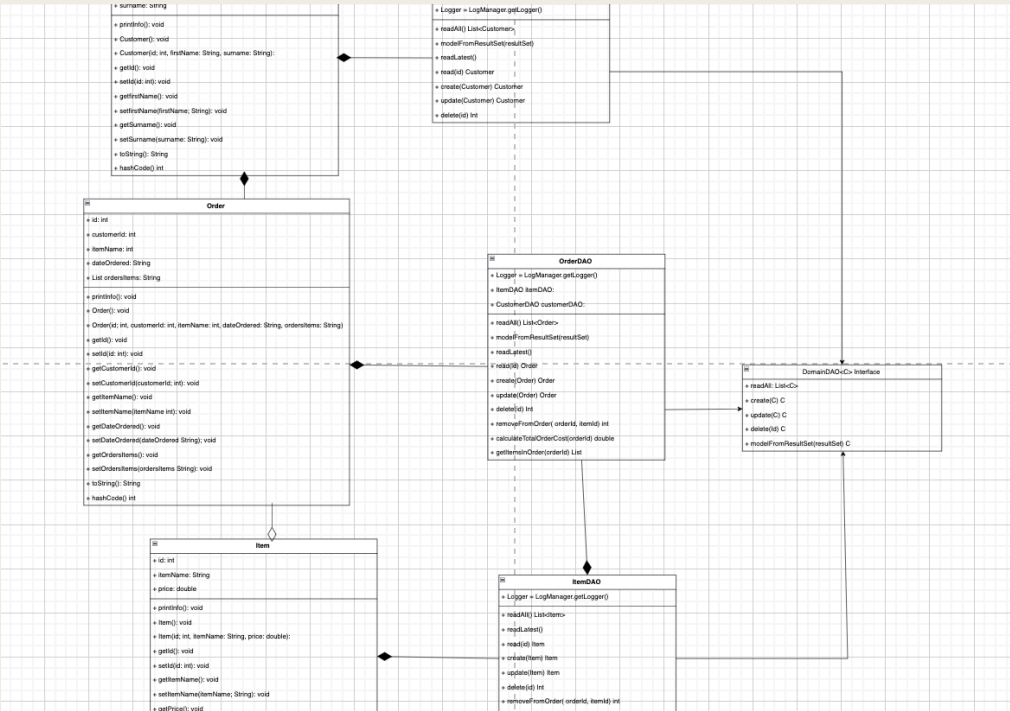
■ WHAT WAS TESTED?

The tests had to be covering 80% which were being run through Junit and Mockito but however, due to few bugs which I had problems finding the errors to I fell short and reached 50% for my testing. I began with lower test result % but I persevered and hit 50.1% which isn't great, but I believe I could have done better if I didn't make errors prior to running the tests.

```
@Test
public void testDelete() {
    assertEquals(1, DAO.delete(1));
}
```

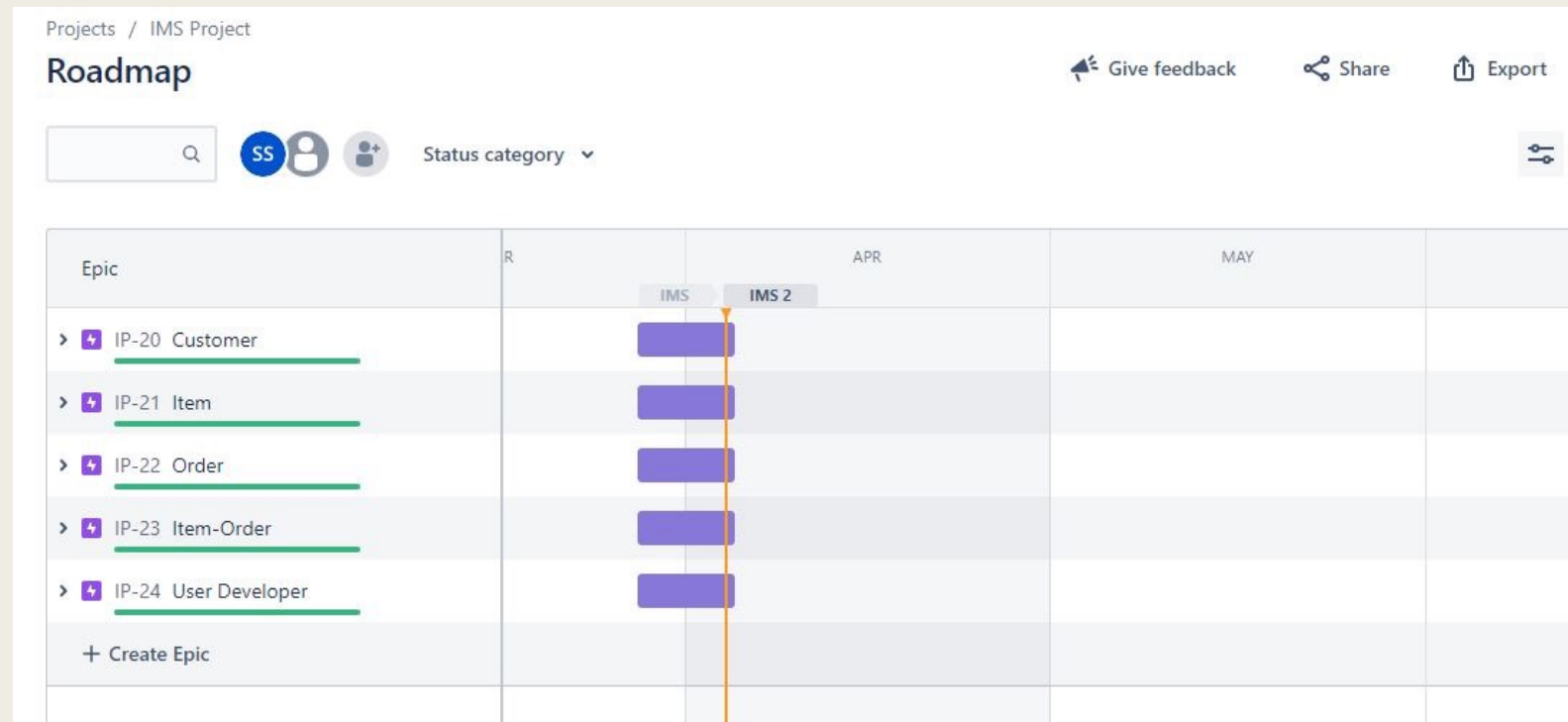
Coverage					
ava (4 Apr 2022 01:10:59)					
Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions	
IMS-Project	50.1 %	1,630	1,625	3,255	
> src/main/java	39.8 %	970	1,467	2,437	
> src/test/java	80.7 %	660	158	818	

ERD AND UML



PROJECT MANAGEMENT BOARD

- <https://salah456.atlassian.net/jira/software/projects/IP/boards/2/roadmap>



DEMONSTRATION

- DEMONSTRATION OF TESTING AND RUNNING DATABASE

WAS NOT ABLE TO RUN TESTS DUE TO NO PRESENTING

SPRINT REVIEW

■ WHAT DID YOU COMPLETE?

I ended completing my project management board and ran my user stories into my database which are working. My user stories for my customer, item and orders were to create update, read, update and delete which all worked.

■ WHAT GOT LEFT BEHIND?

I did not manage to fix the errors in my test classes and not reach the coverage I was meant to, but I believe I could have done better if I took more time in creating my test classes. I also struggled to complete my order test controller class which I was not able to run, and I believe if I had run it, my coverage would have increased.

SPRINT RETROSPECTIVE

■ WHAT WENT WELL?

I believe what went well was my my creation of my branches on my GitHub and how well organized I created my branches. In the beginning of this project, I previously created a repository but my branching was very unorganized so I made sure I started all over again so it can all be neat when presenting my project.

■ WHAT COULD BE IMPROVED?

I think I could have worked on my order classes as I must say it was the hardest one to work on. There were moments I could not find the error, but I made sure I didn't give up and found how to make sure they were all working in the end.

CONCLUSION

■ REFLECTIONS, FUTURE STEPS AND ANY OTHER RELEVANT INFO

All in all, I would say my effort for this project was solid and was a great start to creating future projects. I now know what kind of approach I should take in the future, so the same mistakes don't occur again.

In the future, I will making sure I first plan a final UML and ERD before moving on to my code so that I know nothing will need changing at the end, so I have no confusions later in future projects.

I believe my knowledge now in the technologies I have learnt are going to only get better as I improve and practice, but I would say my understandings of the technologies have bettered before starting the project.

THANK YOU

Q&A