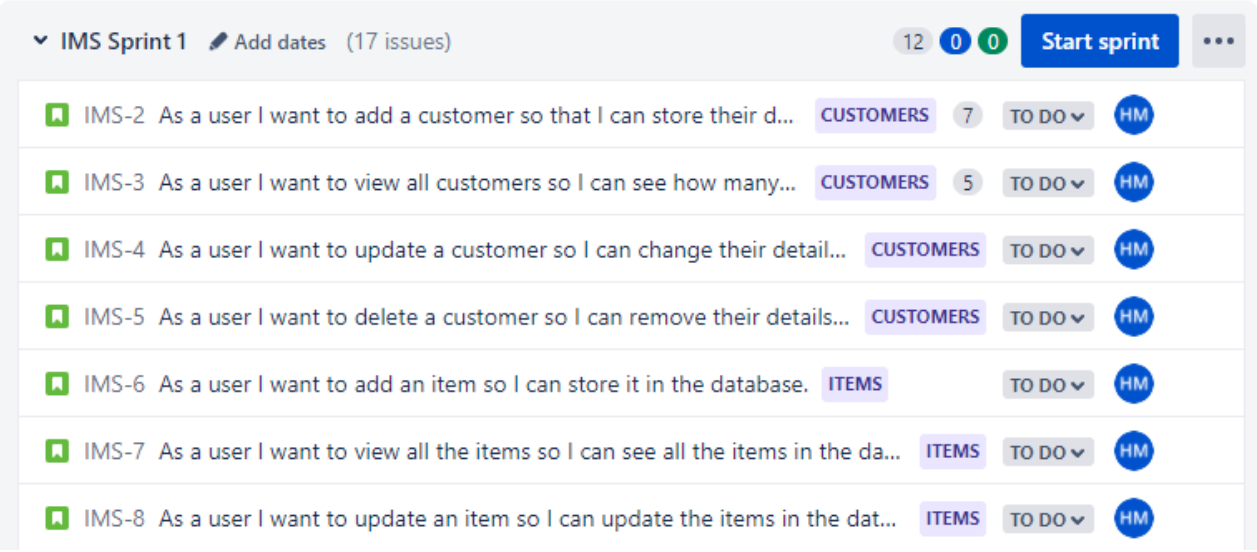
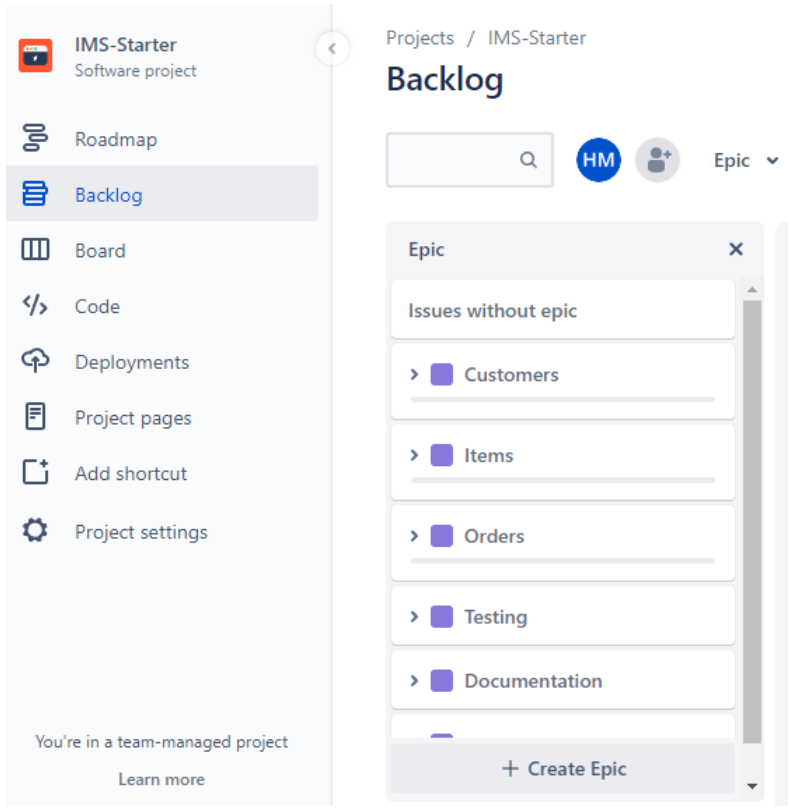
Inventory Management System (IMS) Fundamental Project

By **Hamid Mohammed**

Introduction to My IMS Starter Project

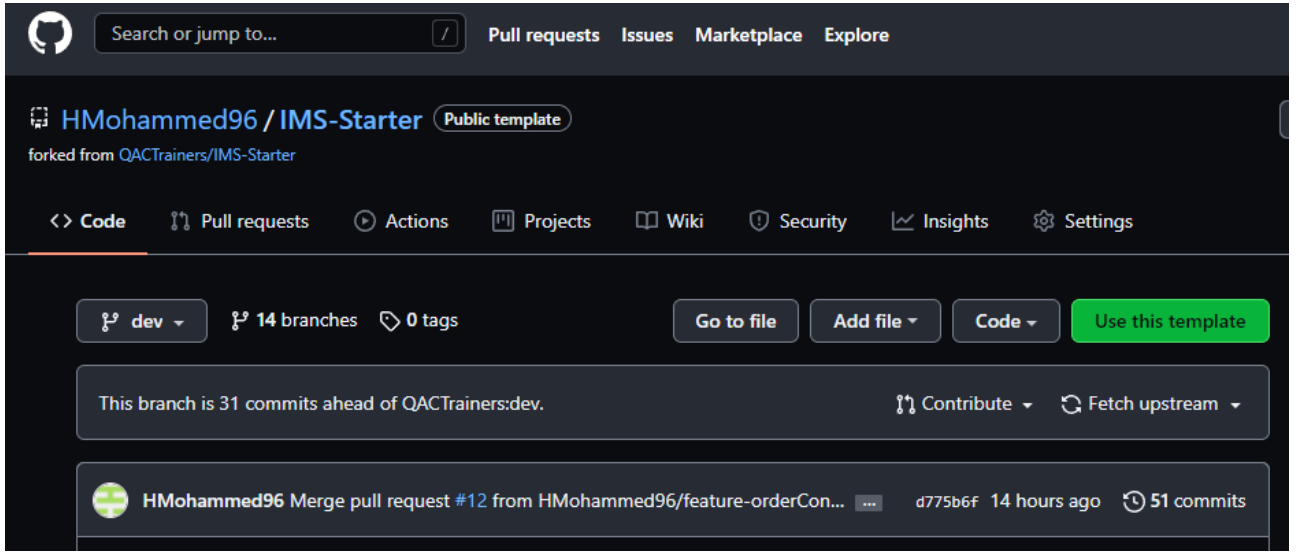
- **Who am I?**
- **How did I approach the specification?**
- I approached the specifications of the project by making notes of the main features in the codebase that we would need to implement into the application and start thinking about the user stories that will go into my backlog.
- I created a Kanban board on Jira which would contain the epics, user stories of our project and sprint also.

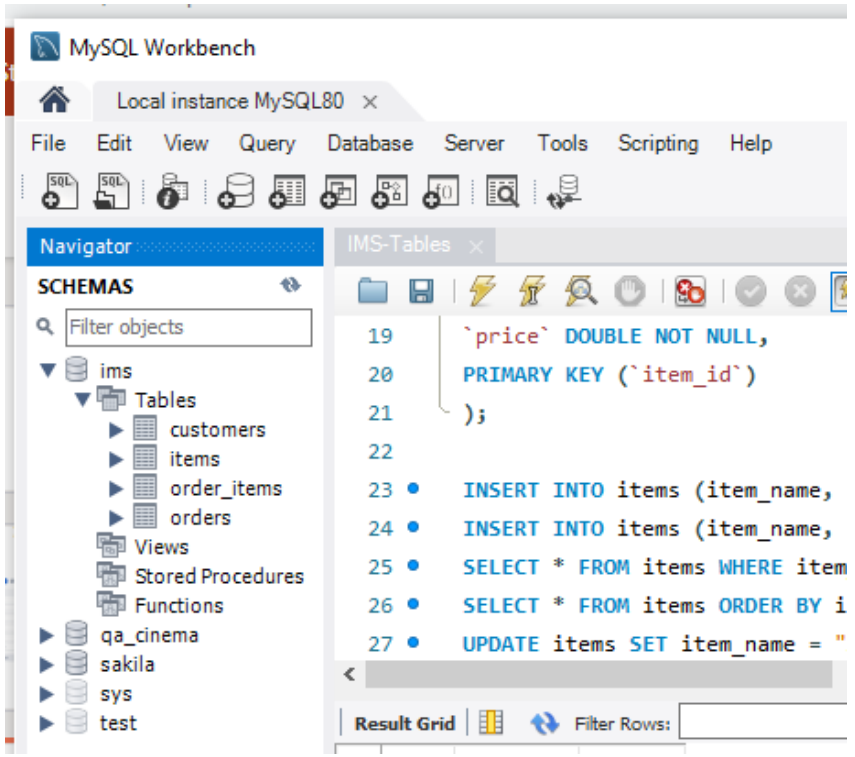




Consultant Journey

- From this project I have learnt more about how Git can be used during a sprint. An example is such as the feature-branch model which meant I was pushing copies of code to my feature branches.
- Also GitHub was used to merge my feature branches to my development branches.
- The use of MySQL was also required for this project and I became comfortable with creating databases and tables which stored data.
- I used Java as the programming language to write my code which would form the codebase of the features in the application I created during this project.
- I used JUnit as the component to do the testing of the code I had written during this project. It is vital as it would confirm if the features implemented in the application would operate as required.





How did I approach version control?

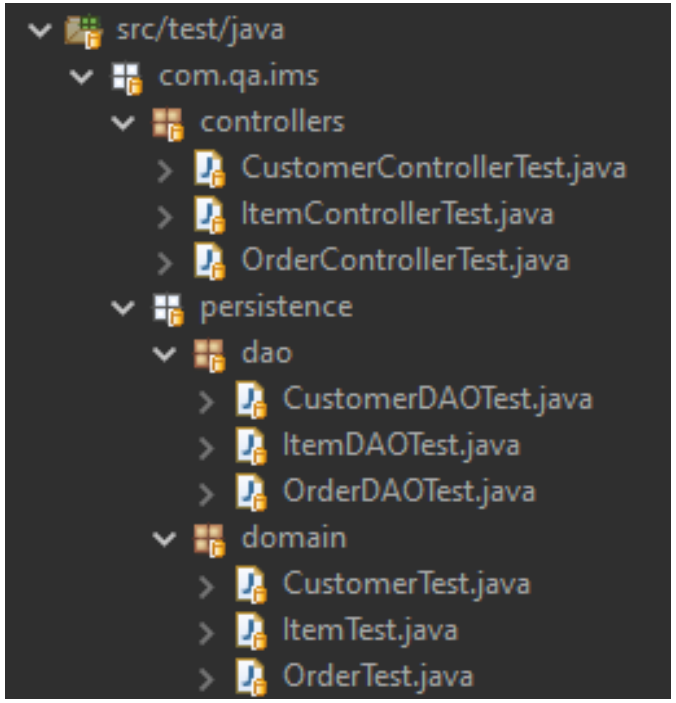
- I approached Git by implementing a feature branch model during the project which meant I would create a feature branch to work on from my development branch.
- Once I was finished working in that particular feature branch I would do a smart commit which would link the code I worked on to one of the epics or user stories that I created on my Kanban board in Jira. I then push to it and then merge with the development branch.

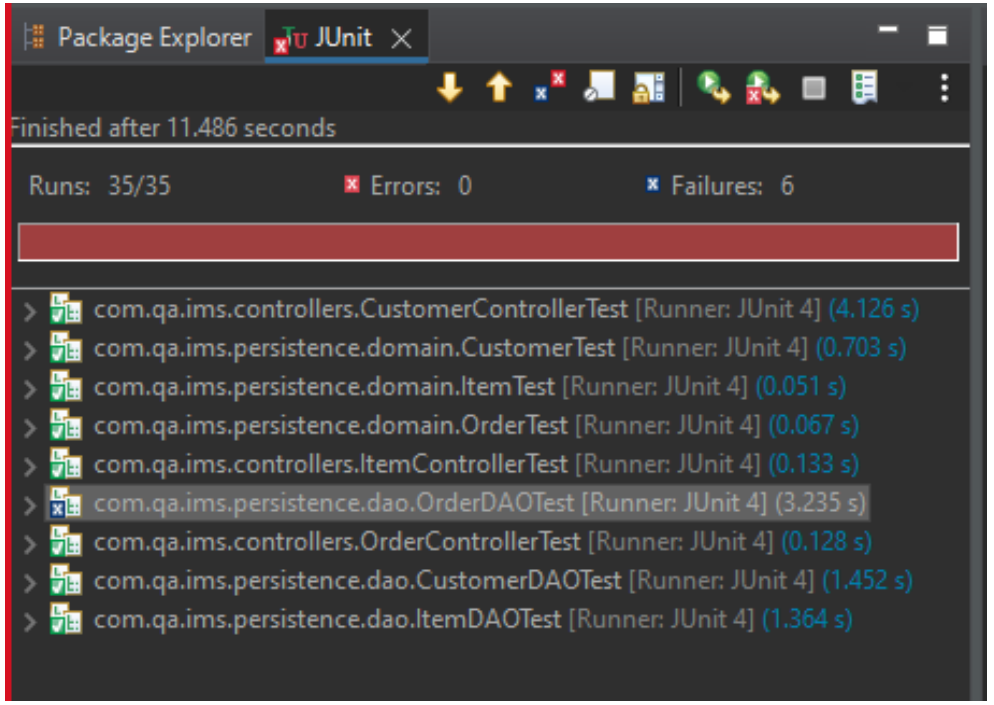
```
Hamid@LAPTOP-61661MAL MINGW64 ~/Documents/IMS-Starter (feature-domain.orders)
$ git checkout dev
Switched to branch 'dev'
Your branch is up to date with 'origin/dev'.

Hamid@LAPTOP-61661MAL MINGW64 ~/Documents/IMS-Starter (dev)
$ git pull
remote: Enumerating objects: 1, done.
remote: Counting objects: 100% (1/1), done.
remote: Total 1 (delta 0), reused 0 (delta 0), pack-reused 0
Unpacking objects: 100% (1/1), 628 bytes | 62.00 KiB/s, done.
From https://github.com/HMohammed96/IMS-Starter
   cd1c70d..2a735cb  dev        -> origin/dev
Updating cd1c70d..2a735cb
Fast-forward
 .../java/com/qa/ims/persistence/domain/Orders.java | 107 ++++++++++++++++++++++
 1 file changed, 107 insertions(+)
 create mode 100644 src/main/java/com/qa/ims/persistence/domain/Orders.java
```

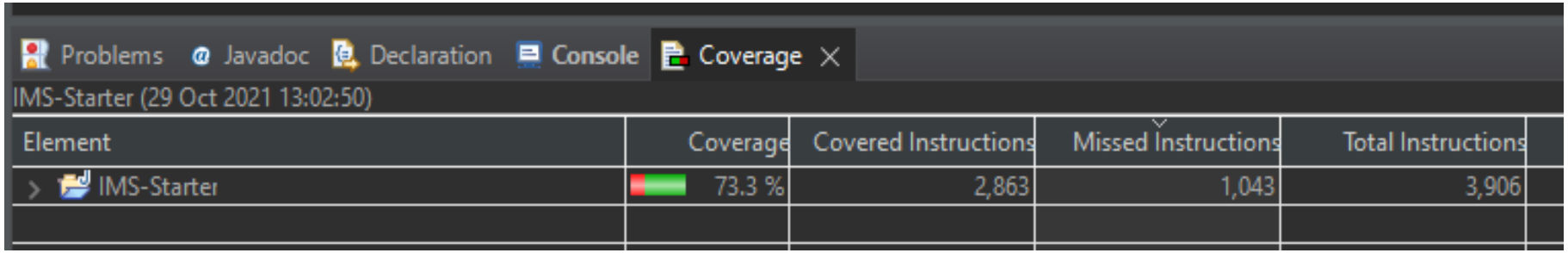
```
Hamid@LAPTOP-61661MAL MINGW64 ~/Documents/IMS-Starter (feature-domain.orders)
$ git add .

Hamid@LAPTOP-61661MAL MINGW64 ~/Documents/IMS-Starter (feature-domain.orders)
$ git status
On branch feature-domain.orders
Your branch is up to date with 'origin/feature-domain.orders'.

Changes to be committed:
  (use "git restore --staged <file>..." to unstage)
        modified:   src/main/java/com/qa/ims/persistence/domain/Orders.java


Hamid@LAPTOP-61661MAL MINGW64 ~/Documents/IMS-Starter (feature-domain.orders)
$ git commit -m "IMS-21 #comment this is my orders domain file"
[feature-domain.orders e50d3a2] IMS-21 #comment this is my orders domain file
 1 file changed, 39 insertions(+), 30 deletions(-)

Hamid@LAPTOP-61661MAL MINGW64 ~/Documents/IMS-Starter (feature-domain.orders)
$ git push
Enumerating objects: 21, done.
Counting objects: 100% (21/21), done.
Delta compression using up to 8 threads
Compressing objects: 100% (8/8), done.
Writing objects: 100% (11/11), 1.09 KiB | 140.00 KiB/s, done.
Total 11 (delta 4), reused 0 (delta 0), pack-reused 0
remote: Resolving deltas: 100% (4/4), completed with 4 local objects.
To https://github.com/HMohammed96/IMS-Starter.git
   05c1e53..e50d3a2  feature-domain.orders -> feature-domain.orders
```

What was tested?

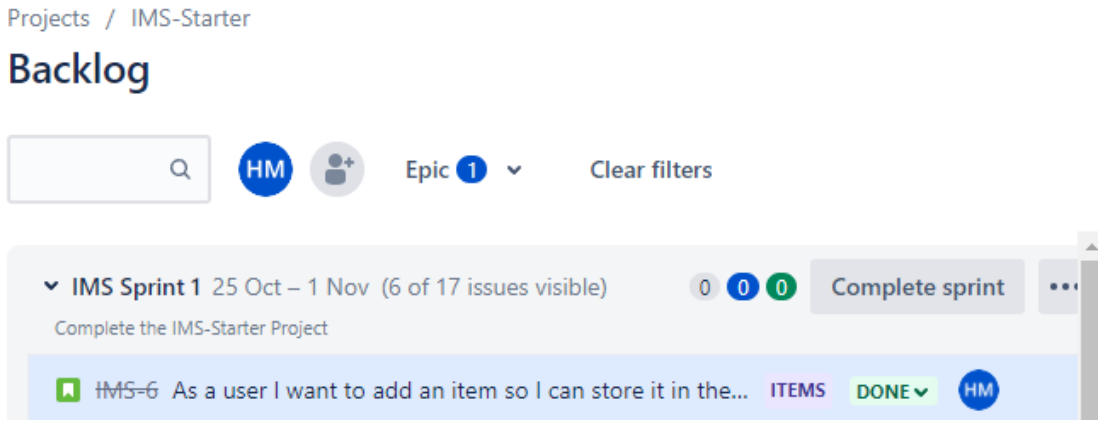
- Testing was performed on the DAO files, Controller files and also the Domain files. This was a total of 9 files that were tested during the testing period of the project. During the testing JUnit was used to test these files.



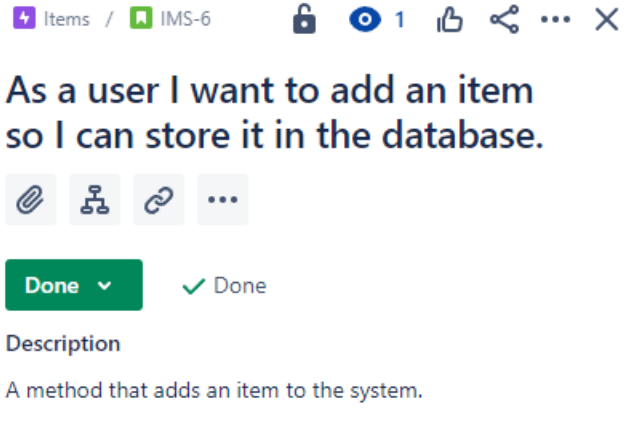




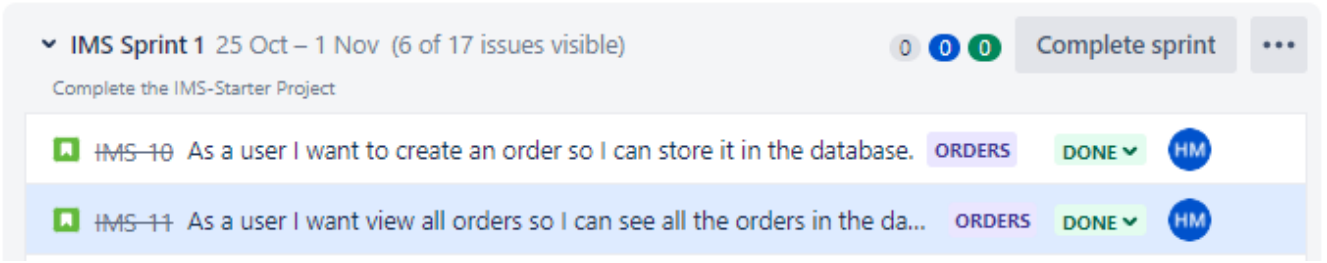
Demonstration



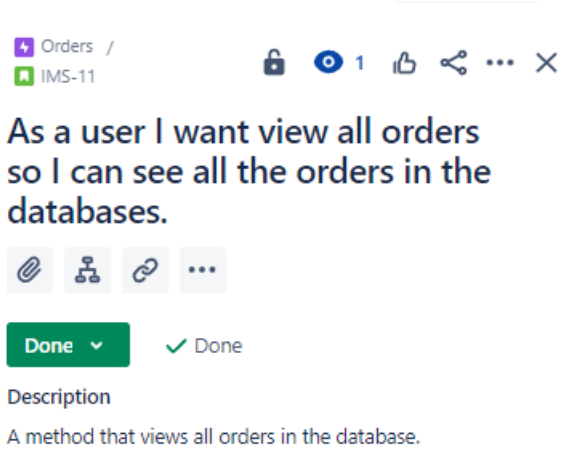
A user story in my IMS Sprint.



A description of one of the user stories.



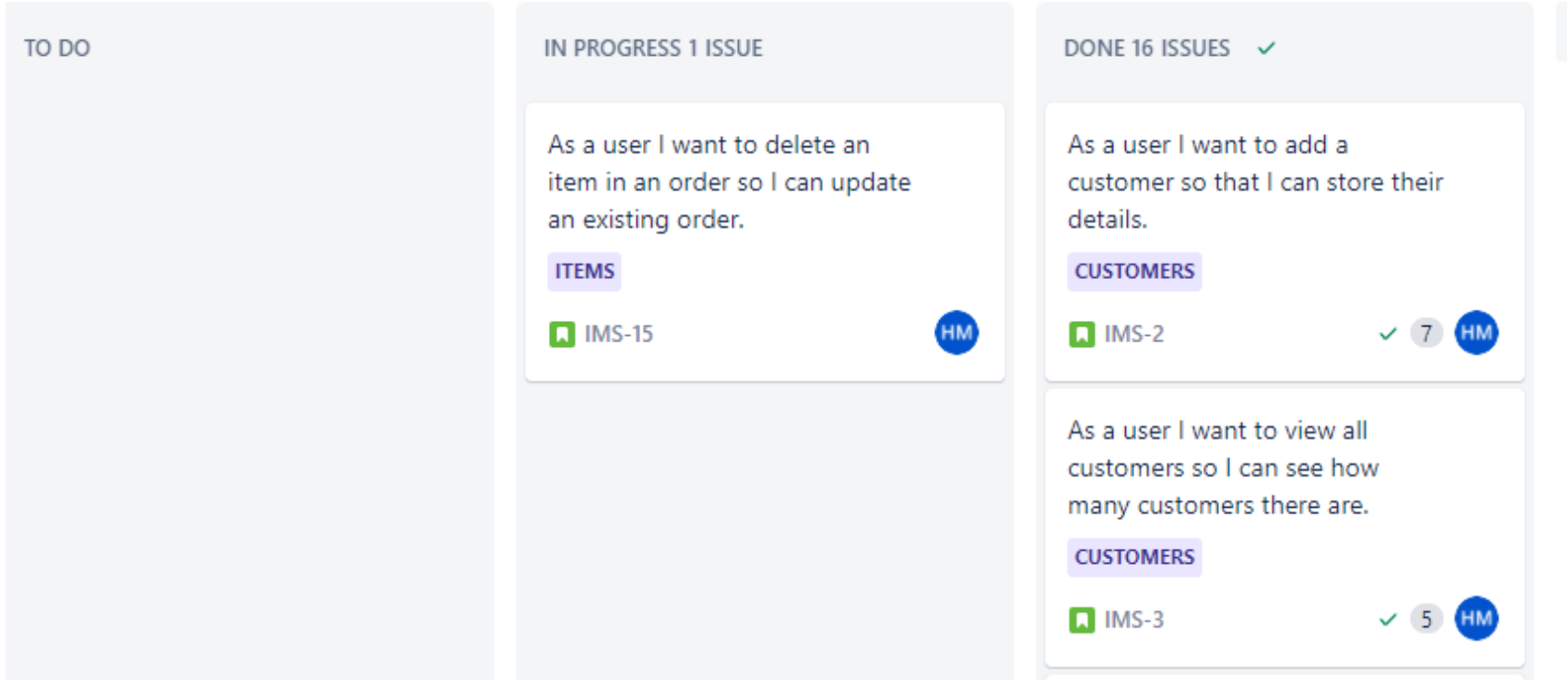
Another user story in my IMS Sprint.



A description of one of the user stories.

Sprint Review

- **What did I complete?**
- During the sprint I assigned certain user stories to particular epics that related to them as this gave my Jira board more structure and made it easier while progressing during the project and dealing with the issues in my backlog. I completed the majority of issues relating to the features that are required in the application. Only IMS-15 had been left behind and was still an issue in progress.

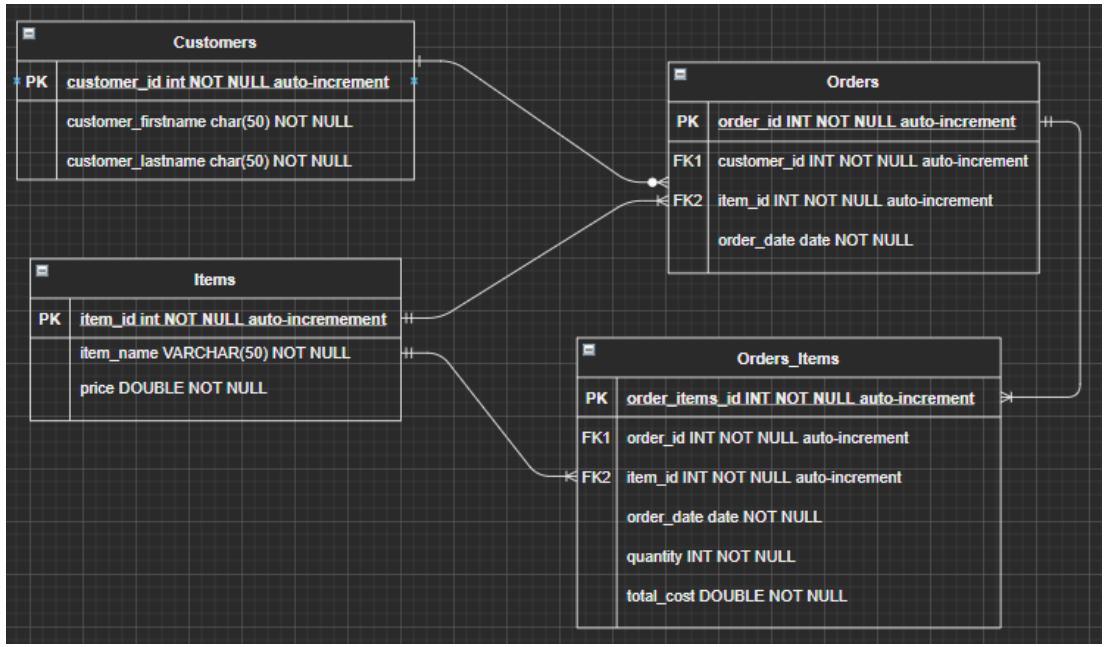


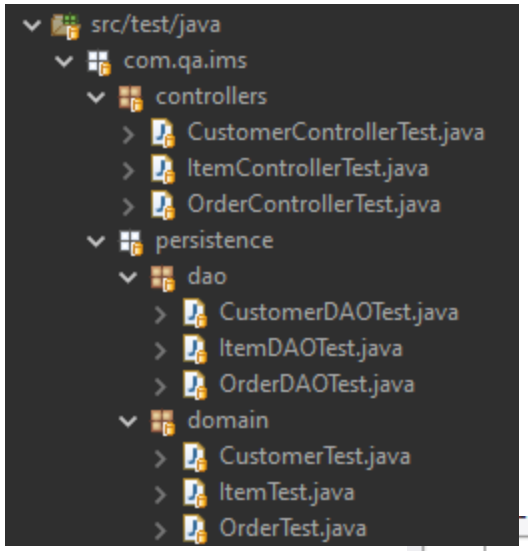
Sprint Retrospective

- In retrospect I would say that the sprint was successful as I was able to complete a majority of the issues that I assigned to my backlog and this meant that as a result I would be able to complete the project and create an application ready to be used.
- For improvement I would say I would create an epic for debugging so I can be more aware of what issues are present in the code and then I can have an idea what I need to deal with in relation to this issue.

Conclusion

- During this project adopted the mindset of a software developer and immersed myself in the role as I had to deal with and overcame many obstacles. As a result this provided my with valuable experience that I can then take forward with me on my journey and use in the next project.
- I realised how vital planning prior to implementing the coding in Eclipse was. In particular the Jira Kanban Board and ERD were crucial as they provided me with the roadmap to create my database which I then utilised to create my codebase in Eclipse.
- In the project I also experienced what testing your code in the project is like as it required diligence and resilience when dealing with the outcome.





item_id	item_name	price
2	Air Max 95	119
3	Air Jordan 1	99

order_id	fk_id	fk_item_id
1	1	1
2	2	2

order_items_id	fk_item_id	fk_order_id	quantity	total_cost
1	1	2	1	15
2	2	2	1	20
3	3	2	1	13
4	4	2	1	20

Q&A