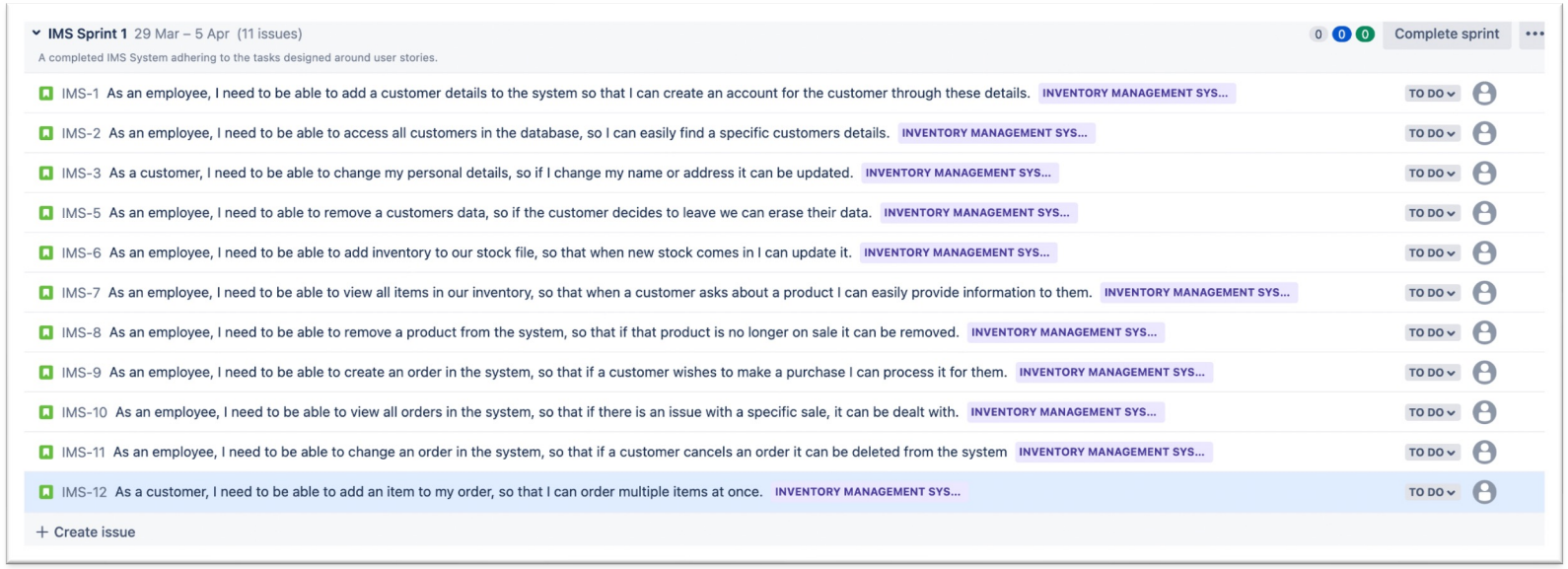
IMS Project

Sayed Sakkaf

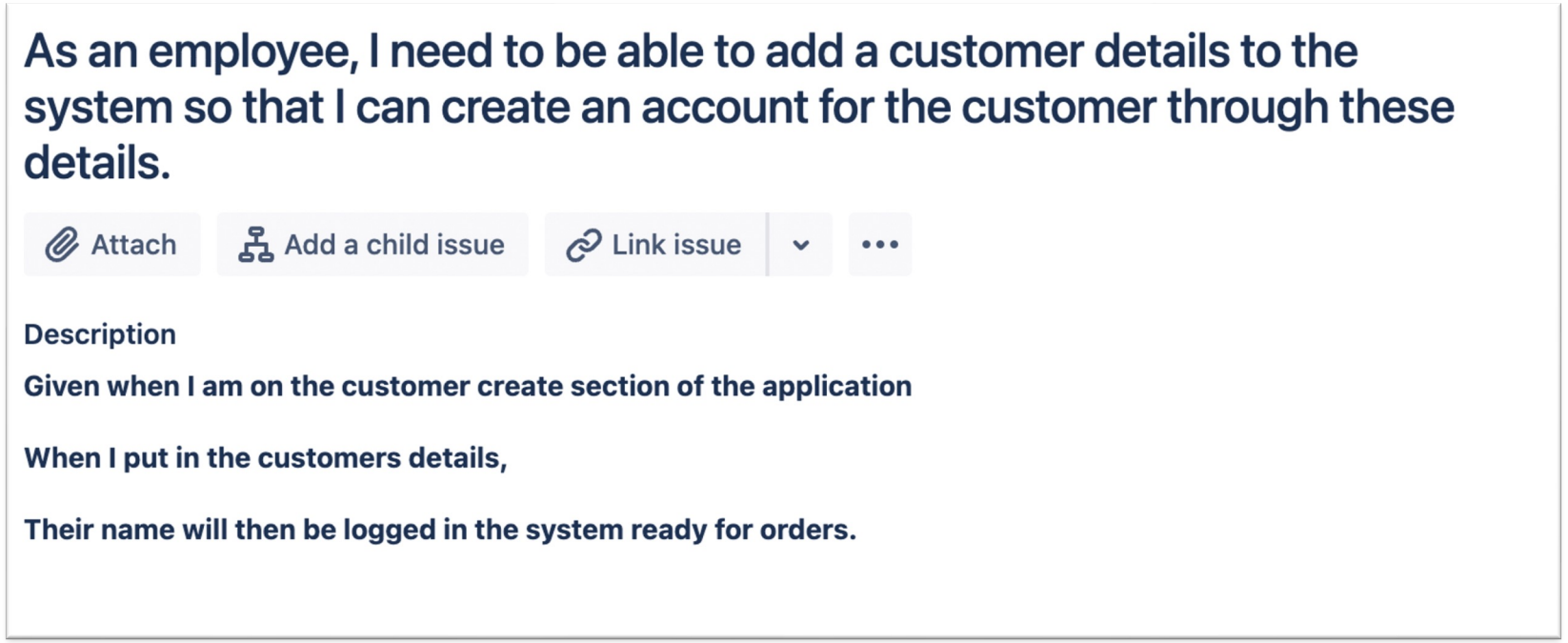
Introduction

- My name is Sayed Sakkaf and welcome to my IMS Project Presentation!
- The approach I took towards completing this project was by first breaking down the specification, bit by bit.
- I created user stories from the tasks in the specification on JIRA and compiled them into a one-week sprint.



Acceptance Criteria

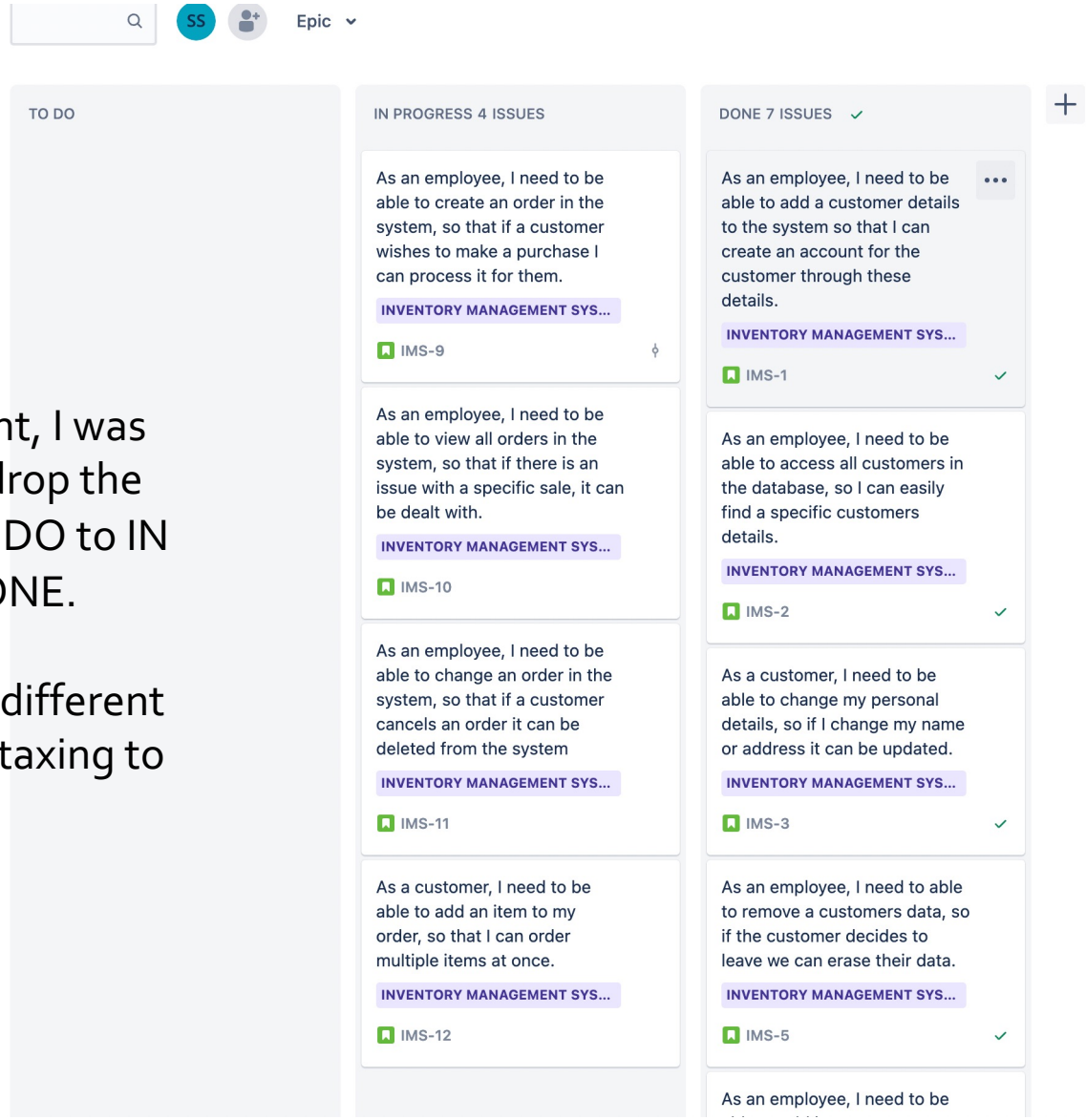
- Using the user stories that I had created for the sprint, I added acceptance criteria for each one by using Given, When, Then from in the comment section. Example of one below:



User Stories

Having started my sprint, I was then able to drag and drop the different tasks, from TO DO to IN PROGRESS and DONE.

This made handling the different parts of the project less taxing to approach.

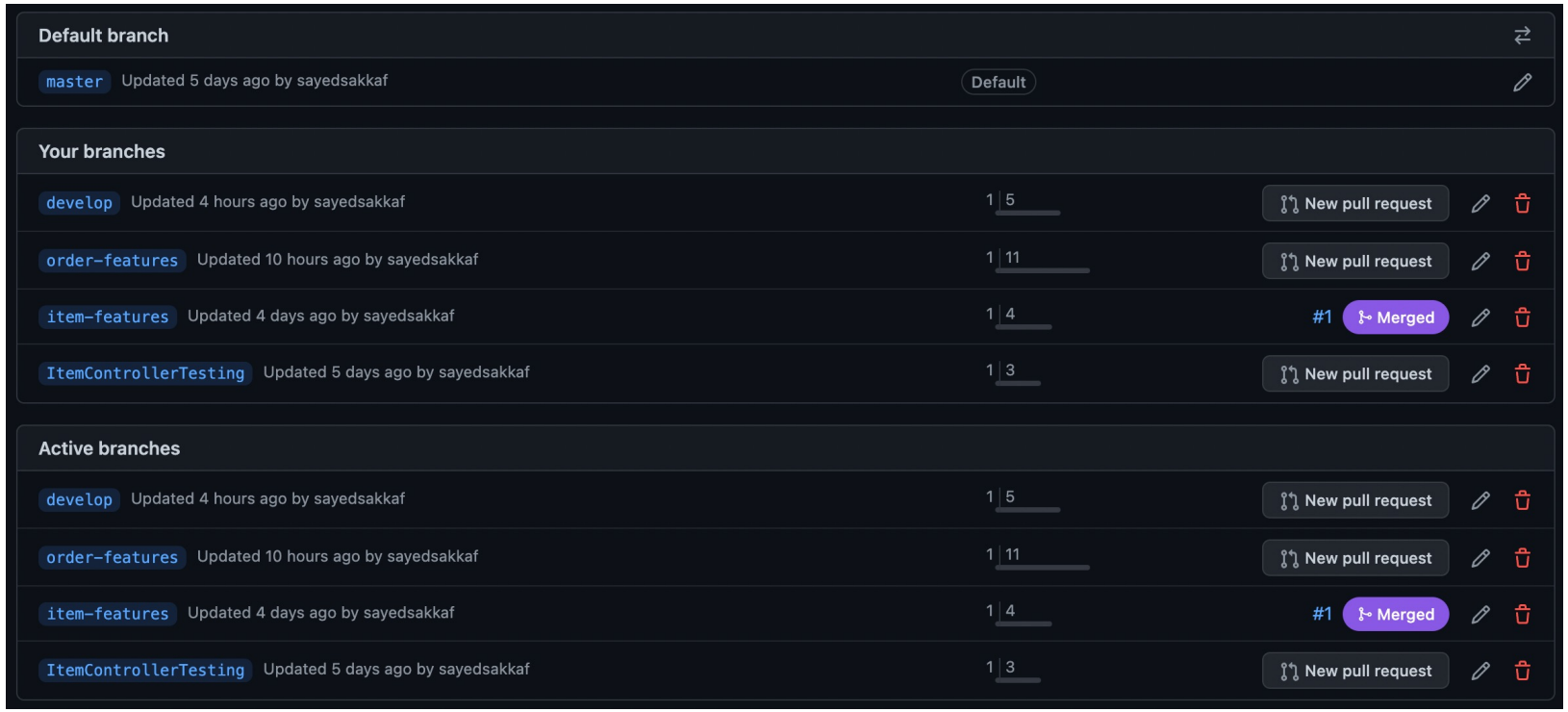


Consultant Journey

- The technologies which I have learned throughout my consultant journey and used throughout this project were:
  - Eclipse IDE
  - Git for version control.
  - GitHub for source code management.
  - Maven as a build tool.
  - Jira for project management.
  - MySQL for database management.
  - Java as the back-end programming language.
  - JUnit for Unit Testing.

Continuous Integration

- Firstly, I had forked the template for the project using GitHub and used Git bash to clone that forked repository onto my system. Having done this, I then created a new repository and created a develop branch so I could extend off it instead of pushing it all to my main branch. I created multiple feature branches to follow best practice:



Testing

Element	Coverage	Covered Instructions	Missed Instructions	Total Instructions
IMS-Project	63.6 %	2,003	1,144	3,147
src/main/java	52.2 %	1,175	1,076	2,251
src/test/java	92.4 %	828	68	896

Testing with incomplete orders class resulted in a testing percentage of only 52.2%. Tested with JUnit for the DAO classes and Mockito for the Controller classes.

Demo – Customers

- This slide shows the CRUD functionality for the customer

```
create
Please enter a first name
James
Please enter a surname
Brown
Customer created
What would you like to do with customer:
CREATE: To save a new entity into the database
READ: To read an entity from the database
UPDATE: To change an entity already in the database
DELETE: To remove an entity from the database
RETURN: To return to domain selection
```

```
read
id:1 first name:Sayed surname:Sakkaf
id:2 first name:Jordan surname:Harrison
id:3 first name:Tom surname:Williams
id:4 first name:Ada surname:Florence
id:5 first name:Elizabeth surname:Ethel
id:6 first name:John surname:Doe
```

```
Update
Please enter the id of the customer you would like to update
6
Please enter a first name
Jamie
Please enter a surname
Brown
Customer Updated
```

```
read
id:1 first name:Sayed surname:Sakkaf
id:2 first name:James surname:Harrison
id:3 first name:Tom surname:Williams
id:4 first name:Ada surname:Florence
id:5 first name:Elizabeth surname:Ethel
id:6 first name:John surname:Doe
id:7 first name:Amy surname:Stevens
What would you like to do with customer:
CREATE: To save a new entity into the database
READ: To read an entity from the database
UPDATE: To change an entity already in the database
DELETE: To remove an entity from the database
RETURN: To return to domain selection
delete
Please enter the id of the customer you would like to delete
7
```

Demo – Items

- This slide shows CRUD functionality for Items:

```
CREATE
Please enter a product name
Laptop
Please enter a price
400
Item created!
What would you like to do with item:
CREATE: To save a new entity into the database
READ: To read an entity from the database
UPDATE: To change an entity already in the database
DELETE: To remove an entity from the database
RETURN: To return to domain selection
```

```
READ
Item [id=1, productName=Television, price=350.0]
Item [id=2, productName=Chair, price=39.9900016784668]
Item [id=3, productName=Desk, price=100.0]
Item [id=4, productName=Table, price=39.9900016784668]
Item [id=5, productName=Cabinet, price=149.99000549316406]
Item [id=6, productName=Cupboard, price=149.99000549316406]
Item [id=8, productName=Lamp, price=49.9900016784668]
Item [id=11, productName=LAPTOP, price=350.0]
```

```
UPDATE
Please enter the id of the item you would like to update
11
Please enter a product name
LAPTOP
Please enter a price
350
No value specified for parameter 1
Item updated!
```

```
Item [id=1, productName=Television, price=350.0]
Item [id=2, productName=Chair, price=39.9900016784668]
Item [id=3, productName=Desk, price=100.0]
Item [id=4, productName=Table, price=39.9900016784668]
Item [id=5, productName=Cabinet, price=149.99000549316406]
Item [id=6, productName=Cupboard, price=149.99000549316406]
Item [id=8, productName=Lamp, price=49.9900016784668]
Item [id=11, productName=LAPTOP, price=350.0]
What would you like to do with item:
CREATE: To save a new entity into the database
READ: To read an entity from the database
UPDATE: To change an entity already in the database
DELETE: To remove an entity from the database
RETURN: To return to domain selection
delete
Please enter the id of the item you would like to delete
11
```

Demo – Orders

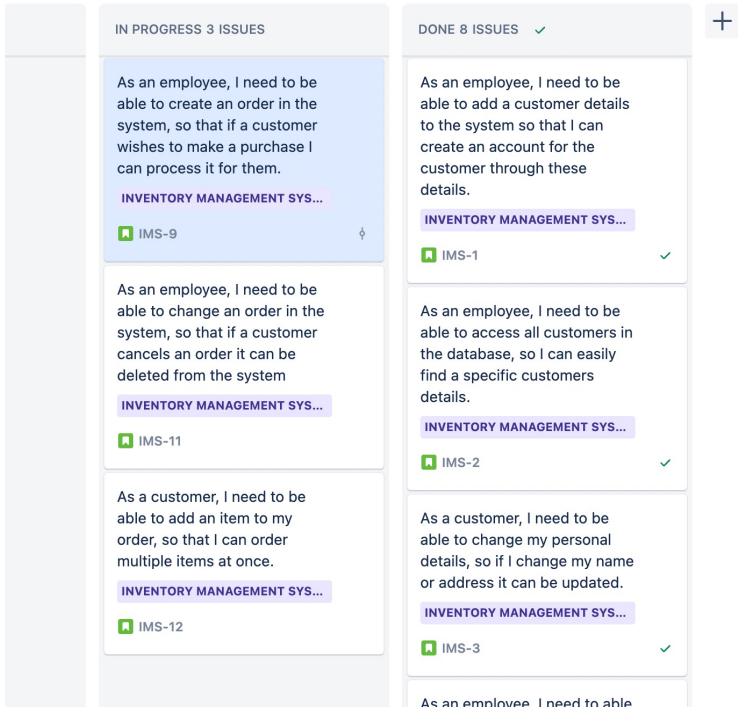
- Orders is where I felt like I lacked the most confidence going into. In the end I was only able to read information pre-inserted information from the database but with more practice and further learning, I am confident I will be able to work out a solution in a quicker time frame.

```
Order [id=1, firstName=Sayed, surname=Sakkaf, productName=Television]
Order [id=2, firstName=James, surname=Harrison, productName=Television]
```

- *USING THE READ OPTION IN THE ORDER MENU:*

Sprint Review

- When reviewing the sprint, I was found that I completed 8 of the 11 user stories I had created as part of this sprint. The remaining 3 user stories that were left were all related to the order menu, which is an aspect of the project I felt I understood the least. Overall, I managed to build on the customer features and create item features.
- What I feel like could be improved in the next project is my time allocation which I will elaborate on in my sprint retrospective.



Sprint Retrospective

- Looking back at the project and the sprint itself, there's many areas I see for self improvement. The first of which is understanding my own abilities and allocating the proper time to completing tasks. I found that, particularly with orders, I spent to much time on other aspects of the projects which were much easier, and in the end, it left me with limited time to complete the final part of the project.
- Additionally, while I was nervous approaching the project, I did enjoy work towards it as prior to the academy, I had never done any sort of coding. This makes me eager to develop my skills further and will work on projects in my free time so I can improve.

Conclusion

- In conclusion, I managed to create a product which adheres to the CRUD functionality in the items and customers aspect but only has a read function in the orders aspect.
- For my next project, I hope to complete all aspects to not only to meet the minimum viable product, but also be in a state where I can work on extra features.
- I have a better understanding now specifically on areas I need to improve so when I comes to future project, I will be well equipped to face it.