IMS Project

Creating an application to manage a store database.

Preface

This morning I had an issue that seemed to erase my entire project. Luckily I was able to revert to a previous version, however this version was before all of the error and failure fixes I implemented yesterday.

Introduction

My name is Ben Phillips. I am fairly new to software engineering and I am eagerly looking to adapt and improve my skills. I have a BSc in Geology which has helped me with my time management and organisation in this project but the software creation aspect has been relatively new.

I approached the specification and the project by identifying the main areas that I needed to work on first. I identified the main areas of concern and created user stories on my kanban board. These user stories address the main functionalities that the application requires.

Consultant Journey

I have learned a variety of skills for this project such as:

1   I have learned a wide variety of the Java language as it is this projects main language and will make up nearly all of the code.

2   Git and Github including the ability to use active repositories and multiple branches, utilising the feature-branch model.

3   I have learned how to use MySQL to create a local database that I can refer to, use to store data for the application and use through eclipse IDE.

4   I have learned how to use Eclipse IDE to write an application using the Java language.

Continuous Integration

I have used Github and the command line interface Bash Git to submit various versions of the application to ensure that not only I have previous versions available in the case that something were to happen to my codebase, and also so any issues or bugs I bring to the current codebase does not get brought into and affect the working version.

Testing

01

Each class had a test counterpart in a separate folder called src/test/java to enable maximum accuracy when finding bugs or errors. When a class was deemed safe and fully working, the version would be pushed to the main branch.

Furthermore observing the coverage of the code and identifying where the code failed to run and continue was helpful in identifying where the problem areas were.

Demonstration

02

User Story #1
As a user, I want to update a customer's details in the system, so I can keep the system as up to date as possible.

User Story #2
As a user, I want to add an item to the system, so it is available to the customers.
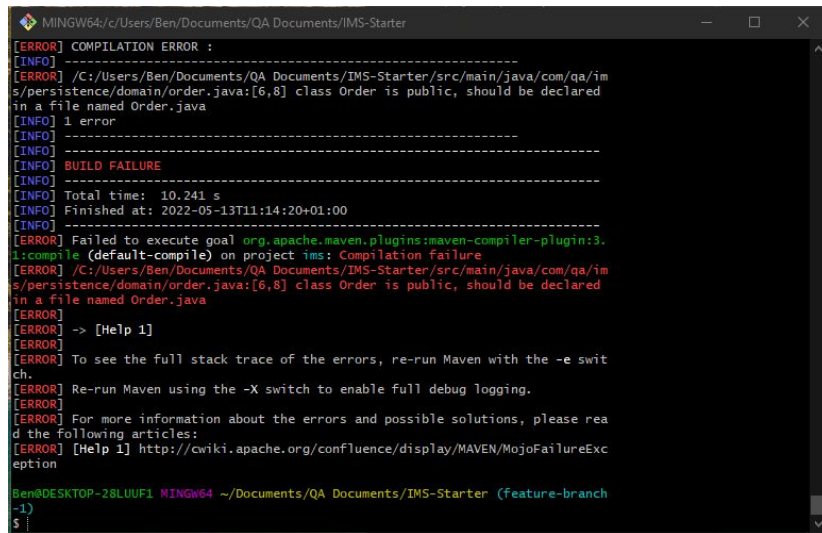
User Story #3
As a user, I want to delete an item from the system so an item is not ordered that we do not sell.

Sprint Review

I completed and implemented the functionality of the item class completely and I was also able to mesh the two classes; Customer and Item, together successfully.

Testing the application has gone fairly successfully and I was able to identify a variety of failures and errors using the testing and using the coverage feature.

Unfortunately I was unable to fully implement the order class and the price functionality due to unforeseen failures that require further investigation. I was also unable to create a fat. Jar. file to demonstrate due to the version issue.

Sprint Retrospective

I was thoroughly pleased with my problem solving skills in this project. I was able to source the issue of countless errors and failures and solve them. Furthermore I am pleased that I opened up and accepted advice and searched for help more openly than I have been before. It is important to lean on and assist those you work with.

Things that can be improved is my knowledge of errors and failures. With increased knowledge of Java I would have been able to work through the issues faster and potentially get to the point where the code was fully implemented.

Conclusion

Overall, I would say that coming into this project, I moderately struggled with recalling the correct information and knowledge required. However by the end stages I became a lot stronger at identifying issues and overcoming them.

The main thing I would do differently is I would commit more versions so I do not go through an issue like the one I suffered today. It was a setback and prevented me from furthering my code.

Questions?

Thank you.