Inventory Management System Week 5 Project

BY LEWIS PEARSON

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Introduction



Lewis Pearson, Mechanical Engineer graduate from the University of Aberdeen



Project Approach:

Great opportunity to learn and gain experience using these technologies in a project environment

Plan thoroughly at the beginning of the project but also throughout utilise project management tools

Understand scope of project and what is needed.

Consultant Journey

Technologies learned for this project

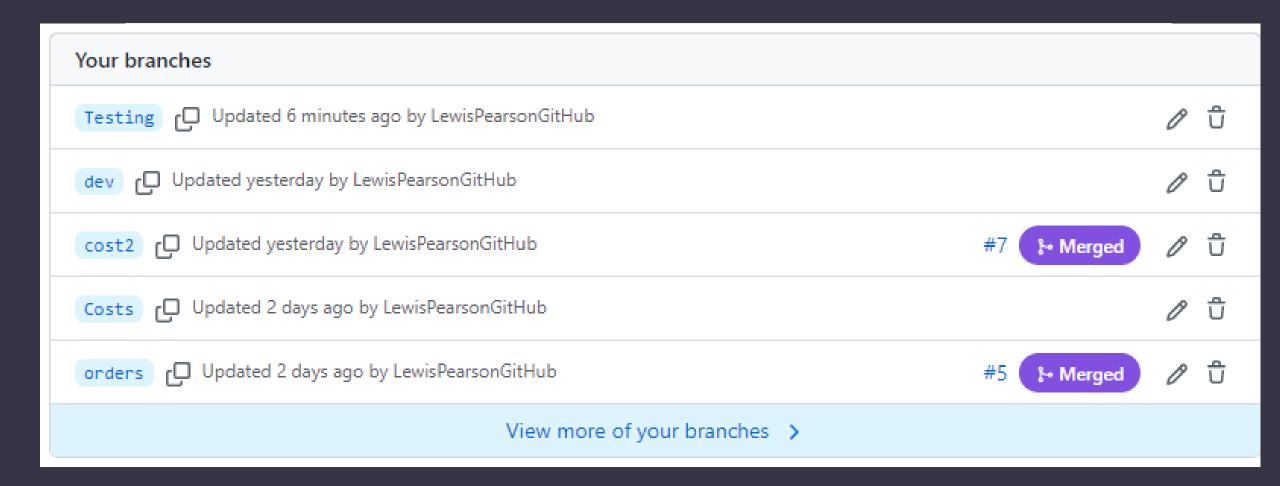
- Git for Version Control
- GitHub for Source Code Management
- Jira for a Scrum Board with User Stories and Tasks
- Java for programming the back-end, including JDBC for database connectivity
- MySQL for the database
- Junit and Mockito for the testing
- Maven for building

Continuous Integration

- Git and GitHub
- Jira for user stories and tasks

Used throughout the project to keep track of what work needed to be done, and what had been done already. Git was used for version control and with smart commits could be linked to Jira. Feature branches were created for significant developments and merged into the dev branch once it was working. Regular commits to keep track of work and prevent losing anything.

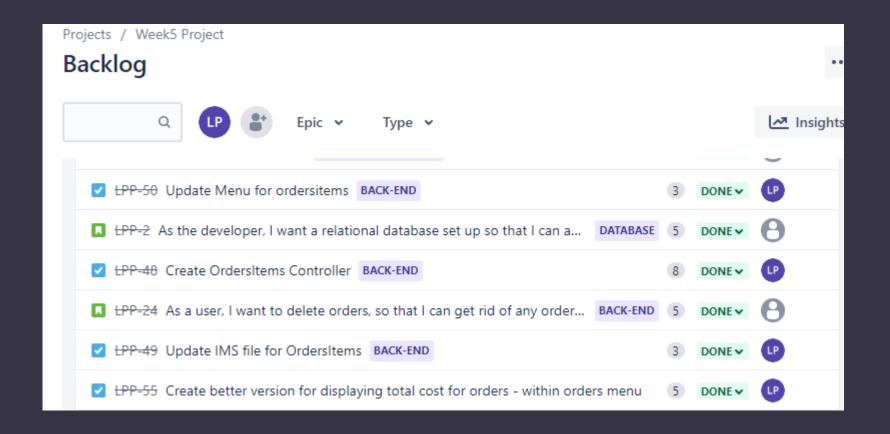
Git and GitHub



Git and GitHub

ပူ dev → ပူ 10 branches 🛇	Go to file Add file ▼ Code ▼	
This branch is 36 commits ahead of j	\$\$ Contribute → \$\$ Fetch upstream →	
LewisPearsonGitHub Merge pu	III request #7 from LewisPearsonGitHub/cost2	7673e39 yesterday 🖰 40 commits
Documentation	LPP-3 #comment Added ERD diagrams 1,2,3	4 days ago
src	changes to orders.java	yesterday
	Relevant files added	4 days ago
LICENSE.md	Relevant files added	4 days ago
□ README.md	LPP-38 #in-progress #comment Added some in	nformation to the READM 4 days ago
pom.xml	Relevant files added	4 days ago

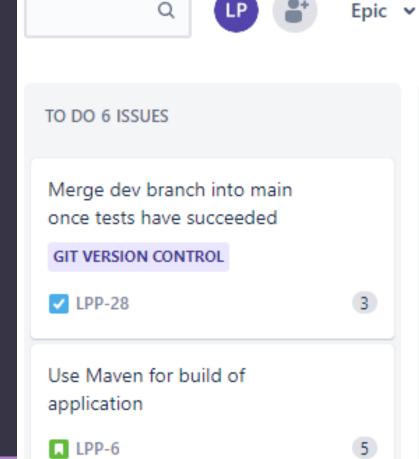
Jira

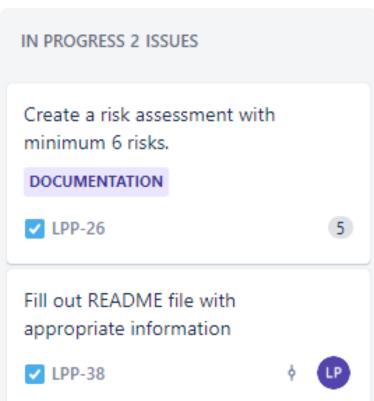


Jira

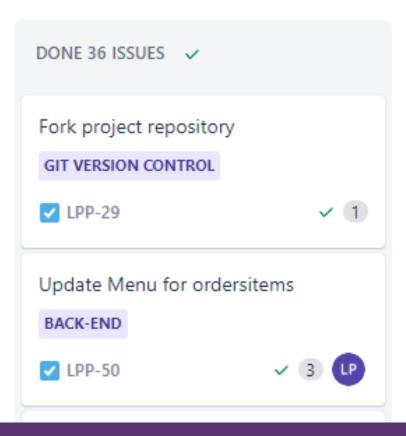
Week 5 project - IMS

Finish week 5 project





Type v



Testing

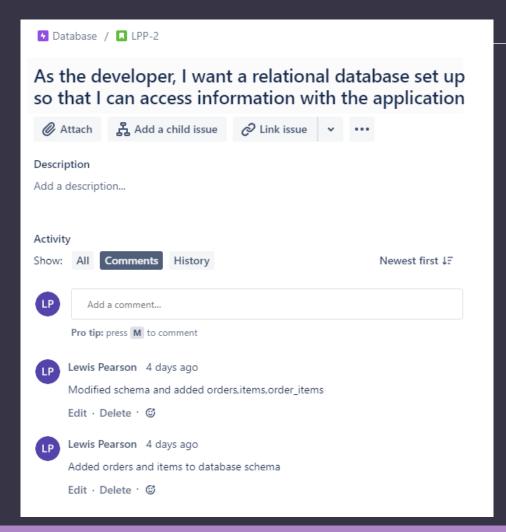
Tests written for:

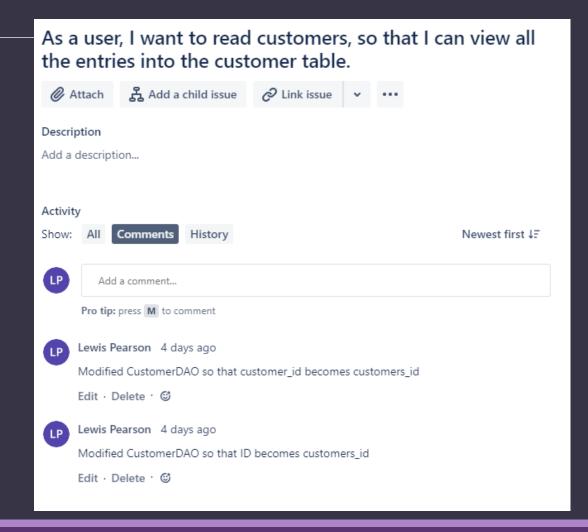
- Customers class Domain, DAO, and Controller
- Items classes Domain, DAO, and Controller
- Orders classes Domain, DAO, and Controller
- OrdersItems Classes – Domain, DAO, and Controller

Testing

💻 Console 🔐 Problems 🗓 Debug Shell 🖋 Search 🧩 Terminal 🛅 Coverage 🗵							
Element	C	overage	vered Instructions	lissed Instructions	Total Instructions		
✓ ✓ IMS-22EnableMay2		80.4 %	3,447	839	4,286		
> 😕 src/main/java		74.3 %	2,074	718	2,792		
> 쁠 src/test/java		91.9 %	1,373	121	1,494		

Demonstration





Sprint Review

Sprint Review as of the time of this presentation:

Completed Work

- -CRUD Functionality for customers, items, and orders with working connectivity through JDBC to a MySQL Database
- Unit testing for a coverage of 74.3% of the src/main/java folder
- -Completed Risk Assessment, MoSCoW, ERD documentation
- -Project management board including user stories and story points

Sprint Review

Things left behind with limited time remaining:

Achieve a unit testing of comfortably >80%

- -Test more exceptions
- -Test files outside of the main CRUD classes

The unmarked extension task of adding a username and password system

Thorough physical testing of the program to make sure it all works properly

UML diagram

Proper adherence to SOLID and OOP Principles.

Sprint Retrospective

What could have be done better?

- Spend more time on thinking through initial documentation and planning.
- -Take more time to fully understand the code before adding to it
- -In general, be more careful with implementation to save time in the future fixing silly mistakes
- But this comes with experience.

What went well?

- The project was completed efficiently and to a good standard.
- Competent use of technologies and processes, I had never used 5 weeks ago.

Conclusion

- Overall, a successful project.
 - Scope adhered to
 - MVP largely achieved
- -Lots learned along the way regarding:
 - Project management and planning
 - How to begin a project of this size
 - How much work a programming project takes
- Valuable experience doing this project and utilising all the technology and tools will put me in good stead for all future projects. Doing a project was important in cementing the new knowledge and working with each technology helped me understand it better.

Conclusion

Future steps:

Work more on testing to try to achieve a higher percentage of coverage.

Finalise all documentation.

Finish build, merge into main and complete the project.

Any Questions?