



Reading List

Practical Project

22MayEnable2

Introduction

- The week9 Project involved creating an OOP-based application with CRUD (Create, Read , Update and Delete).
- A Database with a Book entity.
- Creating an interactive user friendly local hosted site.

Tools

01

Eclipse:

- Java using Spring Boot and Maven
- For testing: JUnit
- My SQL database

02

Visual Studio Code:

- JavaScript, HTML, CSS
- Bootstrap

03

Jira

04

GitHub

Risk Assessment:

Risk	Risk Statement	Response Strategy	Objectives	Likelihood	Impact	Risk Level
Illness	The rate of completing the project will be negatively impacted due to illness	Rest and create a project plan that can account for the time loss due to illness	To protect your health and recover as well as reduce the impact of time lost	Medium	High	8
Internet Failure	The rate of completing the project will be negatively impacted due to illness	Contact network provider and/or use your phone to connect to the internet for short-term internet access.	To ensure the completion of the project objectives on time by reducing the impact of losing internet connectivity.	Low	Medium	4
Technical Difficulties	mistakenly erasing your entire project, or sections of my project from your computer.	Ensure all files are routinely pushed on GitHub so that data may be cloned from the repository in the event of a loss.	To ensure access to the website throughout development and post deployment.	Low	High	7
Loss/Broken of laptop	A broken laptop would result in not being able to complete the project	Have another device that is accessible to you, that allows the download all of the necessary software for this project and use GitHub to clone your recent progress	To ensure access to your work regardless of which device.	Low	High	7
GitHub Failure	GitHub servers going down leads to temporarily not having access to your repository or to losing data and development progress	Make a regular hard backup on a non-cloud service	To ensure you don't lose your work	Low	High	7
Failure to Meet Project Deadline	Poor time management leading to the product not being deployed by the deadline	Ensure project is planned thoroughly and managed throughout.	Finish project on time and to a good standard.	Low	High	7
Hardware Failure	Renewals aren't carried out for web server and domain names leading to website outages until contracts are renewed.	Ensure that all contracts are available to be viewed by relevant parties, and calendar entries are set up with reminders, while also setting up email notifications for when renewals are due.	Prevent the domain name from being lost and having outages due to the web server being removed as it is no longer in service.	Low	High	7
Joint Pains	Constantly sitting could lead to a negative impact on the physical body	It is important to stand and stretch every hour to prevent joint pains	To protect your health and ensure you're not damaging your physical body	High	Medium	6

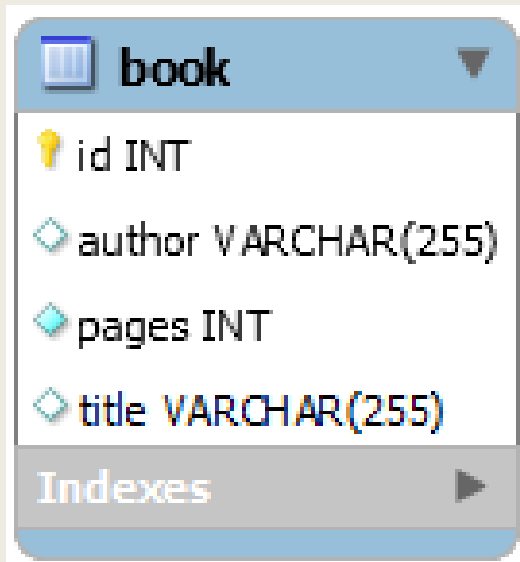
		Impact		
		Low	Medium	High
Likelihood	Low	1	4	7
	Medium	2	5	8
	High	3	6	9

MoSCOW

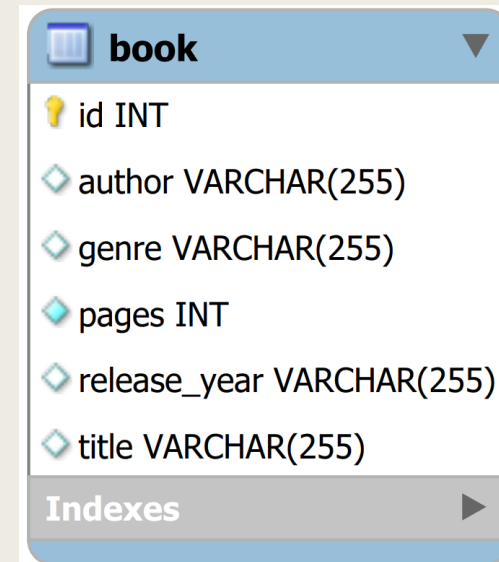
Must have:		Should have:		Could have:		Won't have:	
✓	Working OOP application.	✓	A search function to find the books in their reading list.	✓	A user login page.	✓	Adverts.
✓	User must be able to create/read/update/delete.	✓	A home page.	✓	Images attached to each book in the reading list.	✓	Cookies.
✓	Data has to be displayed in an easy to read manner.	✓	Follow the Feature Branch Model	✓	A comment section for each book.		
✓	A test coverage of 80%.						
✓	A functional application front-end which connects to the back-end API.						
✓	Jira Kanban board with detailed user stories, acceptance criteria, and project tasks						

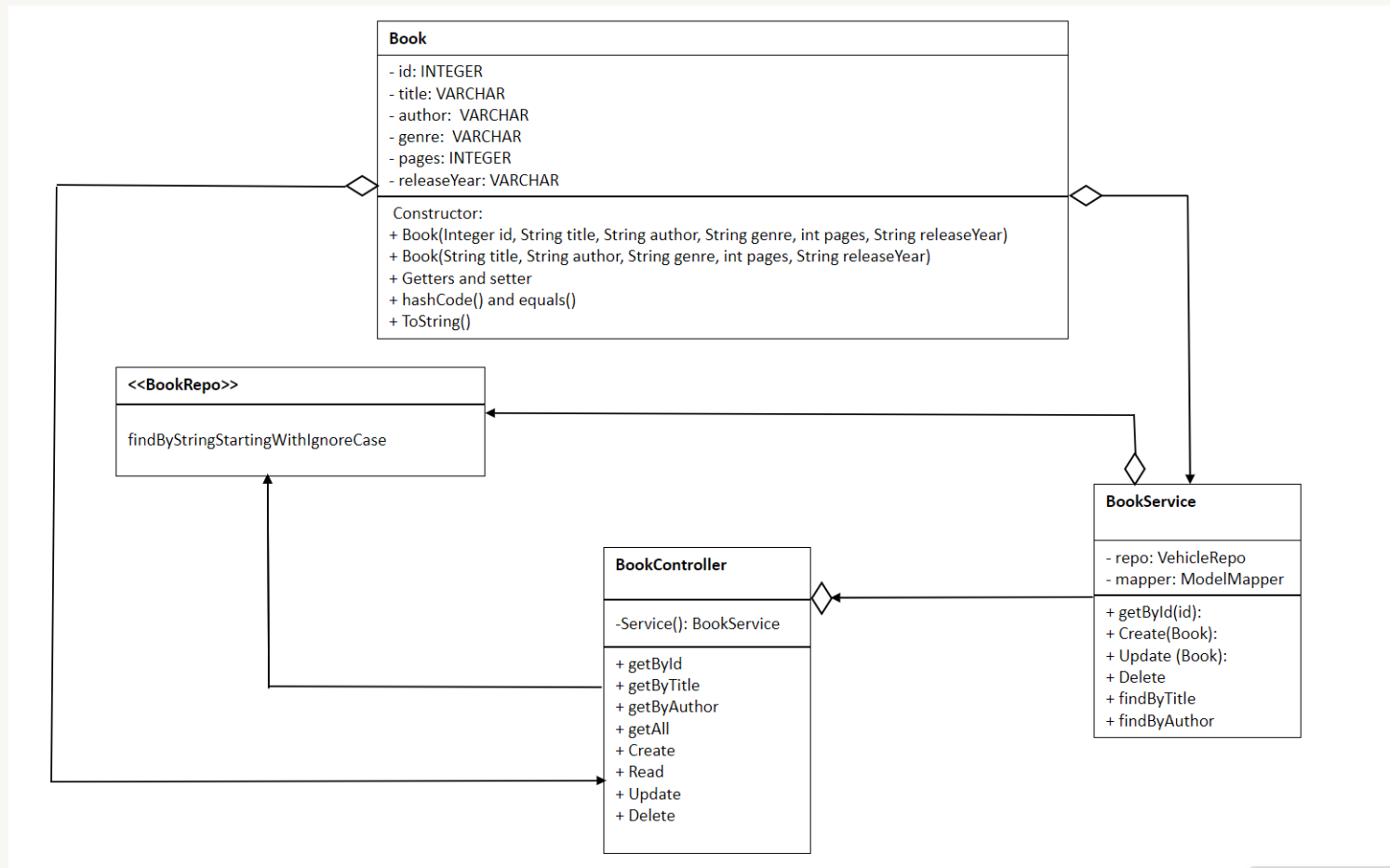
Entity relationship diagram

Initial ERD:



Final ERD:





UML diagram

Epic

Issues without epic

Testing

Front-End

Back-end


Documentation


+ Create Epic


Week 9 - ReadingList 28 Jul – 29 Jul (19 issues)					0	3	61	Complete sprint	
complete Software Core - Practical Project Specification									
HB-122	As a developer, I need to create book repo class	BACK-END	4	DONE					
HB-123	As a developer, I need to create book entity class	BACK-END	2	DONE					
HB-125	As a developer, I need to create book rest class	BACK-END	2	DONE					
HB-124	As a developer, I need to create book service interface	BACK-END	4	DONE					
HB-129	As a developer, I need to Create book service DB	BACK-END	4	DONE					
HB-130	As a developer, I need to Create Application properties	BACK-END	2	DONE					
HB-132	As a developer, I need to Create book-schema	BACK-END	5	DONE					
HB-133	As a developer, I need to create book data	TESTING	2	DONE					
HB-137	As a developer, I need to Create risk assessment	DOCUMENTATION	1	DONE					
HB-139	As a developer, I need to Create ERD	DOCUMENTATION	1	DONE					
HB-140	As a developer, I need to Create UML	DOCUMENTATION	2	DONE					
HB-141	As a developer, I need to Create Powerpoint	DOCUMENTATION	6	DONE					
HB-142	As a developer, I need to use JUnit to test repo	TESTING	5	DONE					
HB-143	As a developer, I need to create book.html - Homepage	FRONT-END	3	DONE					
HB-145	As a developer, I need to create book.html CRUD page	FRONT-END	7	DONE					
HB-147	As a developer, I need to create search-box.html search page	FRONT-END	5	DONE					
HB-148	As a developer, I need to add Style.css	FRONT-END	4	DONE					
HB-149	As a developer, I need to create ReadMe.md file	DOCUMENTATION	3	IN PROGRESS					
HB-150	As a developer, I need to use JUnit to test entity class	TESTING	2	DONE					






ReadingList Sprint

User Stories with Tasks




 Insights


 Back-end /


 HB-130

  1   ... 

As a developer, I need to Create Application properties

   ...



Done 

 Done


Description

Add a description...


Child issues


Order by  ... 


100% Done


 HB-156

create a application pr...








DONE 


 HB-157

create a application-p...








DONE 

 HB-158

create a application-te...





DONE 

Details 

Assignee

 Unassigned
[Assign to me](#)

Labels

None

Sprint

[Week 9 - ReadingList](#)

Story point estimate

2

Development

[Create branch](#) 

[Create commit](#) 

Add a comment...

<div> Merge pull request #1 from HodanB/feature1 </div> <div> HodanB committed 8 days ago </div> <div> Verified 82b763b <> </div>
Commits on Jul 21, 2022
<div> created controller and service </div> <div> HodanB committed 7 days ago </div> <div> e92c5ee <> </div>
<div> Merge pull request #2 from HodanB/feature2 </div> <div> HodanB committed 7 days ago </div> <div> Verified 80f185f <> </div>
<div> created application properties </div> <div> HodanB committed 7 days ago </div> <div> a1812e2 <> </div>
<div> Merge pull request #3 from HodanB/feature3 </div> <div> HodanB committed 7 days ago </div> <div> Verified c9da9d2 <> </div>
Commits on Jul 22, 2022
<div> Create books-schema.sql </div> <div> HodanB committed 7 days ago </div> <div> c750fa4 <> </div>
<div> Merge pull request #4 from HodanB/feature4 </div> <div> HodanB committed 7 days ago </div> <div> Verified 00269fa <> </div>
<div> Create books-data.sql </div> <div> HodanB committed 6 days ago </div> <div> 4f1a79a <> </div>
<div> Merge pull request #5 from HodanB/feature5 </div> <div> HodanB committed 6 days ago </div> <div> Verified aa7542e <> </div>
Commits on Jul 23, 2022
<div> controller and entity testing </div> <div> HodanB committed 5 days ago </div> <div> e46d7aa <> </div>
<div> backend testing </div> <div> HodanB committed 5 days ago </div> <div> b047e64 <> </div>
<div> Merge pull request #6 from HodanB/feature6 </div> <div> HodanB committed 5 days ago </div> <div> Verified d064517 <> </div>
Commits on Jul 24, 2022
<div> Front End </div> <div> HodanB committed 4 days ago </div> <div> 9b4a2af <> </div>
<div> Merge pull request #8 from HodanB/feature7 </div> <div> HodanB committed 4 days ago </div> <div> Verified e040756 <> </div>
<div> linked back end to sql </div> <div> HodanB committed 4 days ago </div> <div> 883c90e <> </div>
<div> Merge pull request #9 from HodanB/feature8 </div> <div> HodanB committed 4 days ago </div> <div> Verified 727a9e3 <> </div>
Commits on Jul 25, 2022
<div> Added search function </div> <div> HodanB committed 3 days ago </div> <div> 6541306 <> </div>
<div> Merge pull request #10 from HodanB/feature9 </div> <div> HodanB committed 3 days ago </div> <div> Verified 0016f64 <> </div>

GitHub

- For this project, I had to create multiple feature and work within them branches to then be merged with my develop branch.

- My main branch remained the same during the project until my software was functioning, passes testing to an industry standard and packages correctly.

Version Control

Each epic = new feature

In Develop branch a feature branch was created by using:

"git checkout -b feature"

After each feature is done:

- Git add .

Then "git commit -m "..."

"git push"

Merge with dev branch in GitHub

To pull to my local in Git bash terminal:

"git pull" in develop branch

Create new feature branch

Front-end

Design:

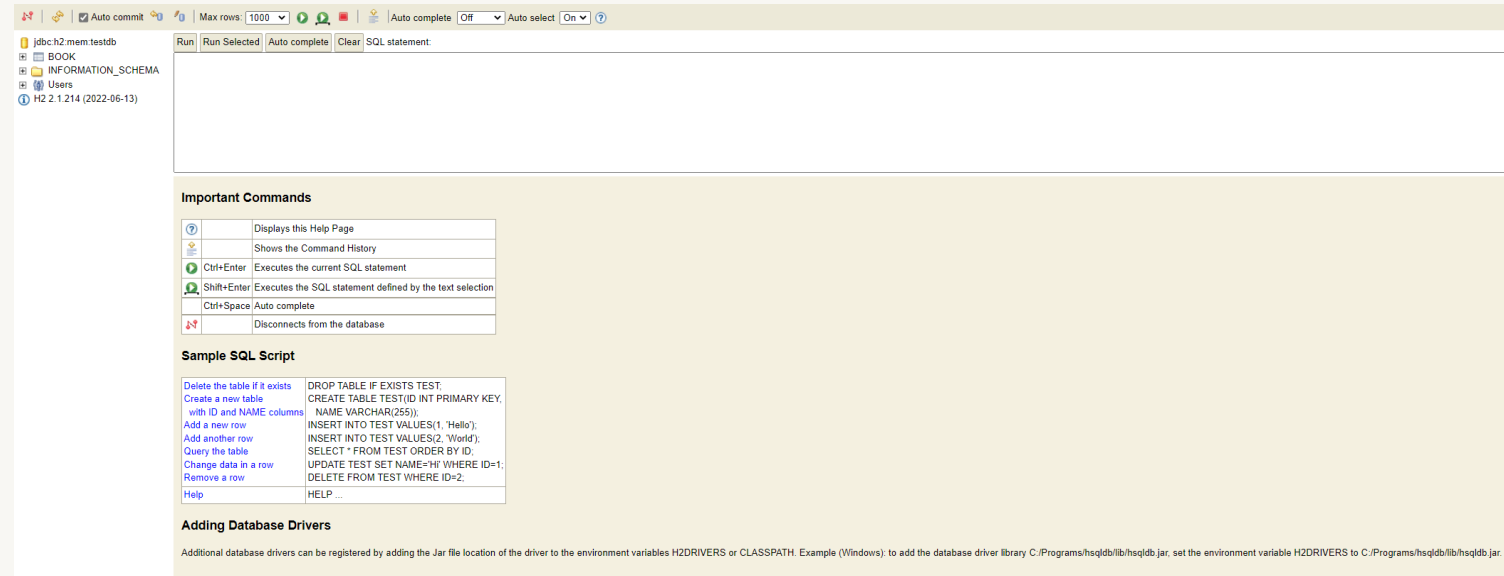
- HTML
- Bootstrap
- CSS

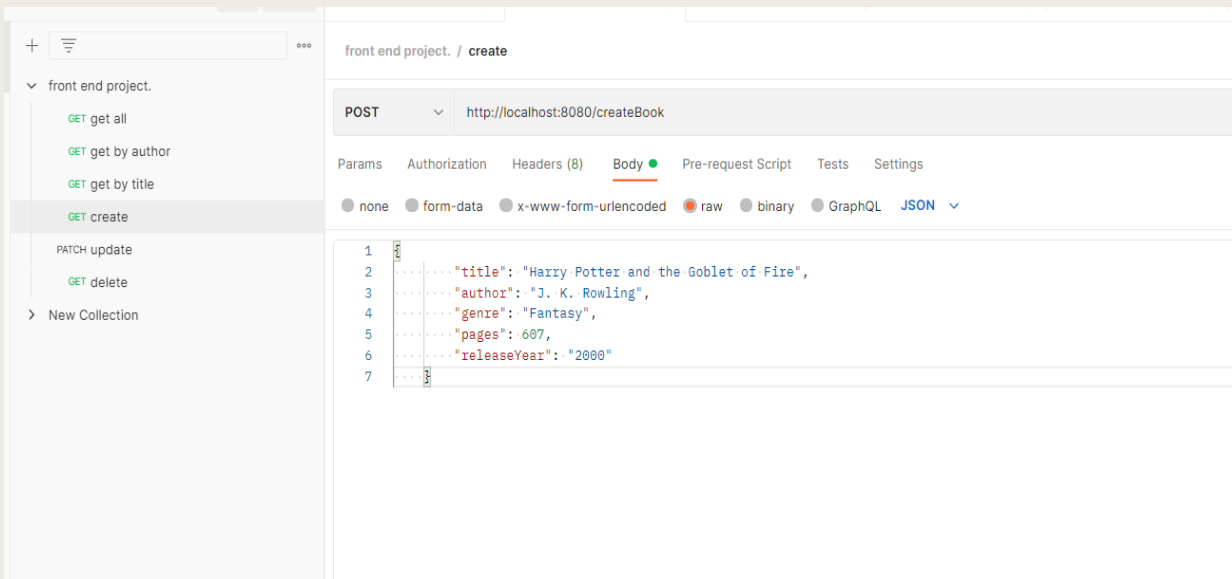
JavaScript:

- Adds interactive features
- Fetch API
- Retrieve data

H2-Console

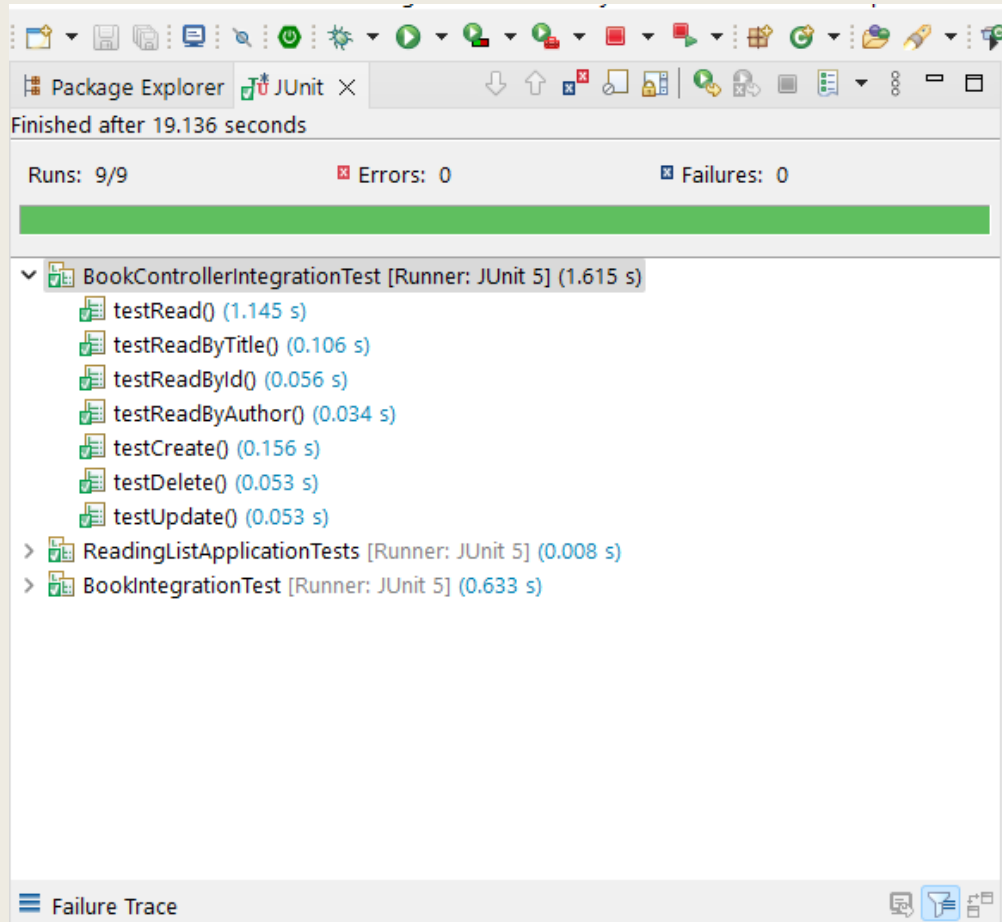
- Manual testing.
- Let's you access a database using a browser.





Postman







- Manual testing.
- To build a request to send to the local server, and log entries the entries



MockMvc Testing

- To test the HTTP request and ensure it passes by testing the Controller class

Test Coverage

Problems @ Javadoc Declaration Console Coverage X				
ReadingList (29 Jul 2022 02:14:12)				
Element	Coverage	Covered Instructi...	Missed Instructio...	Total Instructions
▼ ReadingList	 97.3 %	613	17	630
▼ src/main/java	 95.5 %	361	17	378
> com.example.demo.rest	 87.4 %	83	12	95
> com.example.demo	37.5 %	3	5	8
> com.example.demo.entity	 100.0 %	202	0	202
> com.example.demo.service	 100.0 %	73	0	73
> src/test/java	 100.0 %	252	0	252

Demonstration

Performance Review

19 out of 19 issues were completed, with ReadMe file completed.



Minimum set of requirements completed.



Most of Must have/Should have were completed.



User Friendly application with CRUD functionality.



Functioning front end with an aesthetic design curated through CSS, bootstrap and a colour palate

Conclusion

- Creating an online reading list application that uses an Api query with user input was successful.
- My test coverage was 95.5%, which is a big increase from my last project.
- To improve this project, I would have done more testing by using SonarQube analysis and Selenium.