#### **Group Members:**

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#### **Vision Statement:**

Our vision for this project was to create a fully functional web app, meeting all the desired specifications of our product owner. All of us were inexperienced with React and Springboot, thus we understood from the beginning that we would need to rapidly learn these frameworks and design a product that would meet the requirements. As such the focus was definitely on completing user stories and functionality compared to usability and aesthetics, although we did keep those in mind and apply as much time as possible to optimizing those aspects.

We wanted to ensure users of all classifications (shop owners, publishers, customers and admins) have a full range of functionality which ensures their use of Bookeroo is a positive experience. We wanted to make the act of purchasing and listing books as easy as possible, whilst creating a community within the store through interactions such as reviewing a particular book. An example of our prioritization of ease of use was the decision to use openlibraries API to auto-fill the details of a particular book when a user creates a listing, rather than have to add it in manually.

As such our end product is a functional web-store specializing in the selling of new and used books. Shop owners, publishers and customers are able to post listings of books based of their corresponding ISBN number. The details of a particular book are then accessed through the openlibraries API, and thus can be purchased via PayPal. Furthermore, we utilized various AWS services for deployment including ECS clusters, RDS database and S3 bucket for our front-end.

#### **System Architecture and Design:**

#### **Deployment Architecture**

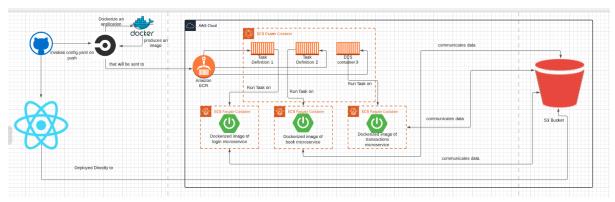
#### **Purpose**

The purpose of this document is to explain in detail the deployment architecture of Bookeroo. The deployment architecture is running on AWS cloud services. We have used Docker for easier deployment solutions of the Springboot API while we opted for a simple service to deploy the React application.

#### Overview

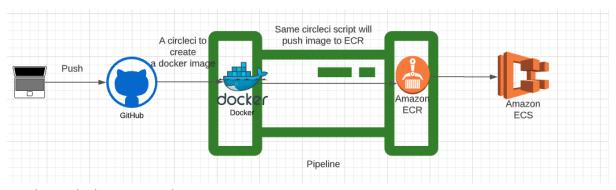
The application is built using a microservice architecture. There are currently 4 microservice applications that makes up Bookeroo. There are 3 microservices built with Springboot which facilitates data management and communication with the database. These microservices are invoked completely from a UI application built with React which is our 4<sup>th</sup> microservice. These microservices interact together as a standalone application providing a seamless experience for buying and selling books.

#### **Deployment Architecture**



A high-level overview of the current deployment architecture

#### **Deployment Pipeline**



Bookeroo deployment pipeline

#### **Docker**

The springboot API runs on java and requires several dependencies to be installed for it to be functioning properly and all the process of setting up a VM can be both time consuming and very tedious process to do. Docker offers are great tool where we can simply create a docker container aka docker image where all the necessary dependencies and libraries are installed and configured to run the java application. Currently we have 3 dockerized applications for each of the springboot microservices. To Dockerize an application, we need to build a docker file to specify what will be dockerized.

```
1 #
2 # Build stage
3 #
4 FROM maven:3.8.2-openjdk-16 AS build
5 COPY src /home/app/src
6 COPY pom.xml /home/app
7 RUN mvn -f /home/app/pom.xml clean package
8
9 #
10 # Package stage
11 #
12 FROM openjdk:16-oracle
13 COPY —from=build /home/app/target/booksmicroservices-V1.jar /usr/local/lib/Book-Microservice.jar
14 EXPOSE 2000
15 ENTRYPOINT ["java","-jar","/usr/local/lib/Book-Microservice.jar"]
```

Docker file for application

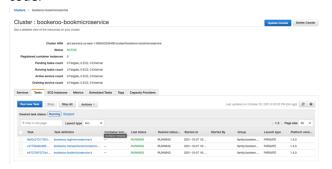
#### CircleCi

The task performed by docker would be repeated every single time a change or update is made to the back-end code which, again, can be time consuming and there is a high change or errors and bugs occurring. To solve this, we have incorporated a CI/CD tool where we have written a config.yaml file that detects pushes to the main branch and every time there is a push to main aka major update, the circleci will run the script which in turn will install all the springboot dependencies, the AWS dependencies , convert the code files into a .jar file which will be dockerized by docker command, and then pushed into ECR on AWS using commands supplied by AWS itself.

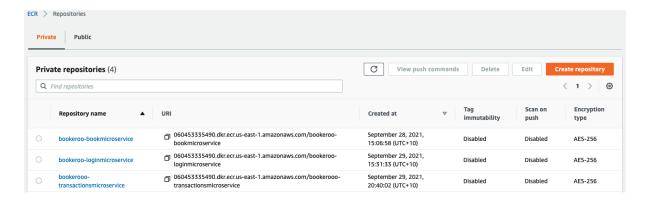
CircleCI Script

#### **Elastic Container Service**

Now that we have our docker image pushed into ECR, now we can actually use the container service on AWS to launch the APIs. We first need to create a cluster. This cluster will host a set of tasks that we can run aka our APIs. So we first proceed to create 3 task definitions, one for each service. These task definitions will have the ECR link for each corresponding docker image, that will sit there. This link will always contain the latest code when there is a new push into the main branch on GitHub. Then we proceed by running a new task. We will choose Fargate because it's light weight and doesn't need many configurations to get it running. We need to repeat this step for each task definitions we have in our cluster. After every push to the main, we need to restart these tasks. Rerunning these tasks is equivalent to restarting the sprintboot application after a major update in the code.



ECS cluster with 3 tasks running from 3 task definitions



Docker images for 3 microservices on ECR

#### S3 Bucket

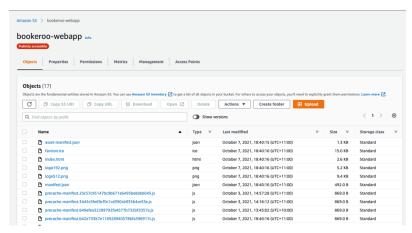
We decided to host the front-end app on S3 bucket due to its simplicity and static webhosting service it provides. We simply need to create a bucket on s3, allow public access, configure the entry point and error point. We then need to set permissions on the s3 bucket to allow accessing the bucket through a DNS made by the bucket. Next step is to include a script in package.json file that will automatically deploy the app after building it.

```
"yarn": "^1.22.11"
},
"scripts": {
    "start": "react-scripts start",
    "build": "react-scripts build",
    "deploy": "aws s3 sync build/ s3://bookeroo-webapp",
    "test": "react-scripts test",
    "eject": "react-scripts eject"
```

package.json file with a deploy script.

```
Bucket policy
The bucket policy, written in JSON, provides access to the objects stored in the bucket. Bucket policy written in JSON, provides access to the objects stored in the bucket. Bucket policy in the bucket poli
```

Bucket policy in permissions



S3 bucket containing our front-end application

#### **Refactoring Report:**

#### Introduction

The purpose of this document is to explain and show the re-factoring process of that was incorporated in our development lifecycle. As a team, we always encouraged writing of clean and robust code to increase productivity and quality of our code.

#### **Coding Style**

#### **Spring Boot/ API**

Springboot Api is a back-end framework that facilitates data communication with the database perform CRUD operations. The framework provides a CRUD repository to help perform actions and manipulate the database. The framework also provides a controller that will invoke these functions. The process for building this API was made in three simple steps to avoid creating spaghetti code and help extend and maintain our in the best possible way. We first created a repository where a class would extend the CRUD repository.

```
/* repository that extends crud repository to create service implementation

@Repository
public interface UserRepository extends CrudRepository<User, Long> {

    User findUserByUsername(String username);
    User findUserById(Long id);
    Collection findAllByEnabled(boolean value);
}
```

User repository

This will tell springboot that this class is responsible to having a set of defined attributes from the model to create a table in the database and implement all the required CRUD methods. Now we need to create a service that will define these methods to satisfy business requirements. This is a refactoring style called "separation of concerns" where every class has specifically ONE job to perform. This would allow us to increase coupling and decrease cohesion which would later be very easy and straightforward to maintain or extend.

#### User service

Our next step is to simply call the methods in the service in the controller. The controller will simply call the required functions to be executed from the REST api functionalities(POST, GET, UPDATE, DELETE). This will also allow developers to not change any code in the controller unless for adding a new route for a new action.

User controller

There is no further refactoring since our functional components are small, adhering to the Single-responsibility principle and the Open-closed principle.

#### React js/ User interface

React is a great JavaScript framework that allows developers to write UI components to render on a user's screen. The front-end UI allows for invoking of functions into the api. The structure of the front-end is very extensible and complex and you will definitely lose control at some point. To make writing javascript code a pleasure, we need to always make sure that if there is a function or a UI component that is more than 7 lines of code, you should definitely convert that into a component, and declare it in the space where you would need to show.

User profile drop down menus

This one example of refactoring where before refactoring, this was a more than 20 lines of code. The code shows a list of drop down items that is different if a user was an admin or a regular user. If one day, this part needs modifications, it will turn into a long function and complexity would go far beyond comprehensibility.

Landing page components

This is another example of refactoring where when a landing page contains several and many components, we start by moving them into components and then declaring them in the space we would like to see on the page. This allows for creating a clean, maintainable and robust components for re-use.

Bookero pay

Another major refactor was our payment system where a user can pay online by PayPal and enter their information to be issued a receipt and a transaction history.

As we can observe, the PayPal payment option is made into a component where it would handle all the actions and data needed to process a PayPal payment. We also build a transactions service where a user can access and view their transactions.

This is how our app is built from the beginning to avoid any formation of code that could not be understood by other developers or avoiding code to span out of control. This way of development encourages best practises and allows for re-use of components when the website is extended.

#### **GitHub Organization:**

Our GitHub repository was organized with error minimization in mind. As such for each sprint we would have a primary 'Sprint' branch (e.g. Sprint 1 or Sprint 2). Stemming off these branches were the individual branches of each team member based on a particular feature designated to them at the beginning of the sprint. Thus, during the process of the Sprint team members would work off only their own branches unless collaborating on a particular feature.

When features were completed, it would be first tested by the developer of that feature on their own branch. If they were satisfied with the functionality, they would push their fully updated code to their branch then request to merge with the relevant primary "Sprint" branch, depending on what Sprint that feature was being developed in. Team members would then resolve any conflicts and successfully merge, and that feature would be tested and looked at by either other group members, or as a collective in meetings to ensure suitable functionality. Furthermore, at the end of Sprints all implemented features would again be tested and reviewed again to attempt to discover any unforeseen bugs.

When the Sprint was fully completed, the relevant Sprint branch would be pushed to main which would then hold the most up to date complete code. A new Sprint branch would then be created based off the main branch, ready for the next sprint.

#### **Scrum Process Description:**

The scrum master of the group was Mac Arriero, who would lead, organize and facilitate group meetings ensuring the team was collaborating effectively and meetings would flow well. Meetings were a minimum of two times a week, with a shorter one on Tuesday 12pm-1pm followed by a lengthier one on Thursday 5:30pm-8pm typically. However, it was not uncommon for these meetings to be extended due to issues with features, deployment, fixing bugs or helping out peers struggling with their set tasks, particularly the Tuesday meeting. Aside from these two mandatory set meetings, team members were free to organize meetings with other team members if they had questions, needed help or wanted to collaborate/discuss.

As per the assignment milestone requirements at the start of each sprint we conducted Sprint Planning sessions to set clear goals and expectations for each member for the duration of the sprint. We also conducted scrum poker sessions to predict the time required for each user story to be completed in that particular sprint. Similarly, at the end of each sprint we would complete a Sprint Retrospective in which we would reflect upon the recently completed sprint and analyze aspects such as what went well, what could be improved and how could we improve.

#### **Acceptance Testing:**

Any found bugs or issues that did not meet the acceptance criteria was fixed and patched in the final code changes. There may be a few that were not amended due to the time constraints of this sprint and which would have been pushed on the next sprint.

SEL1-1	
As a shop owner, I want to log in so that I can create a book listing.	
GWT 1.	
Given I am a shop owner	
When I enter my username and password correctly	
Then it should redirect me to the homepage and log in my account.	
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 12:11 pm
	Tester: Aditya Kerhalkar
	Result: Account gets logged in and redirected to the homepage (if
	approved).
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 12:16 pm
	Tester: Aditya Kerhalkar
	Result: Account gets logged in and redirected to the homepage (if
	approved).
	Bugs Found: None
GWT 2.	7 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 -
Given I am a shop owne	r
	ame and password correctly and I am on my profile dashboard
-	ould be available for me to create a book listing
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 12:21 pm
	Tester: Aditya Kerhalkar
	Result: 'Create Listing' link is available in user dropdown in the top right
	corner
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
rest case 2	Date/Time: 20/10/2021 12:22 pm
	Tester: Aditya Kerhalkar
	Result: 'Create Listing' link is available in user dropdown in the top right
	corner
	Bugs Found: None
GWT 3.	- Baga Found. None
Given I am a shop owne	r who is not logged in
· '	ame and password incorrectly
-	should appear informing me that my details are wrong
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 12:24 pm
	Tester: Aditya Kerhalkar
	Result: The program prohibits me from logging in, but no message
	appears
	Bugs Found: Error message needs to be added
Test Case 2	Browser: Microsoft Edge
1 CSL Case 2	Date/Time: 20/10/2021 12:27 pm
	Tester: Aditya Kerhalkar
	rester. Auttya kerilaikai

Result: The program prohibits me from logging in, but no message
appears
Bugs Found: Error message needs to be added

JL1 1 Z	SEPT-2		
As an admin, I want to log in so that I have access to the admin management page.			
GWT 1.			
Given I am an admin who is not logged in			
When I enter my username and password correctly			
Then it should redirect me to a page with links for administrative tasks			
Test Case 1	Browser: Google Chrome		
	Date/Time: 20/10/2021 10:46 am		
	Tester: Aditya Kerhalkar		
	Result: I get redirected to the main book display page with the admin		
	links visible in the corner		
	Bugs Found: None – but this is not the required functionality		
Test Case 2	Browser: Microsoft Edge		
	Date/Time: 20/10/2021 10:52 am		
	Tester: Aditya Kerhalkar		
	Result: I get redirected to the main book display page with the admin		
	links visible in the corner		
	Bugs Found: None – but this is not the required functionality		
GWT 2.			
Given I am an admin w	ho is not logged in		
When I am on the hom			
	books available to purchase, recommended items and login/register		
options			
Test Case 1	Browser: Google Chrome		
	Date/Time: 20/10/2021 11:00 am		
	Tester: Aditya Kerhalkar		
	Result: The homepage displays available books and 'sign in/sign up'		
	buttons are available in the corner		
	Bugs Found: None		
Test Case 2	Browser: Microsoft Edge		
	Date/Time: 20/10/2021 11:02 am		
	Date/ Inne. 20/10/2021 11.02 and		
	Result: The homepage displays available books and 'sign in/sign up'		
	Result: The homepage displays available books and 'sign in/sign up'		
GWT 3.	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner		
<b>GWT 3.</b> Given I am an admin w	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None		
Given I am an admin w	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None		
Given I am an admin w When I enter my userr	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None tho is not logged in		
Given I am an admin w When I enter my userr	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None  Tho is not logged in same and password incorrectly should appear informing me that my details are wrong.  Browser: Google Chrome		
Given I am an admin w When I enter my usern Then an error message	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None  tho is not logged in the ame and password incorrectly exhould appear informing me that my details are wrong.		
Given I am an admin w When I enter my usern Then an error message	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None  Tho is not logged in same and password incorrectly should appear informing me that my details are wrong.  Browser: Google Chrome		
Given I am an admin w When I enter my usern Then an error message	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None  tho is not logged in same and password incorrectly should appear informing me that my details are wrong.  Browser: Google Chrome Date/Time: 20/10/2021 11:10 am		
Given I am an admin w When I enter my usern Then an error message	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None  Tho is not logged in name and password incorrectly should appear informing me that my details are wrong.  Browser: Google Chrome Date/Time: 20/10/2021 11:10 am Tester: Aditya Kerhalkar		
Given I am an admin w When I enter my usern Then an error message	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None  Tho is not logged in tame and password incorrectly should appear informing me that my details are wrong.  Browser: Google Chrome Date/Time: 20/10/2021 11:10 am Tester: Aditya Kerhalkar Result: The program prohibits me from logging in, but no message		
Given I am an admin w When I enter my usern Then an error message	Result: The homepage displays available books and 'sign in/sign up' buttons are available in the corner Bugs Found: None  Tho is not logged in same and password incorrectly should appear informing me that my details are wrong.  Browser: Google Chrome Date/Time: 20/10/2021 11:10 am Tester: Aditya Kerhalkar Result: The program prohibits me from logging in, but no message appears		

Tester: Aditya Kerhalkar
Result: The program prohibits me from logging in, but no message
appears
Bugs Found: Error message needs to be added

# SEPT-3

As a customer, I want to	log in so that I can buy or share books.
GWT 1.	
Given I am a registered user who is not logged in	
When I enter my details correctly	
Then I have the option to complete a purchase	
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 11:20 am
	Tester: Aditya Kerhalkar
	Result: After logging in and clicking on a book I have the option to buy
	the book
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 11:25 am
	Tester: Aditya Kerhalkar
	Result: After logging in and clicking on a book I have the option to buy
	the book
	Bugs Found: None
GWT 2.	
1	user who is not logged in
When I click the purcha	
Then it should redirect i	5 , 5
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 11:29 am
	Tester: Aditya Kerhalkar
	Result: When I click the purchase button on a book it redirects to the
	login page
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 11:31 am
	Tester: Aditya Kerhalkar
	Result: When I click the purchase button on a book it redirects to the
	login page
	Bugs Found: None

As a customer, I want to register an account so that I can purchase books from other registered		
users or shop owr	ners	
GWT 1.		
Given I am a customer who does not have an account		
When I am on the homepage		
Then there should be a link to enable me to register an account		
Test Case 1	Browser: Google Chrome	
	Date/Time: 20/10/2021 11:36 am	
	Tester: Aditya Kerhalkar	

	Result: 'Sign up' button appears in the corner and redirects to the
	register page
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 11:37 am
	Tester: Aditya Kerhalkar
	Result: 'Sign up' button appears in the corner and redirects to the
	register page
	Bugs Found: None
GWT 2.	
Given I am a customer w	ho does not have an account
When I enter my details	in the registration fields
Then I will be able to reg	gister an account
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 11:39 am
	Tester: Aditya Kerhalkar
	Result: After entering details I can register an account
	Bugs Found: None
	Notes: It doesn't log you in automatically, instead redirecting to login.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 11:41 am
	Tester: Aditya Kerhalkar
	Result: After entering details I can register an account
	Bugs Found: None
	Notes: It doesn't log you in automatically, instead redirecting to login.
GWT 3.	
Given I am a customer w	ho does not have an account
When I enter invalid det	ails in the registration fields
Then an error message s	should appear informing me that my details are invalid
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 11:52 am
	Tester: Aditya Kerhalkar
	Result: Entering invalid details stops you from registering.
	Bugs Found: Not all invalid details are marked with error messages. (For
	instance, not adding an '@' to the email address is marked, but
	password length is not).
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 11:55 am
	Tester: Aditya Kerhalkar
	Result: Entering invalid details stops you from registering.
	Bugs Found: Not all invalid details are marked with error messages. (For
	instance, not adding an '@' to the email address is marked, but
	password length is not).
Given I am a customer w When I enter invalid det Then an error message s <b>Test Case 1</b>	who does not have an account ails in the registration fields should appear informing me that my details are invalid  Browser: Google Chrome Date/Time: 20/10/2021 11:52 am  Tester: Aditya Kerhalkar Result: Entering invalid details stops you from registering.  Bugs Found: Not all invalid details are marked with error messages. (For instance, not adding an '@' to the email address is marked, but password length is not).  Browser: Microsoft Edge Date/Time: 20/10/2021 11:55 am  Tester: Aditya Kerhalkar Result: Entering invalid details stops you from registering.  Bugs Found: Not all invalid details are marked with error messages. (For instance, not adding an '@' to the email address is marked, but

### SEPT-6

As a shop owner, I want to register an account so that I can sell my inventory of books to registered users.

#### GWT 1.

Given I am a shop owner who does not have an account

When I am on the homepage

Then there should be	a link to enable me to register an account
Test Case 1	Browser: Google Chrome
rest case 1	Date/Time: 20/10/2021 1:42 pm
	Tester: Aditya Kerhalkar
	·
	Result: 'Sign up' button appears in the corner and redirects to the
	register page
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 1:43 pm
	Tester: Aditya Kerhalkar
	Result: 'Sign up' button appears in the corner and redirects to the
	register page
	Bugs Found: None
GWT 2.	
•	ner who does not have an account
•	ails in the registration fields and select 'shop owner account'
	register an account which must be confirmed by an admin
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 1:45 pm
	Result: After entering details I can register an account
	Bugs Found: None
	Notes: It doesn't log you in automatically, instead redirecting to login.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 1:49 pm
	Result: After entering details I can register an account
	Bugs Found: None
	Notes: It doesn't log you in automatically, instead redirecting to login.
GWT 3.	
Given I am a shop ow	ner who does not have an account
When I enter invalid	details in the registration fields
Then an error message	ge should appear informing me that my details are invalid
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 1:51 pm
	Tester: Aditya Kerhalkar
	Result: Entering invalid details stops you from registering.
	Bugs Found: Not all invalid details are marked with error messages. (For
	instance, not adding an '@' to the email address is marked, but
	password length is not).
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 1:52 pm
	Tester: Aditya Kerhalkar
	Result: Entering invalid details stops you from registering.
	Bugs Found: Not all invalid details are marked with error messages. (For
	instance, not adding an '@' to the email address is marked, but
	password length is not).
	I become a second secon

### SEPT-7

As a non-registered user, I want to register an account so that I can sell my preowned books to other registered users.

### GWT 1.

Γ	
	r who does not have an account
When I am on the hor	· · ·
	a link to enable me to register an account
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 2:17 pm
	Tester: Aditya Kerhalkar
	Result: 'Sign up' button appears in the corner and redirects to the
	register page
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 2:18 pm
	Tester: Aditya Kerhalkar
	Result: 'Sign up' button appears in the corner and redirects to the
	register page
	Bugs Found: None
GWT 2.	
Given I am a custome	r who does not have an account
When I enter my deta	ils in the registration fields
Then I will be able to	register an account
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 2:19 pm
	Tester: Aditya Kerhalkar
	Result: After entering details I can register an account
	Bugs Found: None
	Notes: It doesn't log you in automatically, instead redirecting to login.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 2:20 pm
	Tester: Aditya Kerhalkar
	Result: After entering details I can register an account
	Bugs Found: None
	Notes: It doesn't log you in automatically, instead redirecting to login.
GWT 3.	
Given I am a custome	r who does not have an account
When I enter invalid o	letails in the registration fields
Then an error messag	e should appear informing me that my details are invalid
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 2:30 pm
	Tester: Aditya Kerhalkar
	Result: Entering invalid details stops you from registering.
	Bugs Found: Not all invalid details are marked with error messages. (For
	instance, not adding an '@' to the email address is marked, but
	password length is not).
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 2:31 pm
	Tester: Aditya Kerhalkar
	Result: Entering invalid details stops you from registering.
	Bugs Found: Not all invalid details are marked with error messages. (For
	instance, not adding an '@' to the email address is marked, but
	password length is not).
	•

### SEPT-8

JLI I U	
As a non-registered user, I want to register an account so that I can sell my preowned books to	
other registered users.	
GWT 1/3.	
See SEPT-7 above.	
GWT 2.	
Given I am a customer who does not have an account	
When I enter my details in the registration fields	
Then I will be able to register an account and the profile will have a link to 'Sell Books'	
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 2:55 pm
	Tester: Aditya Kerhalkar
	Result: After entering details I can register an account. The profile button
	in the corner has a 'Create Listing' link
	Notes: It doesn't log you in automatically, instead redirecting to login.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 2:59 pm
	Tester: Aditya Kerhalkar
	Result: After entering details I can register an account. The profile button
	in the corner has a 'Create Listing' link
	Notes: It doesn't log you in automatically, instead redirecting to login.

### SEPT-9

As a non-registered user, I want to register an account so that I can post reviews on users I have interacted with.

#### **GWT 1/3.**

See SEPT-7 above.

#### SEPT-10

3L1 1-10		
As a registered user, I want to change my email so that receipts and notifications will come to my		
new email.		
GWT 1.		
Given I am a registered user who is logged in		
When I select 'change a	When I select 'change account' in the profile management menu	
Then there should be a	link to enable me to change my email address	
Test Case 1	Browser: Google Chrome	
	Date/Time: 20/10/2021 3:20 pm	
	Tester: Aditya Kerhalkar	
	Result: There is a link in the profile dropdown called 'edit account	
	details'. I can then change my email address and save it.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 20/10/2021 3:23 pm	
	Tester: Aditya Kerhalkar	
	Result: There is a link in the profile dropdown called 'edit account	
	details'. I can then change my email address and save it.	

#### GWT 2.

Given I am a registered user who is logged in

When I enter my new email address in the registration field

Then I will be able to change my email address and will receive notifications there instead

Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 3:21 pm
	Tester: Aditya Kerhalkar
	Result: Entering my new email address in the 'edit account details' page
	means it can be saved.
	Bugs Found: It seems to save the address, but doesn't redirect the user
	so they could be confused as to whether it has worked.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 3:24 pm
	Tester: Aditya Kerhalkar
	Result: Entering my new email address in the 'edit account details' page
	means it can be saved.
	Bugs Found: It seems to save the address, but doesn't redirect the user
	so they could be confused as to whether it has worked.
GWT 3.	
Given I am a registered	user who is logged in
When I enter an invalid	email in the registration field
Then an error message	should appear informing me that this address is invalid
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 3:30 pm
	Tester: Aditya Kerhalkar
	Result: Entering invalid email details gives a specific error.
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 3:32 pm
	Tester: Aditya Kerhalkar
	Result: Entering invalid email details gives a specific error.
	Bugs Found: None

As a registered user, I want to change my password so that it is different from my old password.		
GWT 1.		
Given I am a registered	user who is logged in	
When I select 'change a	ccount' in the profile management menu	
Then there should be a	link to enable me to change password	
Test Case 1	Browser: Google Chrome	
	Date/Time: 20/10/2021 8:39 pm	
	Tester: Aditya Kerhalkar	
	Result: The 'edit account details page' does not include the option to	
	change password.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 20/10/2021 8:40 pm	
	Tester: Aditya Kerhalkar	
	Result: The 'edit account details page' does not include the option to	
	change password.	
GWT 2.		
Given I am a registered user who is logged in		
When I enter my new password in the registration field		
Then I will be able to change my password		
Test Case 1	Browser: Google Chrome	

	Date/Time: 20/10/2021 8:39 pm
	Tester: Aditya Kerhalkar
	•
	Result: The 'edit account details page' does not include the option to
	change password, so this is not a possibility.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 8:40 pm
	Tester: Aditya Kerhalkar
	Result: The 'edit account details page' does not include the option to
	change password, so this is not a possibility.
GWT 3.	
Given I am a registered	user who is logged in
When I enter an invalid	password in the registration field
Then an error message	should appear informing me that this password is invalid
Test Case 1	Browser: Google Chrome
	Date/Time: 20/10/2021 8:39 pm
	Tester: Aditya Kerhalkar
	Result: The 'edit account details page' does not include the option to
	change password, so this is not a possibility.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 20/10/2021 8:40 pm
	Tester: Aditya Kerhalkar
	Result: The 'edit account details page' does not include the option to
	change password, so this is not a possibility.

As a customer, I want to	o view my order history so I can see what I've ordered in the past.
GWT 1.	
Given I am a registered user who is logged in	
When I select 'order history' in the profile management menu	
Then there should be a list of my previously purchased books on screen in a chronological order.	
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 10:54 am
	Tester: Aditya Kerhalkar
	Result: Transaction history doesn't seem to appear
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 10:58 am
	Tester: Aditya Kerhalkar
	Result: Transaction history doesn't seem to appear
GWT 2.	
Given I am a registered	user who is logged in
When I select a book in the order history tab	
Then relevant order details such as price and address should be displayed.	
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 10:54 am
	Tester: Aditya Kerhalkar
	Result: Transaction history doesn't seem to appear
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 10:58 am
	Tester: Aditya Kerhalkar
	Result: Transaction history doesn't seem to appear

SEP 1-13	
As a shop owner, I want	to change my phone number, address, or ABN if they are changed so that
my details remain corre	ct.
GWT 1.	
Given I am logged in as	a shop owner
When I select 'change a	ccount' in the profile management menu
Then there should be a	link to enable me to change my details
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 8:33 am
	Tester: Aditya Kerhalkar
	Result: There is a link in the profile dropdown called 'edit account
	details'. I can then change my details and save them.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 8:34 am
	Tester: Aditya Kerhalkar
	Result: There is a link in the profile dropdown called 'edit account
	details'. I can then change my details and save them.
GWT 2.	· · · · · · · · · · · · · · · · · · ·
Given I am logged in as	a shop owner
	etails in the registration fields
Then I will be able to ch	-
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 8:33 am
	Tester: Aditya Kerhalkar
	Result: Entering my new email address in the 'edit account details' page
	means it can be saved.
	Bugs Found: It seems to save the address, but doesn't redirect the user
	so they could be confused as to whether it has worked.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 8:34 am
	Tester: Aditya Kerhalkar
	Result: Entering my new email address in the 'edit account details' page
	means it can be saved.
	Bugs Found: It seems to save the address, but doesn't redirect the user
	so they could be confused as to whether it has worked.
GWT 3.	,
Given I am logged in as	a shop owner
	tails in the registration field
	should appear informing me that the details are invalid
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 8:36 am
	Tester: Aditya Kerhalkar
	Result: Entering invalid email details gives a specific error.
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
. 300 0000 2	Date/Time: 21/10/2021 8:36 am
	Tester: Aditya Kerhalkar
	Result: Entering invalid email details gives a specific error.
	Bugs Found: None
	Dugo i Outid. Notic

### SEPT-15

As an admin, I want to v	riew a full list of users' information on the website, so that I can get
information about subscribers and their demographics.	
GWT 1.	
Given I am on a page wh	nich lists user information
When I select 'show all'	
Then the app should list	all users.
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 8:47 am
	Tester: Aditya Kerhalkar
	Result: There is no specific 'list all users' page. There is the 'user
	approval' page which can list users that need to be approved by an
	admin, but not one where all users can be seen.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 8:48 am
	Tester: Aditya Kerhalkar
	Result: There is no specific 'list all users' page. There is the 'user
	approval' page which can list users that need to be approved by an
	admin, but not one where all users can be seen.

SEPT-19	
As a shop owner, I	want to search up a book I want to sell so I can compare the going rate for that
book.	
GWT 1.	
Given I am on the s	earch bar
When I type in the	name of the book I want to sell and hit enter
Then I am redirecte	ed to a page listing all the books with that name
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 9:16 am
	Tester: Aditya Kerhalkar
	Result: Typing the book name in the top search bar shows all listings
	which have the same name.
	Bugs Found: None
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 9:17 am
	Tester: Aditya Kerhalkar
	Result: Typing the book name in the top search bar shows all listings
	which have the same name.
	Bugs Found: None
GWT 2.	
Given I have typed	in the name of the book in search
When nobody else	is selling the book on the site
Then no book will o	display on the results page
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 9:18 am
	Tester: Aditya Kerhalkar
	Result: Typing a book name with no attached listings gives the message 'no results were found'.

Bugs Found: None

Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 9:18 am
	Tester: Aditya Kerhalkar
	Result: Typing a book name with no attached listings gives the message
	'no results were found'.
	Bugs Found: None
GWT 3.	
Given I have typed in th	e name of the book in search
When I am on the results page	
Then each result should display the title, picture, price and seller ID of the book	
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 9:19 am
	Tester: Aditya Kerhalkar
	Result: The result for each listing gives the title, picture, ISBN and author,
	but not the seller ID or price. For this you need to click on the book
	listing itself.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 9:19 am
	Tester: Aditya Kerhalkar
	Result: The result for each listing gives the title, picture, ISBN and author,
	but not the seller ID or price. For this you need to click on the book
	listing itself.

SEPT-20	
As a shop owner, I	want to search up a book I have listed so that I can see if my listing is visible to
those looking up t	hat book.
GWT 1.	
Given I am on the	search bar
When I type in the	name of the book I want to sell and hit enter
Then I should see	the book that I am selling in results
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 9:41 am
	Tester: Aditya Kerhalkar
	Result: Book can be seen in search.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 9:44 am
	Tester: Aditya Kerhalkar
	Result: Book can be seen in search.
GWT 2.	
Given I have typed	I the name of the book in search
When I hover over	r my listing
Then it should not	allow me to buy my own book
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 9:41 am
	Tester: Aditya Kerhalkar
	Result: Book can still be bought.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 9:44 am
	Tester: Aditya Kerhalkar
	Result: Book can still be bought.

# SEPT-21

As a customer, I want to	o search for a book that has a particular word in the title, so that I can see a
list of books containing	that word in the title.
GWT 1.	
Given I am on the searc	h bar
When I enter a word fro	om the book title
Then I am redirected to a page listing books with that word in the title.	
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 11:12 am
	Tester: Aditya Kerhalkar
	Result: Books with that word in the title can be seen in search.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 11:13 am
	Tester: Aditya Kerhalkar
	Result: Books with that word in the title can be seen in search.
GWT 2.	
Given I have typed the i	name of the book in search and I am not logged in
When I am on the resul	ts page
Then I shouldn't be able to make a purchase without logging in	
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 11:13 am
	Tester: Aditya Kerhalkar
	Result: Clicking the shopping cart button (to buy the book) redirects to
	the login page.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 11:13 am
	Tester: Aditya Kerhalkar
	Result: Clicking the shopping cart button (to buy the book) redirects to
	the login page.

As a customer I want to	search the name of an author, so that I can see all the books they have
written.	
GWT 1.	
Given I am on the searc	h bar
When I enter an author	's name
Then I am redirected to	a page listing book written by this author or with their name in it
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 11:24 am
	Tester: Aditya Kerhalkar
	Result: Books with that word in the title can be seen in search.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 11:24 am
	Tester: Aditya Kerhalkar
	Result: Books with that word in the title can be seen in search.
GWT 2.	
Given I have typed in the name of the author in search and I am not logged in	
When I am on the result	ts page
Then I shouldn't be able to make a purchase without logging in	
Test Case 1	Browser: Google Chrome

	Date/Time: 21/10/2021 11:24 am	
	Tester: Aditya Kerhalkar	
	Result: Clicking the shopping cart button (to buy the book) redirects to	
	the login page.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 11:24 am	
	Tester: Aditya Kerhalkar	
	Result: Clicking the shopping cart button (to buy the book) redirects to	
	the login page.	
GWT 3.		
Given I am on the search bar		
When I click enter without entering anything		
Then nothing should happen		
Test Case 1	Browser: Google Chrome	
	Date/Time: 21/10/2021 11:29 am	
	Tester: Aditya Kerhalkar	
	Result: Clicking the search button displays a 404 error	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 11:29 am	
	Tester: Aditya Kerhalkar	
	Result: Clicking the search button displays a 404 error	

As an admin, I want to type up to corresponding book.	the ISBN of a book so that I can see if the result matches the
corresponding book.	
GWT 1.	
Given I know the ISBN of the bo	ok I'm searching for
When I search for the ISBN	
Then I am redirected to a page	that displays the book with that ISBN
Test Case 1 Brows	er: Google Chrome
Date/ <sup>-</sup>	Fime: 21/10/2021 11:34 am
Tester	: Aditya Kerhalkar
Result	: Books with that ISBN can be seen in search.
Test Case 2 Brows	er: Microsoft Edge
Date/ <sup>-</sup>	Fime: 21/10/2021 11:34 am
Tester	: Aditya Kerhalkar
Result	: Books with that ISBN can be seen in search.
GWT 2.	
Given I am on the search bar	
When I enter random numbers	that do not match the ISBN format
Then an error message should display indicating the correct ISBN format	
Test Case 1 Brows	er: Google Chrome
Date/ <sup>-</sup>	Fime: 21/10/2021 11:34 am
Tester	: Aditya Kerhalkar
Result	: Simply a 'no results found' error.
Note:	Not sure if further specific error output on ISBN format is
requir	ed.
Test Case 2 Brows	er: Microsoft Edge
Date/ <sup>-</sup>	Fime: 21/10/2021 11:34 am
Tester	: Aditya Kerhalkar

Result: Simply a 'no results found' error.
Note: Not sure if further specific error output on ISBN format is
required.

#### CEDT 24

SEPT-24		
As a public user, I w	rant to search up the title of a book I want to buy so I can find the cheapest	
price.		
GWT 1.		
Given I am on the re	esults page and looking for the cheapest price	
When I scroll down	When I scroll down the results page	
Then I should be ab	le to sort the list in order of price	
Test Case 1	Browser: Google Chrome	
	Date/Time: 21/10/2021 11:43 am	
	Tester: Aditya Kerhalkar	
	Result: No indication of price on the results page. Need to click on the	
	listing and then find the price.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 11:43 am	
	Tester: Aditya Kerhalkar	
	Result: No indication of price on the results page. Need to click on the	
	listing and then find the price.	
GWT 2.		
Given I am on the re	esults page and have clicked the 'sort by price' feature	
When I scroll down	, 5	
	uld be sorted in ascending order of price	
Test Case 1	Browser: Google Chrome	
	Date/Time: 21/10/2021 11:46 am	
	Tester: Aditya Kerhalkar	
	Result: There is no 'sort by price' feature.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 11:46 am	
	Tester: Aditya Kerhalkar	
	Result: There is no 'sort by price' feature.	

SEPT-25			
As a registered public user, I want to set up a main payment method so that I do not have			
payment details every t	ime.		
GWT 1.			
Given I have books in my cart When I go to check out Then I want my payment details set so I do not have to insert them every time.			
		Test Case 1	Browser: Google Chrome
			Date/Time: 21/10/2021 11:59 am
	Tester: Aditya Kerhalkar		
	Result: Storing payment details is the responsibility of PayPal. If you have		
	an account you can easily log in, or pay with a card.		
Test Case 2	Browser: Microsoft Edge		
	Date/Time: 21/10/2021 12:03 pm		
	Tester: Aditya Kerhalkar		

Result: Storing payment details is the responsibility of PayPal. If you have
an account you can easily log in, or pay with a card.

### SEPT-28

As a customer, I wa	ant to add a review for a book I have bought, so that I can tell others about my	
opinion.		
GWT 1.		
Given I am on the 'Purchases' page		
When I click on a bo	When I click on a book that I have bought	
Then I will be able to see its details including the 'Add Review' button.		
Test Case 1	Browser: Google Chrome	
	Date/Time: 21/10/2021 2:04 pm	
	Tester: Aditya Kerhalkar	
	Result: There is no specific 'purchases' page. Reviews can be added	
	through the book listing page and do not depend on whether a user has bought the book.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 2:05 pm	
	Tester: Aditya Kerhalkar	
	Result: There is no specific 'purchases' page. Reviews can be added	
	through the book listing page and do not depend on whether a user has	
	bought the book.	
GWT 2.		
Given I have selecte	ed a book from 'Purchases'	
When I click on the button 'Add Review'		
Then I will be able t	to add a review for the book.	
Test Case 1	Browser: Google Chrome	
	Date/Time: 21/10/2021 2:04 pm	
	Tester: Aditya Kerhalkar	
	Result: Reviews can be added through the book listing page.	
	Bugs Found: May need to be refreshed before it shows up.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 2:05 pm	
	Tester: Aditya Kerhalkar	
	Result: Reviews can be added through the book listing page.	
	Bugs Found: May need to be refreshed before it shows up.	

### SFPT-30

<u> </u>	3EL 1-30	
As a customer, I want to	delete a review for a book I have bought, so that I can update my opinion	
or correct mistakes.		
GWT 1.		
Given I am on the 'Purch	nases' page	
When I click on a book t	hat I have bought	
Then I will be able to see	e its details including the 'Delete' button.	
Test Case 1	Browser: Google Chrome	
	Date/Time: 21/10/2021 2:10 pm	
	Tester: Aditya Kerhalkar	
	Result: There is no specific 'purchases' page. Reviews can be deleted	
	through the book listing page.	
Test Case 2	Browser: Microsoft Edge	

	Date/Time: 21/10/2021 2:11 pm
	Tester: Aditya Kerhalkar
	Result: There is no specific 'purchases' page. Reviews can be added
	through the book listing page and do not depend on whether a user has
	bought the book.
GWT 2.	
Given I have selected a	book from 'Purchases'
When I click on the but	ton 'Add Review'
Then I will be able to a	dd a review for the book.
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 2:10 pm
	Tester: Aditya Kerhalkar
	Result: Reviews can be deleted through the book listing page, by clicking
	the trash icon.
	Bugs Found: May need to be refreshed before it shows up.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 2:11 pm
	Tester: Aditya Kerhalkar
	Result: Reviews can be deleted through the book listing page, by clicking
	the trash icon.
	Bugs Found: May need to be refreshed before it shows up.

### SEPT-38

•	As a customer, I want to see my transaction history, so that I can ensure that my orders went hrough without error.	
GWT 1.		
Given I am logged i	in and on my user profiles	
When I click 'Trans	action History'	
Then I will be able	to see a list of orders, with not-yet-approved orders at the top.	
Test Case 1	Browser: Google Chrome	
	Date/Time: 21/10/2021 2:15 pm	
	Tester: Aditya Kerhalkar	
	Result: Transaction history doesn't seem to load on the page.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 2:16 pm	
	Tester: Aditya Kerhalkar	
	Result: Transaction history doesn't seem to load on the page.	

#### SEPT-39

As a customer, I want to see the status of my current orders, so that I can know whether my orders have been approved.

#### **GWT 1 & 2.**

See SEPT-38 above.

Results when testing were the same. Transaction history doesn't seem to work...?

### SEPT-40

As a shop owner, I want to see my transaction history, so that I can find a specific transaction which I have made.

#### **GWT 1 & 2.**

See SEPT-38 above.

Results when testing were the same. Transaction history doesn't seem to work...?

### SEPT-44

As a buyer, I want to view an image of the book, so that I can see if it is the version I want to buy.		
GWT 1.	GWT 1.	
Given that I have select	Given that I have selected a book	
When I am browsing around Then I want to be able to see if it is a hard or soft cover.		
		Test Case 1
	Date/Time: 21/10/2021 3:18 pm	
	Tester: Aditya Kerhalkar	
	Result: The image is visible (in most cases). However, whether the cover	
	is hard or soft is not obvious.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 3:25 pm	
	Tester: Aditya Kerhalkar	
	Result: The image is visible (in most cases). However, whether the cover	
	is hard or soft is not obvious.	

#### SEPT-51

As a buyer, I want to us	e PayPal, so that I don't have to provide my credit card details directly with
the site.	
GWT 1.	
Given that I want to use	e PayPal as a payment method
When I buy a book	
Then I would like to jus	t click on PayPal and not insert my details.
Test Case 1	Browser: Google Chrome
	Date/Time: 21/10/2021 5:11 pm
	Tester: Aditya Kerhalkar
	Result: If you have a PayPal account you can log into it and buy the book
	that way.
Test Case 2	Browser: Microsoft Edge
	Date/Time: 21/10/2021 5:15 pm
	Tester: Aditya Kerhalkar
	Result: If you have a PayPal account you can log into it and buy the book
	that way.

### SEPT-54

As a buyer, I want to enter my postal address, so I can receive books I have purchased at the address I have provided.

(NOTE that the original acceptance criteria referred to an unregistered user being able to do this, which is not possible.)

#### GWT 1.

Given that I am a customer

When I go to enter my details		
Then there should be a text field where I can enter my address		
Test Case 1	Browser: Google Chrome	
	Date/Time: 21/10/2021 5:32 pm	
	Tester: Aditya Kerhalkar	
	Result: Address can be changed.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 5:33 pm	
	Tester: Aditya Kerhalkar	
	Result: Address can be changed.	
GWT 2.		
Given that I am a customer  When I enter an invalid address in the registration field		
		Then an error message should appear informing me that the address is invalid.
Test Case 1	Browser: Google Chrome	
	Date/Time: 21/10/2021 5:34 pm	
	Tester: Aditya Kerhalkar	
	Result: Entering invalid details stops you from saving.	
Test Case 2	Browser: Microsoft Edge	
	Date/Time: 21/10/2021 5:35 pm	
	Tester: Aditya Kerhalkar	
	Result: Entering invalid details stops you from saving.	

These are all the user stories which actually have acceptance criteria.

#### **Evidence of Communication:**

Documentation about each meeting can be found on files starting with the date of when the meeting occurred. All meetings and report logs are visible on our MS teams link (can be found below). Written communication was also done on MS teams.

Figure 1:

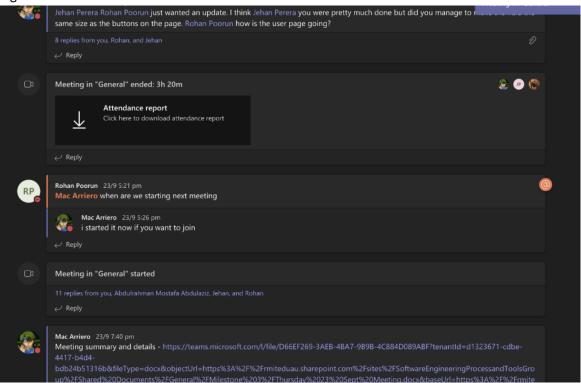


Figure 2:

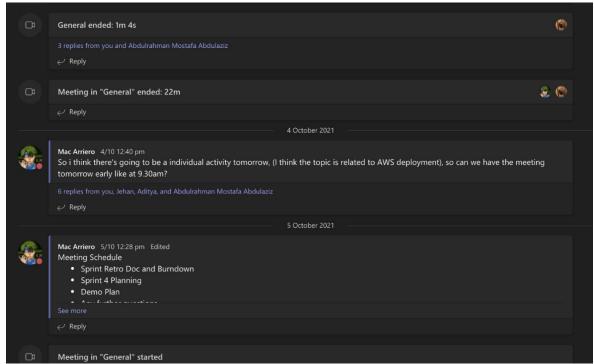
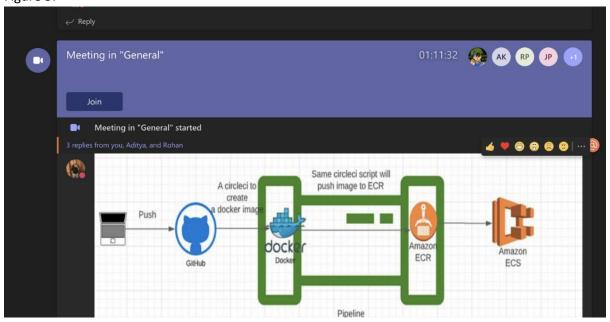


Figure 3:



#### **Project Links:**

Github repository: <a href="https://github.com/AbdoTech93/BookerooApp-SEPT">https://github.com/AbdoTech93/BookerooApp-SEPT</a>

Jira Board: <a href="https://team-1627528793067.atlassian.net/jira/software/projects/SEPT/boards/1">https://team-1627528793067.atlassian.net/jira/software/projects/SEPT/boards/1</a>

 $\label{lem:msp} \textbf{MSTeams Docs:} \ \underline{\text{https://teams.microsoft.com/} \ \#/school/files/General?threadId=19:46Vf8TAhlW-dVU04Degd79aDlmpKx4CTXLqexf5F9SM1@thread.tacv2&ctx=channel} \\ \\$ 

MS Teams: <a href="https://teams.microsoft.com/l/team/19%3a46Vf8TAhlW-dVU04Degd79aDlmpKx4CTXLqexf5F9SM1%40thread.tacv2/conversations?groupId=a06e048a-0f30-4ce5-9e2a-b94e5fdcb8fb&tenantId=d1323671-cdbe-4417-b4d4-bdb24b51316b">https://teams.microsoft.com/l/team/19%3a46Vf8TAhlW-dVU04Degd79aDlmpKx4CTXLqexf5F9SM1%40thread.tacv2/conversations?groupId=a06e048a-0f30-4ce5-9e2a-b94e5fdcb8fb&tenantId=d1323671-cdbe-4417-b4d4-bdb24b51316b</a>

Main Entry Point: <a href="http://bookeroo-webapp.s3-website-us-east-1.amazonaws.com/">http://bookeroo-webapp.s3-website-us-east-1.amazonaws.com/</a> (Services not constantly running due to high AWS services costs (spoken to Homy) services will be reopened upon request)

CircleCl Pipeline: <a href="https://app.circleci.com/pipelines/github/AbdoTech93/BookerooApp-SEPT">https://app.circleci.com/pipelines/github/AbdoTech93/BookerooApp-SEPT</a>