

PURBANCHAL UNIVERSITY

Faculty of Science & Technology

Biratnagar, Nepal



KIST College of Information Technology

Affiliated by Purbanchal University

Kamalpokhari, Kathmandu

Nepal

Project Work on Laravel

LIGHT NOVEL STORE

<u>S.N.</u>	Submitted by:	Symbol no.:
1.	Raman Shrestha	363609
2.	Anuj Paudel	363591
3.	Sneha Sapkota	363619
4.	Adit Malakar	363589

A project report submitted in partial fulfillment of the requirements for

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Of

Purbanchal University, Biratnagar, Nepal

ACKNOWLEDGEMENT

We are pleased to present "**LIGHT NOVEL STORE**" as our 6th semester project. It took us quite a long time to complete this project. This project would have not been possible without some people who really devoted their time to guide us and some tutorial sites found on the internet.

Firstly, and most importantly, we would like to heartily thank our Project Instructor Mr. Kiran Khanal and our program Coordinator Mr. Deepak Khadka for their endless guidance. We cannot imagine which direction our project would have gone without them. We also thank our college, KIST College of Information Technology, for the support throughout the project period, and our college management for providing everything necessary including lab reference materials, which were very important for this project.

Finally, we are very thankful to acknowledge our respective teachers and friends for their active inspiration and co-operation. We would also thank PURBANCHAL UNIVERSITY for designing such course structure, where we get to learn and implement new things. It has and will be helping us to get more knowledge in the field of Information Technology & help us have a successful future in the field of Information Technology.

We hope our University will accept this attempt as a successful project.

Thank you.

Submitted By,

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Raman Shrestha	363609
Anuj Paudel	363591
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Adit Malakar	363589

Date:

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About our Project "LIGHT NOVEL STORE"

LIGHT NOVEL STORE is a web application to manage information about various light novel, their price and their availability in stock. MySQL is used as a Database to store data and information. By this application, we can create, add, modify, delete and search records in/from the database. It is easy and time efficient to store and retrieve recorded data from a server database through this web application.

This application is developed by using PHP, Laravel framework and MySQL database. It is based on GUI (Graphic User Interface). So, it is easy to use. Here database is Centralized on the server where all members can access it by using this application.

This System features are as follows:

- 1. Based on GUI, so easy to use and time efficient.
- 2. Uses of MySQL database to store data and information.
- 3. Database is centralized in the server; all readers can access it through different computers.
- 4. High Security as it uses a database and needs a username and password to login, only authorized members can get access.
- 5. Level or authority to add, modify and delete is categorized. Different authority is provided to different users.
- 6. Admin users can manage all information.

Future of the Project

In the future, the application can be further improved by adding third part item selling with verification of seller, security can be improved and more data can be requested from the user so that data can be accumulated for better statistics generation and better data mining for user convenience. The improved version of this web application can have features like fingerprint for login. We can also add feature where reader can read books online after the payment is done. We can add book review system.

Why the topic "LIGHT NOVEL STORE"?

This title is suitable for this project because it can handle all data and information about light novels. All information about various books can be accessed through this web application. Different users that are authorized by admin can get access. Reader's detail and detail of various light novels are recorded and can be modified/deleted through this application.

The main objective of this application development is to handle databases of a different light novels. Uses of GUI makes it user friendly and easy to understand how to use this application.

Methodology

To develop this application, we used a prototype model.

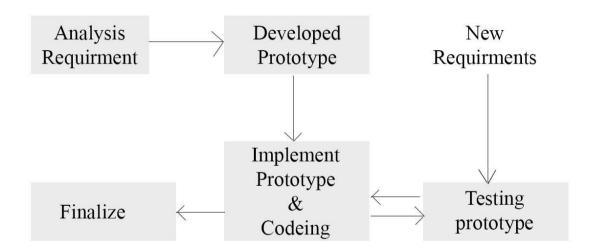


Figure: Prototype model

Steps:

- i) Analyze Requirements
- ii) Design and develop prototype
- iii) Start coding, testing and debugging
- iv) Finalize project

Gantt Chart

This project required about 3 months to be completed. All time period required for this project for different task are shown in table below:

1st Month

S.	Jobs	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
N								
1.	Analysis							
2.	Design							
3.	Coding							
4.	Testing and							
	debugging							
5.	Implementation							
6.	Maintenance							

2nd Month

S.	Jobs	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
N								
1.	Analysis							
2.	Design							
3.	Coding							
4.	Testing and							
	debugging							
5.	Implementation							
6.	Maintenance							

3rd Month

S.	Jobs	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
N								
1.	Analysis							
2.	Design							
3.	Coding							
4.	Testing and							
	debugging							
5.	Implementation							
6.	Maintenance							

System Analysis

In the existing light novel store, user and novels details are entered manually. User's details stored in separate records is a tedious task. Referring to all these records and updating is needed. There is a chance for more manual errors. So, we decided to develop this application that handles the overall database of light novel store. For this we can analyze problems and requirements of various light novel store.

Problems

- i) Manually recorded data are difficult to retrieve and search.
- ii) Less security and probability of data loss.
- iii) Needs huge files and space to store files.
- iv) Difficulty to add and update details.
- v) Not time efficient.

Requirement and Solution

- i) Computerizing information on different light novels.
- ii) Use of Database, makes it easy to retrieve and search.
- iii) Use of a login system to only authorized users create high security.
- iv) Centralizing database, needed less space and can be accessed by multiple user
- v) Use of GUI based web application, makes it easy to add, update and delete.
- vi) User-friendly.
- vii) Time efficient.

System design

The design of an information system produces the details that clearly describe how a system will meet the requirements, identified during system analysis

Input Design (Database Design)

User's details include:

Fields	Data Type	Description
Id	Big increments	It stores id of User
Username	String	It stores username of User
Password	String	It stores password of User
Email	String	It stores email of User

Items details include:

Fields	Data Type	Description
ID	Big increments	It stores id of books.
Name	String	It stores name of Books
Author	String	It stores name of author of books
Genre	String	It stores genre of books
Price	int	It stores price of books
Synopsis	String	It stores synopsis of books
Pic	String	It stores the name of pics

Payment details include:

Fields	Data Type	Description
Id	Big increment	It stores the ID number of payments
user_id	Big increment	It stores id of users
item_id	Big increment	It stores id of books
profit made	int	It stores profits made
Costo	int	It stores total cost

Data Flow Diagram (DFD)

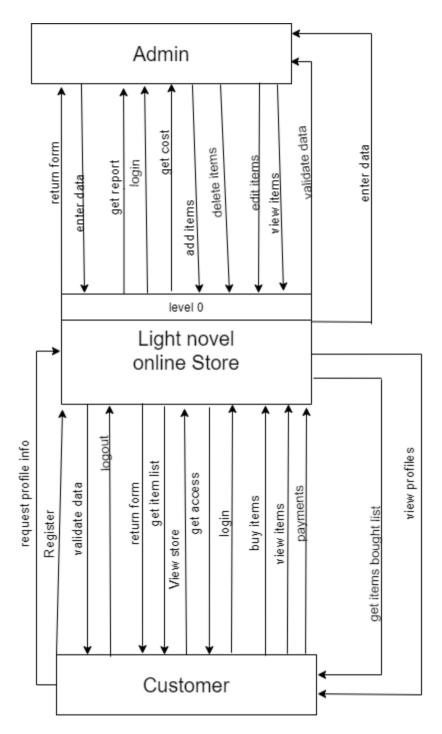


Fig: Level-0

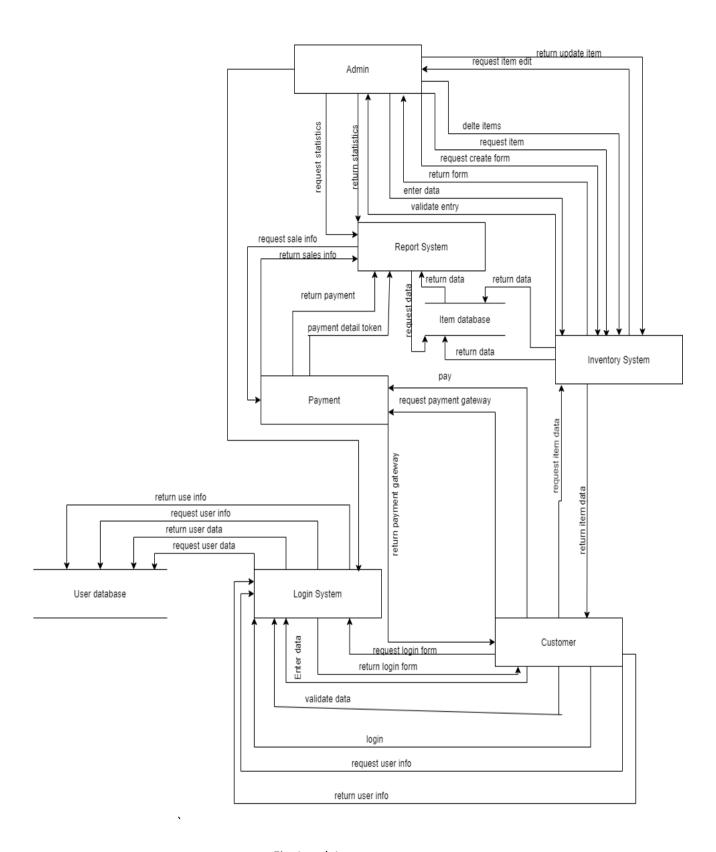


Fig: Level-1

Algorithm

Step 1: Starts

Step 2: Display loading page

Step 3: If user chooses login page goto step 5

Step 4: If user chooses login page goto step 10

Step 5: Show login form

Step 6: Enter credentials

Step 7: If credential match goto step 9

Step 8: If credential don't match show error message

Step 9: Enter user into user or admin dashboard based on authentication

Step 10: Show register form

Step 11: Enter all the fields

Step 12: If all fields are valid goto step 8

Step 13: If all fields are not valid then goto step 10 with validation error

Step 14: END

Crud Algorithm:

Show:

- Step 1: Start
- Step 2: Get all items from database
- Step 3: List all
- Step 4: Stop

Create:

- Step 1: Start
- Step 2: Show create form
- Step 3: Enter all details
- Step 4: If all details are valid goto step 6
 - Step 5: If any field is not valid goto step 2 with error message
 - Step 6: Enter details to database
 - Step 7: Redirect to shop with raw data
 - Step 8: END

Flowchart

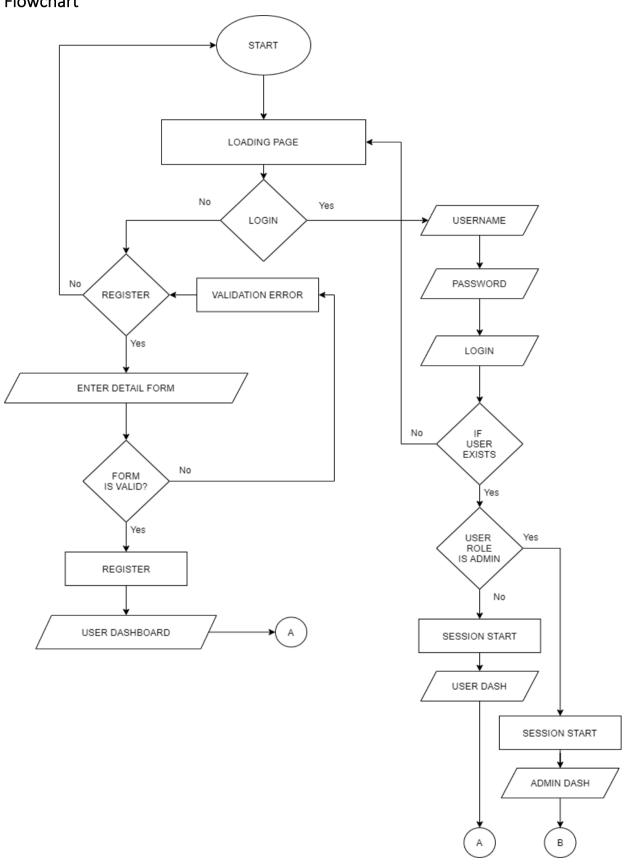


Fig: login

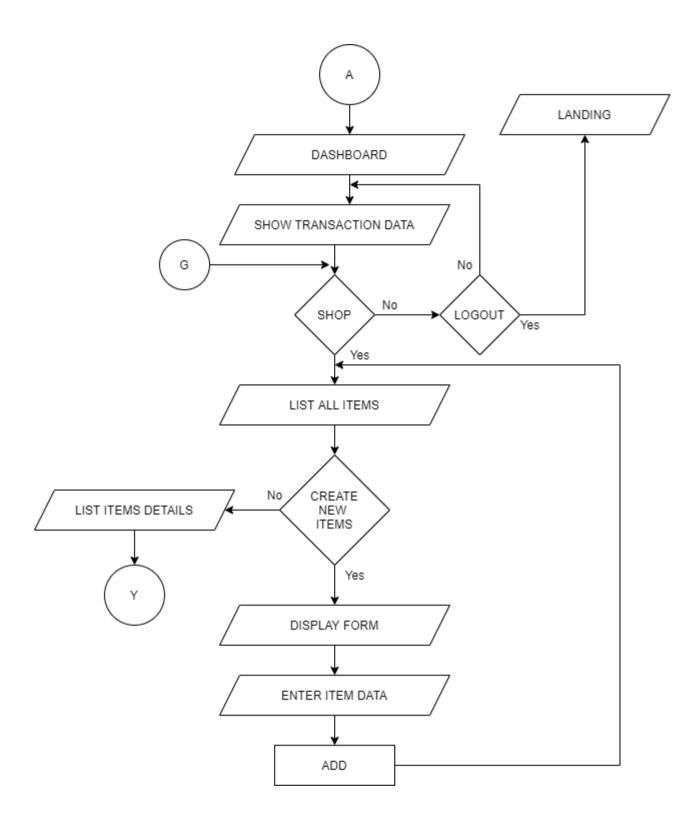


Fig: Admin Section

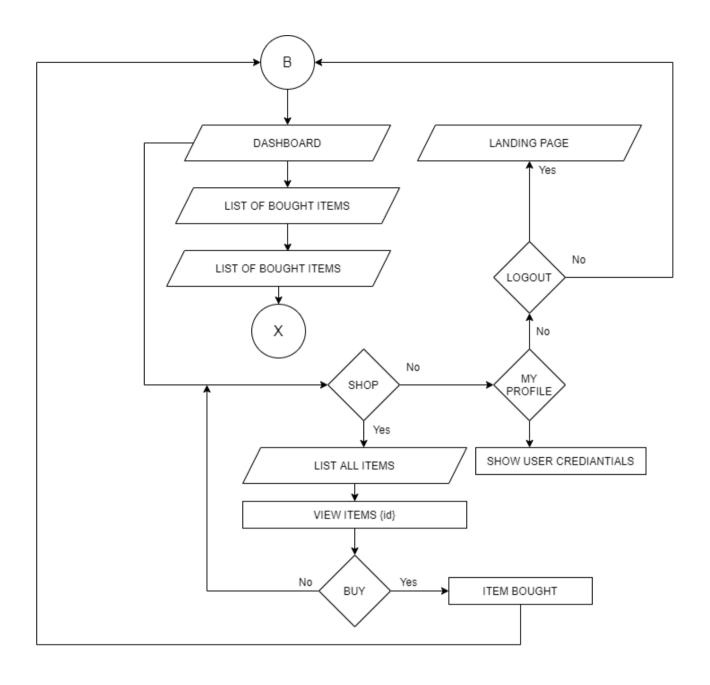


Fig: User Section

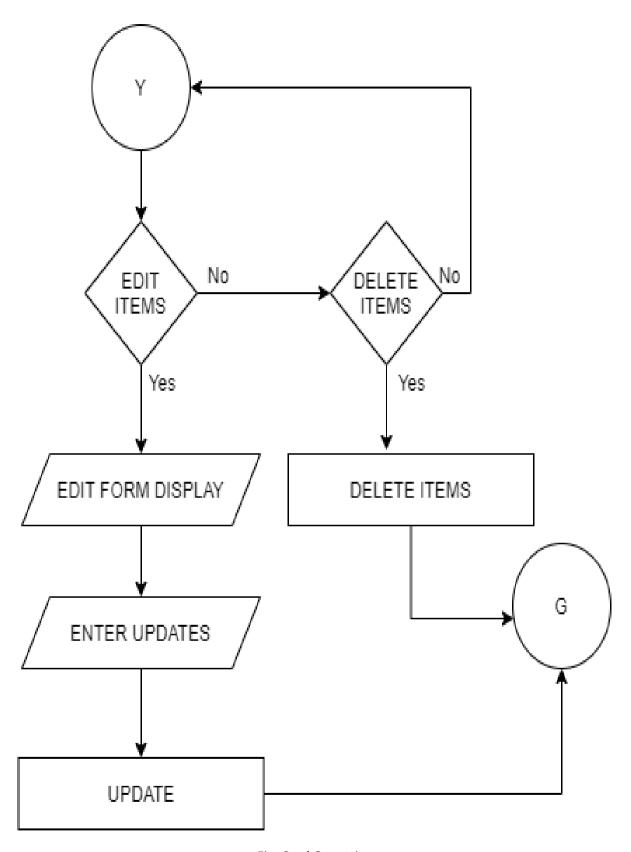


Fig: Crud Operation

Coding & Testing and Debugging

After Analyzing and designing, we started Coding. While coding here starts our testing phase as well. Coding and testing were done side by side. After developing a function, test it and debug if any problem arises. Here we added a new function as well. It took about a month for coding, testing and debugging. At last, we finalize this application.

To complete it, it took about 3 months.

Roles and Permission

Role permission composer package provide way to create acl in laravel 8. They provide how to assign role to user, how to assign permission to user and how to assign permission assign to roles.

- Roles
- Roles users
- Permission_roles

Hardware and Software Requirements

Hardware Requirement:

The Hardware required for proper operation of this application are as follows:

- i) Keyboard and mouse
- ii) Visual Display Unit

Software Requirement:

The software required for the operation of this application are as follows:

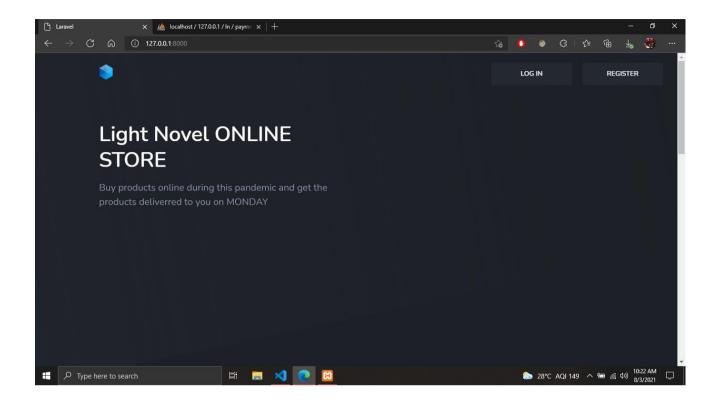
- i) Web browser
- ii) MySQL server connector

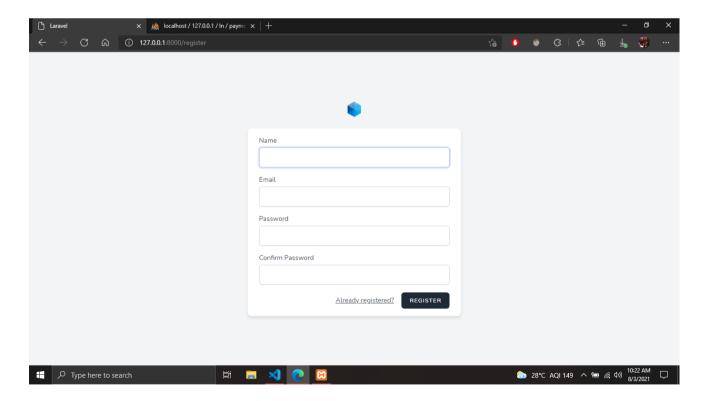
Conclusion

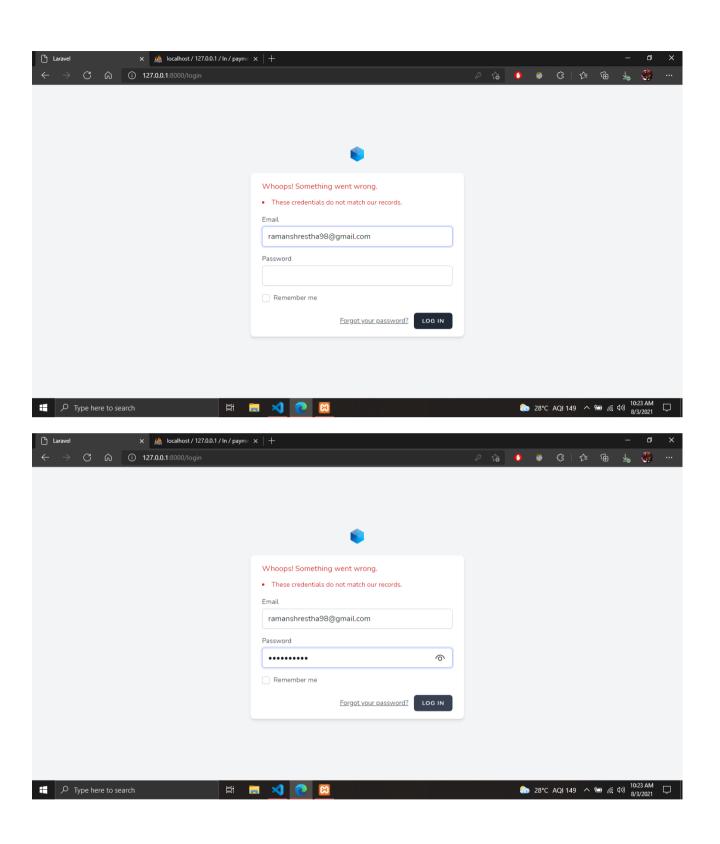
This web application named "LIGHT NOVEL STORE" is developed using PHP, Laravel framework and MySQL database. This project is developed to create a user-friendly environment, where users can create, add, modify, delete and search information on different light novels. Currently this application features records of different light novels, cost, profit made, price and users. High security because only authorized members can access this web application. Authority to particular user gives accuracy and security to the database.

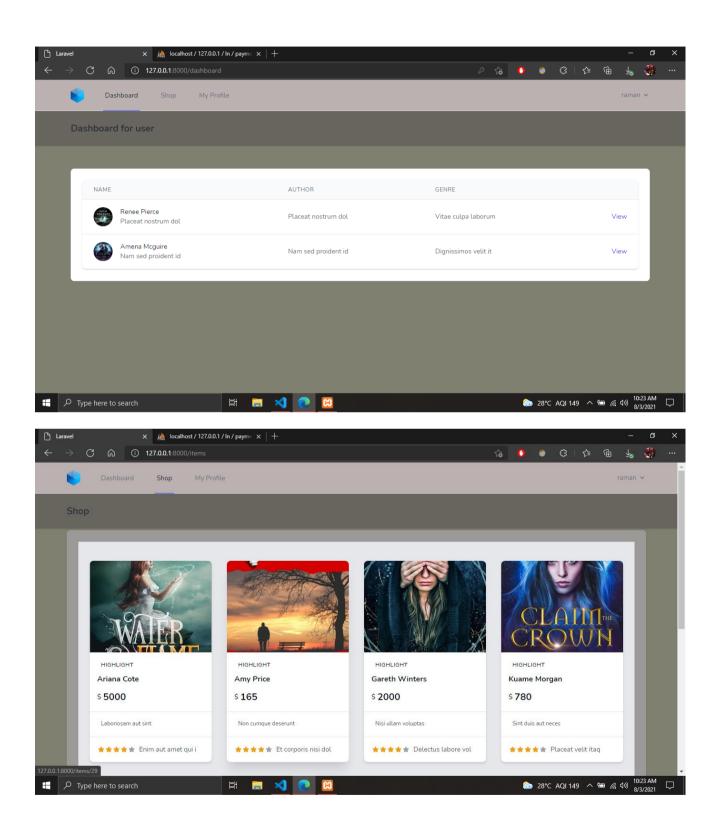
LIGHT NOVEL STORE is huge and can be used to store information about different light novels like author, price etc. This application is also developed by analyzing particular book ecommerce web applications.

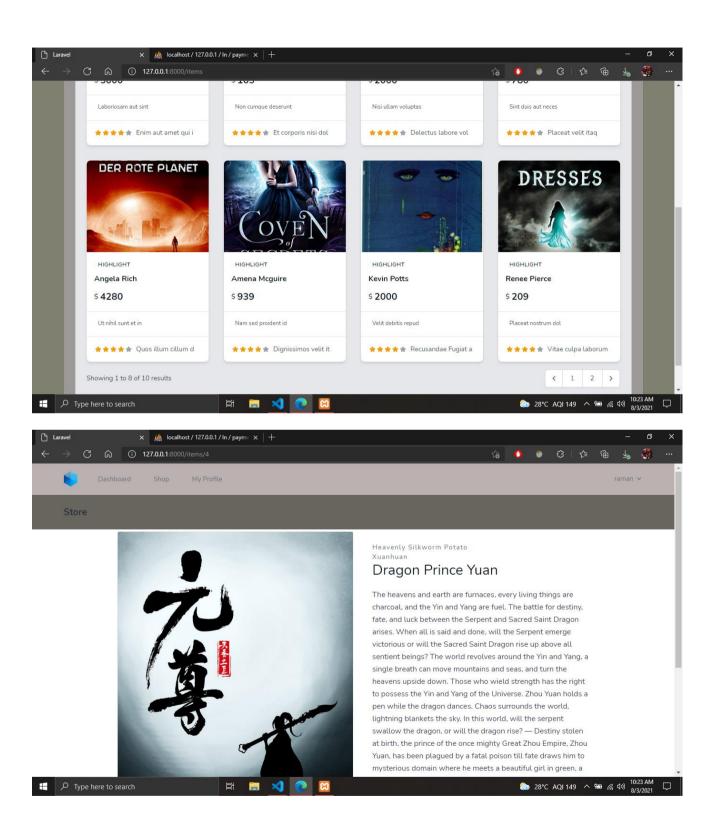
Screenshot

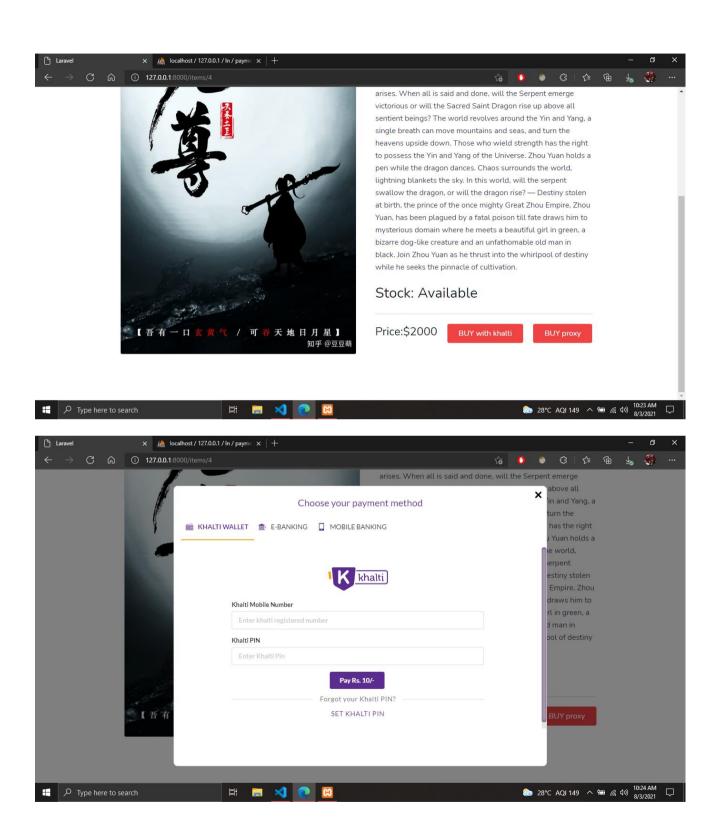


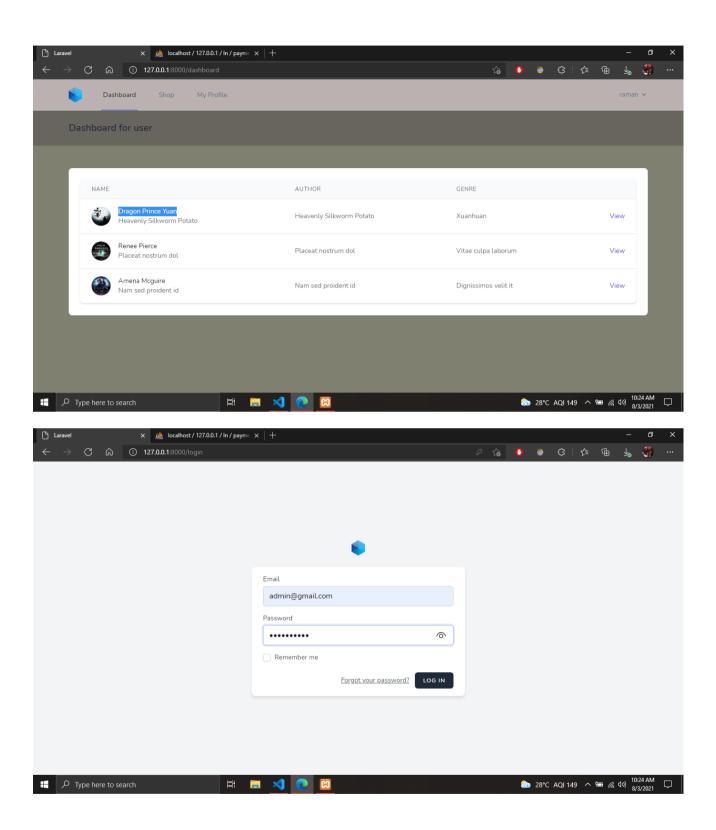


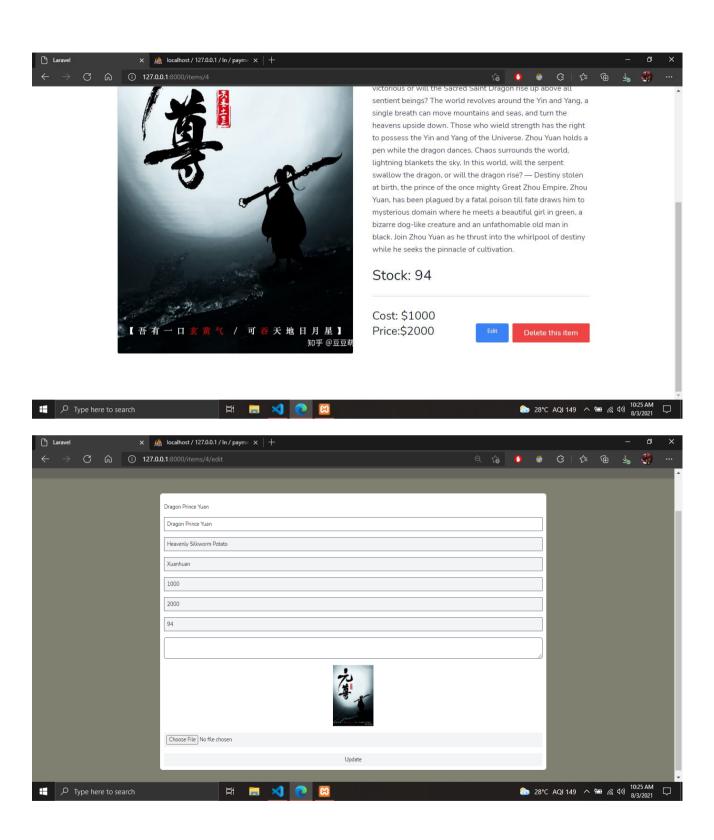


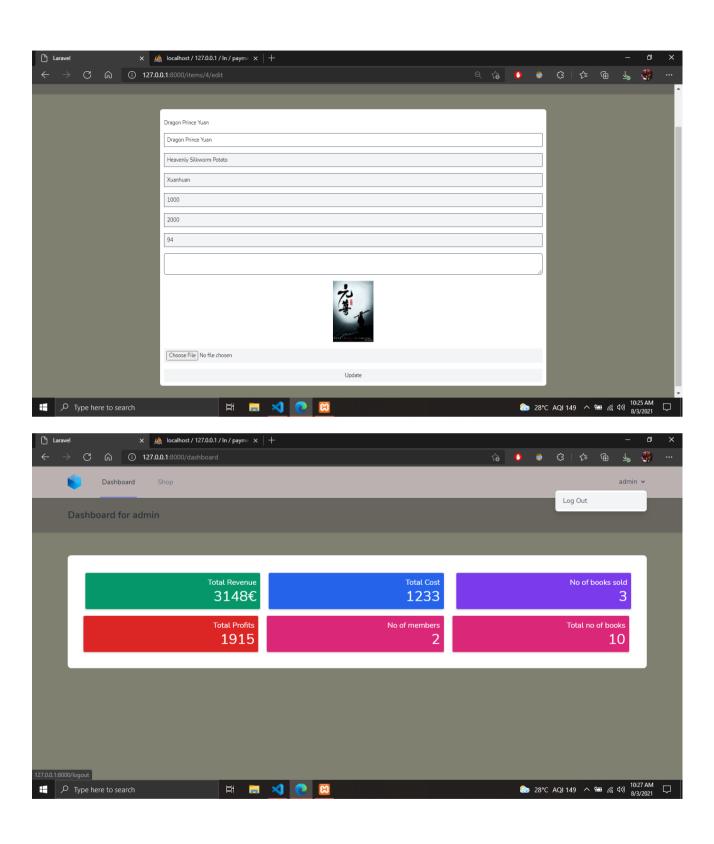












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