DESIGN AND DEVELOPMENT OF AN ONLINE LIBRARY

BY

MD. AL-AMIN
ID: 162-15-7958

AND

TITHEE CHOUDARY
ID: 162-15-7718

AND

RASEDA AKTER
ID: 162-15-7998

This Report is Presented to the Department of CSE of Daffodil International University in Partial Fulfilment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering.

Supervised by

Md. Tarek Habib
Assistant Professor
Department of CSE
Daffodil International University

Co-Supervised by

Mr. Md. Riazur Rahman
Senior Lecturer
Department of CSE
Daffodil International University

DAFFODIL INTERNATIONAL UNIVERSITY

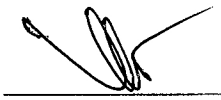
DHAKA, BANGLADESH

MAY 2019

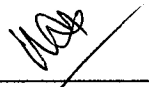
APPROVAL

This Project titled **"DESIGN AND DEVELOPMENT OF AN ONLINE LIBRARY"**, submitted by **Md. Al-amin, ID: 162-15-7958 and Tithee Choudary, ID: 162-15-7718 and Raseda Akter, ID: 162-15-7998** to the Department of Computer Science and Engineering, Daffodil International University, has been accepted as satisfactory for the partial fulfilment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 03/05/2019.

BOARD OF EXAMINERS



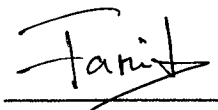
Dr. Syed Akhter Hossain — **Chairman**
Professor and Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University



Internal Examiner

Dr. Md. Ismail Jabiullah
Professor
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University

Dr. Sheak Rashed Haider Noori — **Internal Examiner**
Associate Professor & Associate Head
Department of Computer Science and Engineering
Faculty of Science & Information Technology
Daffodil International University



Dr. Dewan Md. Farid — **External Examiner**
Associate Professor
Department of Computer Science and Engineering
United International University

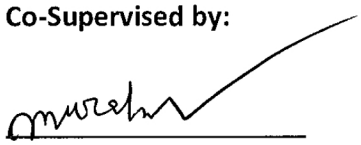
DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Md. Tarek Habib, Assistant Professor, Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

Supervised by:

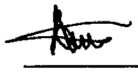
Md. Tarek Habib
Assistant Professor
Department of CSE
Daffodil International University

Co-Supervised by:

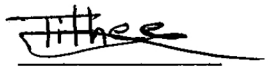


Mr. Md. Riazur Rahman
Senior Lecturer
Department of CSE
Daffodil International University

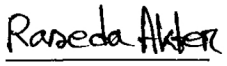
Submitted by:



Md. Al-Amin
ID: -162-15-7958
Department of CSE
Daffodil International University



Tithee Choudary
ID: -162-15-7718
Department of CSE
Daffodil International University



Raseda Akter
ID: -162-15-7998
Department of CSE
Daffodil International University

ACKNOWLEDGEMENT

First we express our heartiest thanks and gratefulness to almighty ALLAH for his divine blessing makes us possible to complete the final year project successfully.

We really grateful and wish our profound our indebtedness to our Department Head **Dr. Syed Akhter Hossain** Supervisor **Md. Tarek Habib**, **Assistant Professor**, Department of CSE, Daffodil International University, Dhaka. Deep knowledge & keen interest of our supervisor in the field of impact of usability design influenced us to carry out this project. Their endless patience, scholarly guidance, continual encouragement, constant and energetic supervision, constructive criticism, valuable advice, reading many inferior draft and correcting them at all stage have made it possible to complete this project.

We might want to offer our heartiest thanks to **Md. Tarek Habib** Sir for his kind help to complete our project and furthermore to other employee and the staff of CSE department of Daffodil International University.

We would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

This is the era of Communication and Internet. Now we don't need to go outside to fulfil our needs. Communication is made in many different ways and it also does means to spread knowledge. Books are a great media for knowledge seekers to acquire knowledge. But when it is come to buy it, we need to go outside and many people also prefer E-books which are not sold in the normal market places. This is the reason we came with this solution where people can go for their own solutions. This project is actually delivers the solution for people's choice. This is a kind of web and app system which will help the consumers to buy books. The aim of the project is mainly to help people to go beyond the boundary of physical book shop. Bangladesh is a technologically driven country. Now online transaction is not a difficult thing. This project is for buying books directly from the web or the app in any formal e.g. PDF or Hardcopy. There is also cash on delivery. To maintain the system after implementation, one administrator is enough who will maintain all the management functionalities. Though out the documentation of the project, reader's convenience was our highest priority. All the documentation has been written in a clean and transparent manner. Technical terms and nations has been elaborated properly.

TABLE OF CONTENTS

CONTENS	PAGE
Board of examiners	i
Declaration	ii
Acknowledgements	iii
Abstract	iv
CHAPTER	
CHAPTER 1: INTRODUCTION	**01-03**
1.1 Introduction	01
1.2 Motivation	01
1.3 Objectives	02
1.4 Expected Outcome	02
1.5 Report Layout	03
CHAPTER 2: BACKGROUND	**04-06**
2.1 Introduction	04
2.2 Related work	04
2.3 Comparative Study	05
2.4 Scope of the Problem	05
2.5 Challenges	06

CHAPTER 3: REQUIREMENT SPECIFICATION 07-15

3.1 Business Process Model 07

3.2 Requirement collection and Analysis 08

3.2.1 Functional Requirement 08

3.2.2 Non-functional Requirement 09

3.3 Use Case Modeling and Description 09

3.4 Entity Relationship Diagram 11

3.5 Data Flow Diagram 14

3.6 Design Requirements 15

CHAPTER 4: DESIGN SPECIFICATION 16-37

4.1 Front-end Design 16

4.2 Back-end Design 29

4.3 Admin Dashboard 30

4.4 Interaction Design and UX 35

4.5 Implementation of Requirements 35

4.6 Server 37

CHAPTER 5: IMPLEMENTATION AND TESTING 38-42

5.1 Implementation of Database 38

5.2 Implementation of Interaction 40

5.3 Testing Implementation 40

5.3.1 Test plan 40

5.3.2 Unit Testing 41

5.3.3 System Testing 42

5.4 Test Result and Report 42

CHAPTER 6: CONCLUSION AND FUTURE SCOPE **43-43**

6.1 Discussion and Conclusion 43

6.2 Scope for Further Developments 43

APPENDIX 44

REFERENCES 45

PLAGIARISM REPORT 46

LIST OF FIGURES

FIGURES	PAGE NO
Figure 3.1 Business Process Model for buying Book	8
Figure 3.2 Use Case Model for Customer	10
Figure 3.3 Use Case Model for Admin	10
Figure 3.4 E-R Diagram for Customer	12
Figure 3.5 E-R Diagram for Admin	13
Figure 3.6 Data Flow Diagram	14
Figure 4.1 Book OCEN home page	16
Figure 4.2 Book OCEN category	17
Figure 4.3 Book OCEN current book page	18
Figure 4.4 Book OCEN popup menu of selected book	19
Figure 4.5 Book OCEN check out page	20
Figure 4.6 Book OCEN order confirmation	21
Figure 4.7 Book OCEN login page	22
Figure 4.8 Book OCEN customer profile page	23
Figure 4.9 Book OCEN download history page	24
Figure 4.10 Book OCEN personal details page	25
Figure 4.11 Book OCEN order history page	26
Figure 4.12 Book OCEN order confirmation page	27
Figure 4.13 Book OCEN order success page	28
Figure 4.14 Book OCEN blog page	28

Figure 4.15 Book OCEN admin dashboard 30

Figure 4.16 Book OCEN admin order page 31

Figure 4.17 Book OCEN orders page 31

Figure 4.18 Book OCEN invoice page 32

Figure 4.19 Book OCEN customer list page 32

Figure 4.20 Book OCEN category add page 33

Figure 4.21 Book OCEN product add page 34

Figure 5.1 Database of Book OCEN 39

CHAPTER 1

INTRODUCTION

1.1 Introduction

Technology has driven us so far that we no longer need to go outside to fulfil our needs. Most of the people has their own smartphone and laptop. People are attached to modern technologies. Books are a great source of knowledge. As different people are different, so many people sometimes prefer hard copy of books and many prefer soft copy. Sometimes people gets stuck where he or she can't carry books. Based on these situation and conflict of choice, we are making an online platform where people can get their desired books by staying wherever they are. We are introducing an interface based on web and android app where people can search for books, order books and buy books in whatever format they want. They also can read books online. In addition, they no longer need to go outside to buy books. Now books are every one's doorstep. We know that everyone's comfort zone is different. Our project gives flexibility to the knowledge seekers choice.

1.2 Motivation

In created nations individuals are utilizing web and app for a gigantic time. We know present day's in our nation Internet wind up prominent so we needed to make a site that make our kin to accomplish the proficiency in quicker selling of books. So we were propelled from this quicker online book store and attempt to make a total framework for book selling. This Enables knowledge seekers to buy book of their own choice of format. Our intention was to give the people the freedom of their own in terms of choice. And as the books are in three format e.g. online reading mode, softcopy, hardcopy; so the publishers also gets an extra platform to showcase their publications. They are not bind to one platform of publication. So giving all the knowledge seekers and publishers a diverse platform was our main motive.

1.3 Objective

- To make a online platform of buying and selling books.
- To lessen correspondence cost of searching outdoors.
- To decrease time loss.
- To make a freedom of choice for buyers.
- To construct a completely utilitarian framework with the end goal to accomplish a productivity in quicker buying and selling framework.
- To make the publications and digital marketing rapidly and effortlessly in total online based framework.

1.4 Expected Outcome

- Customer has his / her freedom of choice of choosing format of books.
- Customers get the privilege of reading books anywhere anytime.
- Publishers can publish their books in a wide range through internet.
- Publishers gets a platform of digital marketing.
- To give everyone the privilege of getting books at their fingertips.

1.5 Report Layout

We have sorted out our report as pursues.

In chapter 2, we present the foundation conditions of our undertaking. We likewise informed about the related work, the degree and difficulties of the task and we are doing similar investigation with numerous other competitor frameworks. In chapter 3, we determined the prerequisite venture. We characterized the business procedure show, information stream chart, utilize case graph, ER outline and plan necessities. We likewise examined about the necessity gathering and investigation process. In chapter 4, we indicated the front-end and back-end structure of the undertaking. In chapter 5, we showed the usage of the entire task and we tried each segment of the venture whether the application is filling in of course. In chapter 6, we assigned about end and the extension for further improvement of the task. Finally, of all, we give some related reference to guarantee that the data in the report are must be right.

Chapter 2

BACKGROUND

2.1 Introduction

There are different types of online shops but they only sell hard copies and nowadays maximum people prefers pdf format. But the matter of fact that all the pdf's are not available in a single website. So people needs to surf all over the internet. So to remove this problem we have come with this solution which is our project. Here if people needs hardcopy of their desired book then they can get it here and if they prefer softcopy then they also gets the privilege. Typically if people can easily read and get their desired books that's why we have come with this project. Here people also gets the privilege of reading books online.

Our project contains following features:

- Customer can visit store and search
- Customer can see book details
- Customer can compare books
- Customer can buy books online and pay
- Customer can choose between softcopy and hardcopy
- Customer can register and login
- Publisher can sell books online
- Publishers can also use this platform for marketing

2.2 Related Work

There are some related work that we found here we defined some of them. As our project is online based, there are some similar projects created before. But they are not fully same. There are significant differences and here we want to highlight them.

Among all of the similar projects that are out there, the much known one is Rokomari [1]. This is the most popular one in Bangladesh and it has some great features e.g. people can search, buy,

review, categorise books. There is also a blog in their website and additionally App is also available. But they haven't come with softcopies till now. Though they are planning to.
There are also other sites which delivers almost same functionalities or services e.g. Bookstores [2], Boibazar [3]. All of these have almost same type of functionalities including blogs but lacking of softcopy. They don't sell softcopies till now but it is a much needed thing now.
Our project offers this unique features and additionally we are collaborating with the publishers. This is a great advantage of our project where we have given a great priority to the publisher to expand their business through digital marketing.
So the features we uniquely offers here

- Selling Softcopies
- Collaborating with the publishers
- Online reading platform

2.3 Comparative Study

We already know that there are many sites and app that sells books online. They also have blogs to read, search options and many other features that we have already gone through. These features are common and we all know that people always search for uniqueness. That is why we came with this project with some most needed services that is needed for this technological advanced era. Most of the well-known sites are preparing for next step like softcopy selling and we already have done this. We are also giving priority to the publishers. A new platform has given to them to expand their business. So comparatively these unique features are our great strength of coming forward and make some difference.

2.4 Scope of the Problem

We always try to develop anything without any problems but that is not possible. Problems are problems but it is also a blessing too. Because when we go through problems, we try to solve that and in that procedure, we learn many new things. During this project, we have also faced many problems. But with our dedication and hard work, we have solved those problems. As there are many projects that are similar to ours, those references helped us a lot. As we all

know that starting a project from the scratch is a very difficult thing to do. So choosing the interface and implementing that in real was also a challenge. As customers are related to our project, so making it very friendly and easy to understand was our first priority. Then for the initial part, collecting all the softcopies and implementing the backend was also a difficult task. Additionally what to include and what not, by which function the customers will be more comfortable, deciding these things was also a problem.

2.5 Challenges

When you need to accomplish something then unquestionably you need to confront a few difficulties and deterrents. Consequently, our task has a few difficulties as well. We have confronted a few issues while doing the development as we are new in this arena. We endeavoured to actualize it with no mistake still we require all the more testing to guarantee it. We are students, so our primary challenge is to keep up time other than our other fundamental works at our regular routine. On the off chance that we were not able finish the project on time it would be an extraordinary lament for us. So, we needed to partition our time to finish every one of the errands to finish the entire project. To permit search at different places and to give the correct data in the meantime through the reaction framework as online is extremely intense and particularly perplexing. We needed to complete a considerable measure of arranging and needed to look over those and do appropriate coding, empower seek and to check results on our application. We endeavoured to make a point to the client alright with application's UI. Furthermore, we made a decent attempt to make a point to give the best understanding to our clients. And additionally making web application along with android app was also a big challenge.

Chapter 3

REQUIREMENT SPECIFICATION

3.1 Business Process Model

Business process displaying (BPM) in business process administration and frameworks designing is the movement of speaking to procedures of an undertaking, with the goal that the current procedure might be dissected, enhanced, and mechanized. BPM is normally performed by business investigators, who give ability in the demonstrating discipline; by topic specialists, who have specific information of the procedures being displayed; or all the more regularly by a group involving both. Then again, the procedure model can be gotten straightforwardly from occasions' logs utilizing process mining instruments.

The business objective is frequently to expand process speed or lessen process duration; to build quality; or to diminish costs, for example, work, materials, scrap, or capital expenses. By and by, an administration choice to put resources into business process displaying is frequently spurred by the need to report prerequisites for a data innovation venture.

Change administration programs are regularly required to incorporate any enhanced business forms. With advances in programming plan, the vision of BPM models winding up completely executable (and fit for recreations and round-trip designing) is coming nearer to the real world [4].

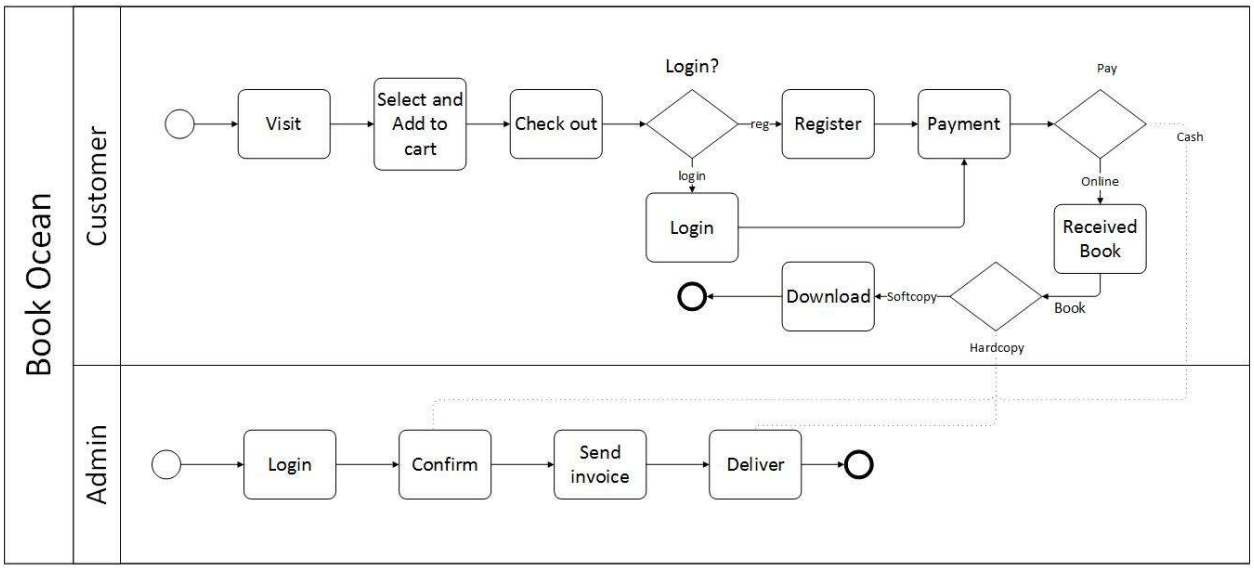


Figure 3.1: Business Process Model for Buying Book

3.2 Requirement Collection and Analysis

Our framework is gathered tremendous measure of information when any client enrolls in our framework. We examination information and consider the information that we gather from client. Administrator can get to the information and watch out for the client that on the off chance that they do any hostile work they can without much of a stretch discover. There are two types of requirement, one is functional requirement and the other is nonfunctional requirement.

3.2.1 Functional Requirement

Functional requirement are the activities that's the application software or website can easily perform.

In our project there are so many functional requirements like, register section, a log in section, a review section, a search book section, a add to cart section, a check out section, log out section, payment section, blog section.

3.2.2 Non-functional Requirement

Non-functional prerequisites in our application are help to advance execution, memory devouring, being more proficient, smoother activity and load on rapidly as conceivable to our application. Application's and web sites UI ought to be easy to understand and stunning for phenomenal client encounter.

3.3 Use Case Modeling and Description

A use case is a methodology used in system analysis to identify, clarify, and organize system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal. It consists of a group of elements (for example, classes and interfaces) that can be used together in a way that will have an effect larger than the sum of the separate elements combined. The use case should contain all system activities that have significance to the users. A use case can be thought of as a collection of possible scenarios related to a particular goal, indeed, the use case and goal are sometimes considered to be synonymous [5].

A use case has these characteristics:

1. Use to compose utilitarian requirements.
2. Modelling the objectives of the on-screen character associations.
3. Record way from trigger occasion to objectives.

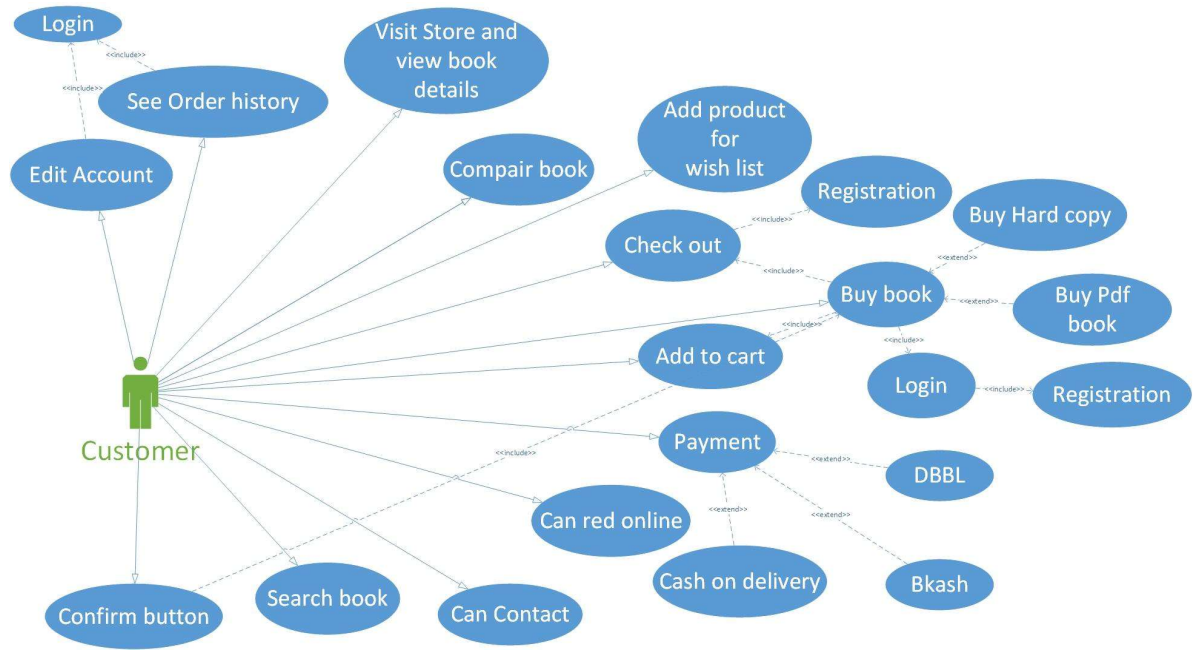


Figure 3.2: Use Case Model for Customer.

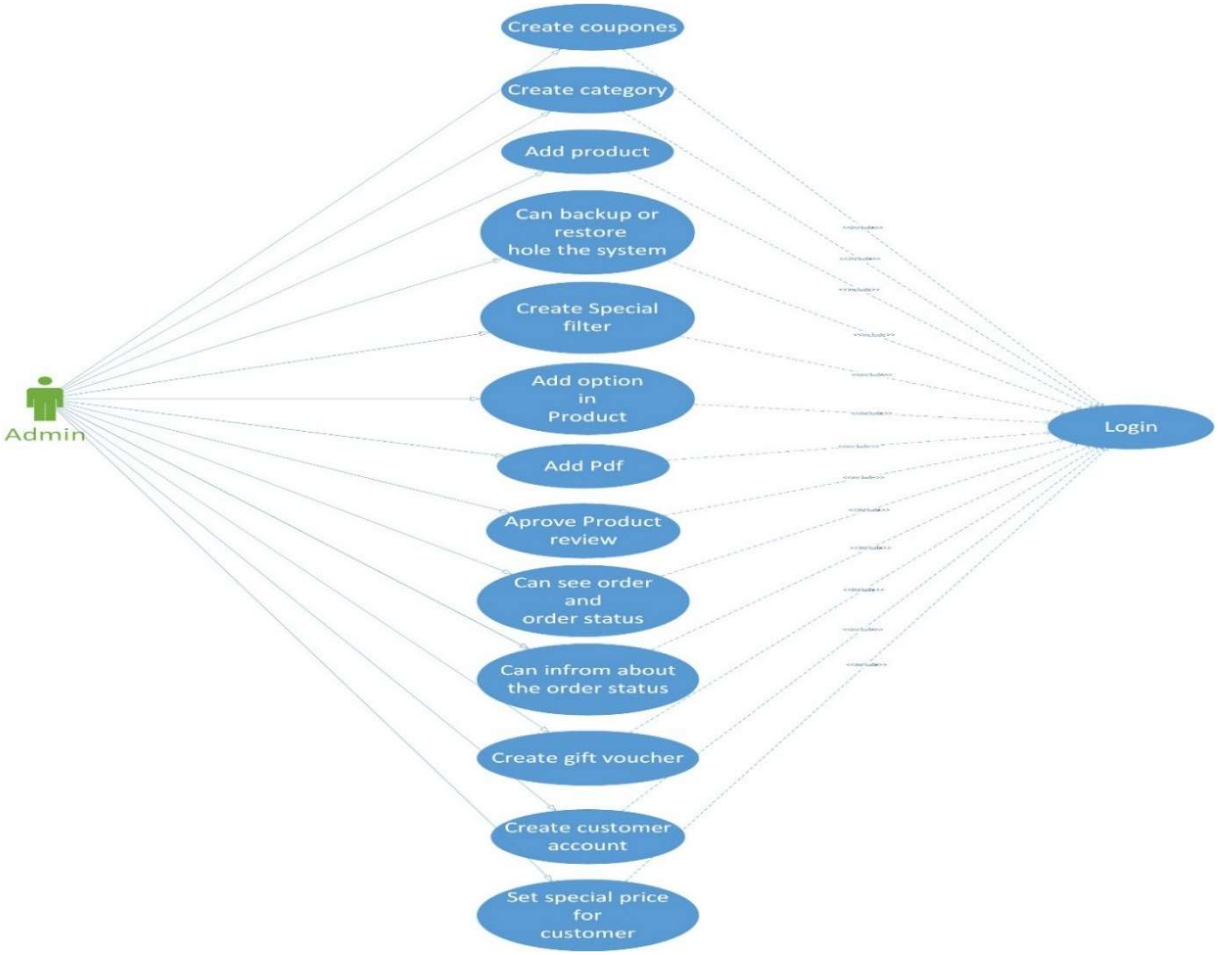


Figure 3.3: Use Case Model for Admin.

3.4 Entity Relationship Diagram

The entity Relation (E-R) data model is based on a perception of a real world that consists of a collection of basic objects, called Entity, and of relationship among these objects. An entity is a thing or object in the real world that is distinguishable from other objects. In addition to Entities Relationship, the E-R model represents certain constraints to which the contents of a database must conform. One important constraint is mapping cardinalities, which express the number of entities to which another entity can be associated via relationship [6].

The overall logical structure of a database can be expressed graphically by an E-R diagram which built up from the following:

1. Rectangle, represents entity sets.
2. Double Rectangle, represents the weak entity.
3. Ellipses, which represents attributes.
4. Diamonds, which represents relationship.
5. Lines, which link attributes to entity sets to relationship.
6. Double ellipses, represents multi valued attributes.
7. Dashed ellipses, which represents derived attributes.
8. Double lines, which indicate total participation of an entity in a relationship.

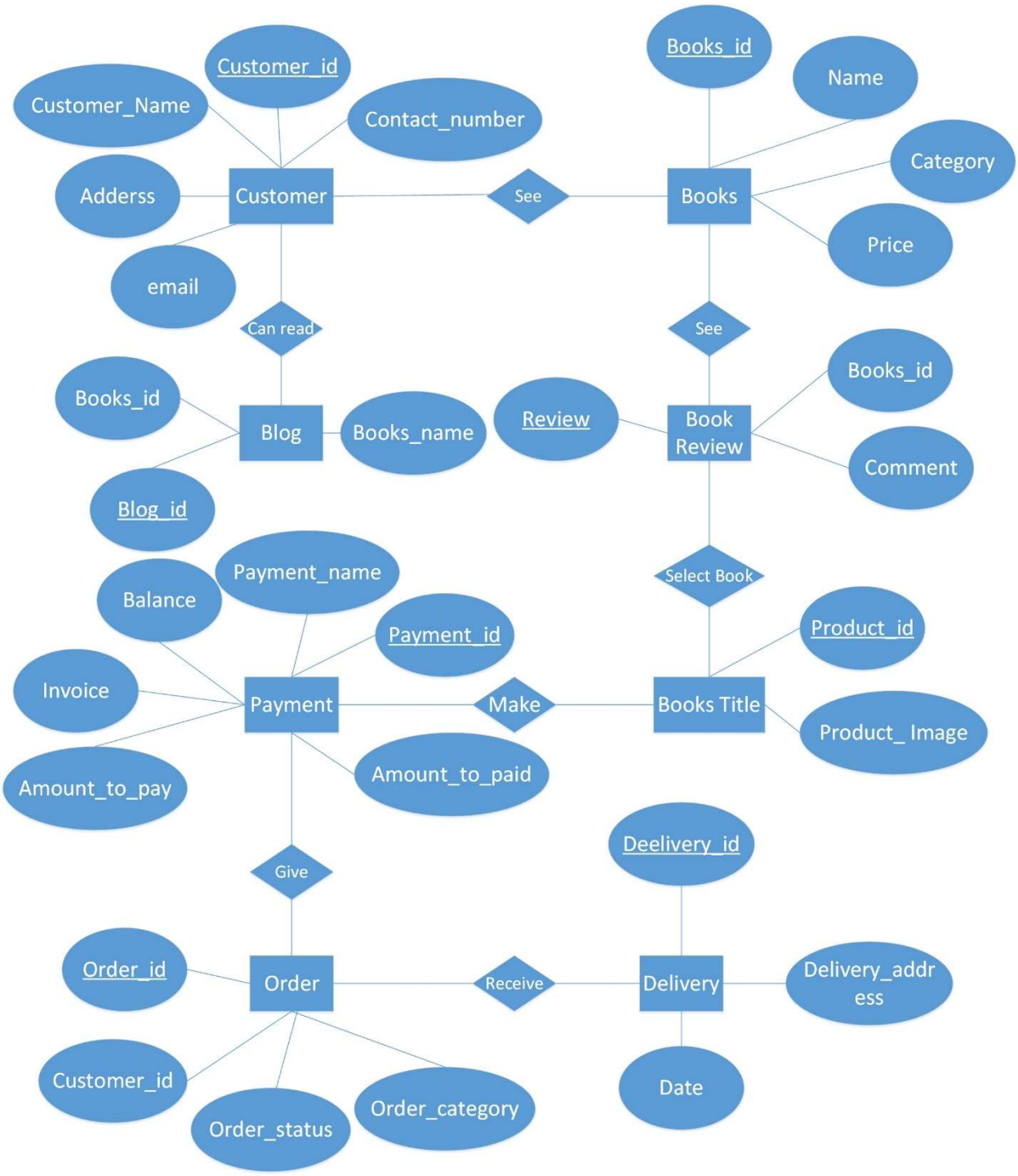


Figure 3.4: E-R Diagram for Customer.

Figure 3.5: E-R Diagram for Admin.

3.5 Data Flow Diagram

Data flow diagram is also called data flow graphs. This is commonly used during problem analysis. Data flow diagram is quite general and is not limited to problem analysis for software requirement specification. A DFD shows the flow of data through the system. It shows a system as a function that transforms the inputs to the desired output. The aim of DFD is to capture the transformation that takes place within the system to the input data so that eventually the output data is produced. The agent that performs the transaction of data from one stage to another is called a process. So, a DFD shows the movement of data through the different transformation in the system. Named circles show the processes and named arrows entering or leaving the bubble represents data flows. A rectangle represents a source or a sink is typically outside the main system of study [7].

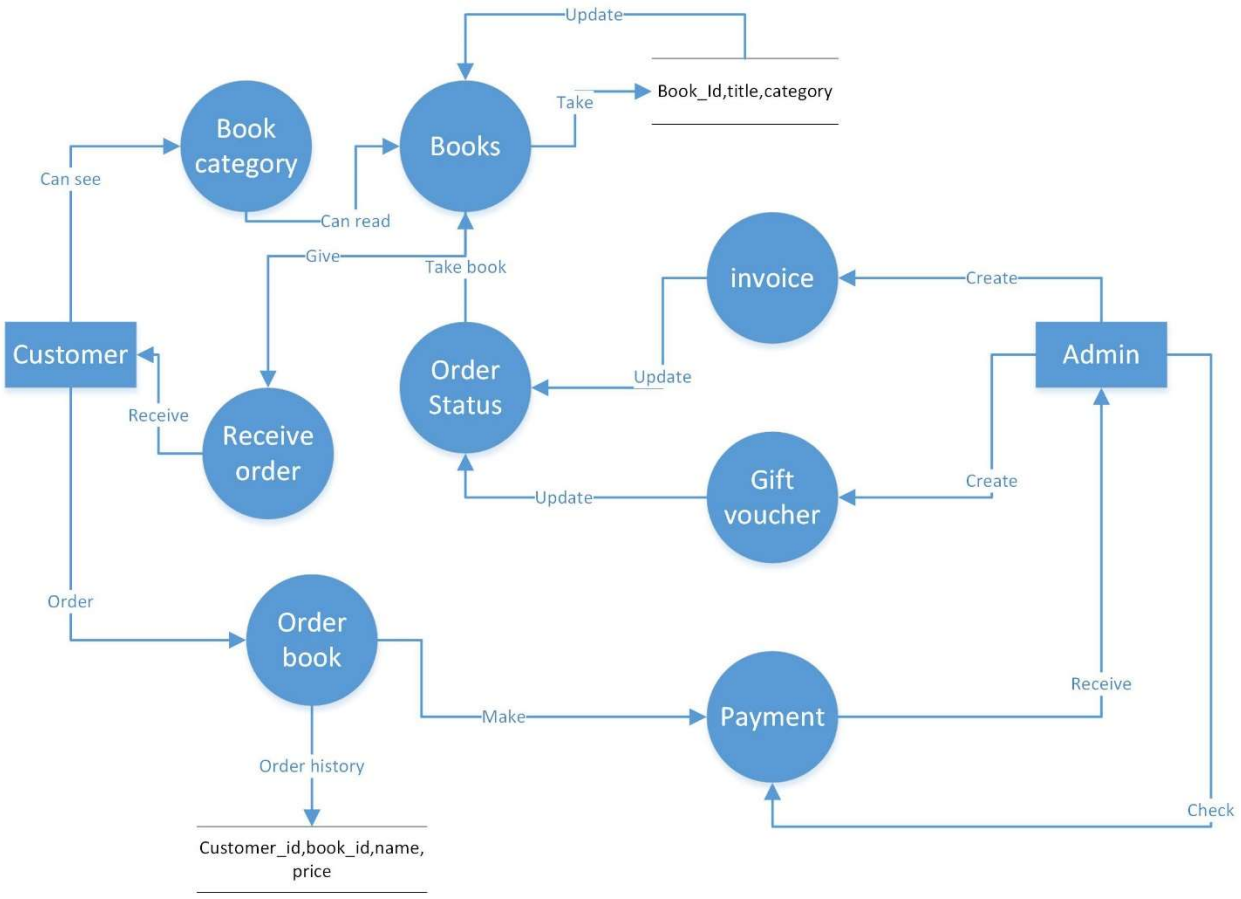


Figure 3.6: Data Flow Diagram

3.6 Design Requirements

Dashboard has been utilized to actualize the website pages of the proposed framework. HTML, CSS, JavaScript, JQuery likewise have been utilized to assemble the site page. Here we present four distinct dashboards for our framework admin and customer consciously. Each dashboard has diverse highlights which are structured premise of Bootstrap with HTML, CSS, JavaScript, and JQuery.

Chapter 4

DESIGN SPECIFICATION

4.1 Front-end design

Front end design is a very crucial part of any user interacting software and website. Because a user can be anyone, someone may like very simple designs, someone my like very design oriented things. But the fact is we can't satisfy all. So we have to come with something that is convenient to all. And we also have to make sure that it is understandable to all.

So that's why we have tried to keep the design of our website and app very basic. We have attached our websites front end design as follows:

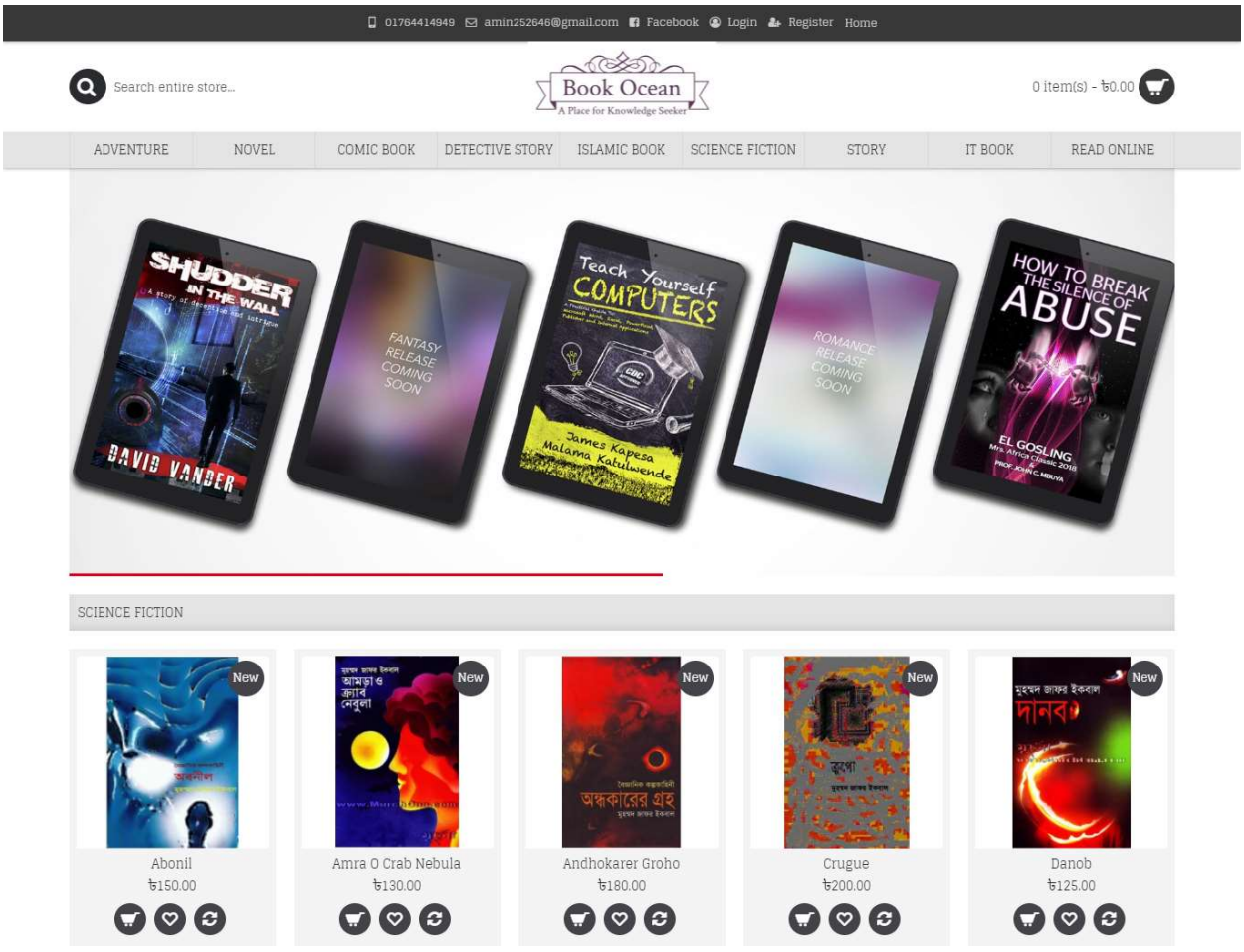


Figure 4.1: Book Ocean home page.

Figure 4.1 Shows home page of our site. Here customers can see the overall site, books, and prices, search for books and also categorize books.

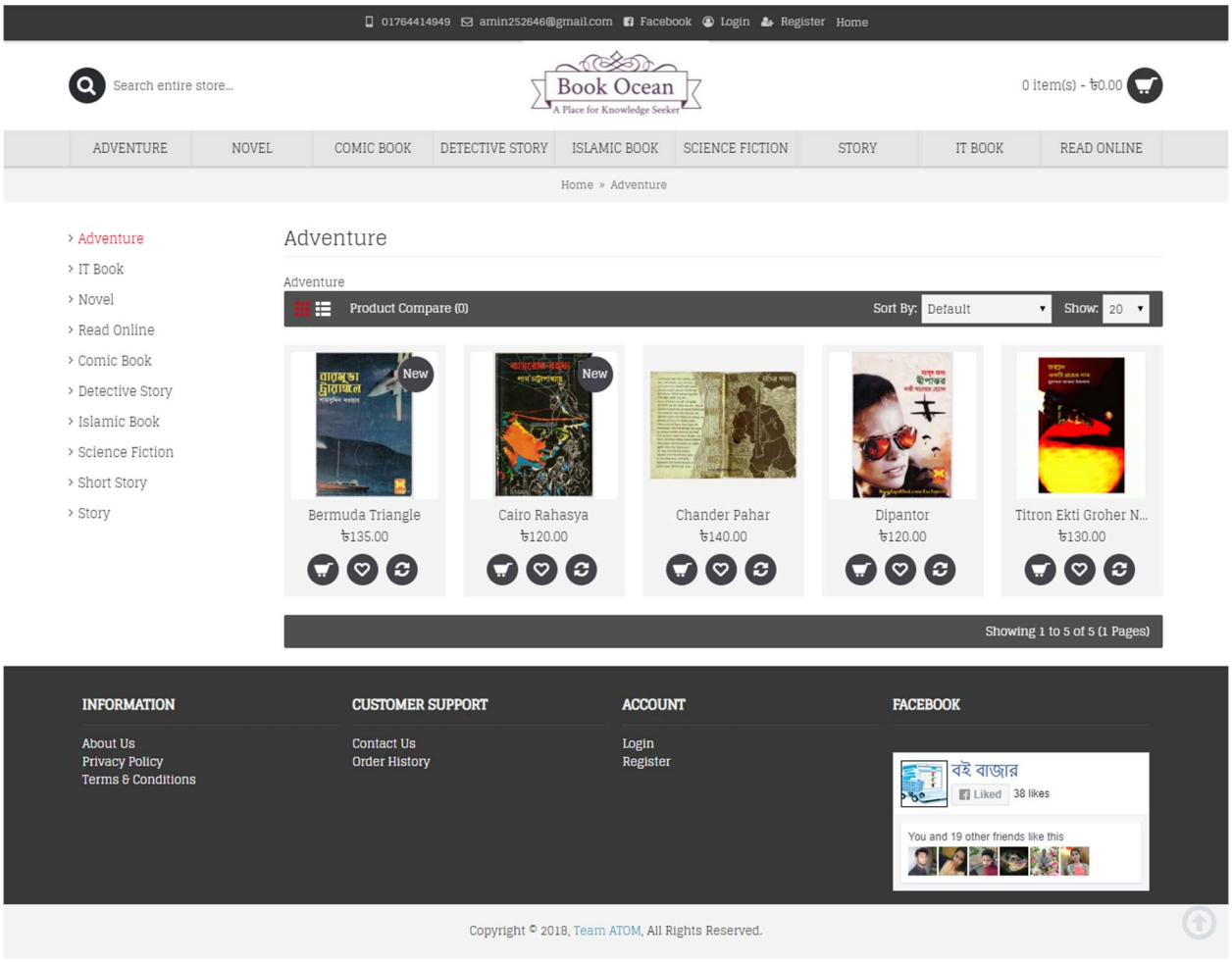


Figure 4.2: Book Ocean category.

Figure 4.2 This page shows books by its category. User can see books according to the category. There are different types of category there. Without searching for the whole page, user gets his/her privilege to choose accordingly to their choice.

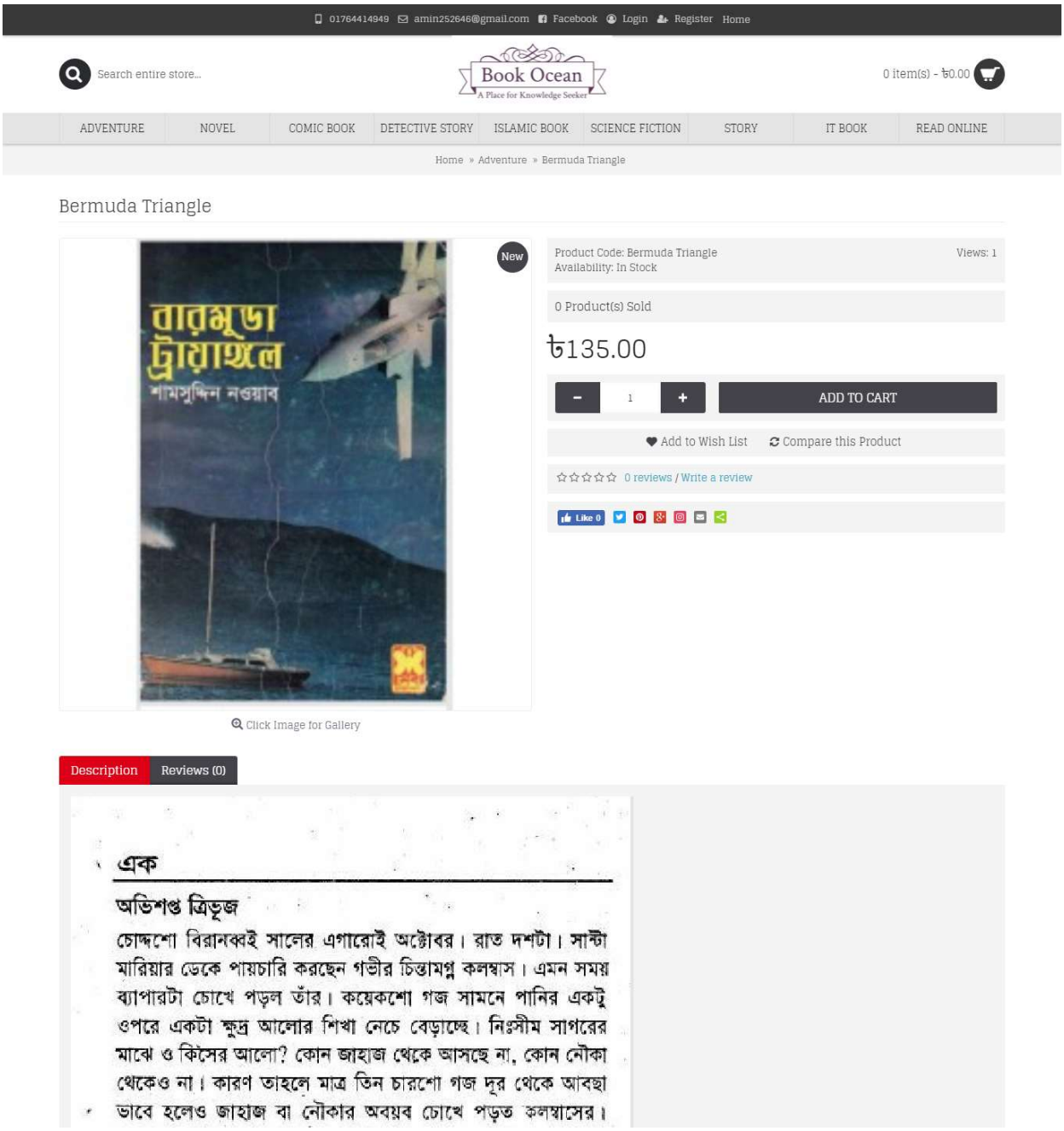


Figure 4.3: Book Ocean current book page.

Figure 4.3 Shows current book page which is chosen by the user. Here user gets a little glimpse of the book that he/she wants to buy. This page helps the consumer to take a decision whether to buy it or not as it shows the starting of the book.

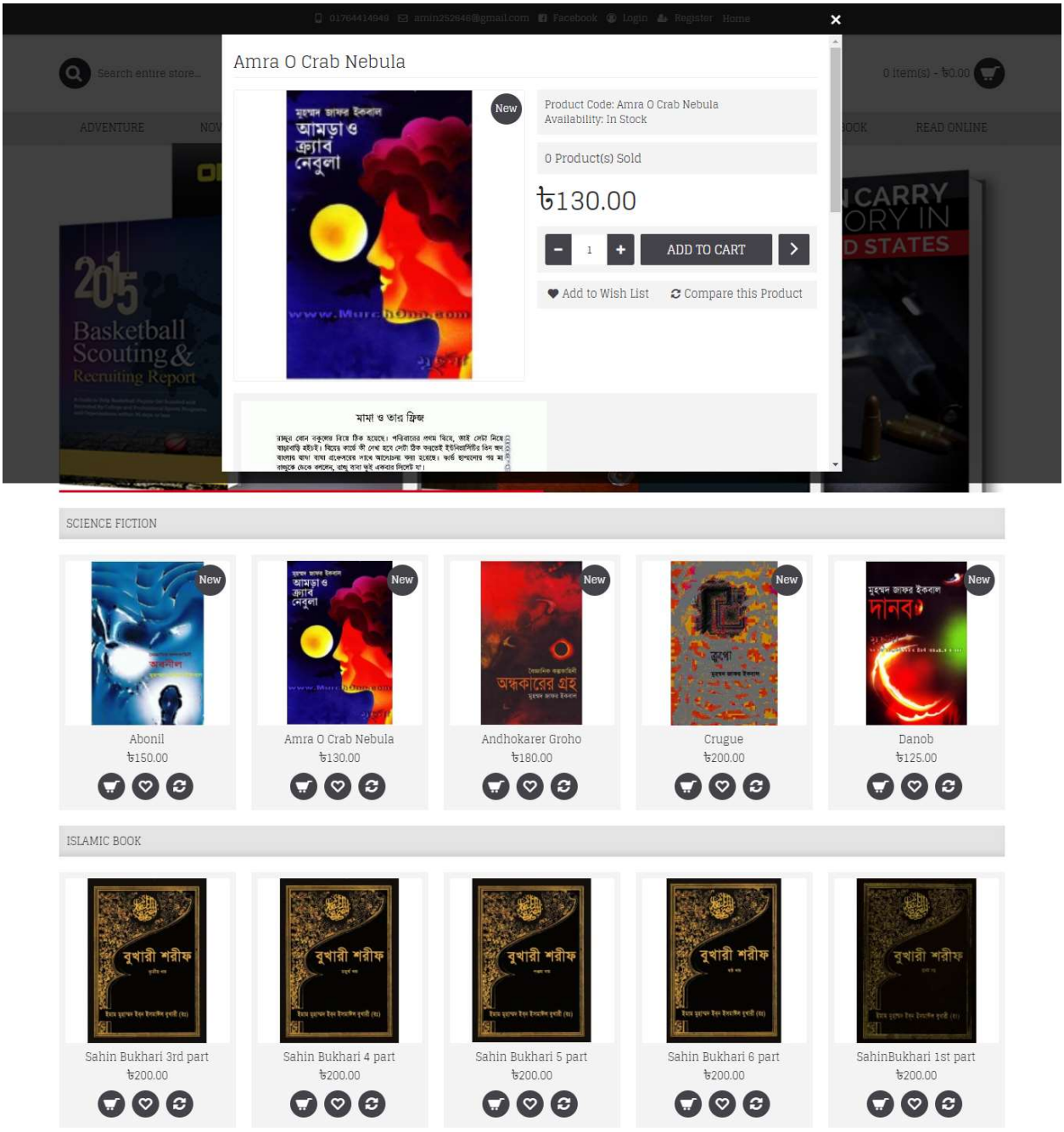


Figure 4.4: Book Ocean popup menu of selected book.

Figure 4.4 Shows a popup menu of the book that is selected by the user. Here user can add his/her selected book to the cart. He/she can also see some pages to take the decision of whether to buy it or not.

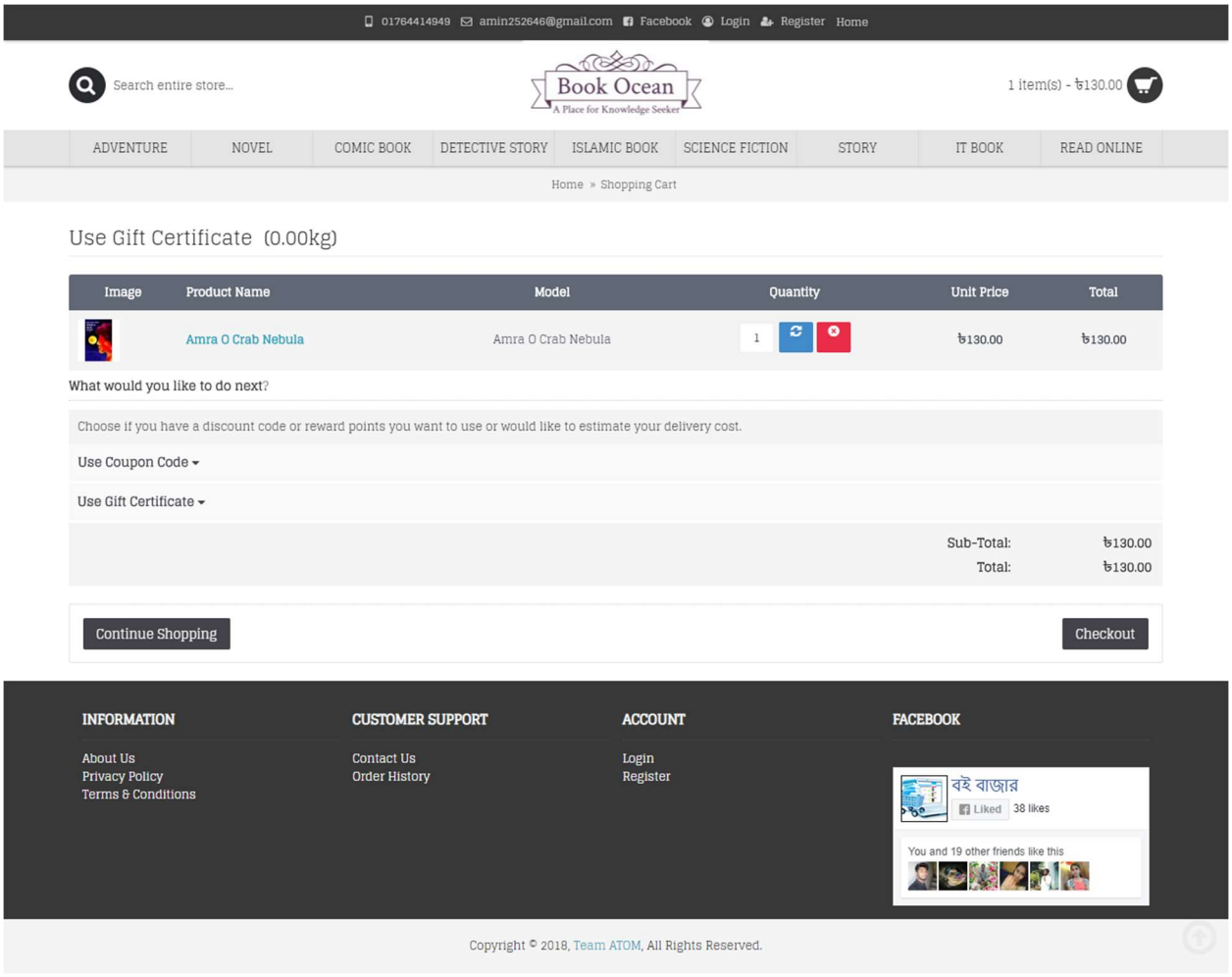


Figure 4.5: Book Ocean check out page.

Figure 4.5 Shows the checkout page of our site. Here user can checkout with the selected book or if he/she chooses to continue shopping then he/she also can do that.

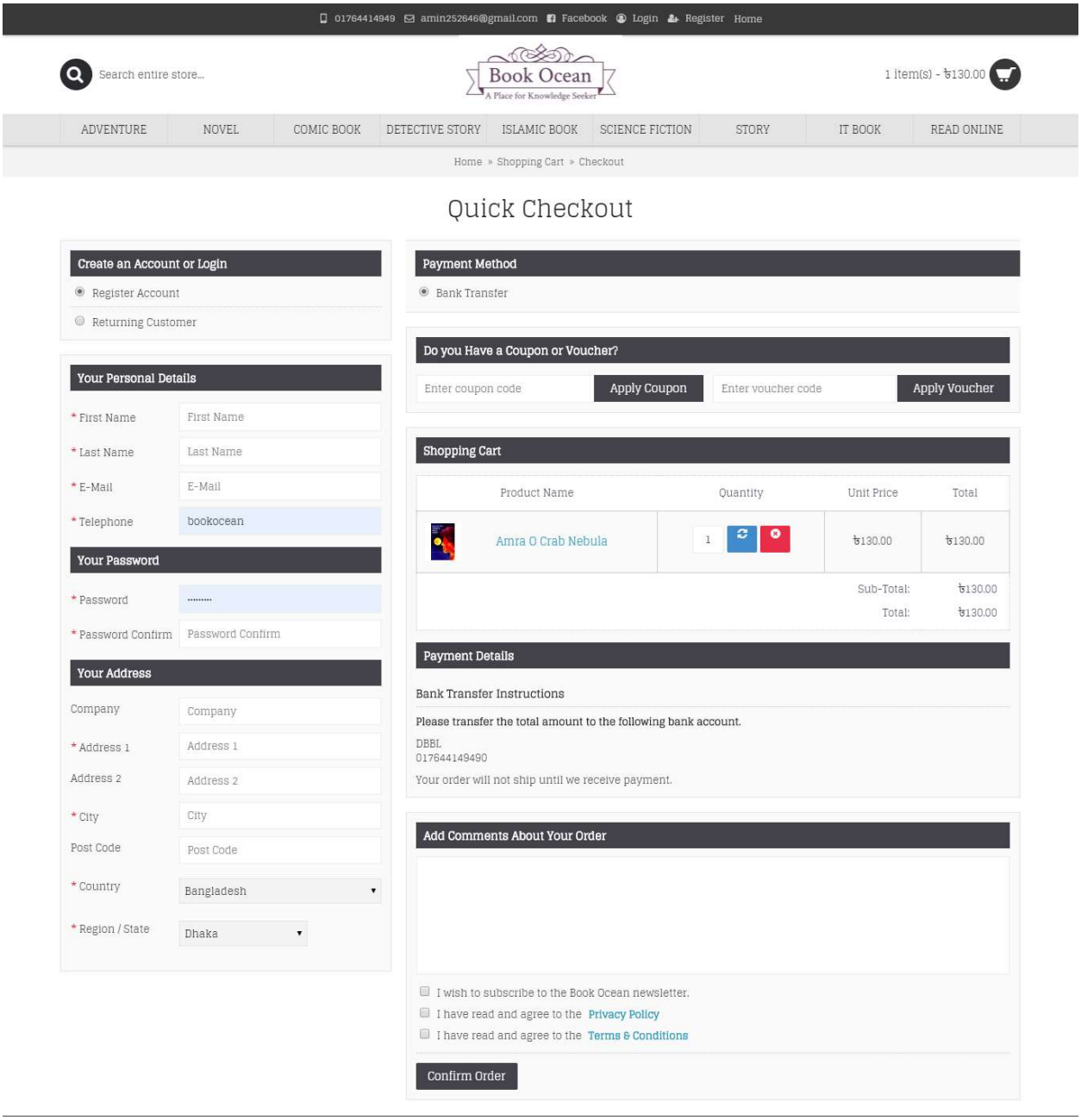


Figure 4.6: Book Ocean order confirmation.

Figure 4.6 Shows that if any customer wants to check out then he/she must login. If not registered then he/she must register first.

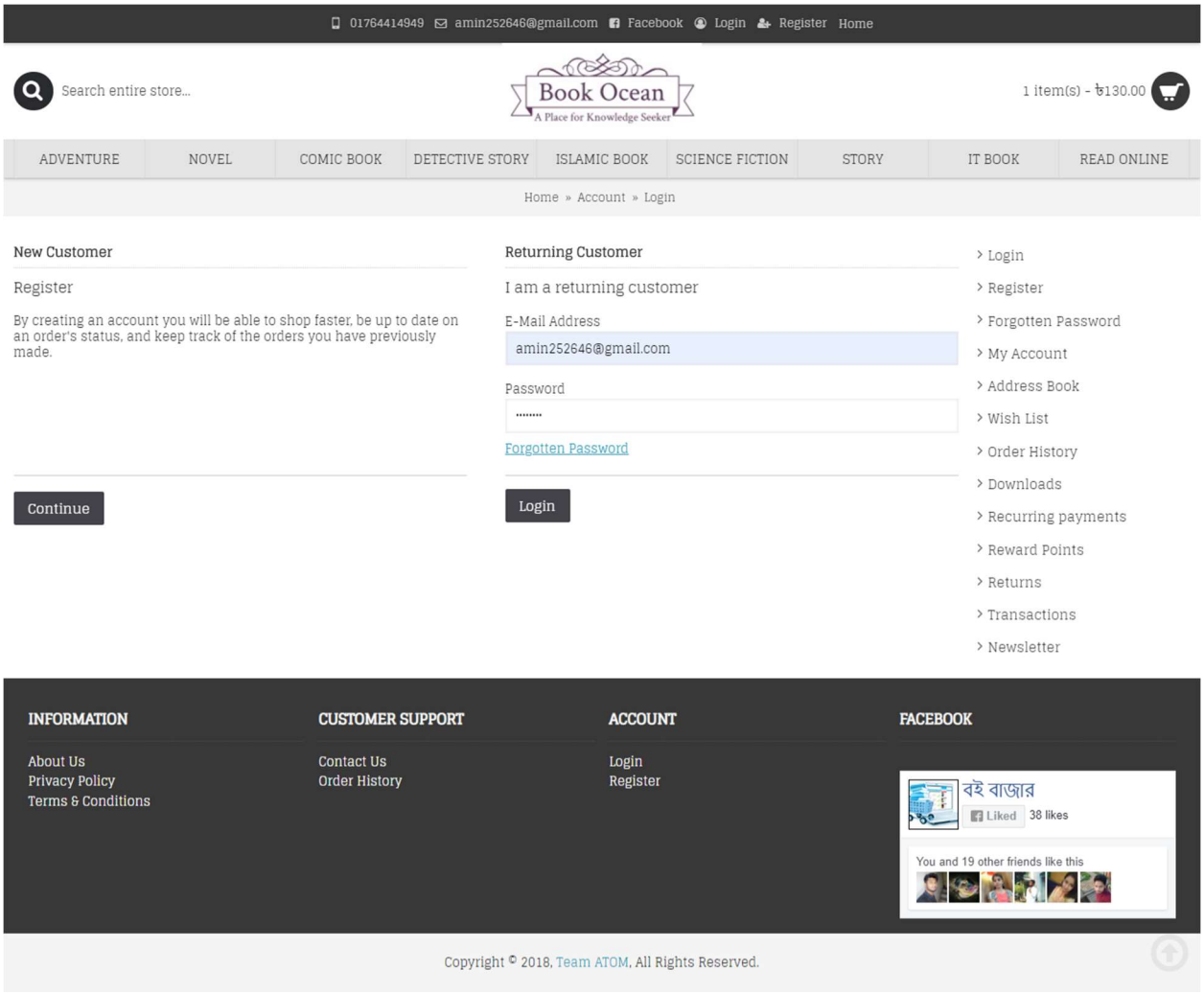


Figure 4.7: Book Ocean login page.

Figure 4.7 Shows login page of customer. But registration is must if any customer wants to login. So this page is a login page of a customer.

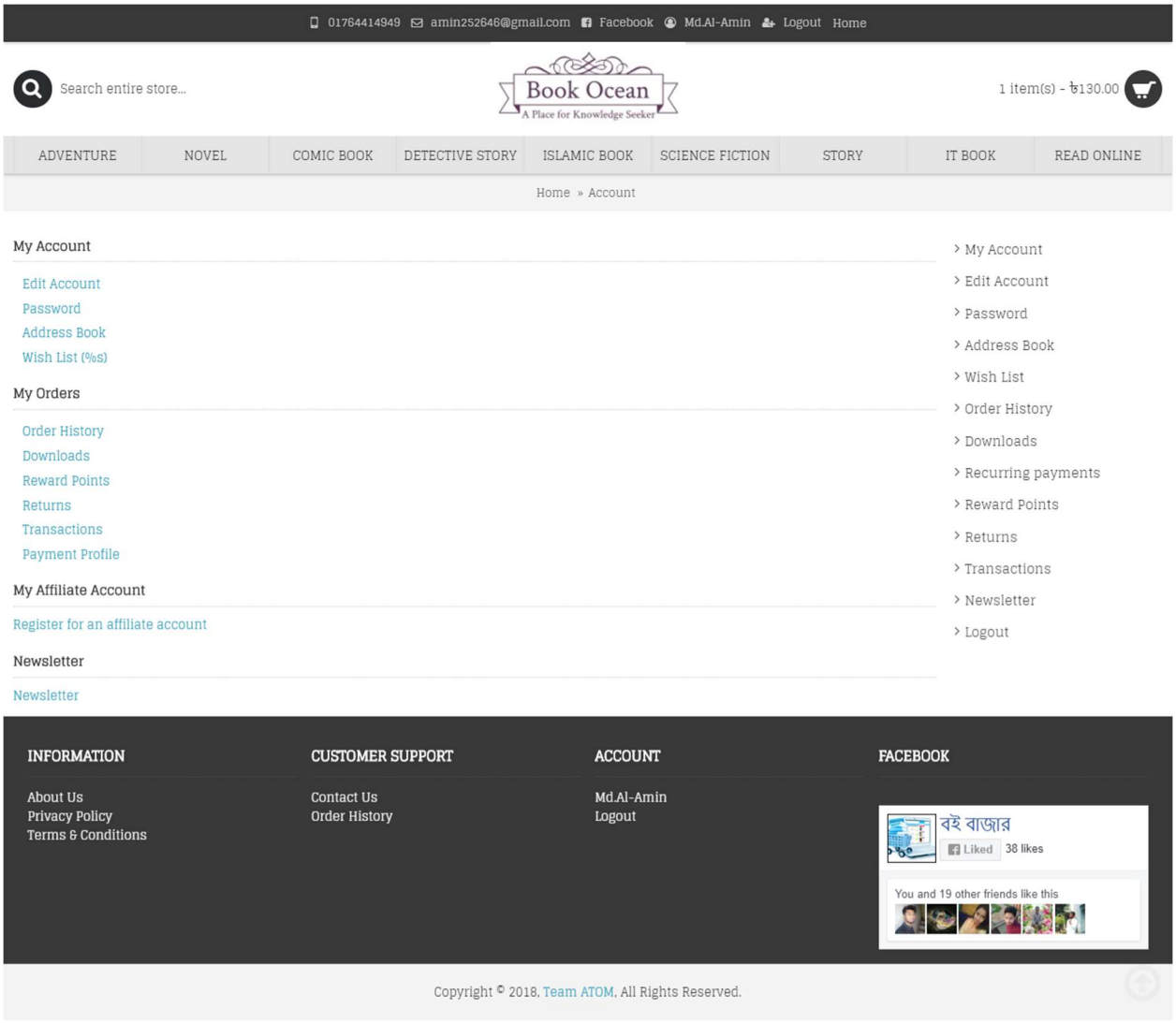


Figure 4.8: Book Ocean customer profile page.

Figure 4.8 Shows the profile page of a customer. Here a customer gets different functionalities regarding his/her profile e.g. edit account, change password, order history, downloads, transactions etc.

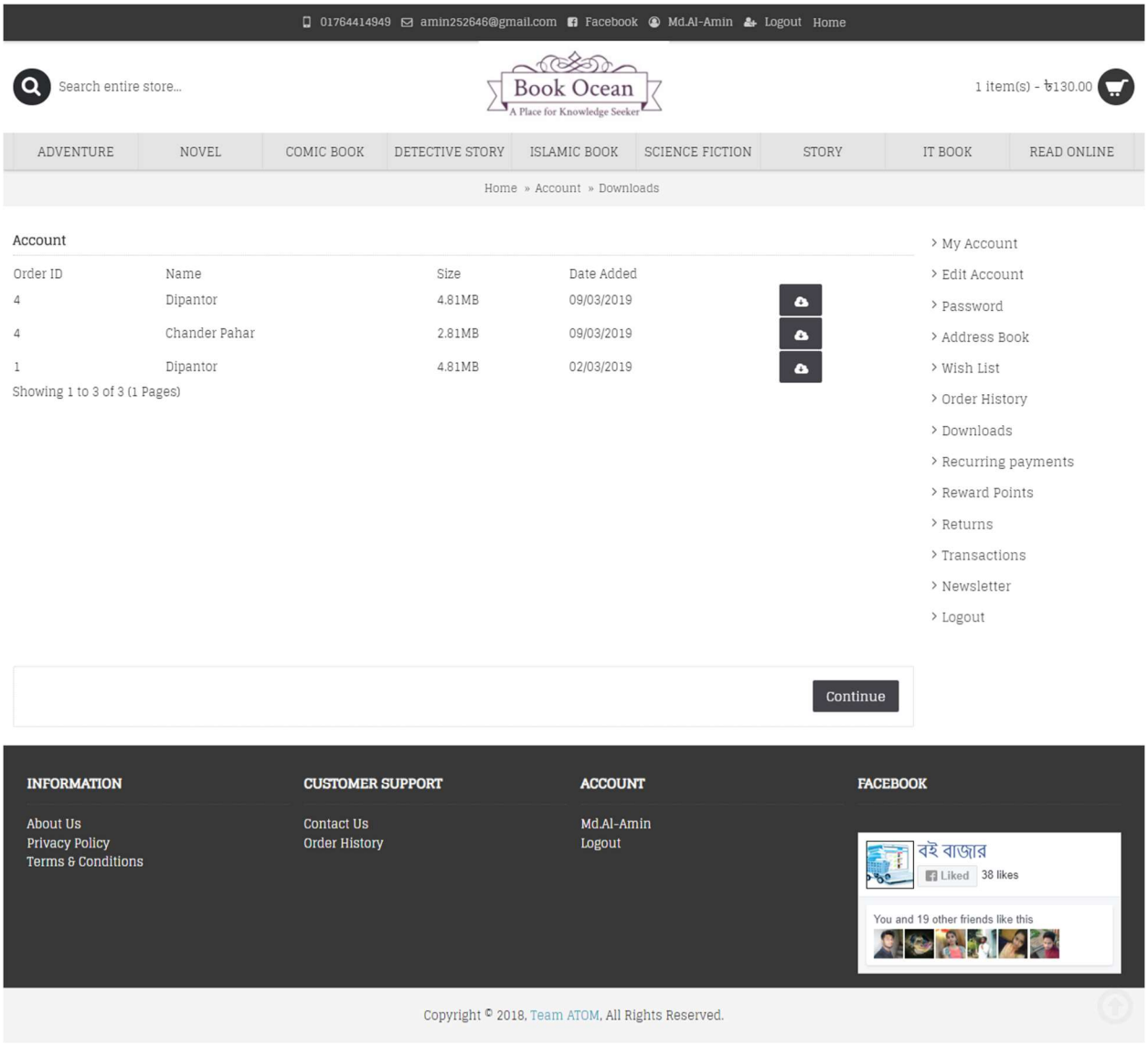


Figure 4.9: Book Ocean download history page.

Figure 4.9 Shows the history page of books that a customer has already downloaded. This page is just another flexibility to our customers where he/she can keep track on their profile.

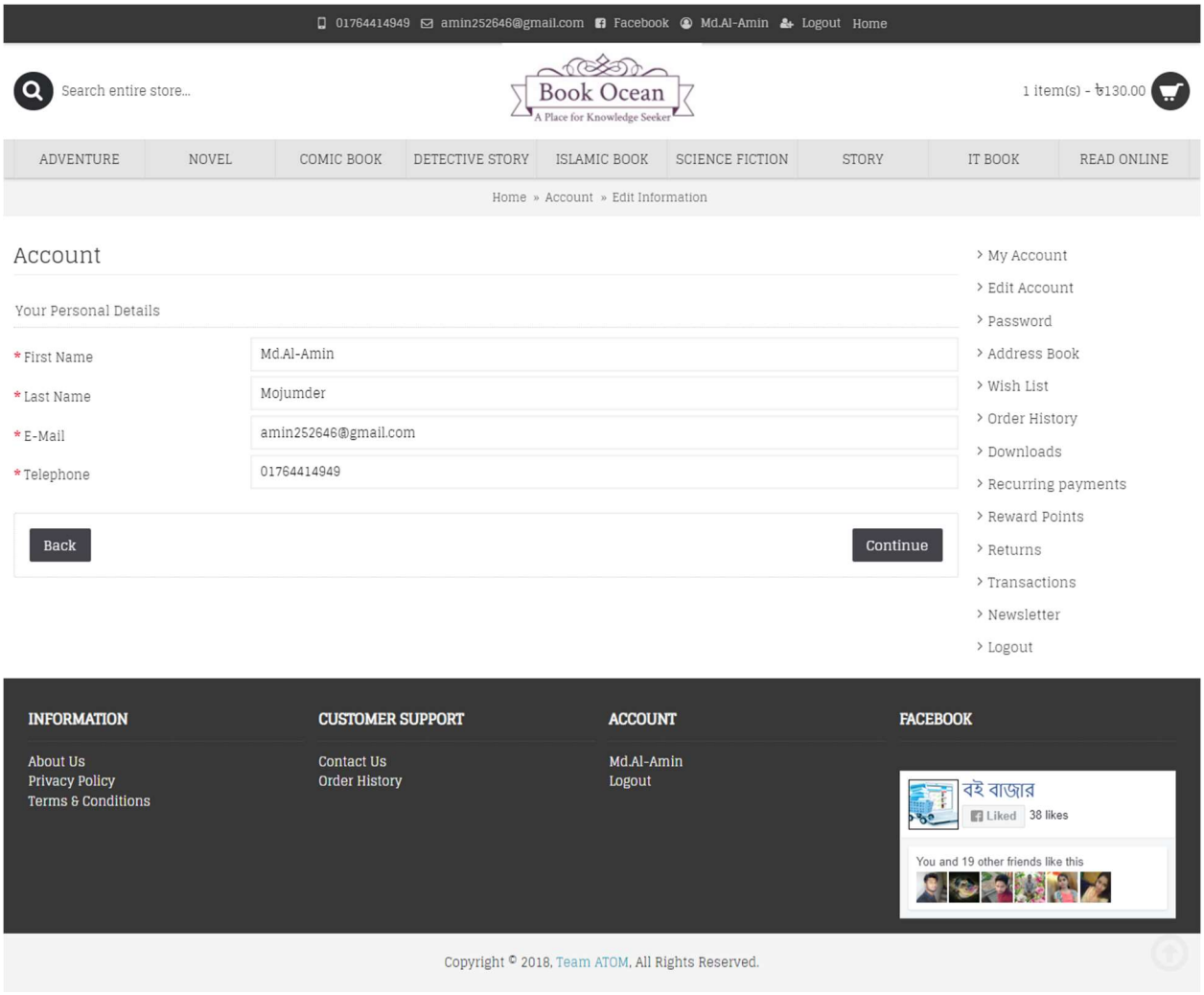


Figure 4.10: Book Ocean personal details page.

Figure 4.10 Shows the customer profile's personal details page where he/she can see his/her personal details. Customer also can edit his/her information here.

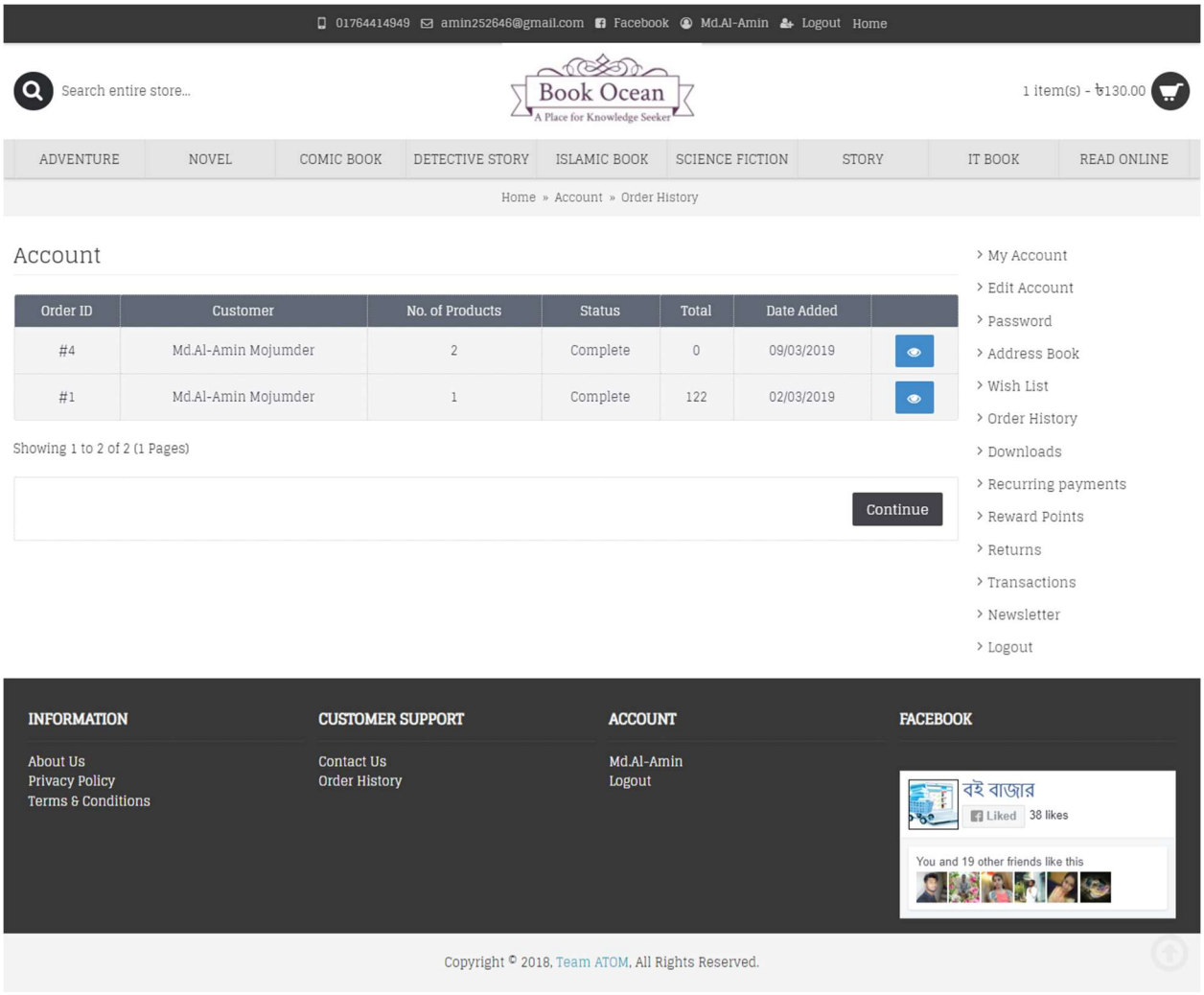


Figure 4.11: Book Ocean order history page.

Figure 4.11 Shows the details of what has already been purchased by a customer. Here he/she can keep track of his/her orders.

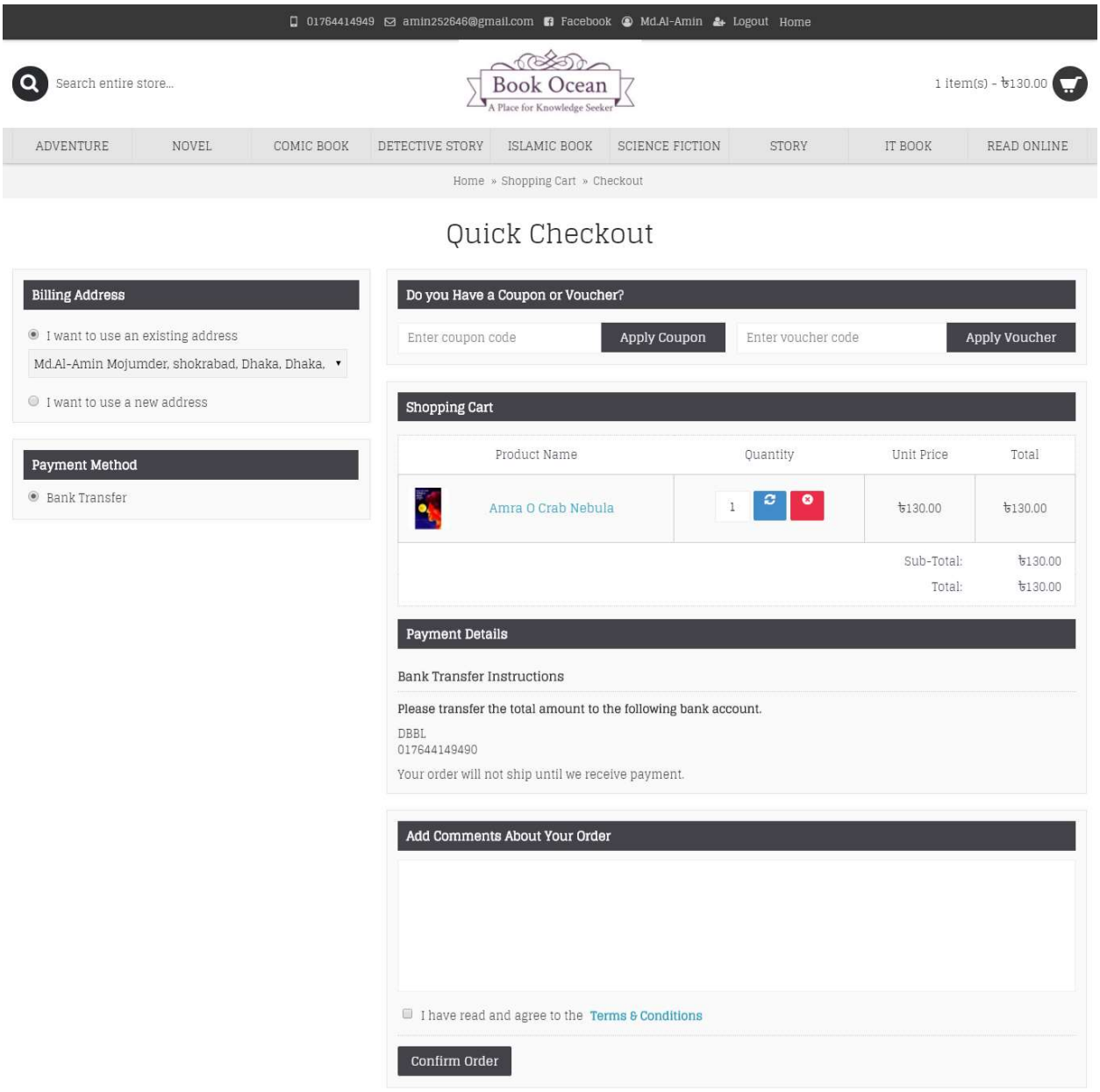


Figure 4.12: Book Ocean order confirmation page.

Figure 4.12 Shows the final order confirmation page. This page shows up after going through all the procedures e.g. registration or login. But if the customer has already been logged in then he/she directly is redirected to this page of order confirmation. This is the final page for purchasing a book.

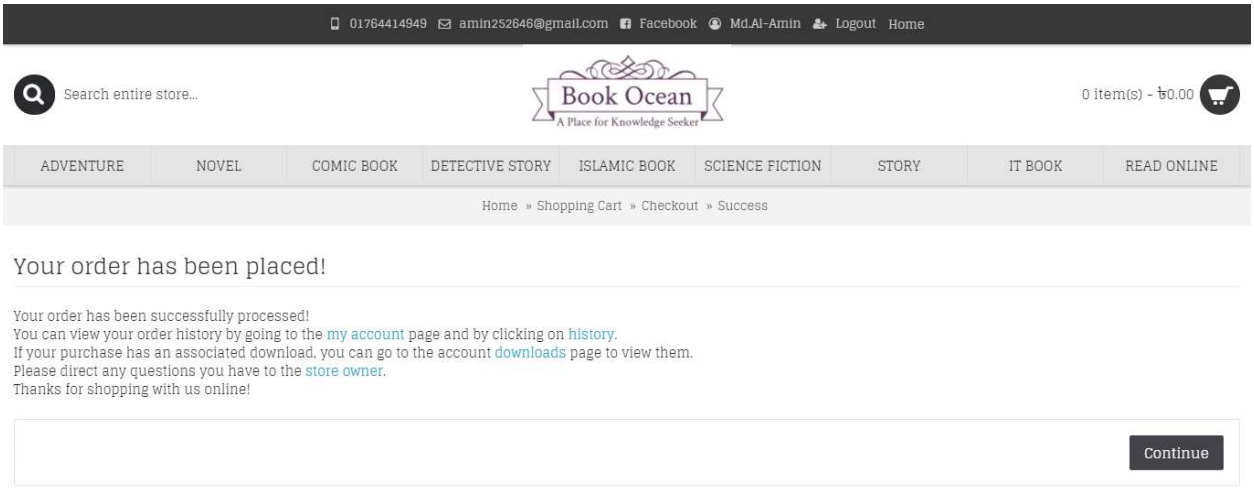


Figure 4.13: Book Ocean order success page.

Figure 4.13 Shows the order success page where he/she can see all the aspects of order and additionally can return to the home page.

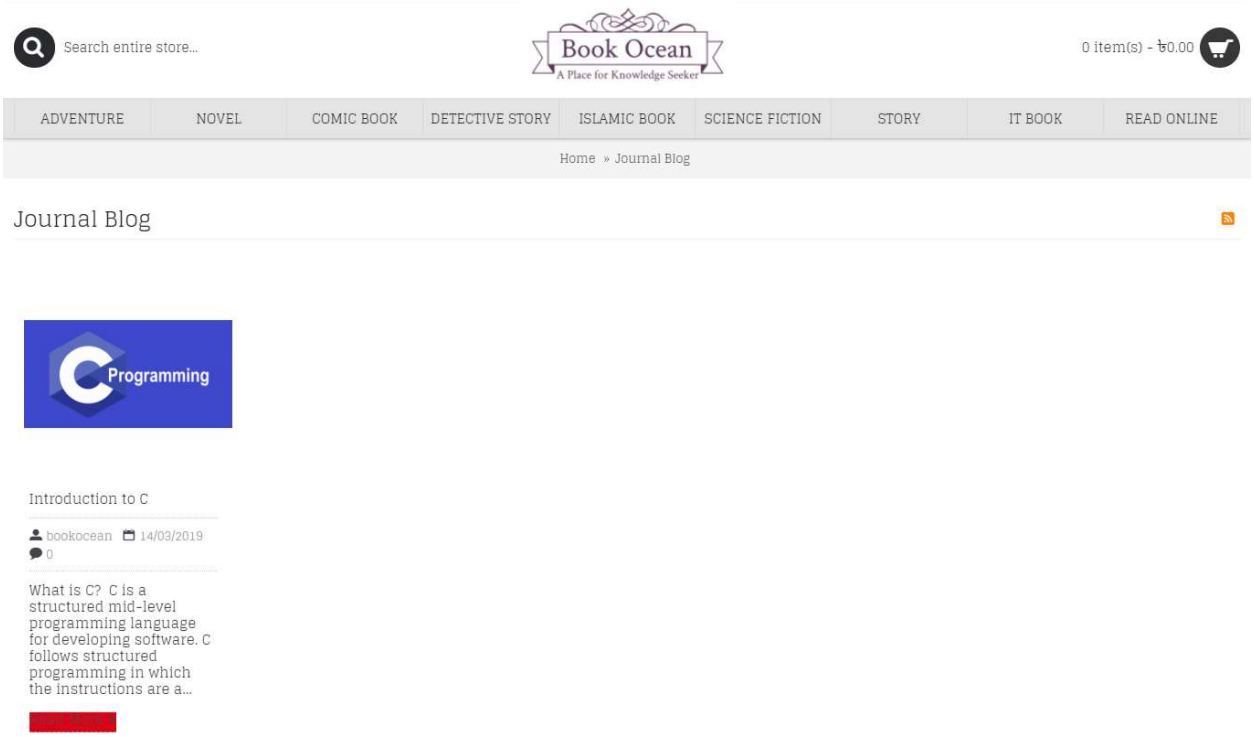


Figure 4.14: Book Ocean blog page.

Figure 4.14 Shows a blog to directly read books from our site. But these books which are available are not given for sell. User only can read these books.

4.2 Back-end Design

Our project back-end has planned by PHP & HTML components; PHP is a server-side scripting dialect structured essentially for web advancement yet in addition utilized as a broadly useful programming dialect. HTML components are used to design & create a user friendly UI. We have use .tpl file extension to make a bridge between HTML components & PHP. MySQL database has utilized. Right around 45 pages of our venture have substance of back end implies push PHP. In our task 146 tables made to oversee information. There are some centre tables, a few tables are brief premise and client information contains by a few tables. PHP have a solid holding with SQL inquiry dialect parsing, every sensible guidance made by PHP. Client session creation and obliterate are overseen by PHP libraries. Information exchange between pages are utilized $_POST technique a large portion of time. We are intrigued to specify some imperative assignment done by PHP point to point.

- PHP makes session for clients and in addition approve client.
- PHP have authority over all information exchanging User end to Saver end.
- All Logical statement created utilizing PHP code
- Loops, If-else and control articulation done by PHP
- Main calculation wrote in PHP
- Data exchange between pages utilizes $_POST strategy for PHP

4.3 Admin Dashboard

An admin can see all reports, all record, all order, all transaction that is are affirmed or dropped all customer list, all user list, , Admin can add different payment system, can create delete, update customer information , user information, Admin can control entire framework.

Here given the administrator dashboard subtle elements.

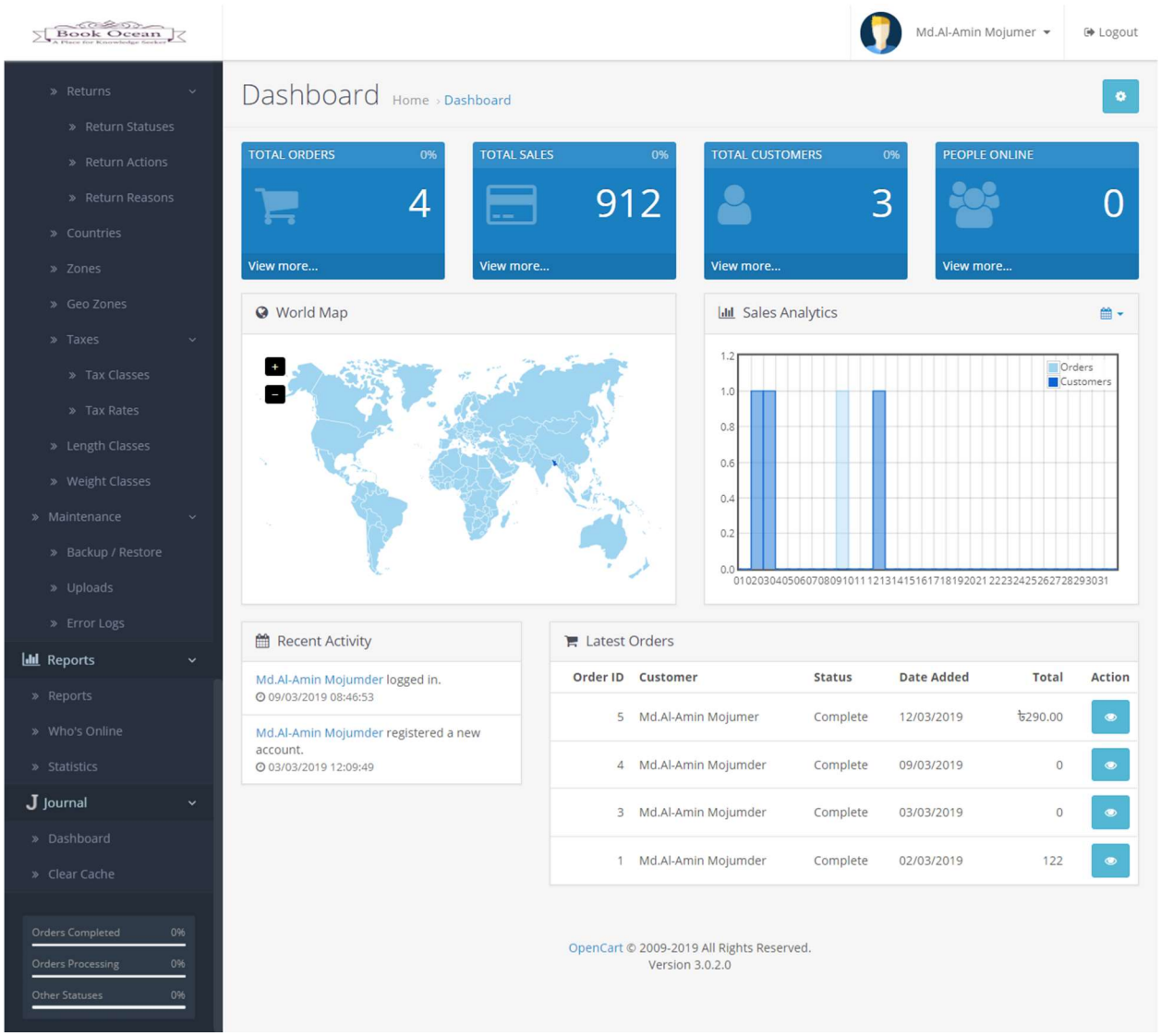


Figure 4.15: Book Ocean admin dashboard

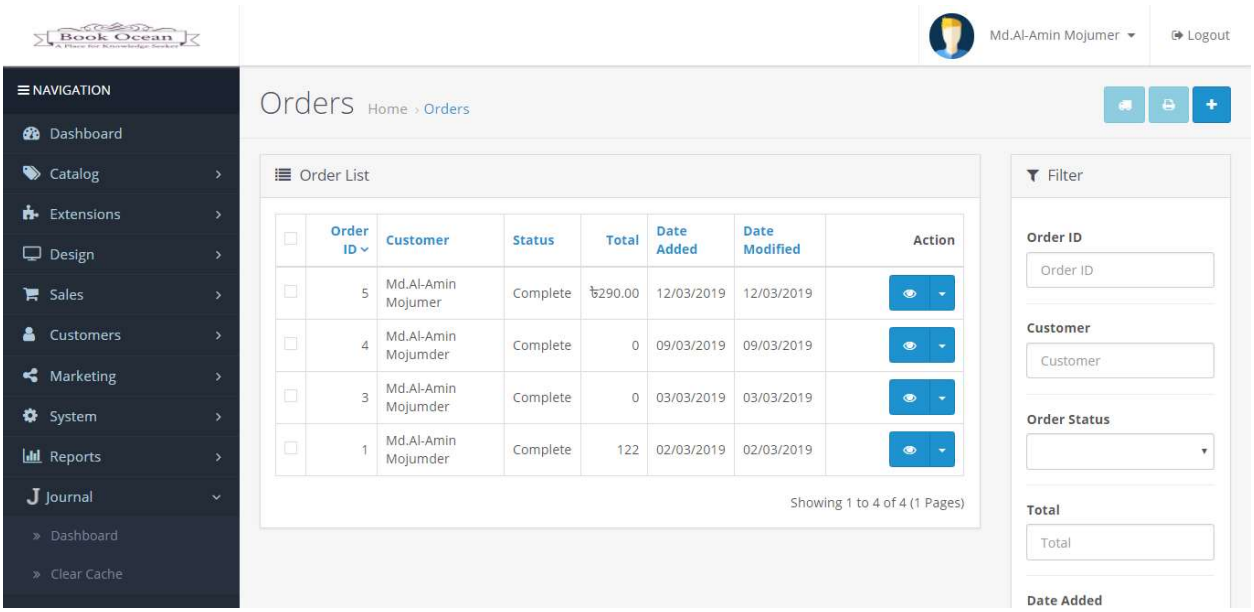


Figure 4.16: Book Ocean admin order page.

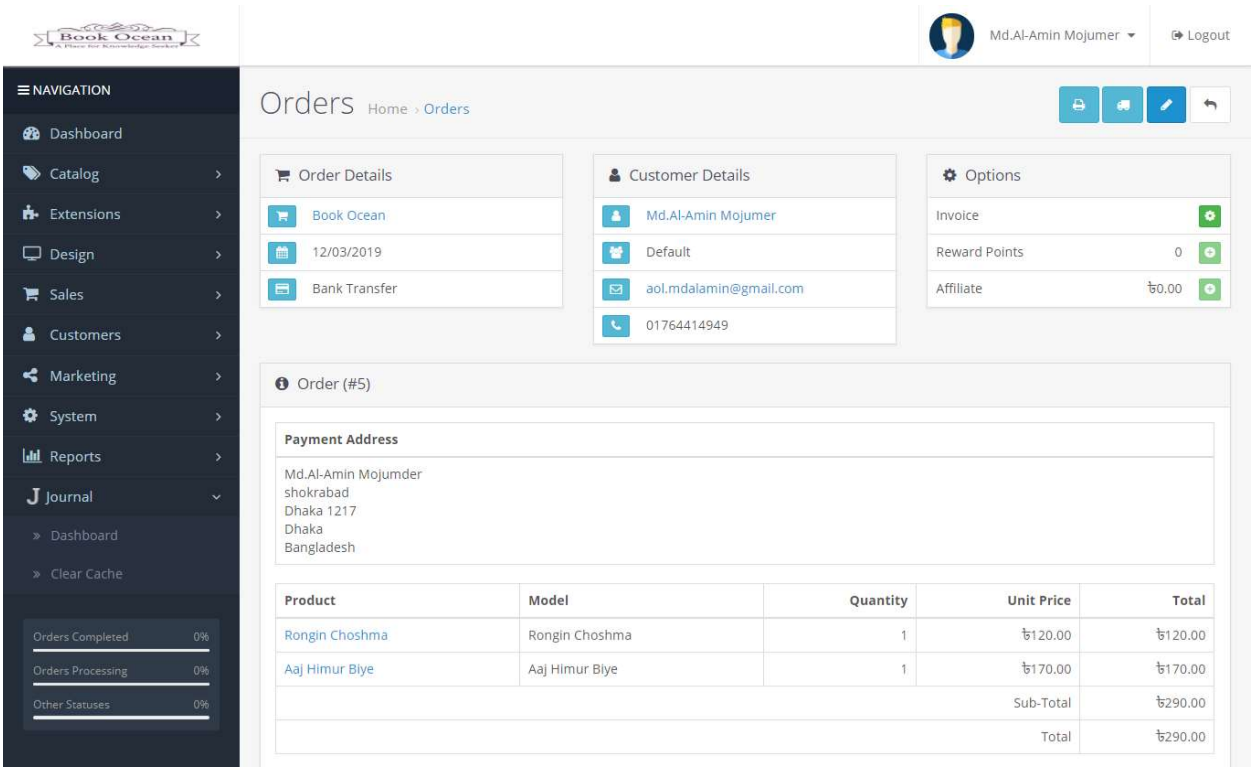
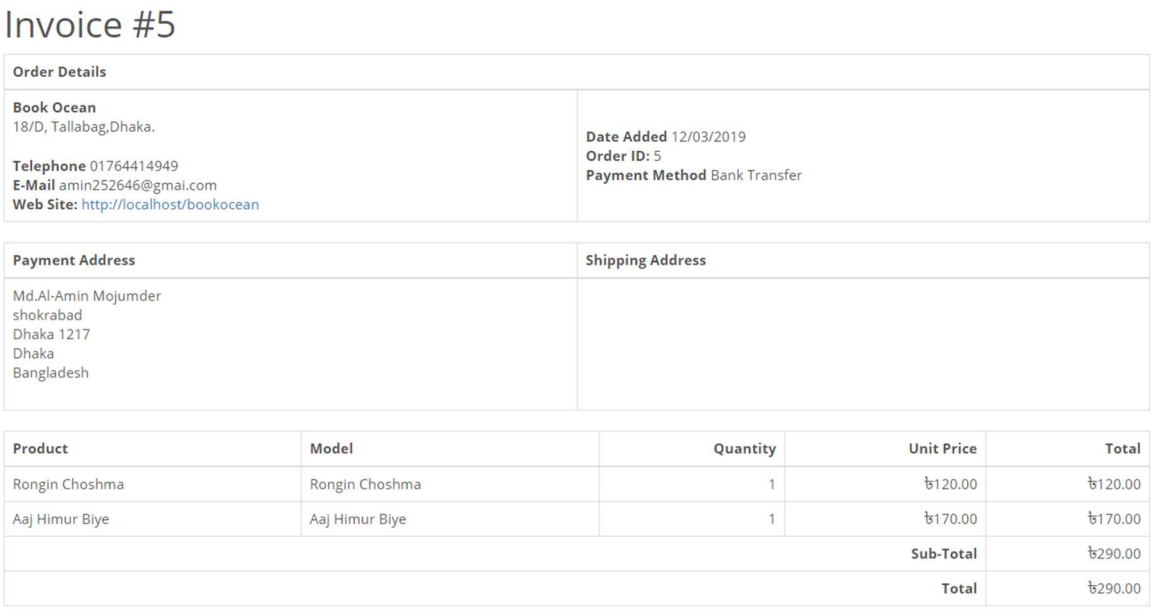


Figure 4.17: Book Ocean orders page.



Invoice #5

Order Details

Book Ocean
18/D, Tallabag,Dhaka.

Telephone 01764414949
E-Mail amin252646@gmai.com
Web Site: http://localhost/bookocean

Date Added 12/03/2019
Order ID: 5
Payment Method Bank Transfer

Payment Address	Shipping Address
Md.Al-Amin Mojumder shokrabad Dhaka 1217 Dhaka Bangladesh	

Product	Model	Quantity	Unit Price	Total
Rongin Choshma	Rongin Choshma	1	৳120.00	৳120.00
Aaj Himur Biye	Aaj Himur Biye	1	৳170.00	৳170.00
			Sub-Total	৳290.00
			Total	৳290.00

Figure 4.18: Book Ocean invoice page.

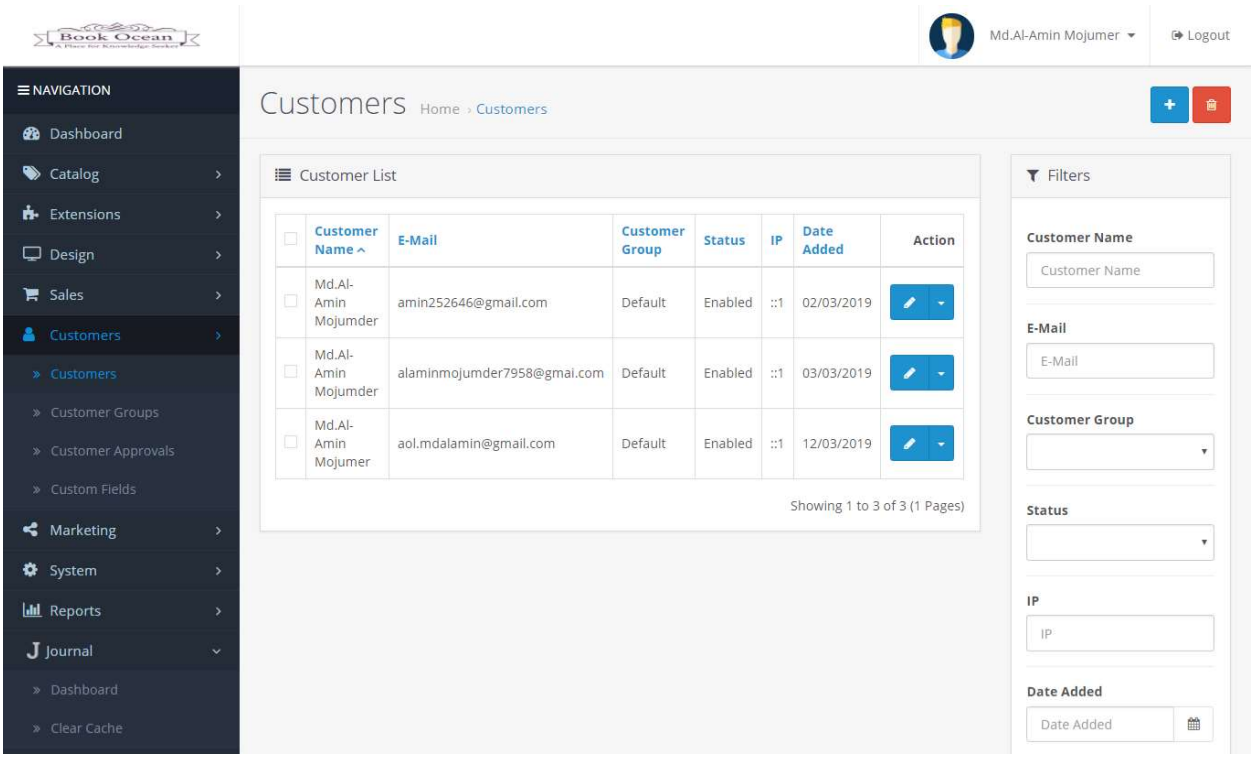


Figure 4.19: Book Ocean customer list page.

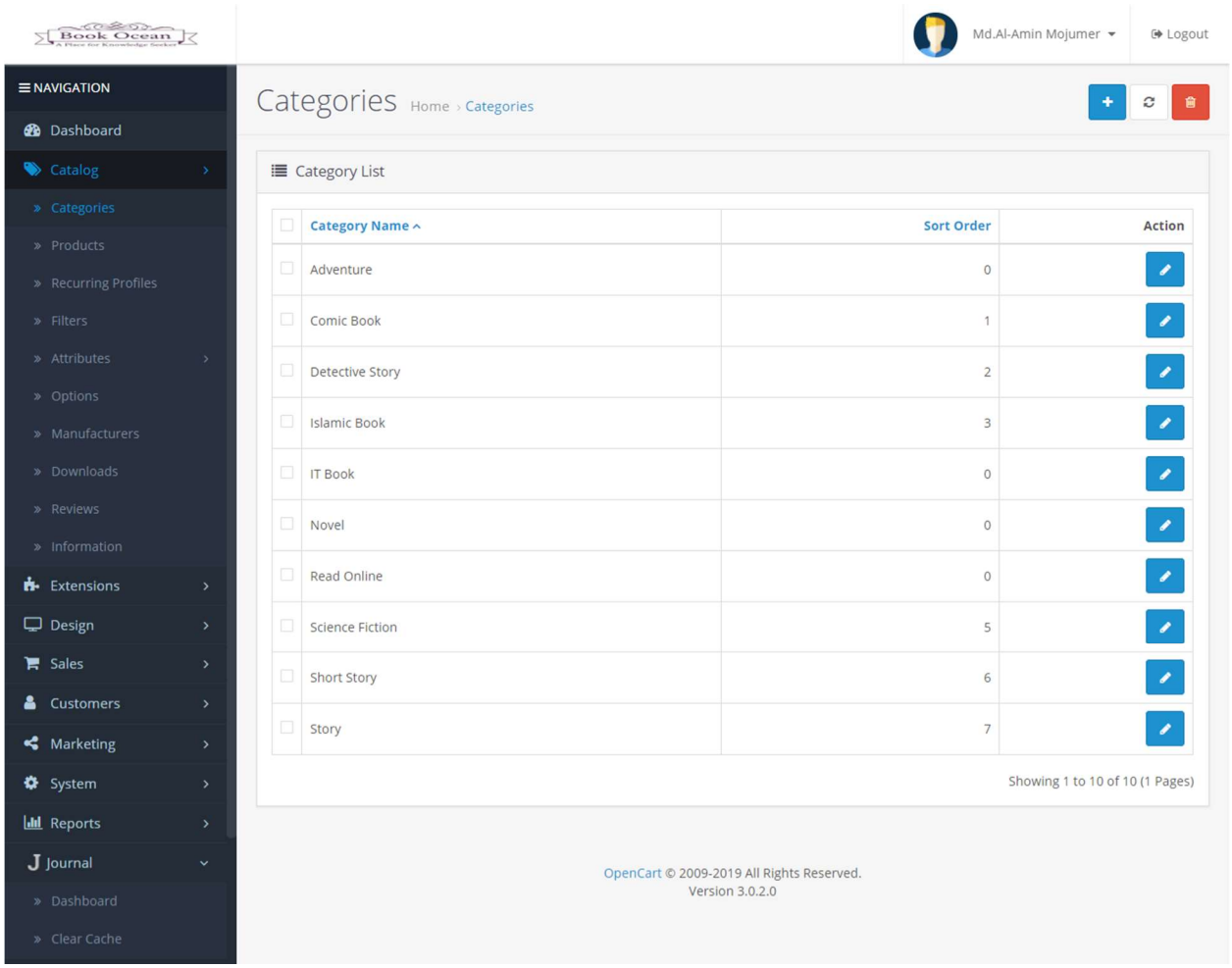


Figure 4.20: Book Ocean category add page.

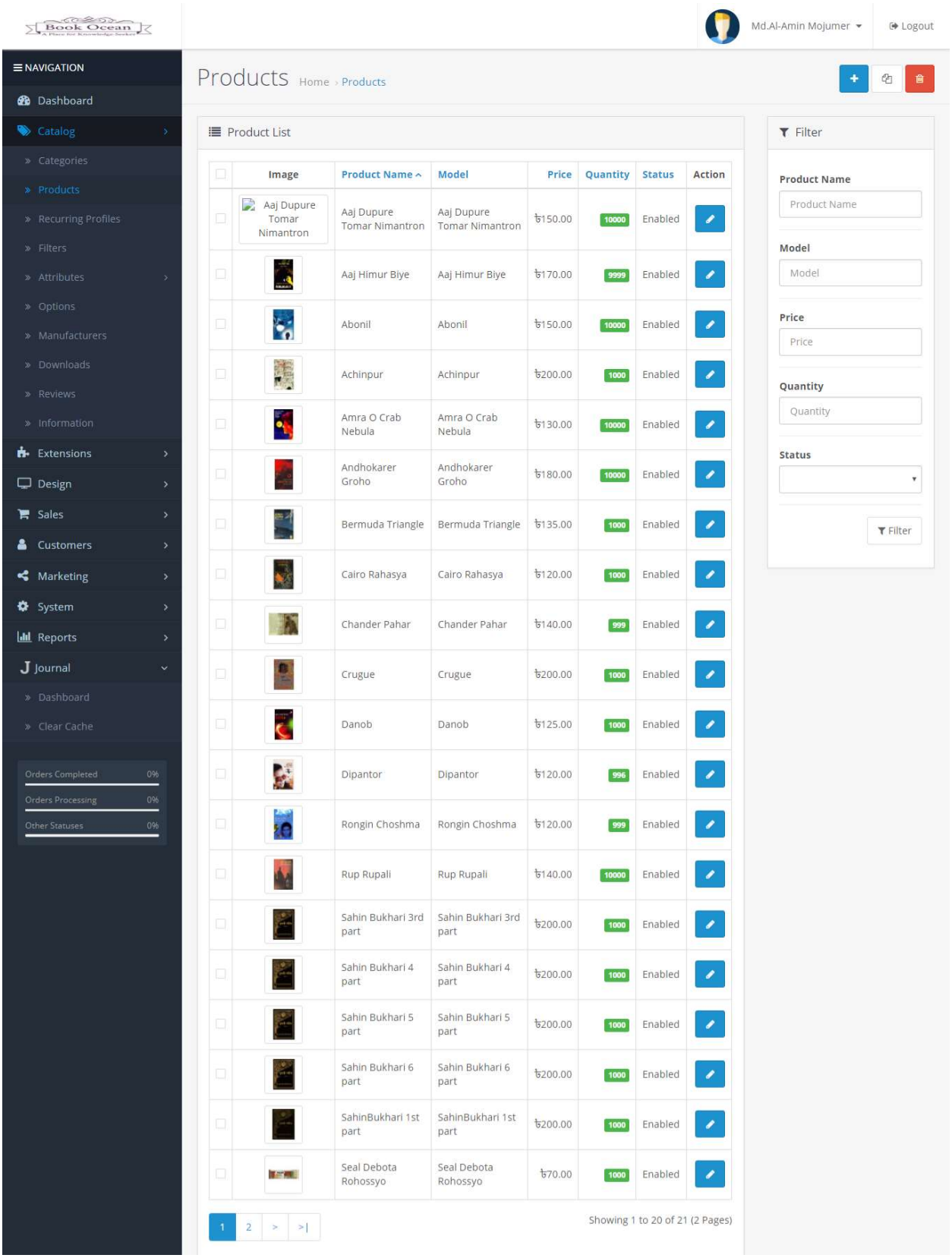


Figure 4.21: Book Ocean product add page.

4.4 Interaction Design and UX

Collaboration structure fundamental for any venture what is uncommonly an ideal standard between a framework and client. This is consolidated structure what will assist client with interacting with framework effortlessly. It encourages client to spare their time. There have a few measurements of portrayal of a framework or programming to clients what will improve client encounter. For example, Button Labels, Images, Typography, Icons that guide in client collaboration.

4.5 Implementation of Requirements

We require two sorts of necessities. The necessities are:

- Hardware necessity.
- Software necessity.

Hardware Requirement:

One database server must be accessible to actualize the framework with following arrangement.

- PC
- 1 server class mark PC facilitating MySQL
- Database Server

Software Requirement:

1.1 System Requirements

Software

- Software: PHP 5.2.4+ (5.4+ recommended)
- MySQL: 5.0.4+
- Nonpaid ++

Web Sever

- Apache: 2.x+
- Microsoft: IIS 7
- Nginx: 1.0 (1.1 recommended)

1.2 Browser Requirements

- Firefox 4+
- IE (Internet Explorer) 9+
- Google Chrome 10+
- Opera 10+
- Safari 5+

1.3 Development Environment

During the development process, Localhost is preferred. we can use the following servers on our PC to develop..

Windows

- WAMPSEVER
- XAMPP for Windows

4.6 Server

All the work happens on the server. A particular application, called a web server, will be in charge of speaking with the program. A social database server stores whatever data the application requires. At long last, we require a dialect to representative demands between the web server and database server, it will likewise be utilized to perform automatic errands on the data that comes to and from the web server. Obviously none of this is conceivable without a working framework. The web server, programming dialect, and database server we utilize must function admirably with the working framework.

There are many web servers out there in the market. To actualize exam mechanization framework, it is financially savvy. It is speedy and intense. It might not have each chime and shriek accessible for a social database, however for most clients there is bounty. WAMP or XAMPP server is blend of PHP, APACHE, and MYSQL server.
For development we use XAMPP. And after that we live it in a cloud SERVER.

Chapter 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

For our task database is a basic part. We know numerous database administration framework are utilizing around the world. We decide for our task MySQL. MySQL is the world's most mainstream open source database. With its demonstrated execution, unwavering quality and usability, MySQL has turned into the main database decision for electronic applications .MySQL is an open-source social database administration framework (RDBMS) [8].

All database related data's are given in no time:

- Database name: bookocean
- 146 tables and each table have different sections

We are demonstrating a figure 5.1 which will indicate table name with its motivation and a rundown of site pages to which this tables has a place with. Database usage incorporates the execution of the functionalities of every module and the usage of information reinforcement and reclamation. Here we will accentuation on presenting the usage of information reinforcement. Information reinforcement alludes to capacity of client information including documents, database, application programs and so forth for information recuperation. In this manner, it is basic to give information reinforcement and rebuilding component to enhance framework security [9].

Here, is our database 146 tables and each table has various segments and each section pronounced distinctive credit which are help to execute our framework.

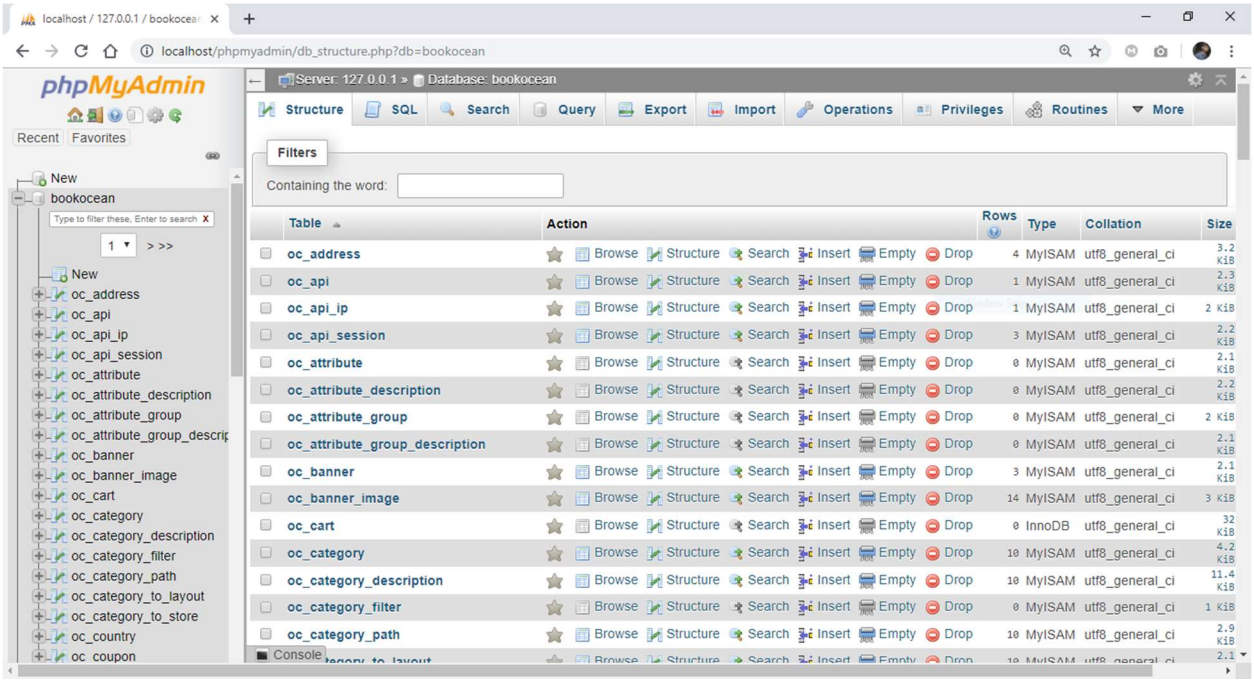


Figure 5.1: Database of Book Ocean.

5.2 Implementation of Interaction

To make our framework (All in one healing facility administration framework) we have executed intuitive UI for better client encounter. As a rule we have utilized intelligent symbol instead of content connection or catch. The framework configuration planned with arrangement of back to back strides to help individuals for comprehension.

Execution of Interactions is basic assignment for all improvement ventures. As our undertaking is a web base venture such a significant number of assets and client movement need to cooperate. Here we utilize database like MySQL. Furthermore, our venture greatest assignment is identified with information. So every time server and customer imparting to each other's. Information read, compose and alteration, information getting all are continuous a considerable lot of the movement. Information exchange between page to page likewise take places.

5.3 Testing Implementation

Testing is a set of activity that can be planned in advance and conducted systematically. Developer of the software and an independent test group conducts testing. The software should be tested for expected result and efficiency after implementation of the system. Because during implementation everything may not be done according to the system design. So without testing those errors cannot be detected and then corrected. Therefore system testing is very important phase of a system development.

5.3.1 Test plan

Prior to testing starts, a test plan is made. An average test plan reports input esteems for the test, techniques used to play out the testing and the normal yield esteems or results. Test designs run from exceptionally easy to extremely mind boggling, ordinarily in connection to the Complexity of programming forms which are to be tried.

For example, testing whether another client provoke is added to a screen may not require a test plan by any stretch of the imagination, while testing a confounded procedure may require archiving many shifted input situations and the relating expected outcomes and yields for each case. Amid testing, the test plan is refreshed to log test exercises, results and differences with what was initially anticipated.

5.3.2 Unit Testing

Unit testing focuses verification effort on the smallest unit of the system design the software component or module. All the inputs taken each module will be tested by testing data and different in results before and after adding validation will be shown.

Different tests are conducted as part of unit testing are as follows:

- Interface testing
- Local data structure testing
- Error handling paths testing
- Boundary condition testing
- Independent paths testing
- Execution path testing

During the design of the system we had conducted these tests frequently.

5.3.3 System Testing

Framework testing includes testing of the entire arrangement of utilization program. This testing will be completed to guarantee that the program can be meet the requests of clients. In the event that would check the usefulness of the proposed framework. The test would pick the zones that should be adjusted any oversight or insufficiencies in the manner in which the framework works. We create one specific component and attempt to test it and if it's not work right we experience the coding or actualize it on the program over and over until the point that it works legitimately.

Expected to check canter point is the site will do all canter functionalities. Content help and cross-site and cross-area checking issues additionally should have been considered.

5.4 Test Result and Report

Results are the principle worry of our task. As a matter of first importance our undertaking is result arranged. Each undertaking needs a yield subsequently. According to our testing background we have discovered every normal outcome.

We performed required experiments as per advancement criteria. Distinctive experiments have made for a particular procedure and put away all experiment results appropriately to translate all outcome. This will settle on choice with better level of exactness.

We have made cycle shrewd and robotized testing to settle on better choice. When test results are deliverable, at that point it has been discharged. A test outcome ought to be assess as per DOD (Definition of done) of particular piece of an undertaking.

Chapter 6

CONCLUSION & FUTURE SCOPE

6.1 Discussion & Conclusion

At the end of our project we want to remind that this is fully unique system and we assure that it will help us all, as well as any consumer, publisher and author. Hope this application will be very demandable in coming future.

6.2 Scope for Further Development

This framework is a very initial approach from us. We already have created an android app for android user so that any android phone user can have the benefits of using this on the go. As for the initial approach we were very focused on creating the functionalities rather than it's gorgeous look. But these services are always appreciated when it is being updated on a regular basis. People always likes the changing features and looks. This is why we are very inspired to develop its overall looks and functionalities. And also we didn't make any approach for iPhone users. So we are looking forward to make an iOS app to them also. So that no one is left with less priority. So we hope in very future we will come with new updates that we are already working on that includes all the platforms with added interesting features and a very iterative look.

APPENDIX

Project Reflection

From Summer-2018 semester we had begun our adventure to make a framework where customers can search for any book anytime of time or can see books by category. Here customer also gets the flexibility of getting the book in either in softcopy or hardcopy. And certainly if a customer requires for hardcopy then it will be home delivered. Here if a customer chooses for softcopy then it will open for download option. Customer gets the freedom for online transaction added with invoice. Customer also gets the option for reading books online. By so far here publishers also gets a platform for digital marketing, and online selling of books. All these services that are mentioned here are not limited to one single platform. We have developed android app for our project for natively android users and also planned for an iOS app. Because our motive is to satisfy all users from different platforms.

Project Drive Link:

https://drive.google.com/file/d/1qG3vyEMZrjaa0RY4jJ1pOS1ArJk2tOZ/view?fbclid=IwAR3-9juniIy6QKCxCe3871klm7vrGBCO7S-UPcrx-mJceIOdTmknhS0vEzo

REFERENCES

[1] "Rokomari Online Book Shop" [Online]. Available: https://www.rokomari.com/book.[Retrieved on 02 February 2019].

[2] "Bookstores Online Book Shop" [Online]. Available: https://www.bookstores.com/browse/books/ [Retrieved on 03 February 2019].

[3] "Boibazar Online Book Shop" [Online]. Available : https://www.boibazar.com/. [Retrieved on 04 February 2019].

[4] "Business Process Model" [Online]. Available: https://www.visualparadigm.com/solution/bpm/bpmntools/?src=google&kw=%2Bbusiness%20%2Bprocess%20%2Bmodeling&mt=b&net=g&plc=&gclid=Cj0KCQjw7YblBRDFARIsAKkKdJ4nErpJFtGBBFdITVBzsjACvyejRNXMB4j59yCVBgMVht4SQP_gaAlIlEALw_wcB. [Retrieved on 20 January 2019].

[5] "Use Case Model" [Online]. Available : https://en.wikipedia.org/wiki/Use_case_diagram [Retrieved on 26 January 2019].

[6] "Entity Relationship Diagram" [Online]. Available: https://www.smartdraw.com/entitrelationship-diagram/ [Retrieved on 29 January 2019].

[7] "Data Flow Diagram" [Online]. Available: https://go.gliffy.com/go/html5/launch [Retrieved on 15 February 2019].

[8] "PHP MySQL Database, PHP syntax, PHP xml" [Online]. Available: https://www.w3schools.com/php/php_mysql_intro.asp [Retrieved on 24 August 2019].

[9] "Download MySQL" [Online]: Available : https://www.oracle.com/technetwork/database/mysql/index.html [Retrieved on 26 August 2019].

Plagiarism Report

ORIGINALITY REPORT

20%	10%	4%	18%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	Submitted to Daffodil International University Student Paper	6%
2	searchsoftwarequality.techtarget.com Internet Source	2%
3	Submitted to Strathfield College Pty Ltd Student Paper	2%
4	assets.vmou.ac.in Internet Source	2%
5	www.slideshare.net Internet Source	1%
6	www.smartaddons.com Internet Source	1%
7	www.happinessworks.com Internet Source	1%
8	Submitted to Gulf College Oman Student Paper	1%
9	Submitted to Hamdan Bin Mohammed Smart University	1%

	Student Paper	
10	Submitted to City University of Hong Kong Student Paper	1%
11	www.gpcet.ac.in Internet Source	<1%
12	Submitted to CVC Nigeria Consortium Student Paper	<1%
13	Submitted to Universiti Tenaga Nasional Student Paper	<1%
14	Submitted to American Intercontinental University Online Student Paper	<1%
15	d-nb.info Internet Source	<1%
16	Submitted to Kolej Universiti Poly-Tech MARA Student Paper	<1%
17	androidtuts4u.blogspot.com Internet Source	<1%
18	Submitted to Texas A & M University, Kingville Student Paper	<1%
19	nucloweb.jinr.ru Internet Source	<1%
20	www.planerka.info Internet Source	<1%

21	edoc.site Internet Source	<1%

Exclude quotes	Off	Exclude matches	Off
Exclude bibliography	Off		