DEVELOPMENT OF DIU BOOK SHOP APPLICATION

BY:

Shahrear Ahmed ,

ID: 142-15-154

And

Shakilur Rahman

ID: 143-15-184

Department of Computer Science and Engineering

Daffodil International University

This Report Presented in Partial Fulfillment of the Requirements for the Degree of Bachelor of Science in Computer Science and Engineering.

Supervised By:

Tanvir Rahman
Senior Lecturer,
Department of CSE
Daffodil International University

CO-Supervised By:

Md. Mahfujur Rahman
Lecturer,
Department of CSE
Daffodil International University

DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

APRIL 2019

APPROVAL

This Project/internship titled "DEVELOPMENT OF DIU BOOK SHOP APPLICATION", submitted by Name: Shahrear Ahmed, ID: 142-15-154 , Shakilur Rahman, ID: 143-15-184 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 06th April, 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

_____

Dr. S M Aminul Haque **Internal Examiner**

Assistant Professor & Associate Head

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Daffodil International University.

_____

Md. Reduanul Haque **Internal Examiner**

Lecturer

Department of Computer Science and Engineering

Faculty of Science & Information Technology

Daffodil International University

_____

Dr. Mohammad Shorif Uddin **External Examiner**

Professor

Department of Computer Science and Engineering

Jahangirnagar University

DECLARATION

I hereby declare that, this project has been done by me under the supervision of Tanvir Rahman, Lecturer, Department of CSE, Daffodil International University. I 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:

…….

Tanvir Rahman

Senior Lecturer,

Department of Computer Science and Engineering

Daffodil International University

CO-Supervised By:

Md. Mahfujur Rahman
Lecturer,
Department of CSE
Daffodil International University

Submitted by:

Shahrear Ahmed
ID:142-15-154
Department of CSE
Daffodil International University

Shakilur Rahman
ID:143-15-184
Department of CSE
Daffodil International University

ACKNOWLEDGEMENT

I am very much thankful to my advisor **Mr. Tanvir Rahman, Senior Lecturer,** Department of CSE, Daffodil International University who guide me nicely to do this work. His patience and mentality always gives me a spirit that how can we complete this work. He provides all type of resource related with this. So I can get the actual theme to fulfill my work. Gives special thanks to **Md. Mahfujur Rahman Raju, Lecturer,** Department of CSE, Daffodil International University who gives me nice idea related to this work. Which process I can complete this work he gives me the suggestion.

Md. Reduanul Haque, Lecturer, Department of CSE, Daffodil International University, Permanent Campus, **Dr. S.M. Aminul Haque**, **Assistant Professor and Associate Head**, Department of CSE Daffodil International University, Permanent Campus and Professor Syed Akhter Hossain, Head, Department of CSE gives them special thanks that's why I can fully complete this work.

Finally, I gives thanks to my family for their guide and their support I can complete my final year project. I complete my work nicely and get a spirit that in future I can fluently doing my work to achieve my goal.

ABSTRACT

Day by day the increasing popularity of online Book ordering system for the university students develop an ecommerce base Book ordering website and in this have some good features that how a student can order and purchase a product in this project try to make an online Book shopping base web application based on user comfortably. In this site have various types of Book item. A customer can order a product by his choice. Specially for purpose of DIU students who can easily see list of Book s items then by the choice of his own user can choose a product then this product adds to the shopping card. A user can delete a product from the shopping card. The project is works with user satisfaction that how easily a user can order and purchase product via online. In this project the management system is very easy and comfortable for user and easily interact with the website.

TABLE OF CONTENTS

Approval	ii
Declaration	iii
Acknowledgement	iv
Abstract	v
CHAPTER	
1. Organization of the project	1
Introduction	1
1.1 Objectives	1
1.2 Organization of the project	1
2. Literature Review	2
3. Theory	3
3.1 Overall Description	3
3.1.1 Description	3
3.1.2 Code Details	3
3.1.3 Web page Details	3
3.1.4 Project Flow Chart	4
3.2 DIU Book Shop System	5
3.2.1 Home Page	5
3.2.2 product List page	6
3.2.3 Sign up page	7
3.2.4 Sign In page	8
3.2.5 Payment Method	9
3.2.6 Purchase order page	10
3.3 System Requirement	11
3.3.1 Use Case Diagram	12
3.4 Database Management	13
3.4.1 Database Illustration	14
3.4.2 Database Objects	15
Discussion	16

Conclusion 17
References 18
Appendix 19-22

LIST OF FIGURES

FIGURES

Figure 3.1.4.1	**4**
Figure 3.2.1.1	**5**
Figure 3.2.2.1	**6**
Figure 3.2.3.1	**7**
Figure 3.2.4.1	**8**
Figure 3.2.5.1	**9**
Figure 3.2.6.1	**10**
Figure 3.2.5.1	**11**
Figure 3.4.3.1	**13**
Figure 3.4.3.2	**13**

Chapter One

Introduction

1.1 Introduction

Ecommerce website is responsible for buy and sell product over internet. This website is an Ecommerce base website and working with ordering and selling Book over internet. This site has a list of first Book items. A user shows the details information about the first Book items. If a user choice a Book, then easily order a Book item and it to the shopping card. Then a user can view which items order by. Then from the list order product a user can remove one or more product and finally pay bill. For paying bill a user should sign up or sign in this site. So a student can easily purchase a product via internet.

1.2 Objectives of the Project:

This project mainly working on students benefit when a student wants to get first Book item very firstly via internet it's very helpful. Because a student can easily place order in this site by his choice. It's mainly working on user's preferences. As a daffodilian can easily give an order in this website and get a first Book easily. A student can make his self-employment by this project. A good commercial benefit has in this project when it explores over the internet.

As a dynamic website it gives the priority to a user and can take place and remove order by his choice. The billing system also working on user's alternative mailing platform. Overall it can fulfill all the criteria for make good Ecommerce website and it gives best option for choosing a product in the internet. So for the Daffodilian it can make impact very goodly and make a good platform on online Book ordering system. So finally this project is very helpful for all DIU students and globally it also makes good impact and that's the motto of the project.

1.3 Organization of the project:

This project is an Ecommerce base project mainly develop on the basis of easy Book ordering system for the students. In think of the criteria the website mainly focusses on user satisfaction and how can easily purchase a product.

1.4 Literature Review:

When the web concept introduced to the world that time the web has the static platform. Then to build a web page used html for do this. The dynamic web concept come in 1993 since 25 years ago when the CGI (Common gateway Interface) was introduced. After that perl, python, ASP.NET was come to build the dynamic website. Today in web application has content Management System platform where a people can easily build a dynamic application and User can interact with the website anytime. The Ecommerce concept was first introduced in 1971 in the seminar "the seminar acts of ecommerce". Day by day it was updated nowadays all big international company was run by the concept of ecommerce. Like Amazon.com, alibaba.com and all recognized international company follow the ecommerce concept.

A remaining challenge is that the definitions of website design elements often overlap. For example, several studies evaluated organization by how well a website incorporates cognitive architecture, logical and hierarchical structure, systematic information arrangement and categorization, meaningful headings and labels, and keywords. However, these features are also crucial in navigation design. Also, the implications of using distinct logos and icons go beyond graphical representation. Logos and icons also establish unique brand/identity for the organization (purpose) and can serve as visual aids for navigation. Future studies are needed to develop distinct and objective measures to assess these elements and how they affect user engagement

Given the rapid increase in both mobile technology and social media use, it is surprising that no studies mentioned cross-platform compatibility and social media integration. In 2013, 34% of cellphone owners primarily use their cellphones to access the Internet, and

this number continues to grow. With the rise of different mobile devices, users are also diversifying their web browser use. Internet Explorer (IE) was once the leading web browser. However, in recent years, Firefox, Safari, and Chrome have gained significant traction. Website designers and researchers must be mindful of different platforms and browsers to minimize the risk of losing users due to compatibility issues. In addition, roughly 74% of American Internet users use some form of social media, and social media has emerged as an effective platform for organizations to target and interact with users. Integrating social media into website design may increase user engagement by facilitating participation and interactivity.

There are several limitations to the current review. First, due to the large number of studies published in this area and due to this study being exploratory, we selected from the first 100 research publications on Google Scholar search results. Future studies may benefit from defining design to a specific topic, set of years, or other area to limit the number of search results. Second, we did not quantitatively evaluate the effectiveness of these website design elements. Additional research can help to better quantify these elements.

It should also be noted that different disciplines and industries have different objectives in designing websites and should thus prioritize different website design elements. For example, online businesses and marketers seek to design websites that optimize brand loyalty, purchase, and profit. Others, such as academic researchers or healthcare providers, are more likely to prioritize privacy/confidentiality, and content accuracy in building websites. Ultimately, we advise website designers and researchers to consider the design elements delineated in this review, along with their unique needs, when developing user engagement strategies.

Chapter Three

Theory

3.1 Overall Description:

3.1.1. Description:

- ➔ A user can view the available Book products.
- ➔ A member can purchase product via online by doing order.
- ➔ To get a product from online a user must sign in in the website.
- ➔ This website make Book ordering system very easier.

3.1.2. Code details:

- ➔ Use Mongo DB Non SQL database for data Management.
- ➔ For Back-End implementation use Node JS library and Express generator framework.
- ➔ In the Front-End implementation, Use JavaScript, Bootstrap and CSS.

3.1.3. Website page Information:

1. Home page
2. About page
3. Order page
4. Sign up page
5. Sign In page
6. Product Detail page
7. Checkout page
8. Pay Bill page

3.1.4. Project Flowchart:

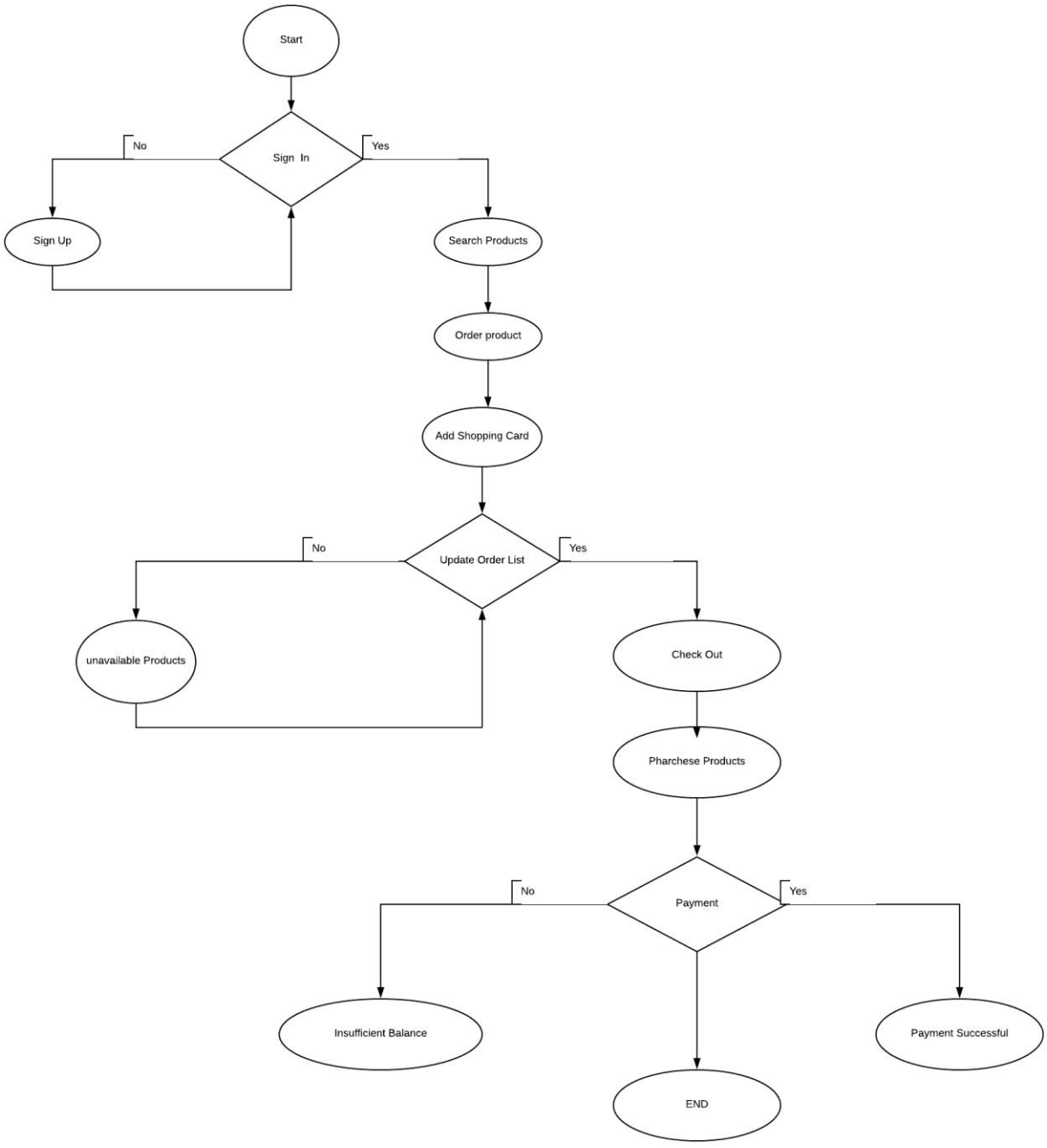


Figure3.1.4.1: DIU Book Shop Project Flow Chart

3.2. DIU Book Shop System:

3.2.1. Home Page:

Home page shows all the option in this website and by which procedure and user can interact with this. As an online first Book shopping in has some special features shown in this page.

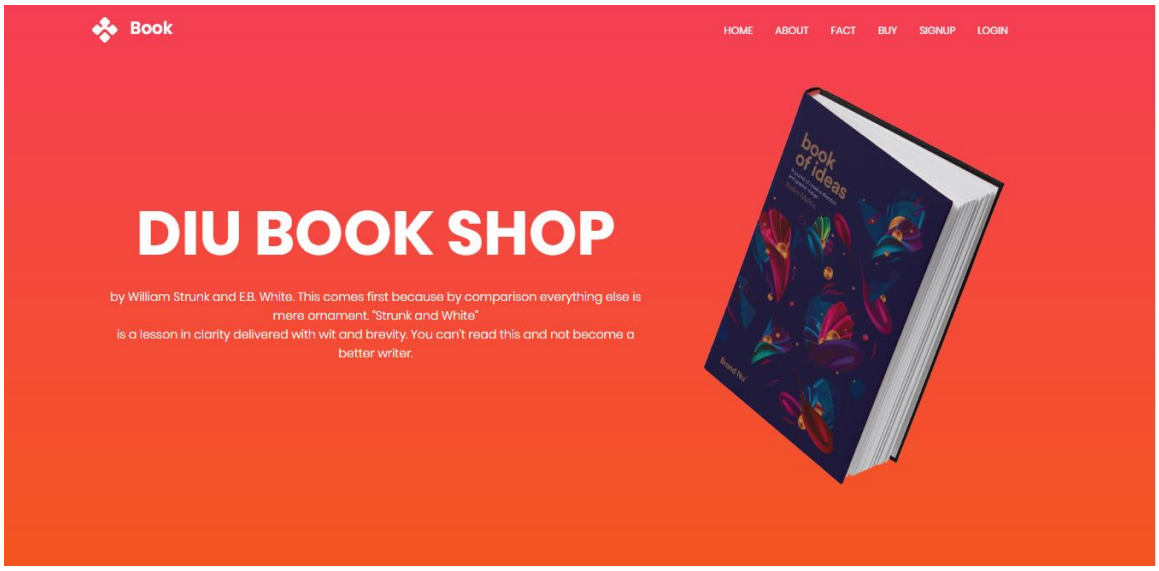
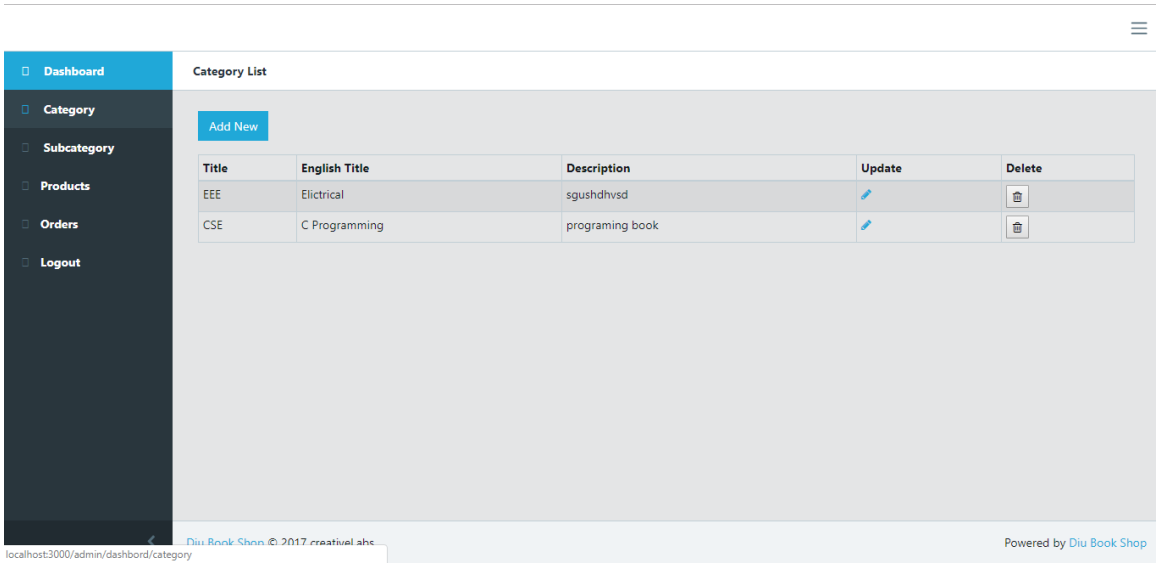


Figure3.2.1.1: Home page

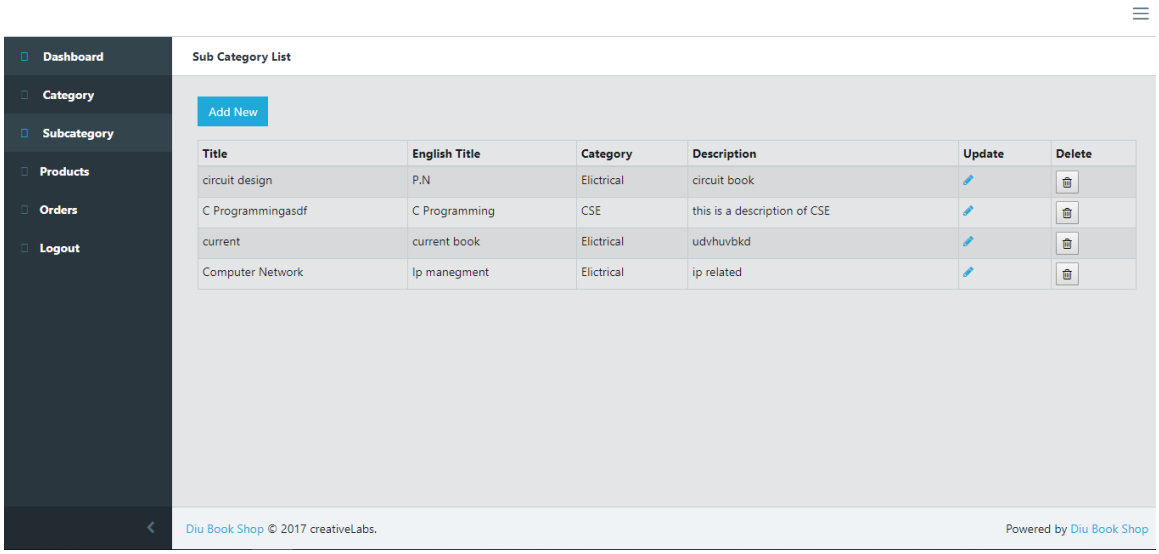
3.2.2. Product Category:

Product category mainly show the list of category of Book and also refers to search the user demandable category from the list of items.



3.3.3 Sub Category:

Product Sub category mainly show the list of particularly category of Book and also refers to search the user demandable category from the list of items.



3.3.4 Product List:

Product list mainly show the list of items and also refers to search the user demandable products from the list of items. Every product has own features and prize in this page.

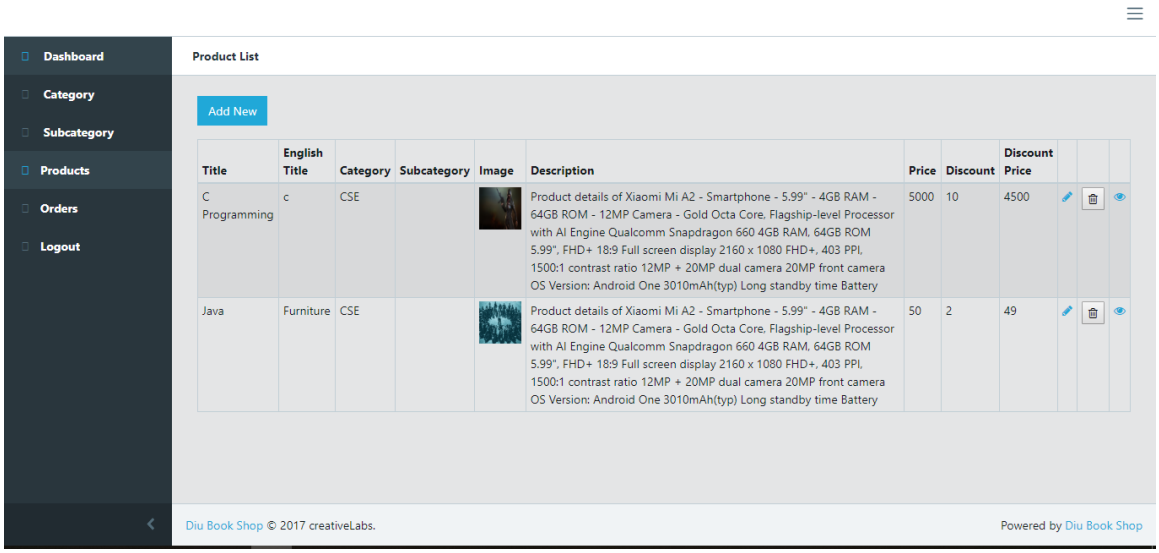
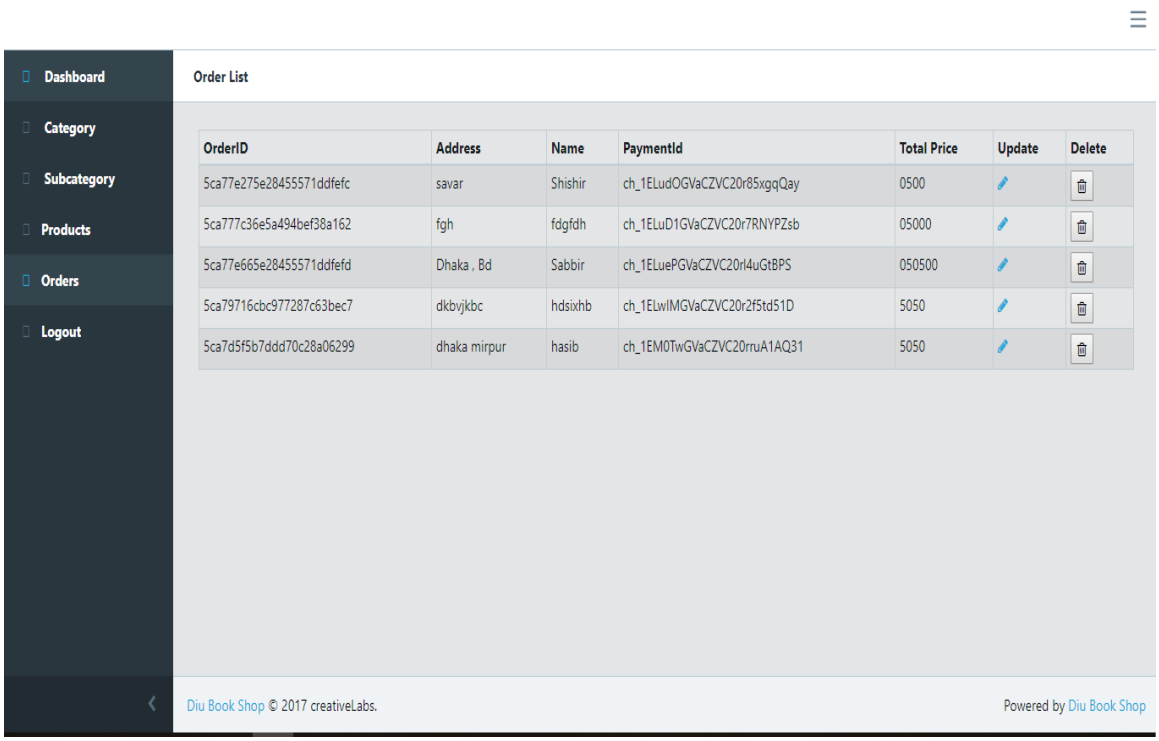


Figure3.2.2.1: Product List

3.3.4 Order List:

Order List Show the list of customers that's want



3.2.3. Sign Up page:

This page mainly use for user management.

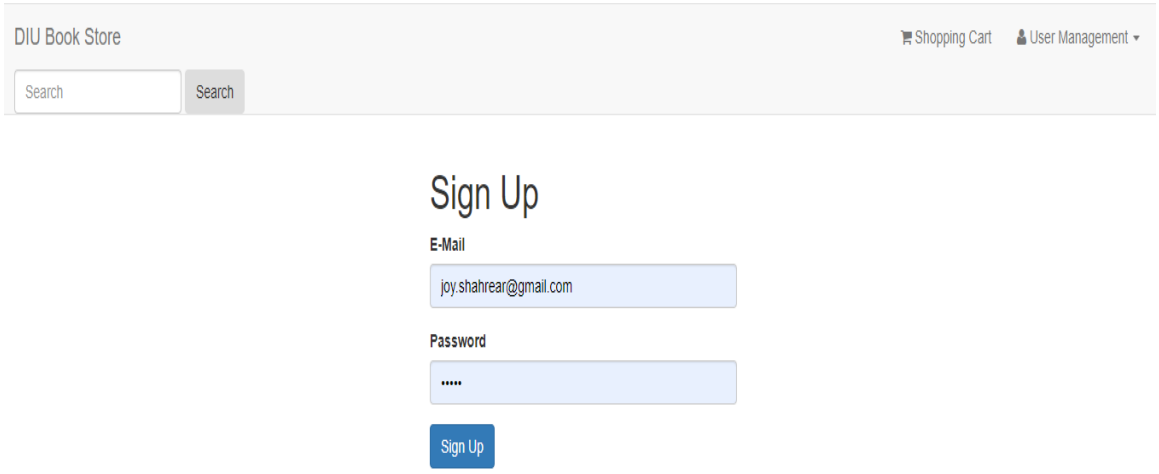
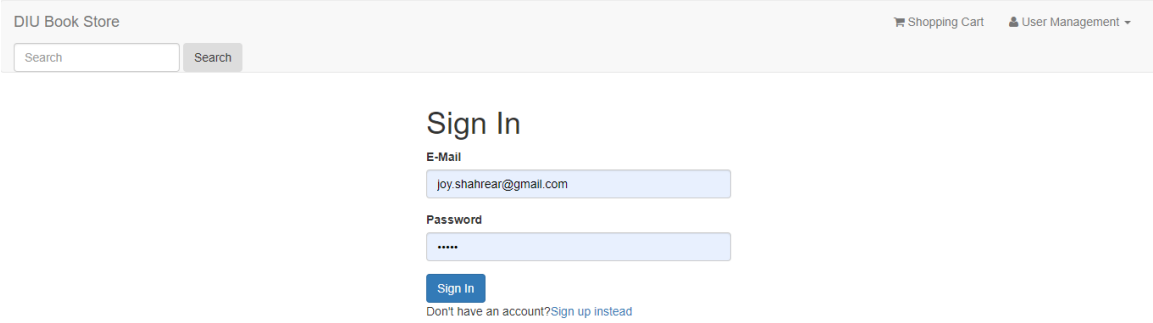


Figure3.2.3.1: Sign up page

3.2.4. Sign In page:

This page also use for user Management.



Figur3.2.4.1: Sign In page

3.2.5. Payment Method:

To buy product user input valid data.

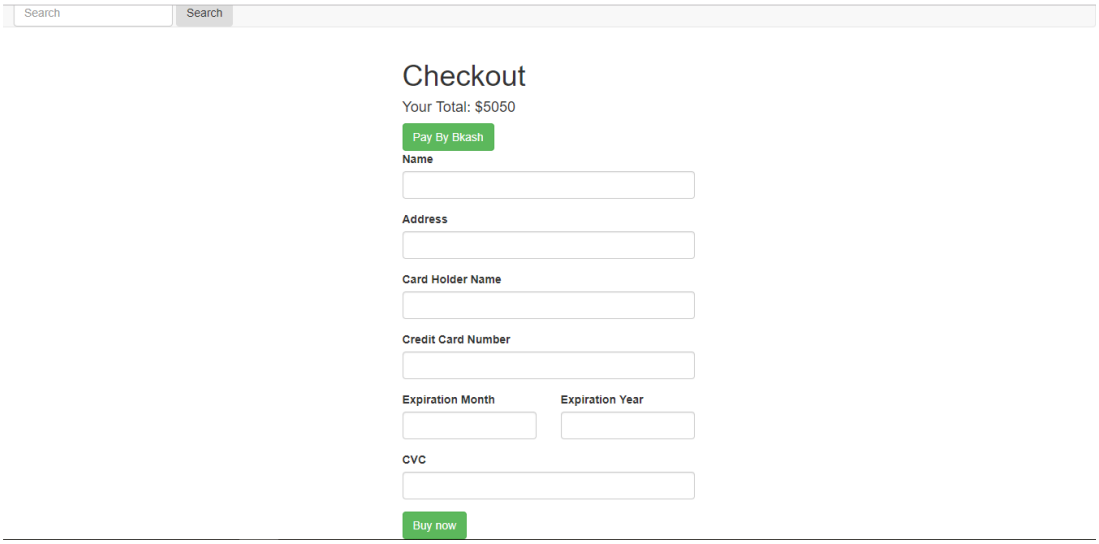


Figure3.2.5.1: Bill Payment Form

3.3 System Requirements:

3.3.1. Use case Diagram:

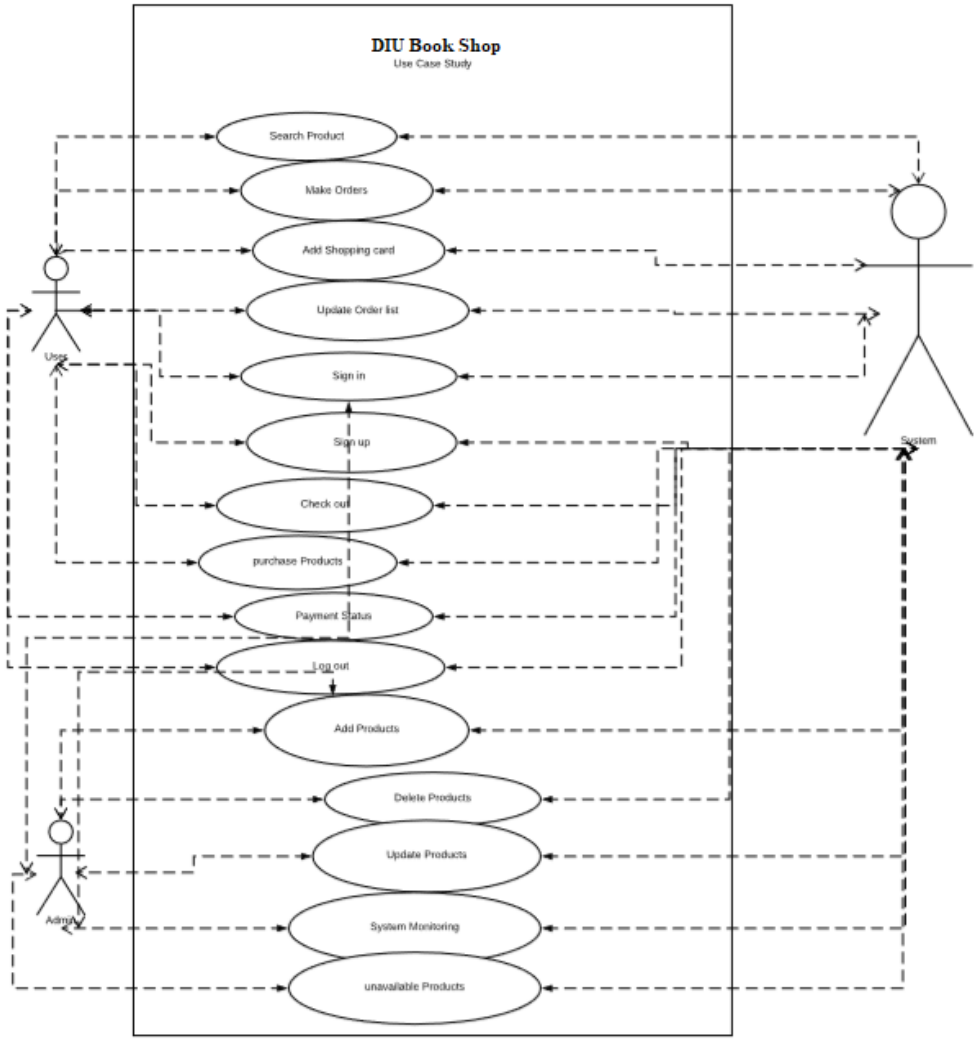


Figure3.3.1.1: Use Case Diagram of DIU

Chapter Four

Book Shop

3.4 Database Management:

Data management is essential for storing and retrieving data from database. For this project, try to make a good database management by using Mongo DB online database.

3.4.1. Database illustration:

The overall database structured created by:

User: A user has unique id, has a name when user want to add to the database.

Admin: An admin has unique id, has a name when Admin add to the database.

Product: product has id, name, image and product prize in the database and show this to the website.

Order: Order has id, item and total value of order prize in the database.

3.4.2. Database Objects:

User: id, password

Admin: id, password

Product: product id, product name, image, product prize

Order: order id, order item, value

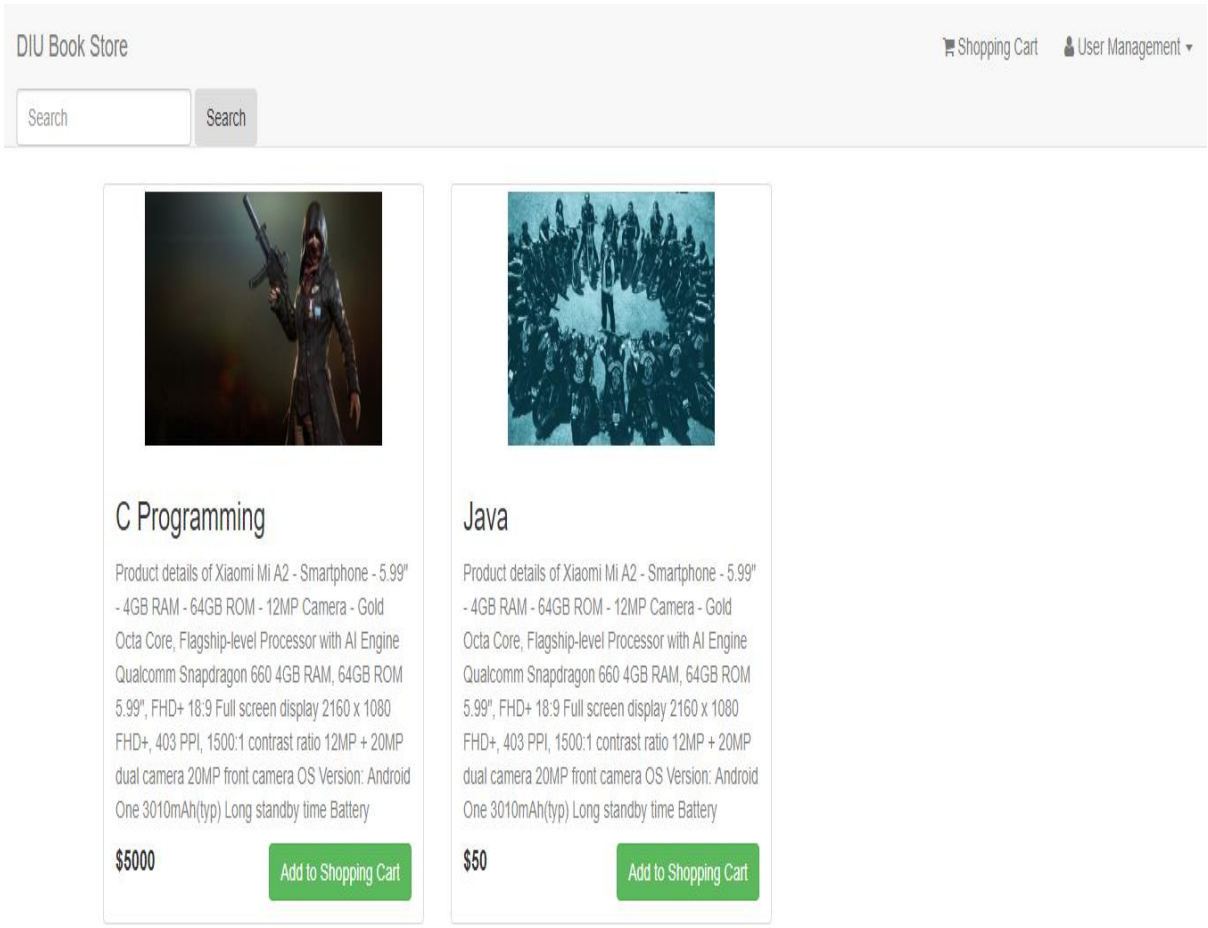


Figure3.4.3: product Details

Discussion:

DIU Book Shop is an Ecommerce base website. It has many commercial benefit and a user can easily be working with this website. This website can give the opportunity to the user to find a product very easily because the list of products shows in this website by list of views so easily can decide which items user want to place order. It has many commercial benefit for a university canteen and for a student who want to take Book very easily via internet. But on the other hand, it has some difficulty like It can't priority which product user's best choice. This website can't specify by which process deliver the ship of order of products to the students. A student can't first time check how easily can buy a Book item so the process can't dynamically be working on payment system. But overall the project working nicely on user preference and the website places a good Ecommerce website.

Conclusion:

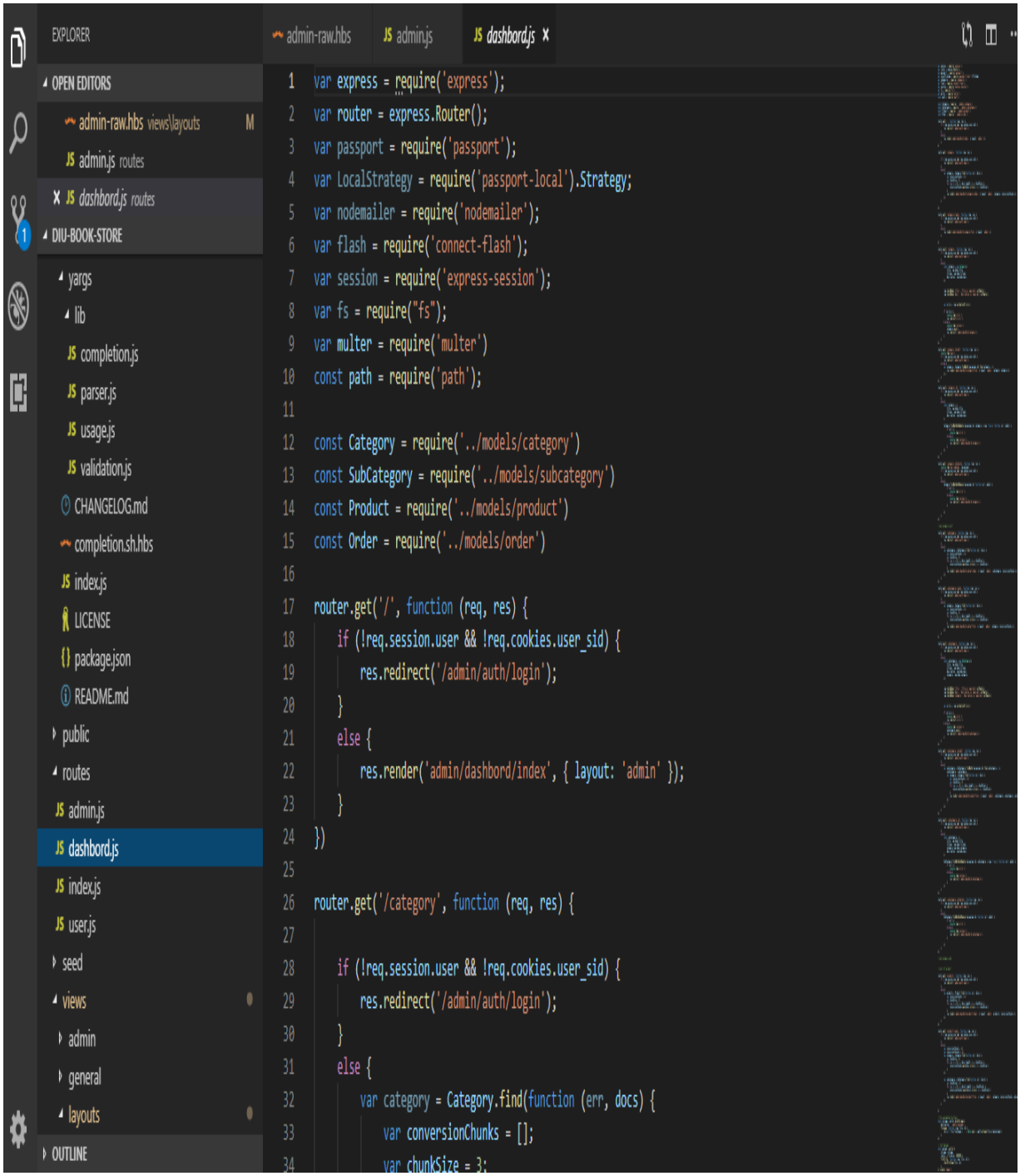
This project gives the all types of facility that a user need to satisfy. By this project a student can order a product easily from this site. The website gives of all this by an it handles all customers demand and user friendliness. Finally list of view. A student nicely works with this website for his desire prospectus. As a dynamic website, this gives all the facility that should provide for a customer demand. So all the evaluation I see if i add some extra features in this website it will become an excellent website that a user wants. Future work of this website is to promote this website globally for make a demand full website in this country and also the world. I try to add some additional features that the project will be a good and efficient website around the circumstance of Ecommerce base websites. In future, this site can make a platform that a user can very easily interact with this from all other Ecommerce websites. Because try to develop a complete dynamic website which can works on all user preferences.

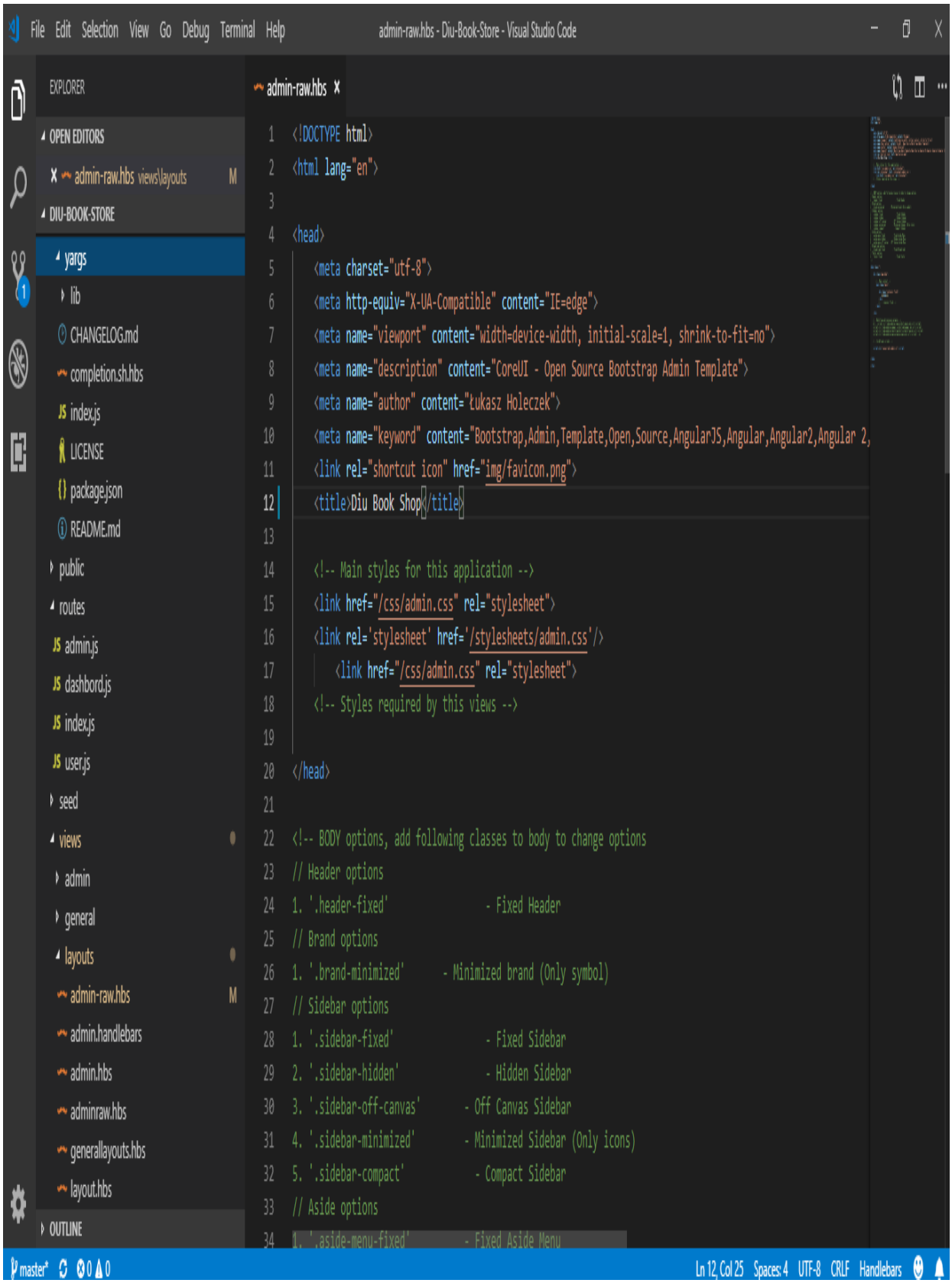
References:

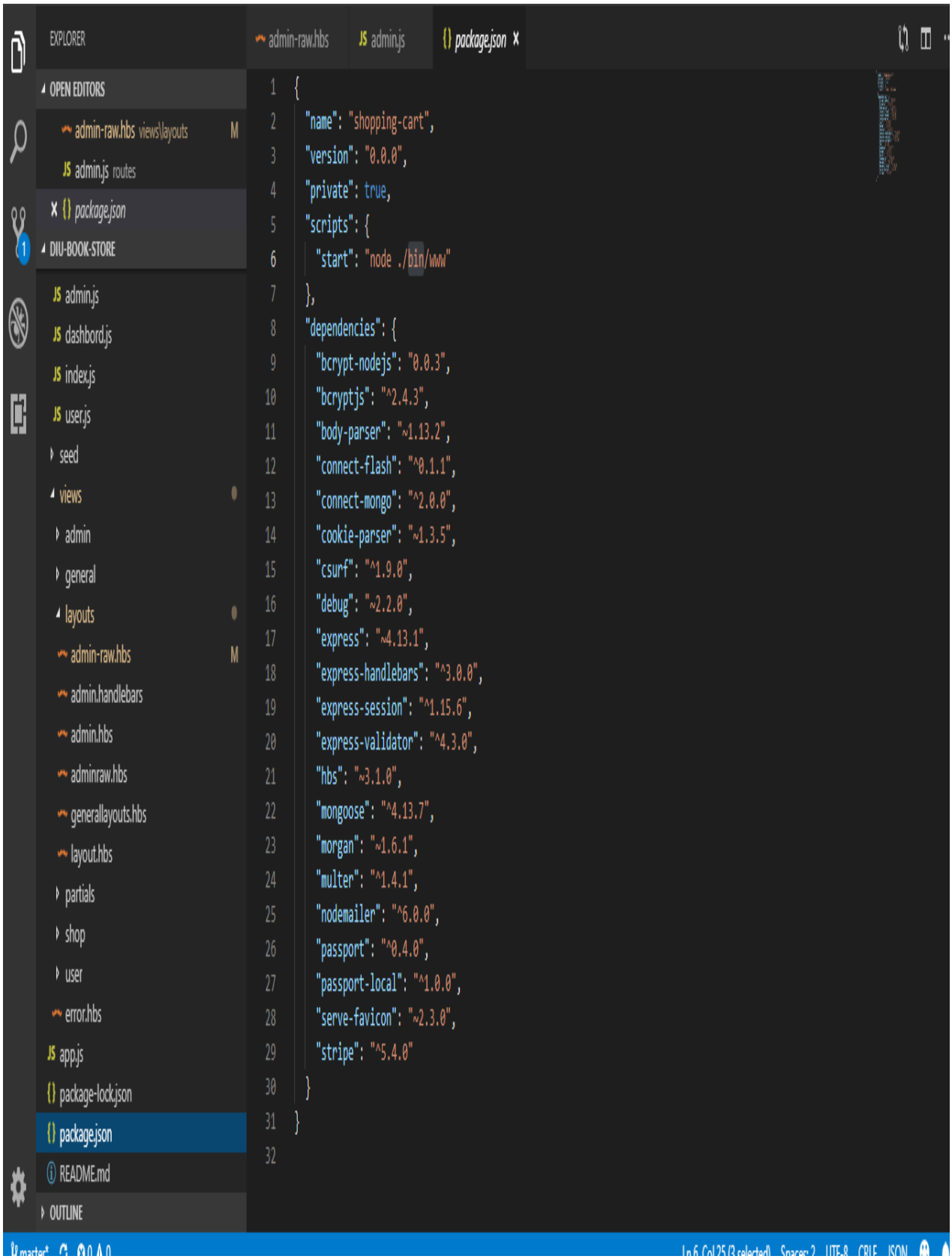
1. https://onlinelibrary.wiley.com/doi/abs/10.1111/1467-9663.00182
2. https://www.tandfonline.com/doi/abs/10.1080/13675560210148641
3. https://www.sciencedirect.com/science/article/pii/S0969698902000176
4. https://www.sciencedirect.com/science/article/pii/S0747563205000956
5. https://aip.scitation.org/doi/abs/10.1063/1.3510540
6. https://www.ers.usda.gov/webdocs/publications/45818/11562_err42_1_.pdf?v=41056
7. https://patents.google.com/patent/US7464880B2/en
8. https://www.tandfonline.com/doi/abs/10.1300/J061v03n02_02

Appendix

Basic Code of DIU Book Shop




File Edit Selection View Go Debug Terminal Help
admin-raw.hbs - Diu-Book-Store - Visual Studio Code
EXPLORER
admin-raw.hbs
OPEN EDITORS
admin-raw.hbs views\layouts M
DIU-BOOK-STORE
yargs
lib
CHANGELOG.md
completion.sh.hbs
index.js
LICENSE
package.json
README.md
public
routes
admin.js
dashbord.js
index.js
user.js
seed
views
admin
general
layouts
admin-raw.hbs M
admin.handlebars
admin.hbs
adminraw.hbs
generallayouts.hbs
layout.hbs
OUTLINE
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="utf-8">
<meta http-equiv="X-UA-Compatible" content="IE=edge">
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">
<meta name="description" content="CoreUI - Open Source Bootstrap Admin Template">
<meta name="author" content="Łukasz Holeczek">
<meta name="keyword" content="Bootstrap,Admin,Template,Open,Source,AngularJS,Angular,Angular2,Angular 2,
<link rel="shortcut icon" href="img/favicon.png">
<title>Diu Book Shop</title>
<!-- Main styles for this application -->
<link href="/css/admin.css" rel="stylesheet">
<link rel='stylesheet' href='/stylesheets/admin.css'/>
<link href="/css/admin.css" rel="stylesheet">
<!-- Styles required by this views -->
</head>
<!-- BODY options, add following classes to body to change options
// Header options
1. '.header-fixed' - Fixed Header
// Brand options
1. '.brand-minimized' - Minimized brand (Only symbol)
// Sidebar options
1. '.sidebar-fixed' - Fixed Sidebar
2. '.sidebar-hidden' - Hidden Sidebar
3. '.sidebar-off-canvas' - Off Canvas Sidebar
4. '.sidebar-minimized' - Minimized Sidebar (Only icons)
5. '.sidebar-compact' - Compact Sidebar
// Aside options
1. '.aside-menu-fixed' - Fixed Aside Menu
master*
Ln 12, Col 25 Spaces: 4 UTF-8 CRLF Handlebars


EXPLORER
admin-raw.hbs
admin.js
package.json
OPEN EDITORS
admin-raw.hbs views\layouts M
admin.js routes
package.json
DIU-BOOK-STORE
admin.js
dashbord.js
index.js
user.js
seed
views
admin
general
layouts
admin-raw.hbs M
admin.handlebars
admin.hbs
adminraw.hbs
generallayouts.hbs
layout.hbs
partials
shop
user
error.hbs
app.js
package-lock.json
package.json
README.md
OUTLINE
{
"name": "shopping-cart",
"version": "0.0.0",
"private": true,
"scripts": {
"start": "node ./bin/www"
},
"dependencies": {
"bcrypt-nodejs": "0.0.3",
"bcryptjs": "^2.4.3",
"body-parser": "~1.13.2",
"connect-flash": "^0.1.1",
"connect-mongo": "^2.0.0",
"cookie-parser": "~1.3.5",
"csurf": "^1.9.0",
"debug": "~2.2.0",
"express": "~4.13.1",
"express-handlebars": "^3.0.0",
"express-session": "^1.15.6",
"express-validator": "^4.3.0",
"hbs": "~3.1.0",
"mongoose": "^4.13.7",
"morgan": "~1.6.1",
"multer": "^1.4.1",
"nodemailer": "^6.0.0",
"passport": "^0.4.0",
"passport-local": "^1.0.0",
"serve-favicon": "~2.3.0",
"stripe": "^5.4.0"
}
}