



INSTITUTE FOR ADVANCED
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Documentation On

“E-Commerce Website”
E-DAC SEPT 2020

Submitted By:

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Project Guide

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1. Introduction

Document Purpose

The advancement in Information Technology and internet penetration has greatly enhanced various business processes and communication between Admin/Seller and their customers who are purchasing the products. This E-Commerce Website is developed to provide the following services:

Enhance Business Processes:

To be able to use internet technology to project to the global world instead of limiting their services to their local domain alone, thus increase their return on investment (ROI).

E-Commerce Website:

A tool through which admin can Create a Product and provide many functionalities to them. The admin also receives some set of functionalities which help in managing the webiste.

Problem Statement

Existing system for a Local Shop is based on our traditional way keeping records and details on paper and registers. Access of these details and papers are not granted to common member in absence of the authority. It is hard to manage all the society system with pen and paper. It gets really hard to maintain the records and then keep track of past records. Hence this system is proposed to overcome the flaws of the existing system and giving power to the admin of the website so that he/she will be able to manage the website easily.

Product Scope

This project traverses a lot of areas ranging from business concept to computing field, and required to perform several researches to be able to achieve the project objectives. The area covers include:

- Node JS and React Technologies used for the development of the Web application.
- General customers as well as the Admin/Seller will be able to use the system effectively.
- Web-platform means that the system will be available for access 24/7 except when there is a temporary server issue which is expected to be minimal.

Aims & Objectives

Specific goals are: -

- To produce a web-based system that allow the admin to add new products and provide functionalities to its customers.
- To ease admin to help him in his work to add and track order details efficiently.

Overall Description

Product Perspective:

2.1.1 Existing system function:

Existing system for a society is based on our traditional way keeping records and details on paper and registers. Access of these details and papers are not granted to common member in absence of the authority. For voting for various designations (secretary, treasurer, chairman, etc) in society members need to be present on site for voting. Due to some unavoidable reasons some members cannot cast vote. Proposed system has a facility for voting online which will provide anytime anywhere access.

• III. PROPOSED SYSTEM

Product functionality:

E-Commerce Website provides the features for admin , seller and customer. It includes several functionalities describes as below:

Admin:

It provides facility to add, update, delete and view the order details who are purchasing a particular product in the website. We can view their details and also update it if that particular

Any product is sold to any new customer but if he ordered any product from one buyer then for his second order he have choose the product of same seller.

Benefits of E-Commerce Website

- This E-commerce website is fully functional and flexible.
- It is very easy to use.
- This E-Commerce Website helps in back office administration by streamlining and standardizing the procedures.
- It saves a lot of time, money and labour.
- Eco-friendly: The monitoring of the Website and the overall business becomes easy and includes the least of paper work.
- The application acts as an office that is open 24/7.

- It increases the efficiency of the management at offering quality services to the customers.
- It provides custom features development and support with the application.

Users and Characteristics:

Admin/Seller:

- Admin can login to the system.
- View the list of all users in the website.
- View the list of all the products in the website
- View the list of all orders placed from the website
- Add new Product.
- Delete new/existing product.
- Update new/existing product .
- View order details of end user.

End Users:

- USers can login to the system.
- View his/her personal details.
- View order.
- Buy Product.
- Update their personal credentials.

Operating Environment:

Server Side:

Processor: Intel® I3 processor 3500 series

HDD: Minimum 500GB Disk Space

RAM: Minimum 2GB

OS: Windows 10 , Linux

Database: MongoDB

Client Side (minimum requirement):

Processor: Intel Dual Core

HDD: Minimum 80GB Disk Space

RAM: Minimum 1GB

OS: Windows 7, Linux

Design and Implementation Constraints:

- The application will use Html, JavaScript, jQuery and css as main web technologies.
- Several types of validations make this web application a secured one and unauthorised Injections can also be prevented.
- Since E-Commerce Website is a web-based application, internet connection must be established.
- The E-Commerce Website will be used on PCs and will function via internet or intranet in any web browser.

Specific Requirement

External Interface Requirements:

User Interfaces:

- All the users will see the same page when they enter in this website. This page will display few products .
- After being authenticated by correct username and password, user will be redirect to their corresponding profile where they can do various activities.
- The user interface will be simple and consistence, using terminology commonly understood by intended users of the system. The system will have simple interface, consistence with standard interface, to eliminate need for user training of infrequent users.

Hardware Interfaces:

- No extra hardware interfaces are needed.
- The system will use the standard hardware and data communication resources.
- This includes, but not limited to, general network connection at the server/hosting site, network server and network management tools.

Application Interfaces:

OS: Windows 7, Linux

Web Browser:

The system is a web-based application; clients need a modern web browser such as Mozilla Firebox, Internet Explorer, Opera, and Chrome. The computer must have an Internet connection in order to be able to access the system.

Communications Interfaces:

- This system uses communication resources which includes but not limited to, HTTP protocol for communication with the web browser and web server and TCP/IP network protocol with HTTP protocol.
- This application will communicate with the database that holds all the user , product and orders information. Users can contact with server side through HTTP protocol by means of a function that is called HTTP Service. This function allows the application to use the data retrieved by server to fulfil the request fired by the user.

System Design

Activity Diagram

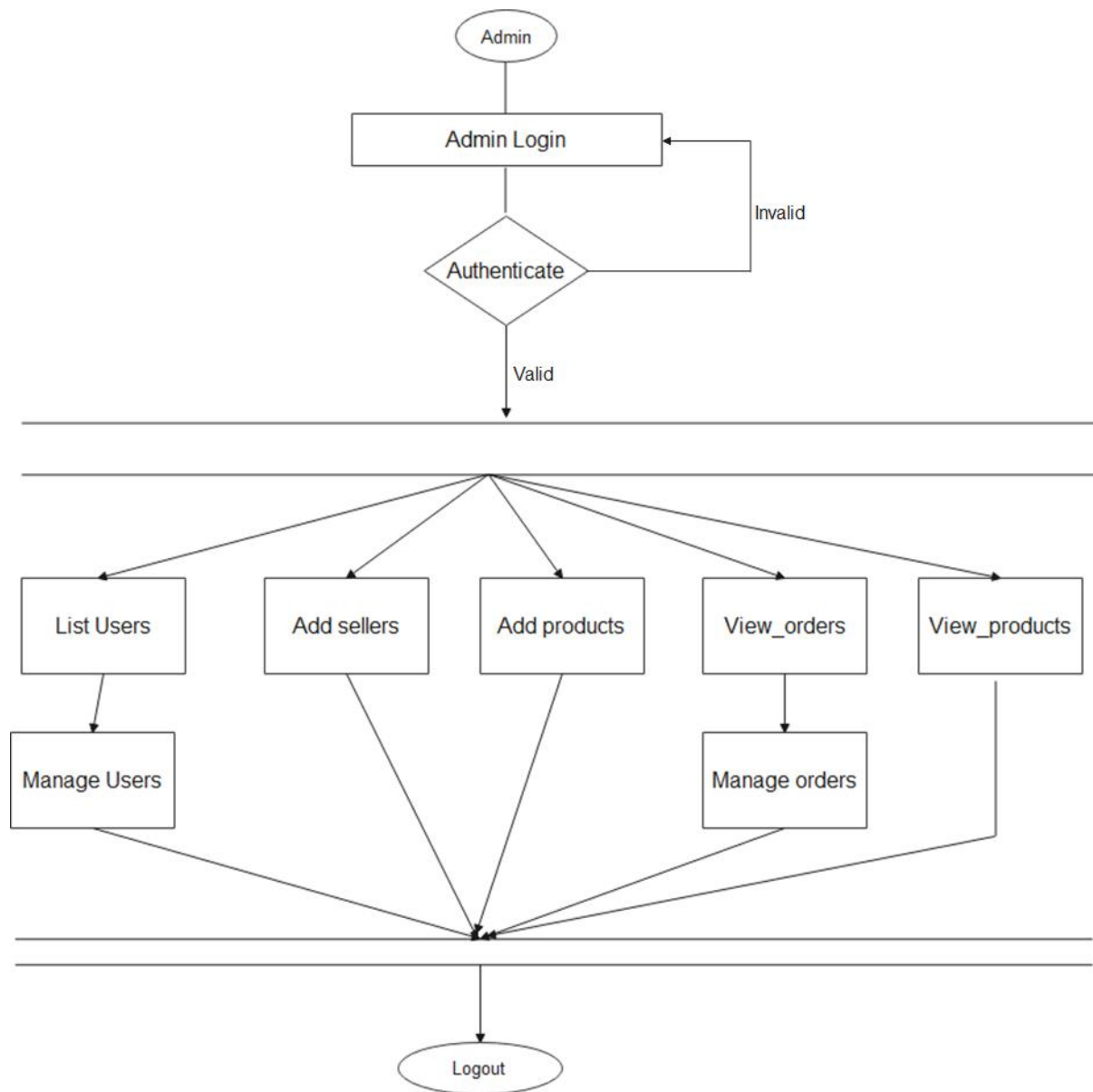


Figure 1: Admin Activity Diagram

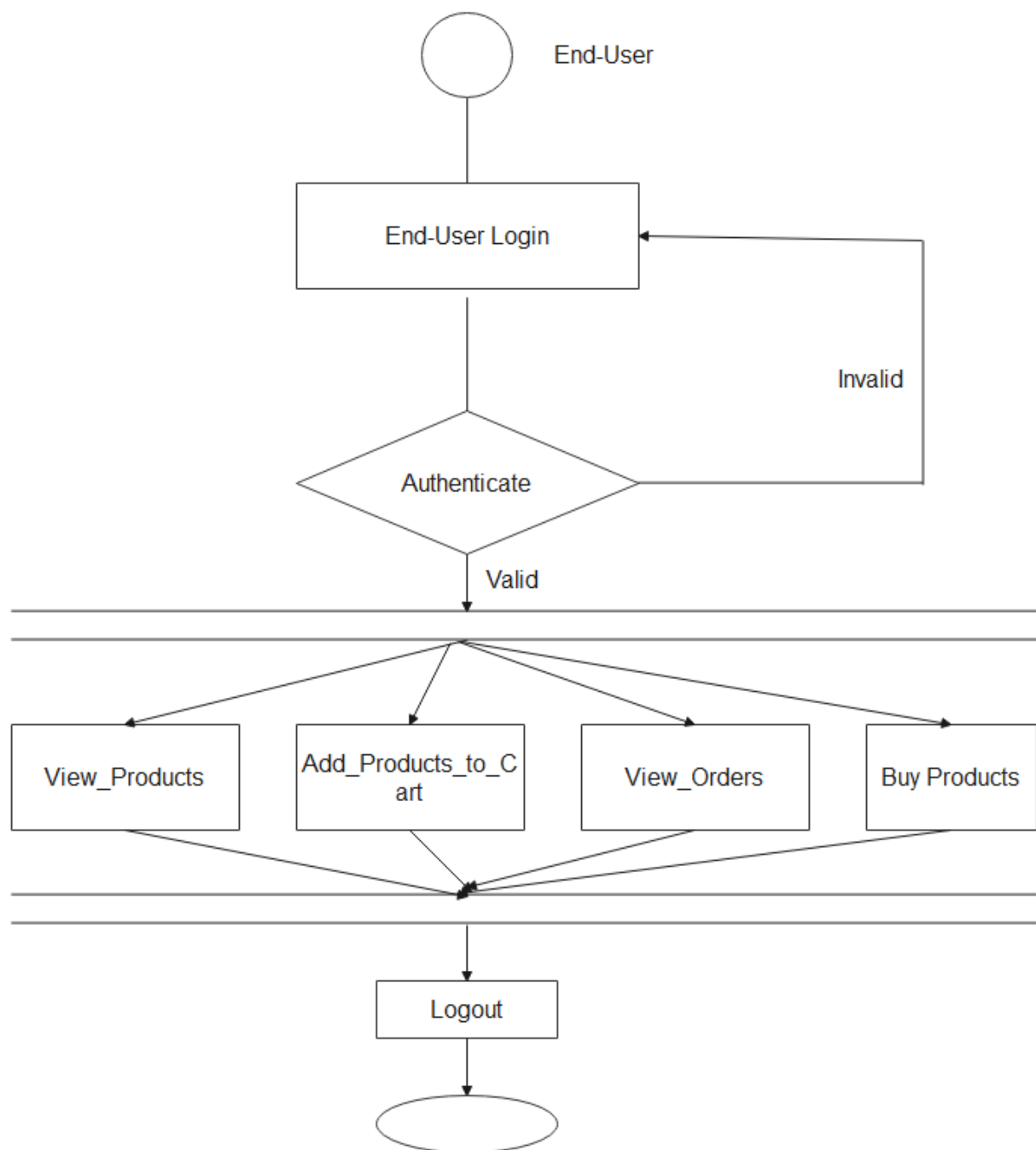


Figure 2: User Activity Diagram

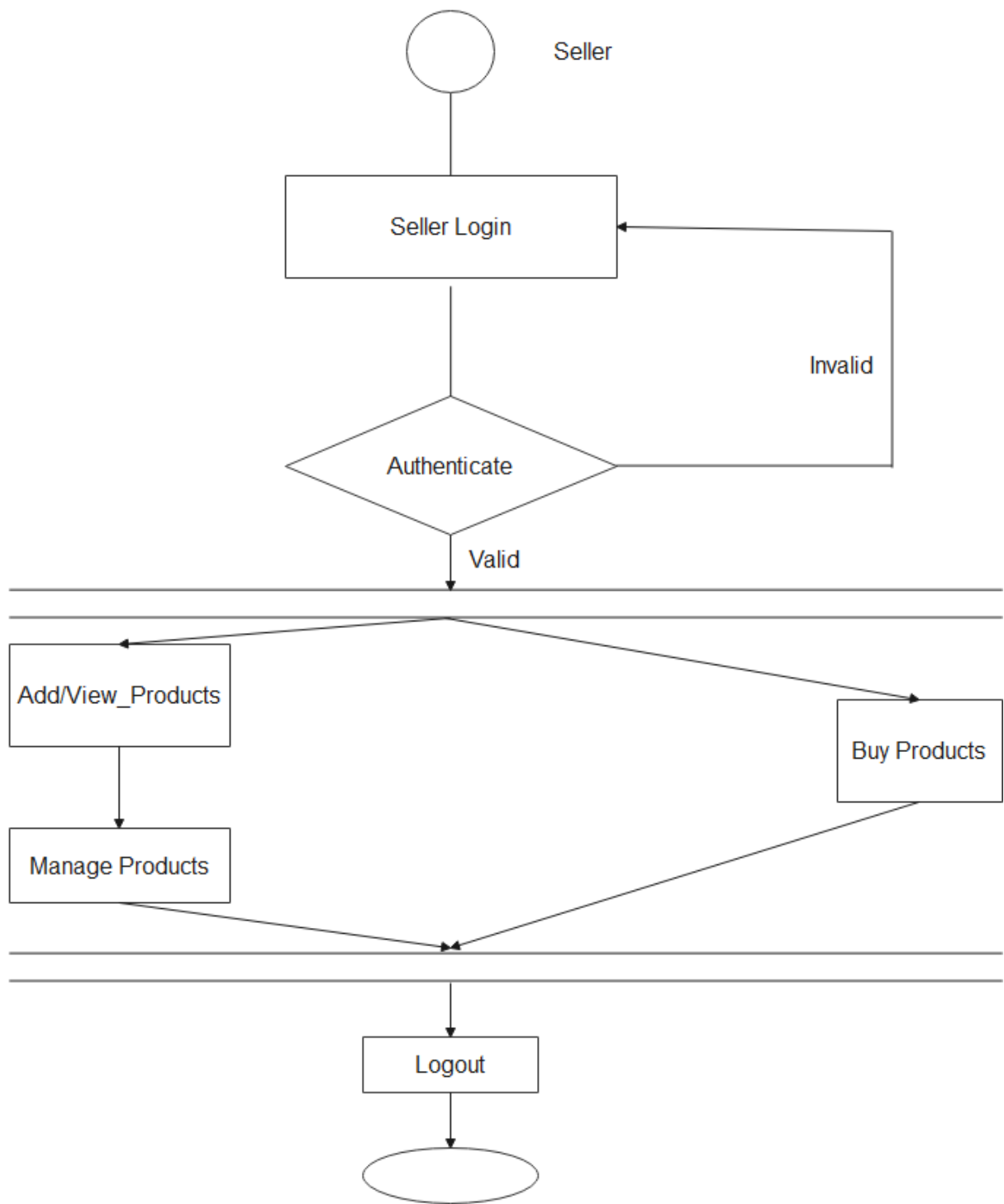
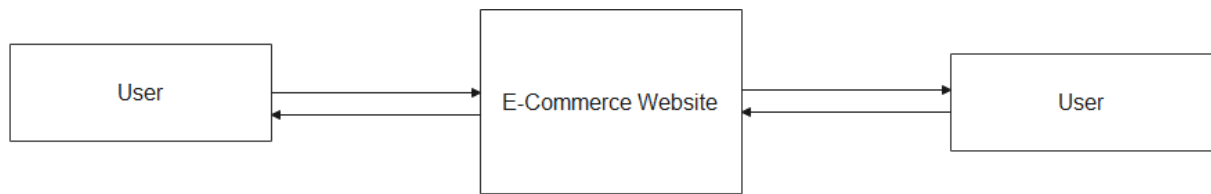


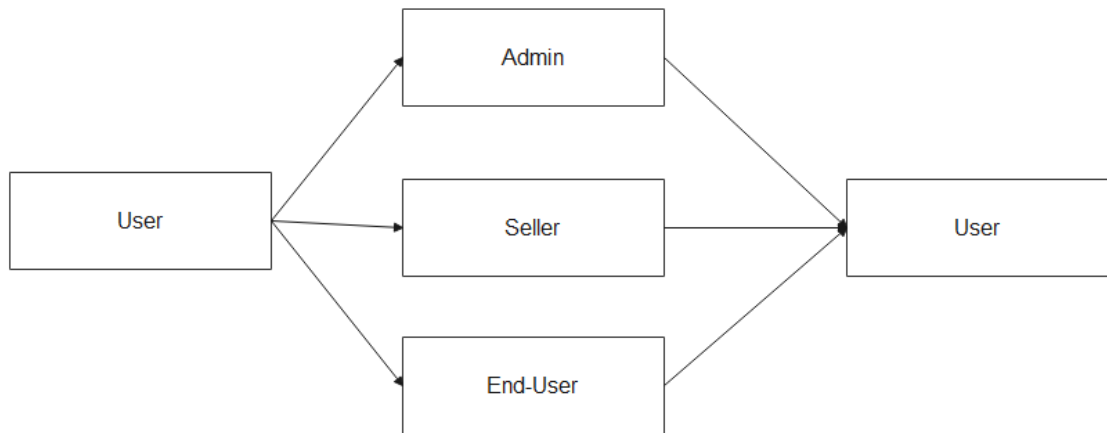
Figure 3: Seller Activity Diagram

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Data Flow Diagram



Level - 0 Data Flow Diagram



Level - 1 Data Flow Diagram

Figure 4: Level 0 Data Flow Diagram
Figure 5: Level 1 Data Flow Diagram

IACSD

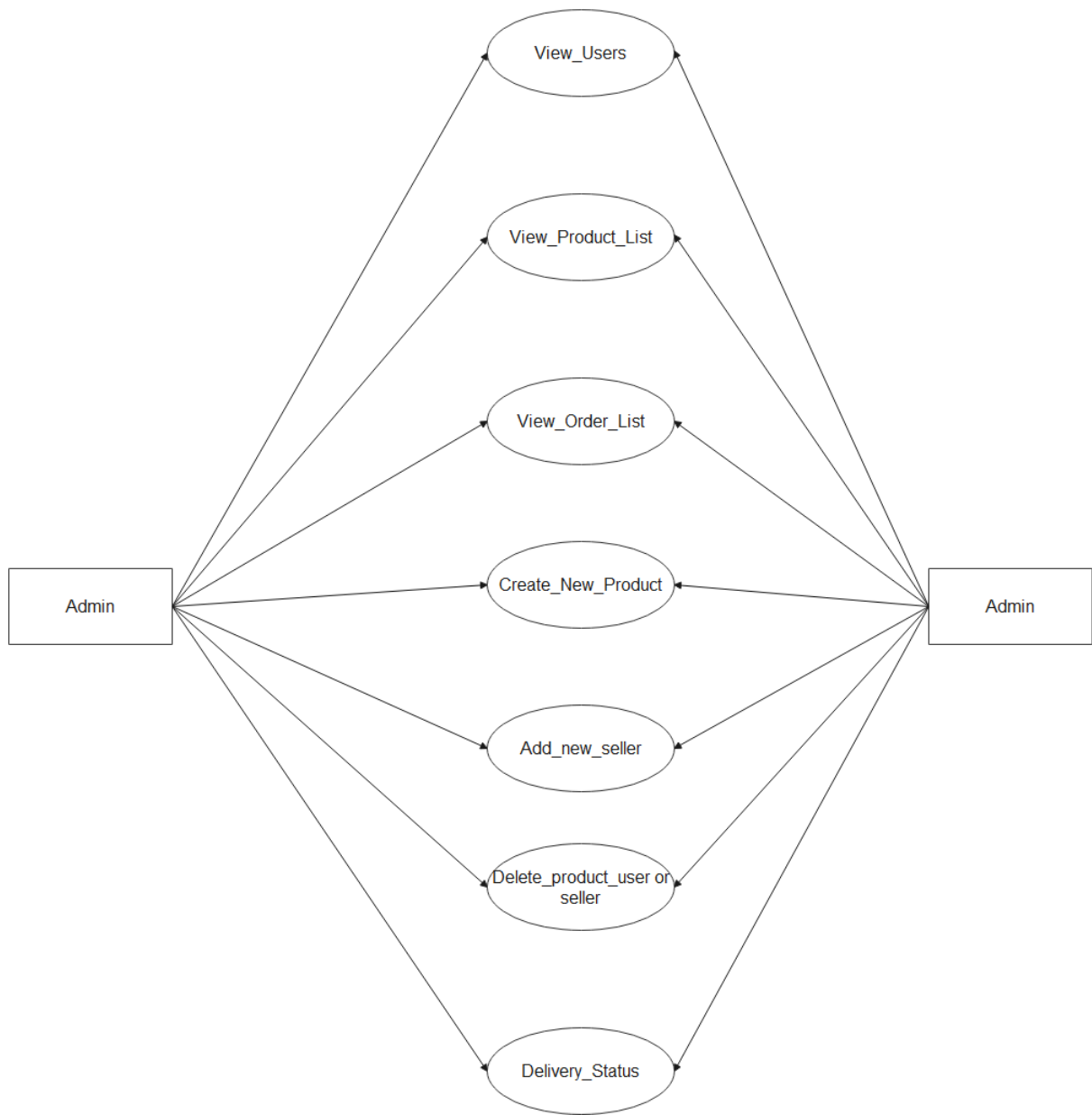


Figure 6: Level 2 Data Flow Diagram for Admin

IACSD

Use Case Diagram



Figure 7: Use Case Diagram

IACSD

ER Diagram

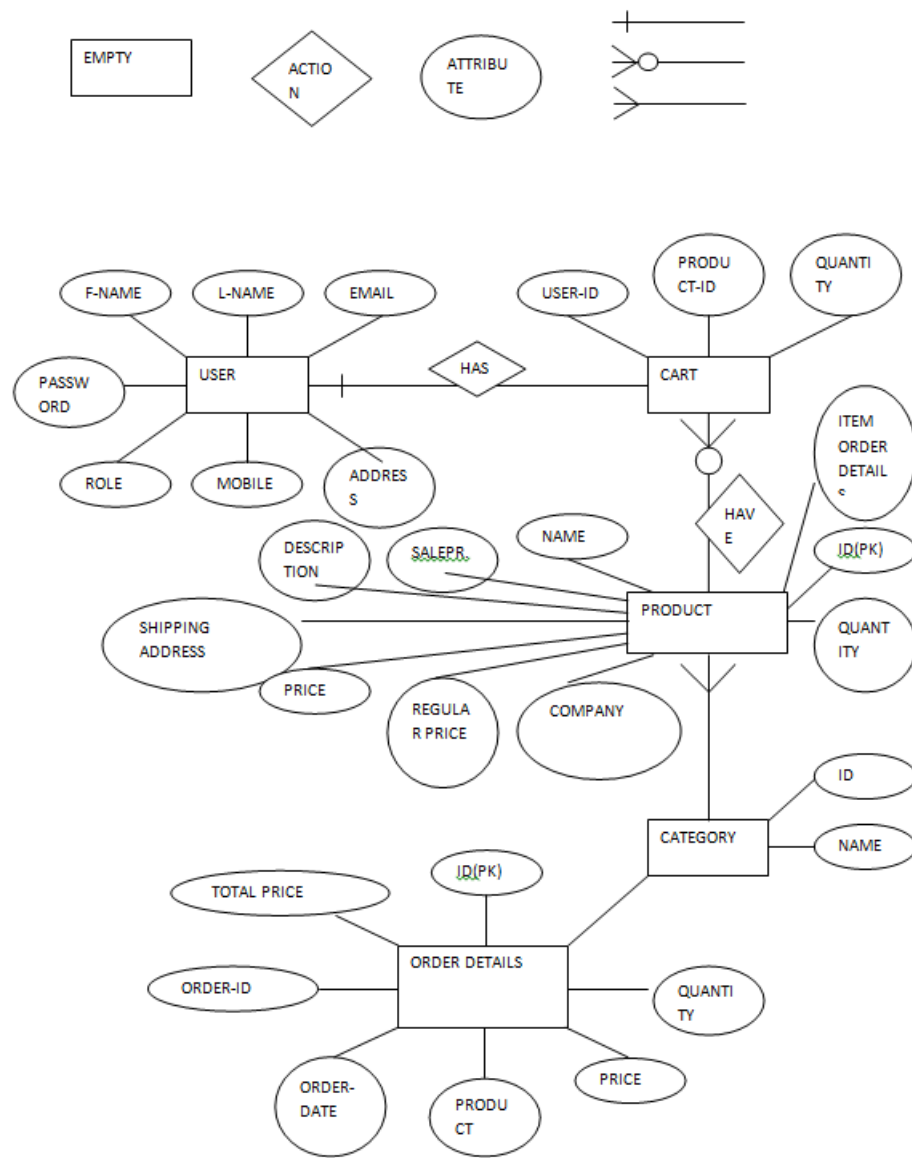
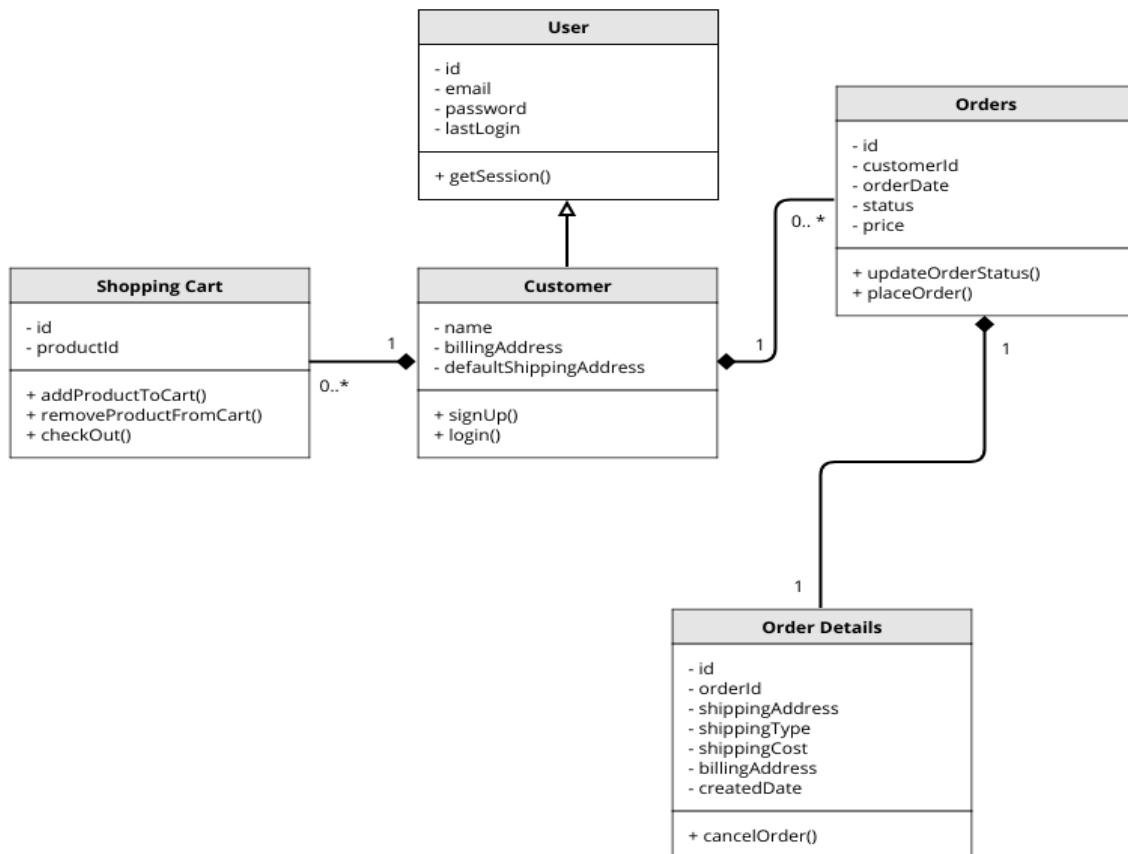


Figure 8 Use Case Diagram

Class Diagram :-



IACSD

Table Structure

Products :

```

{
  name: { type: String, required: true, unique: true },
  seller: {
    type: mongoose.Schema.Types.ObjectId,
    ref: 'User' },
  image: { type: String, required: true },
  brand: { type: String, required: true },
  category: { type: String, required: true },
  description: { type: String, required: true },
  price: { type: Number, required: true },
  countInStock: { type: Number, required: true },
  rating: { type: Number, required: true },
  numReviews: { type: Number, required: true },
  reviews: [reviewSchema],
},
{
  timestamps: true,

```

```
}
```

End-Users:

```
{
  name: { type: String, required: true },
  email: { type: String, required: true, unique: true },
  password: { type: String, required: true },
  isAdmin: { type: Boolean, default: false, required: true },
  isSeller: { type: Boolean, default: false, required: true },
  seller: {
    name: String,
    logo: String,
    description: String,
    rating: { type: Number, default: 0, required: true },
    numReviews: { type: Number, default: 0, required: true },
  },
},
{
  timestamps: true,
}
```

IACSD

Orders :

```
{
  name: { type: String, required: true },
```

```

    qty: { type: Number, required: true },
    image: { type: String, required: true },
    price: { type: Number, required: true },
    product: {
      type: mongoose.Schema.Types.ObjectId,
      ref: 'Product',
      required: true,
    },
  },
],
shippingAddress: {
  fullName: { type: String, required: true },
  address: { type: String, required: true },
  city: { type: String, required: true },
  postalCode: { type: String, required: true },
  country: { type: String, required: true },
},
paymentMethod: { type: String, required: true },
paymentResult: {
  id: String,
  status: String,
  update_time: String,
  email_address: String,
},
itemsPrice: { type: Number, required: true },
shippingPrice: { type: Number, required: true },
taxPrice: { type: Number, required: true },
totalPrice: { type: Number, required: true },
user: { type: mongoose.Schema.Types.ObjectId, ref: 'User', required: true },
},
seller: {
  type: mongoose.Schema.Types.ObjectId,
  ref: 'User'},
isPaid: { type: Boolean, default: false },
paidAt: { type: Date },
isDelivered: { type: Boolean, default: false },
deliveredAt: { type: Date },
},
{
  timestamps: true,
}

```

Conclusion

E-Commerce Website puts forth the actual working of a local shop. Administration, management, payment calculation, seller management, user management, product mangament etc. similar to a shops are the key features of our project. User can access services and functionalities from the website anywhere and anytime for their own comfort.

Future Scope

This project can be enhanced further by adding Discount coupons.. The software is flexible enough to be modified and implemented as per future requirements. We have tried our best to present this free and user–friendly website to our customers as well as sellers. Email alerts for various happenings in the website can be added to the system so that users do not miss the updates and happenings of the website.

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7.0 References

[1] Amazon Website.

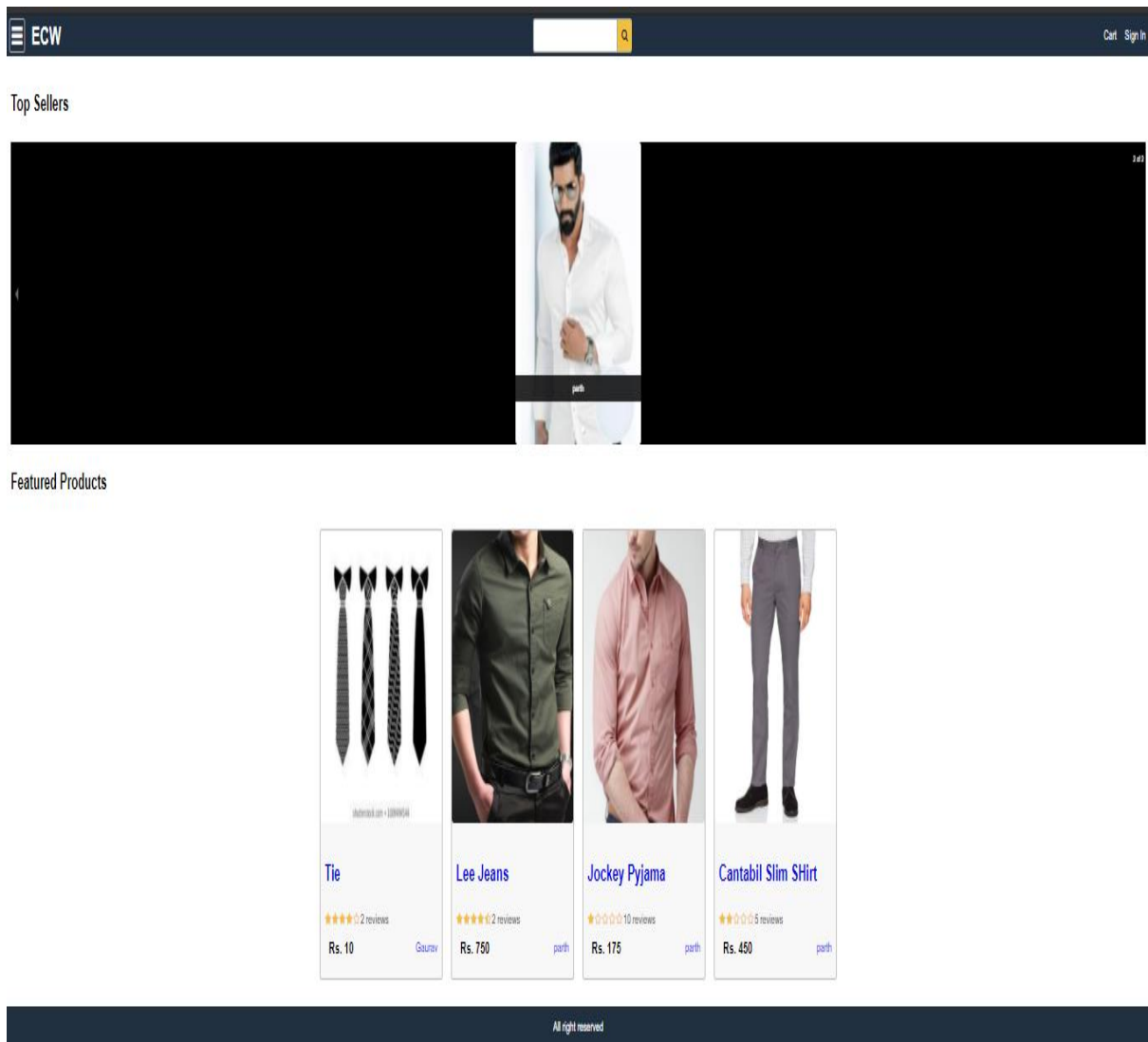
ONLINE REFERENCE

[2] <https://www.youtube.com/watch?v=IXxEdhA7fig>

[3] <https://youtu.be/qO4JsQ2VY-M>


Screenshots of our Website :-

HomeScreen :-



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ProductScreen :-

 **ECW**

[Cart](#) [Sign In](#)

[Back to result](#)

Tie

★★★★☆ 2 reviews

Price : Rs. 10

Description:

sample description

Seller

Gaurav

★★★★☆ 120 reviews

Price **Rs. 10**


Status **In Stock**

Qty


[Add to Cart](#)

IACSD

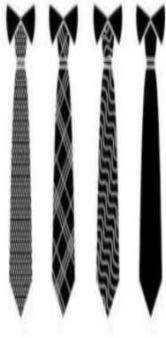
SellerScreen :-



[Cart](#) [Gaurav](#) [Seller](#) [Admin](#)



Gaurav
★★★★☆ 120 reviews
[Contact Seller](#)
best seller




shutterstock.com • 100949544

Tie

★★★★☆ 2 reviews


Rs. 10 Gaurav



Louis Fit Pant

★★★★★ 5 reviews


Rs. 350 Gaurav



Bblerry Fit Shirt

★★★★☆ 10 reviews

Rs. 500 Gaurav



Monte Carlo Jacket

★★★★☆ 15 reviews

Rs. 250 Gaurav

All right reserved

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CartScreen :-

 ECW



Cart  Gaurav ▾ Seller ▾ Admin ▾

Shopping Cart

 Tie

1 ▾

Rs.10

Delete

Subtotal (1 items) : Rs.10

Proceed to Checkout

All right reserved

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LoginScreen :-

 ECW



[Cart](#) [Sign In](#)

Sign In

Email address

Password


Sign In

New customer? [Create your account](#)

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CreateAccountScreen :-

 ECW

[Cart](#) [Sign In](#)

Create Account

Name

Email address

Password

Confirm Password

Register

Already have an account? [Sign-In](#)

All right reserved

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CreateProductScreen :-

ECW

Cart Gaurav Seller

Edit Product 605d9f4a5d9a882cbcc00076

Name

Dummy Data 1616748382953

Price

0

Image

images/p1.jpg

Image File

Choose File

No file chosen

Category

sample category

Brand

sample brand

Count In Stock

0

Description

sample description

Update

All right reserved

14:16

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UserListScreen :-

ECW

Q

Cart Gaurav Seller Admin

Users

ID	NAME	EMAIL	IS SELLER	IS ADMIN	ACTIONS
60467b960669243e0cad83f2	Gaurav	admin@example.com	YES	YES	<div>EditDelete</div>
60467b960669243e0cad83f3	Chintu	chintuser@example.com	NO	NO	<div>EditDelete</div>
60473f4eef9b6e12ecc66bf9	Parth	parth@gmail.com	YES	NO	<div>EditDelete</div>

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User/SellerProfileScreen :-

ECW

Cart Gaurav Seller Admin

User Profile

Name

Gaurav

Email

admin@example.com

Password

Enter password

confirm Password

Enter confirm password

Seller

Seller Name

Gaurav

Seller Logo


/images/p1.jpg


Seller Description

best seller

Update

All right reserved





Cart Gaurav ▾ Seller ▾ Admin ▾

Products

Create Product

ID	NAME	PRICE	CATEGORY	BRAND	ACTIONS
605d9f4a5d9a882cbccd0076	Dummy Data 1616748362953	0	sample category	sample brand	<div>EditDelete</div>
60475c532374ff112870726a	Tie	10	Shirts	Lee	<div>EditDelete</div>
604744524d349b282c6cae64	Lee Jeans	750	Shirts	Lee	<div>EditDelete</div>
604744494d349b282c6cae63	Jockey Pyjama	175	Shirts	Jockey	<div>EditDelete</div>

1234

IACSD

EditProductScreen :-

ECW

CartGauravSellerAdmin

Edit Product 605d9f4a5d5a882bced0076

Name

Dummy Data 1616740362953

Price

0

Image

images/p1.jpg

Image File

Choose FileNo file chosen

Category

sample category

Brand

sample brand

Count In Stock

0

Description


sample description


Update

All right reserved

IACSD

OrderDetailsScreen :-

 **ECW**



Cart Gaurav▼ Seller▼ Admin▼

Order 60462fabdb19814a783e75a8

Shipping

Name: gaurav purohit
Address: 16/43,jodhpur, 342001,jodhpur

Delivered at 2021-03-08T18:13:22.767Z

Order Summary

Items	Rs. 1200.00
Shipping	Rs. 0.00
Tax	Rs. 180.00
Order Total	RS. 1380.00

Payment

Method: SBI

Paid at 2021-03-08T14:08:57.803Z

Order Items



Nike Slim Shirt

1 x Rs. 1200 = Rs. 1200

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