

A Mini Project Report on

# **Online Bookstore Management**

Submitted in partial fulfillment of the requirements for the award  
of the degree of

**Bachelor of Engineering**

in

**Computer**

by

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UNIVERSITY OF MUMBAI

**Academic Year 2021-2022**

## Approval Sheet

This Mini Project Report entitled "***Project Title***" Submitted by "***Anjali Divekar***" (20102105), "***Mansi Gupta***" (20102133), "***Shivangi Kumar***" (20102132), "***Vaishnavi Kothari***" (20102138) is approved for the partial fulfillment of the requirement for the award of the degree of ***Bachelor of Engineering*** in ***Branch Name*** from ***University of Mumbai***.

(Prof. Archana Kotangale)  
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## CERTIFICATE

This is to certify that the mini project entitled “**Online Book Store**” submitted by “**Anjali Divekar**” (20102105), “**Mansi Gupta**” (20102133), “**Shivangi Kumar**” (20102132), “**Vaishnavi Kothari**” (20102138) for the partial fulfillment of the requirement for award of a degree **Bachelor of Engineering in Computer**, to the University of Mumbai, is a bonafide work carried out during academic year 2021-2022.

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## **Declaration**

We declare that this written submission represents our ideas in our own words and where others' ideas or words have been included, we have adequately cited and referenced the original sources. We also declare that We have adhered to all principles of academic honesty and integrity and have not misrepresented or fabricated or falsified any idea/data/fact/source in our submission. We understand that any violation of the above will be cause for disciplinary action by the Institute and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been taken when needed.

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(Signature)

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# **Abstract**

This project aims at creating an efficient and reliable online book selling and buying platform. After the implementation of project, one can inquire and buy any book available in the store from anywhere. Online book store is a web application to allow users to select books through internet and get them delivered to their doorsteps.

As this web-based bookstore application helps both the buyer and the seller, it is beneficial to both of them. It saves the time of buyer by providing access to bookstore from anywhere and facilitating the home delivery service. The use of the proposed online software keeps the record of sold and stock books automatically in the database.

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# List of Abbreviations

IDS:	Intrusion Detection System
WSN:	Wireless Sensor Network
MANET:	Mobile Ad-Hoc Network
AODV:	Ad-Hoc On-demand Distance Vector Routing
DSR:	Dynamic Source Routing Protocol
NS2:	Network Simulator 2
ACK:	Acknowledgement
AGT:	Agent
RTR:	Router

# **Chapter 1**

## **Introduction**

### **1.1 Problem Definition**

The current system involves a physical show room where customer searches for his required book and purchases them. This process requires every aspect (customer, book, money, seller) to be physically present at the sales spot.

The aim is to build a website as a front end of a bookstore to eliminate this physical presence at sale spot and purchasing a book easier.

### **1.2 Objective**

- Here we try to develop such type of system which provides automation on any type of the bookshop.
- It keeps the record of sold and stock books automatically in the database.
- It helps the customers to purchase the books without any complexity.
- It saves the time of buyer by providing access to bookstore from anywhere and facilitating the home delivery service.
- Online bookstore allows its users to search and purchase a book online based on title, author and subject.
- The user can also give feedback to a book by giving ratings on a score of five and can also leave a review. This can be helpful for the customers who intend to purchase that particular book.

## **1.3 Scope**

This project has a wide scope, as it is not intended to a particular organization. This project is going to develop generic software, which can be applied by any business organization. It aims at reducing user's searching time and also providing user friendly environment.

Moreover, it provides facility of searching through various books sorted category wise and buying and ordering books from anywhere to its customer. Also, the software is going to provide a huge amount of summary data. It allows the admin to keep a record of the available stock and sold books.



## **Chapter 2**

### **Existing System/Project**

At present, the Wholesale and Retail outlets are working under manual management. All records related to Products, Sales, Suppliers, Orders, Payment are stored in registers. To manage data, the person maintaining records has to take great pain. Various registers have to be maintained for each separate process.

Existing system, used for the Management of sales of electronic products, is completely dependent on human actions and responses (Manual Management), which couldn't be free from errors. In each process whether it is Product Management, Maintaining Customer Records, Payment Management, Report Generation, user has to pay attention to a greater extent while performing the tasks.

During the manual management, the tasks, which are to be performed by its users, are:

Maintenance of Customers Records (including the new and the existing customers).

New Products launched in the market.

Maintenance of Customers Payment Record (including installment details).

Issue Orders for more Stock.

Maintenance of Suppliers and Staff Records.

Searching and answer the query asked by other users.

Present monthly, quarterly or annual Reports.

All these operations will lead to continuous modifications in the database (Here Registers).

In case of Customer records, all information related to customers and the product which the customer has purchased is to be stored in the Customers register. If the changes in the customer profile (like Phone no., Address) occur, registers must be updated. In case of new product launched, all the entries like product name and brand must be same in the register (except Model number). For the maintenance of the payment records, the customer register has to be checked to know the details of the product purchased by customer.

Monthly payment of installment needs record in the register to be updated. During issuing order of more stock, the product register is required to check to availability of stock in hand.

To generate the reports based on the management requirement, will require extensive searching of records. In case of Supplier and Staff Record Management, the registers need to be updated time to time as information (like Phone No., Address) changes frequently.

# **Chapter 3**

## **Technology Stack**

Front-End: JSP, Html, CSS, JS.  
Server-side: Servlet.  
Back-end: MYSQL, Java.  
Server: Tomcat 8.5.

The system uses the JSP and Servlet technology, with C3Po connection pool to connect to the development of MySQL database, the front interface design is to use Dreamweaver CS6 to achieve, and the page effects using the JavaScript language and its library function jQuery, enhanced User interaction with the interface experience [5-6].

# Chapter 4

## Benefits and Applications

### 4.1 Benefits for society

- Those who have bookstores situated far from their places have to take transport to reach there. With the help of an online bookstore this issue can be resolved.
- In remote areas even if there are libraries, they lack good reference books for higher studies.
- It saves time and money.
- Reading from a pdf makes it portable. You can continue your reading even if you are moving.
- In online bookstore one can get many discounts and offers.
- Customers can get their book delivered instead of actually going and buying the book.
- They can make payment online itself.

### 4.2 Benefits for environment

- In printing of books lot of paper is utilized which means more deforestation. Downloading a pdf can reduce deforestation.
- Whenever you buy an eBook, you are essentially bypassing the old requirement of a fossil fuel vehicle to deliver or pick up the product. The production of printed books produces about 10 times more CO<sub>2</sub> in the atmosphere than eBooks.
- Printing books also require a lot of electricity to produce traditional books.
- Even though book stores that sell books are fun places to spend time and read, think of all the amount of energy required to warm or cool such a large store.
- Physical presence of a bookstore also takes up a lot of land



space. This land otherwise can also be utilized for greener means like planting trees, gardens or farming.

### **4.3 Applications**

- The system can be very well used by the bookstore shopkeepers to expand their customers.
- The system can also be implemented in publishing houses.
- Your retail bookstore has a limited amount of space to hold and display certain book titles, which can restrict readers' choices. Having an online database allows you to offer a wide range of titles and increase their exposure to all the stock you have.
- A bookstore's presence online can give your business an edge to earn great results and meet the evolving needs of the modern customer.
- An online store is not limited and is cheaper.

# **Chapter 5**

## **Project Design**

### **5.1 Proposed System**

In this project you can view any book very easily online. You can purchase online books by selecting any payment gateway like pay-pal or money wire.

You can also sell and resell a book.

This is controlled by an admin who have full control over all the books. All the books are stored into the Database. So, there is full security of theft of payment etc.

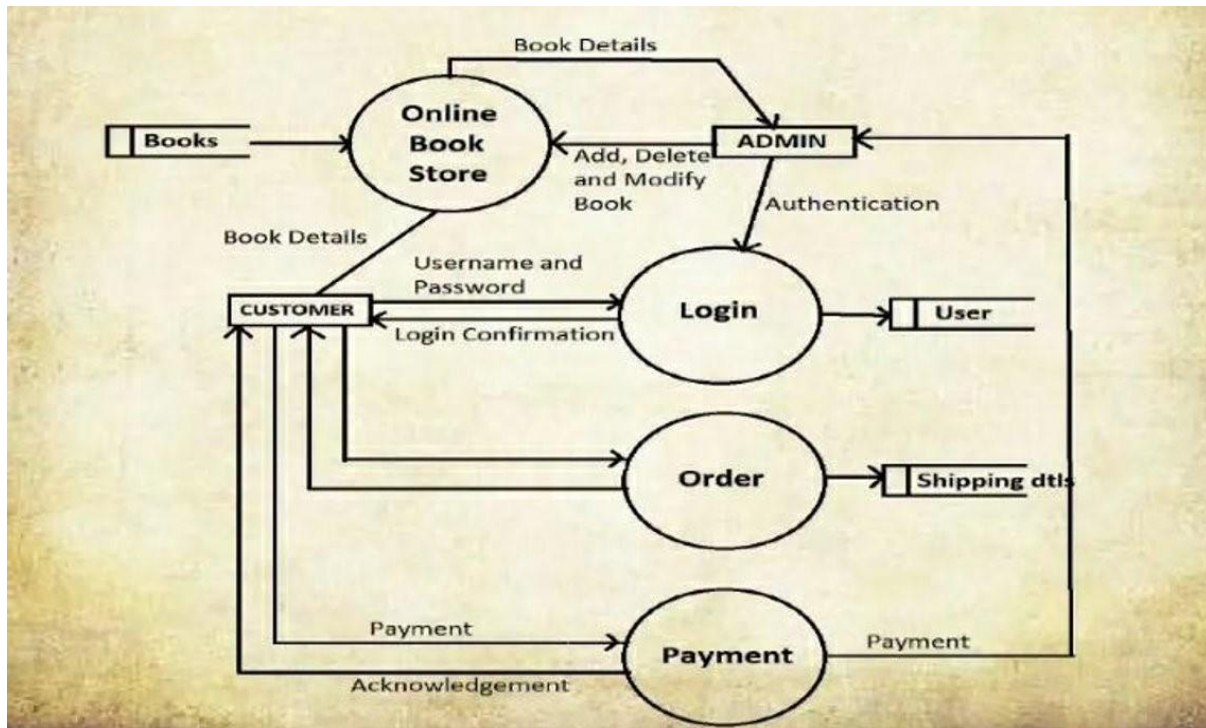
Online bookstore provides a platform where all the books are kept in an arranged way and you can choose your required book by just selecting it from the store. While selecting book one can view all the description such as name of book, name of author and price, user can make payment of it in order to get it.

Chances of theft are very less.

### **5.2 Flow of modules**



### **5.3 Data flow diagrams**



## 5.4 Modules of the system

The project is divided into various modules to help the work divide into small yet efficient modules. Each modules output acts as an input to the next module. Each module requires a specific set of knowledge and skill which takes time hence they have been divided accordingly

The site will contain the following features:

- ❖ Registration / Login
- ❖ Admin
- ❖ User
- ❖ Manage Shopping Cart
- ❖ Payment option

### **5.4.1 Registration and Login**

If the user doesn't have an account, he will be asked to register. The user will have to enter the required details in that registration form. After registration the user can login to their account to get access to all the functionalities of Online Bookstore by using their user id and password.

### **5.4.2 Admin**

Provided for the sake of administrators to manage the site and update content at regular intervals.

An Admin can:

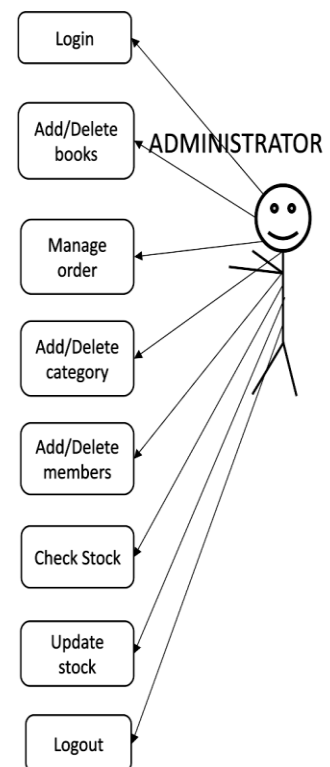
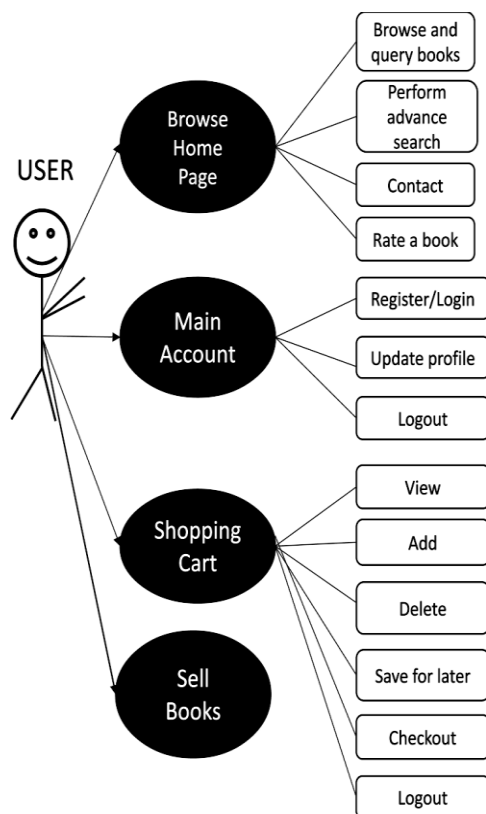
1. Add/Delete/Update record of any customer
2. Add/Delete/Update the product details
3. Can check orders and transaction details of all the customers
4. Can update the database.

### **5.4.3 User**

The user can search for the book he is in need, if he finds it, he can buy that book from the comfort of his home itself.

A user can:

1. Login/Logout from his/her account.
2. Search for their favourite books based on category/author.
3. Add/Remove items from their cart.
4. Place/Cancel their order.
5. Checkout by selecting a suitable payment option.
6. Get payment receipt.



#### 5.4.4 Manage Shopping Cart

1. **Place an order** - If the user wants to purchase a book, then he can place an order by selecting the add to

shopping cart button and entering the quantity required under the book description. The order will be added to the user's shopping cart.

**2. Update Shopping Cart** – If the user wants to change the quantity of book or change a book then he can update his shopping cart. The updated cart details will be reflected in the shopping cart.

**3. View Shopping Cart** - If the user wants to view the items he added to the shopping cart, then he can click the shopping cart link at the top of the page. The user's shopping cart summary will be displayed in a tabular format with all the books and their quantity. A total cost of all the items is also displayed at the bottom.

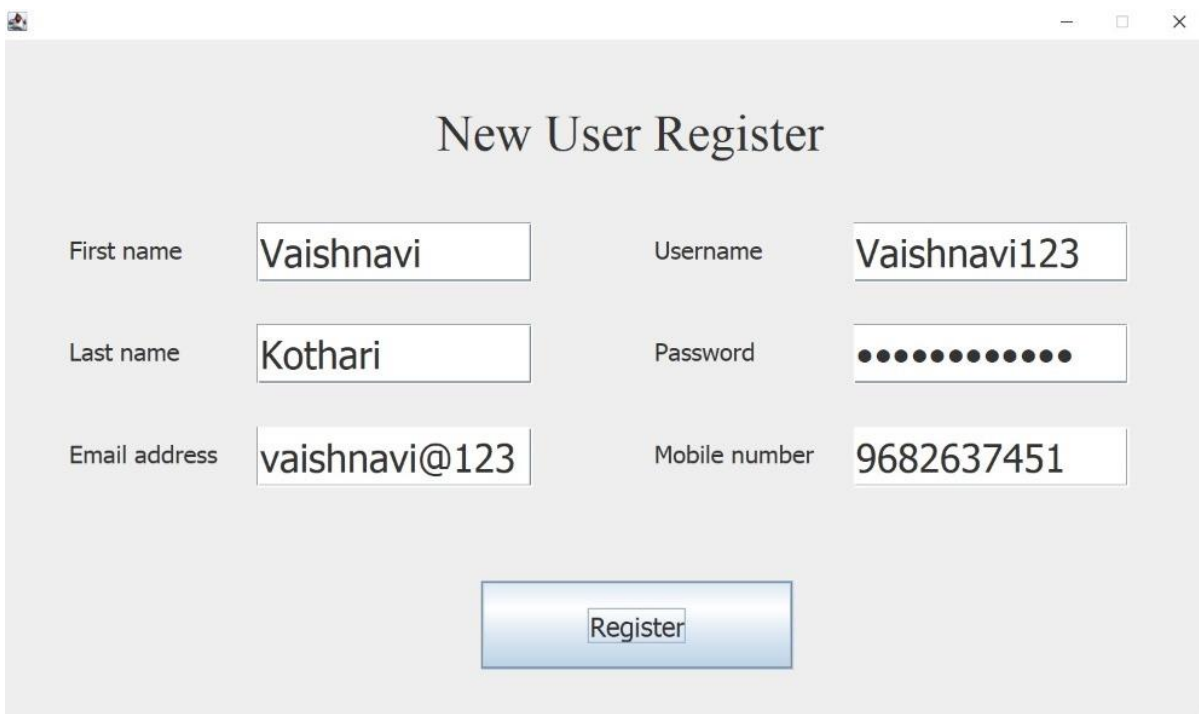
#### **5.4.5 Payment Option**

After placing an order, user can proceed to confirm their order by paying the required price. A payment gateway will allow users to make payment through credit card, debit card or direct payment processing. They can choose any method suitable for them. Users will even get an option of downloading a payment receipt which will be saved directly on their device.

## Chapter 6

### Project Implementation

Frontend:



The screenshot shows a web browser window with a title bar containing standard minimize, maximize, and close buttons. The main content area has a light gray background and is titled "New User Register" in a large, dark serif font. Below the title, there are six input fields arranged in two columns. The left column contains fields for "First name" (containing "Vaishnavi"), "Last name" (containing "Kothari"), and "Email address" (containing "vaishnavi@123"). The right column contains fields for "Username" (containing "Vaishnavi123"), "Password" (displayed as 12 black dots), and "Mobile number" (containing "9682637451"). All input fields have a thin gray border. At the bottom center of the form is a blue rectangular button with a white border and the text "Register" in a white sans-serif font.

First name	<input type="text" value="Vaishnavi"/>	Username	<input type="text" value="Vaishnavi123"/>
Last name	<input type="text" value="Kothari"/>	Password	<input type="password" value="••••••••••••"/>
Email address	<input type="text" value="vaishnavi@123"/>	Mobile number	<input type="text" value="9682637451"/>

Backend:

The image shows a 'New User Register' form with the following fields and values:

Field	Value
First name	Vaishnavi
Last name	Kothari
Email address	vaishnavi@123
Username	Vaishnavi123
Password	.....
Mobile number	9682637451

A 'Message' dialog box is displayed in the center, containing the text: 'Welcome, Vaishnavi' and 'Your account is sucessfully created'. The dialog has an 'OK' button.

Database:



MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator: account SQL File 1 swing\_demo.account account x

Limit to 1000 rows

1 • `SELECT * FROM swing_demo.account;`

Result Grid

first_name	last_name	user_name	password	email_id	mobile_number
Anjali	Divekar	AnjaliD26	anjaldivekar	anjaldivekar2002@gmail.com	987654321
Demo	finally	Hello	hogaya	demo@123	7892637181
shivangi	kumar	shivangikumar	shivangi123	shivangi@123	9837162641
Vaishnavi	Kothari	Vaishnavi123	Vaishnavi456	vaishnavi@123	9682637451

Table: account

Columns:

- first\_name varchar(40)
- last\_name varchar(40)
- user\_name varchar(40)
- password varchar(40)
- email\_id varchar(40)
- mobile\_number varchar(10)

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Read Only Context Help Snippets

Output

# Chapter 7

## Result

This Bookshop Automation System is an attempt to overcome the present inefficient and time consuming process of locating, reserving and purchasing quality reading materials available in the store. Currently, clients have to go through a time consuming process to perform aforementioned tasks which cause waste of labor and firms resources. Through our automated book store solution, we provide an easy way of searching, reserving and purchasing of books. User data are validated and checked for authenticity with the data stored in the system database. All the newly coined processes will address time consuming, ineffective and inefficient areas of the existing system which has been wasting a lot of firms resources such as, labor, electricity, equipment, products and services, while discouraging customers to make purchases and repelling clients from the book store.

Proposed system will support both clients and the store in many areas. It's worth analyzing and identifying the benefits as it would directly influence the productivity of the store.

Customer satisfaction plays the most vital role in any form of product and service rendering store as the existence of any firm solely depends on its customer-base. Therefore, every system should facilitate the customer satisfaction up to a certain extent which is feasible from the company perspective.

The aforementioned facts ensure customer satisfaction to a greater extent benefiting the store in:

- Retaining current customers
- Temping current customers to attract their friends to the store    Attracting new customers
- Enhancing the customer faith on the firm due to secure transaction techniques while temping customers to make more online purchases
- Identifying profitable customers    Identifying different categories of customers
- Making necessary alterations and plans to address broader range of customers    Identifying key areas of the inventory which need to be maintained at a healthy stock limit
- Analyzing trends to make more effective management decisions and development of new strategies to increase profit

These particulars will make sure the broadening the customer base of the store which will have good impact on the sales and revenue of the store.

Employee satisfaction also plays an influential role in healthy revenue levels of a firm. Due to the proposed system, employees will have to handle minimum amount of workload than that of the existing system which will help the employees to provide optimal service to the firm while maintaining healthy physical and mental levels.

=

Proposed system will reduce transaction and agency cost of the store up to a certain extent since the transactions are automated and need of minimal labor to handle work as the their work has been governed by the system.

Even though these advantages prevail, due to lack of IT literacy and fluency of clients and lack of distribution of internet facility will have a negative impact and it will take some time to cover up the capital investment made on implementing the new system. Since the technical facilities are expanding in great heaps, proposed system will facilitate enhancing productivity immensely.

## GANTT CHART TEMPLATE

**Smartsheet Tip** Use Gantt chart's visual timeline above to see details about each task as well as project dependencies

**PROJECT TITLE** Online Bookstore Management System  
**PROJECT GUIDE** Prof. Arindam Kottagalli

**COMPANY NAME** [Company's name]  
**DATE** 3-12-18

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURAT (WORKING HRS)	PCT OF TASK COMPLETE	PHASE ONE			PHASE TWO			PHASE THREE			PHASE FOUR			PHASE FIVE			PHASE SIX			PHASE SEVEN						
							WEEK 1	WEEK 2	WEEK 3	WEEK 4	WEEK 5	WEEK 6	WEEK 7	WEEK 8	WEEK 9	WEEK 10	WEEK 11	WEEK 12	WEEK 13	WEEK 14	WEEK 15	WEEK 16	WEEK 17	WEEK 18	WEEK 19	WEEK 20	WEEK 21	WEEK 22	WEEK 23	WEEK 24	WEEK 25
1	Project Conception and Initiation																														
1.1	Problem search	Aajul, Shrawgi, Vaishnavi, Musci	3-5-21	3-6-21	1	100%																									
1.1.1	Problem finalization	Aajul, Shrawgi, Vaishnavi, Musci	3-5-21	3-6-21	1	100%																									
1.2	Project Title	Aajul, Shrawgi	3-7-21	3-9-21	1	100%																									
1.3	Abstract	Vaishnavi, Musci	3-24-21	3-26-21	1	100%																									
1.4	Problem Definition	Vaishnavi	3-27-21	3-27-21	1	100%																									
1.5	Objectives	Vaishnavi	3-28-21	3-28-21	1	100%																									
1.6	Scope	Aajul	3-29-21	3-29-21	1	100%																									
1.7	Existing System/Project	Aajul	3-30-21	3-30-21	1	100%																									
1.8	Technology stack	Aajul	10-2-21	10-2-21	1	100%																									
1.9	Benefits for environment	Shrawgi	10-3-21	10-3-21	1	100%																									
1.11	Benefits for society	Shrawgi	10-5-21	10-5-21	1	100%																									
1.11	Applications	Musci	10-6-21	10-7-21	1	100%																									
2	Project Design																														
2.1	Proposed System	Musci	10-7-21	10-9-21	1	100%																									
2.2	Design/Flow Of Module(s)	Musci	10-9-21	10-9-21	1	100%																									
2.3	Data Flow Diagram	Vaishnavi, Musci	10-9-21	10-9-21	1	100%																									
2.4	Module	Aajul, Shrawgi, Vaishnavi, Musci	10-10-21	10-10-21	1	100%																									
2.4.1	Module-1	Aajul	10-10-21	10-10-21	1	100%																									
2.4.2	Module-2	Vaishnavi	10-11-21	10-11-21	1	100%																									
2.4.3	Module-3	Shrawgi	10-11-21	10-11-21	1	100%																									
2.4.4	Module-4	Musci	10-12-21	10-12-21	1	100%																									
2.5	Preparation Of Report	Aajul, Shrawgi, Vaishnavi, Musci	11-15-21	11-25-21	1	100%																									
3	Project Implementation																														
3.1	Module-1	Musci	11-10-21	11-14-21	0	100%																									
3.2	Module-2				0	0%																									
3.3	Module-3				0	0%																									
3.4	Module-4				0	0%																									
4	Testing																														
4.1	Design of Test Cases	Aajul, Shrawgi, Vaishnavi, Musci	11-20-21	11-21-21	0	100%																									
4.2	Testing	Aajul, Shrawgi, Vaishnavi, Musci	11-21-21	11-22-21	0	100%																									
5	Results and Analysis																														
5.1	Analysis Of Results	Aajul, Shrawgi, Vaishnavi, Musci	11-27-21	11-29-21	0	100%																									
5.2	Graphical Representation	Aajul, Shrawgi, Vaishnavi, Musci	11-30-21	11-30-21	0	100%																									
5.3 Report Preparation																															

# **Chapter 8**

## **Annexure A**

### **8.1 Gantt Chart**

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- [http://en.wikipedia.org/wiki/Unit\\_test](http://en.wikipedia.org/wiki/Unit_test)
- <http://www.viveo-oolobject.com/savoirfaire/ecmfinance/concepts/usine/3tiers.php>
- <file:///C:/Documents%20and%20Settings/Owner/Desktop/jakarta-jmeter-2.3RC3/docs/usermanual/build-adv-web-test-plan.html>
- [http://en.wikipedia.org/wiki/Manual\\_testing](http://en.wikipedia.org/wiki/Manual_testing)

# **Appendices**



# Acknowledgement

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