FINAL REPORT

For

VIT Old Book House

Prepared By

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Contents

Section 1.	Overview	5
	1.1 Introduction	
	1.3 Scope	
Section 2.	Process Model Intification and Justification	6
	2.1 Modules Involved	6
	2.2 Process Model	7
	2.2.1 Description	7
	2.2.2 Justification	7
	2.3 Conclusion.	8
Section 3.	Stack Holder Identification	9
Section 4.	Use Case Diagrams	10
	4.1 General Model as Whole	10
	4.2 Seller and Buyer	10
	4.3 Developers of the Product	11
	4.4 Individual Use Case Diagrams of Seller, Buyer and Adminstrator	11
Section 5.	Functional Requirements	12
Section 6.	Non-functional Requirements	13
	6.1 Usability	13
	6.2 Security	13
	6.3 Performance	14
	6.4 Availability	14
	6.5 Portability	14
	6.6 Privacy	14

Section 7.	Various Charts and Work Breakdown Structure	15
	7.1 Timeline Chart	15
	7.2 Gant Chart	15
	7.3 Pert Chart	16
	7.4 Work Breakdown Structure	16
Section 8.	System Architecture	17
Section 9.	Class Diagram	18
Section 10.	Sequence Diagrams and Descriptions	19
	10.1Sequence Diagram for Authentication Module	19
	10.2Sequence Diagram for Buyer Module	20
	10.3 Sequence Diagram for Seller Module	21
	10.4 Sequence Diagram for Payment Module	22
Section 11.	Activity Diagram	23
	11.1 Activity Diagram for Login/SignUp Module	23
	11.2 Activity Diagram for Buyer/Seller and Payment Module	23
	11.3 Activity Diagram For the Whole System	24
Section 12.	State Chart Diagram	25
	12.1State Chart Diagram to depict state transitions of Login/SignUp	25
	12.2 State Chart Diagram to depict state transitions of Buyer/Seller and Payment	25
	12.3 State Chart Diagram to depict state transitions of Whole Diagram	26
Section 13.	Data Design	27
	13.1 ER Diagram	27
	13.2 Table layout	27
Section 14.	Data Flow Diagrams	28
	14.1Level 0 DFD	28

	14.2 Level 1 DFD
	14.3 Level 2 DFD
Section 15.	Detailed Module Description
	15.1 VIT Old Book House
Section 16.	User Interface Design
	16.1User Interface Screen for User Login
	16.2 User Interface Screen for User SignUp
	16.3 User Interface Screen for User Home Display33
	16.4 User Interface Screen for User as Buyer
	16.5 User Interface Screen for Buyer Decision
	16.6 User Interface Screen for Use as Seller
	16.7 User Interface Screen for Seller Decision
	16.8 User Interface Screen for User Payment
	16.9 User Interface Screen for Seller View of Payment Details
	16.10 User Interface Screen for Buyer View of Payment Details
Section 17.	Testing
	17.1 LOGIN Module
	17.2 SELER/BUYER Module39
	17.3 BUYER Module41
	17.4 PAYMENT Module
	17.5 SELLER MODULE45

Section 1. Overview

1.1 Introduction:

The platform for book selling and buying between VIT students. VIT is an institute that offers some important courses over the years. The students every year take these courses in order to complete their degree. Thus the students need the books which are required for the courses. The books are not always available in the market place and the students have to borrow it from their seniors who either throw it or sell it to second hand book stores. Thus we see that the seniors always don't have the book and the juniors have to suffer by buying online or booking from shops at a high price. Thus it is in the view of all this that this buying selling software is made to help both students (seniors and juniors).

1.2 Objective:

The project "VIT Old Book House" is software which will help both type of students of VIT (students who have done a particular course and students who are will be doing that particular course). The students who have done the course generally either throw the books or give it to the juniors. Therefore indirectly land up in a loss of the money they had paid for the book. On the other hand the juniors or students who had taken the course are not able to get the course books as it is not always available in market or it's too much priced. This software therefore is going to be a link between these two types of students in order to facilitate the book access and delivery.

1.3 Scope:

The VIT Old Book House is supposed to have the following features.

- Registration of User
 - o Status of User has Logged in or not
 - o Signed up to make an account
- As Seller
 - Giving the book details
 - Quotation Price
- As Buyer
 - Buying the book details
 - o Bargain Price if the buyer amounts to.
- As Payment
 - Payment of the book by Buyer
 - Money getting by seller

Section 2. Process Model Identification and Justification

2.1 Modules Involved:

Module 0: Authentication

This contains the authentication of user identity and involves thinks like "User Name" and "Password" for checking.

Module 1: Database Creation

The creation of the database with books which is mostly used in VIT.

Module 2: Option for being a Seller/Buyer

After authentication it is the user choice to choose for being a buyer or a seller and accordingly the things are shown.

Module 3: Book Details

If the user chooses to be a seller then he/she can fill the details of the book into the database like Name of the book, Edition of the book, Quotation price, Type of the Book (like Xerox or printed book). Then he/she has to submit the book.

Module 4: Book Buying

If the user chooses to be a buyer then he/she searches for the book from the database and chooses for buying or sending bargaining. The database will contain the details of the book and choice to buy of bargain.

Module 5: Quotation/Bargain

This module is based on the bargain and quotation price send to the buyer and seller approving it

Module 6: Payment Gateway

This is the payment of the buyer to the seller. This will show the book is sold from database or not.

2.2 Process Model:

2.2.1 Description:

The waterfall model is a relatively linear <u>sequential design</u> approach for certain areas of <u>engineering design</u>. In <u>software development</u>, it tends to be among the less iterative and flexible approaches, as progress flows in largely one direction through the phases of conception, initiation, <u>analysis</u>, <u>design</u>, <u>construction</u>, <u>testing</u>, <u>deployment</u> and <u>maintenance</u>.

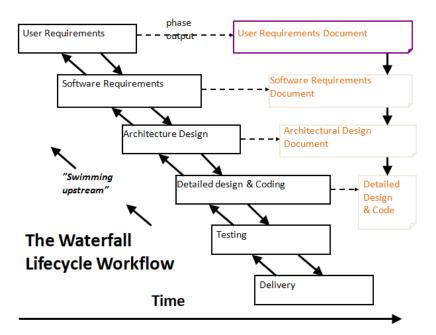
The waterfall development model originated in the <u>manufacturing</u> and <u>construction</u> industries; where the highly structured physical environments meant that design changes became prohibitively expensive much sooner in the development process. When first adopted for software development, there were no recognized alternatives for knowledge-based creative work.

2.2.2 Justification:

This is used in the project as all the requirements are known from pre-hand and no modification will be needed in separate modules and if changes required it shall be in the modules linkage which can be handled. The rest of the details are briefed below.

Phases Involved are:-

- User Requirements The books to access in course completion.
- Software Requirements This software is going to bridge the gap between the students.
- Architecture Design The structure of the software involving database management system.
- Detailed design and Coding The making of the software in Java.
- Testing The testing of the software for proper functioning.
- Delivery The completion of the software.



2.3 Conclusion of Process Model:

This model suits the project as it clearly identifies the modules and it is all properly placed and if minor changes required can be done in this project. The user requirements and checked followed by software requirements. Then it is dataset is created and analyzed for the connectivity between them. Then the making of authentication module, book selling, book buying, detailing the things that will be present in each module. Thus the model is taken into consideration.

Section 3. Stack Holder Identification

In our project the stake holders can be divided into two parts, the primary stakeholders and the secondary stake holders.

In primary stake holders-

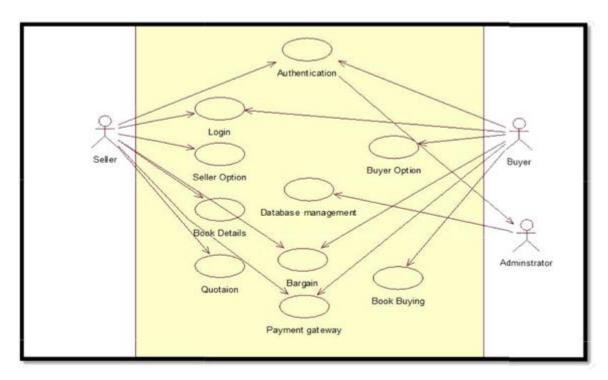
- 1. The users who are the customers and will buy the books from our platform, as informed from seeing the add. They can be students, professors and scholars.
- 2. The users who are going to sell the books and give the information about their book in the form of the advertisement. They can be students, professors and scholars.

In secondary stake holders-

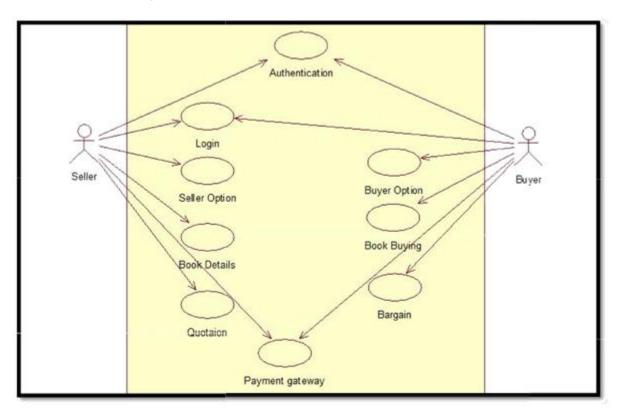
The software administrators which constitutes of us, the developers will be involved. We are in charge of overseeing that entire operation and the software runs smoothly without any break and hitch. We will also see that no spamming is being done and the portal is not misused. The admin strators also look for the safety of the website portal

Section 4. Use Case Diagrams

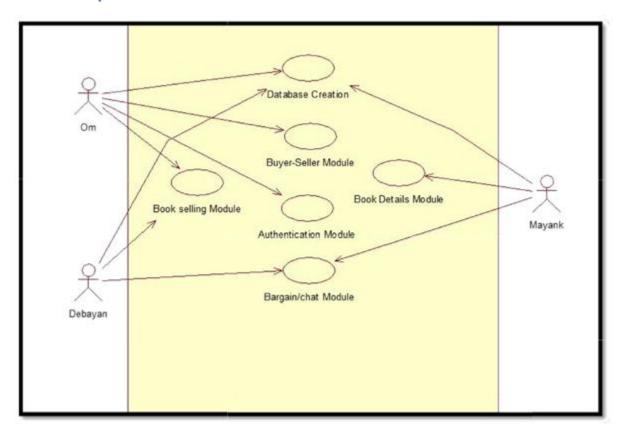
4.1 General Model as a whole



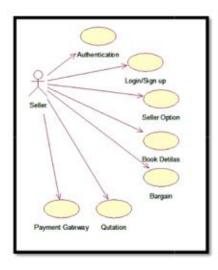
4.2 Seller and Buyer

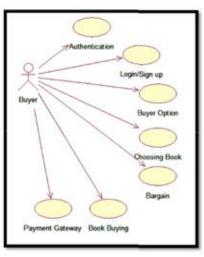


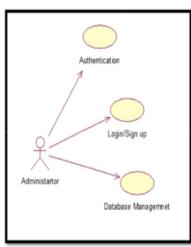
4.3 Developers of the Product



4.4 Individual Use Case Diagram for Seller, Buyer and Administrator







Section 5. Functional Requirements

- The authentication of user identity and involves thinks like "User Name" and "Password" for checking.
- The creation of the database with books which is mostly used in VIT.
- After authentication it is the user choice to choose for being a buyer or a seller and accordingly the things are shown.
- If the user chooses to be a seller then he/she can fill the details of the book into the database like Name of the book, Edition of the book, Quotation price, Type of the Book (like Xerox or printed book). Then he/she has to submit the book.
- If the user chooses to be a buyer then he/she searches for the book from the database and chooses for buying or sending bargaining. The database will contain the details of the book and choice to buy of bargain.
- Requirement based on the bargain and quotation price send to the buyer and seller approving it.
- Requirement for payment of the buyer to the seller. This will show the book is sold from database or not.

The Modules are been shown in the process identification and justification section.

Section 6. Non-functional Requirements

This section describes in detail all the non-functional requirements of VIT old book house

6.1 Usability

- 6.1.1 The system shall allow the users to sell books and buy books.
- 6.1.2 A seller page will be there to allow the user to specify all the details he feels need to be mentioned for the book along with the price.
- 6.1.3 The buyer will be able to view list of all the books available on the database along. If he selects any book, details of the book will be displayed.
- 6.1.4 A dedicated chat service will be provided where the two users can communicate.
- 7.1.5 From the details page user can go to payment gateway and purchase the book.

6.2 Security

6.2.1 Login requirements -

- 6.2.1.1 Every user must first login to continue with selling or buying.
- 6.2.1.2 Any new user will first get authenticated by admin to avoid spam users.
- 6.2.2 A secure method should be used for the payment gateway to avoid any malpractice.

- 6.2.3 Password requirements
- 6.2.4 Passwords must have a minimum length of 8 characters
- 6.2.5 Passwords must meet requirements for quality:
 - o at least 1 lower case letter
 - o at least 1 upper case letter
 - o at least 1 number
 - o At least 1 special character (@,_,*)

6.3 Performance

6.3.1 Response time: The list of all books will be fetched in less than 10s from opening the page.

6.4 Availability

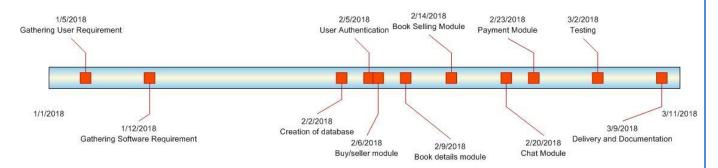
- 6.4.1 Hours of operation: The system will be available on all days 24*7
- 6.5 Portability: The system will run on any computer having java.

6.6 Privacy

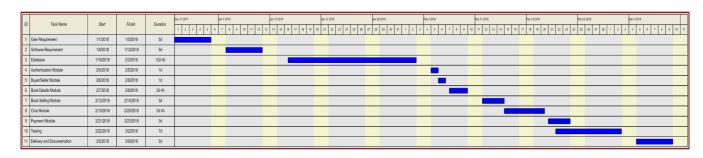
- 6.6.1 Contact details of the users will not be displayed until and unless the user himself displays it.
- 6.6.2 Messages between two users will be private and not be accessible by any other user.
- 6.6.3 Payment details will not be stored in safely.

Section 7. Various Charts and Work Breakdown Structure

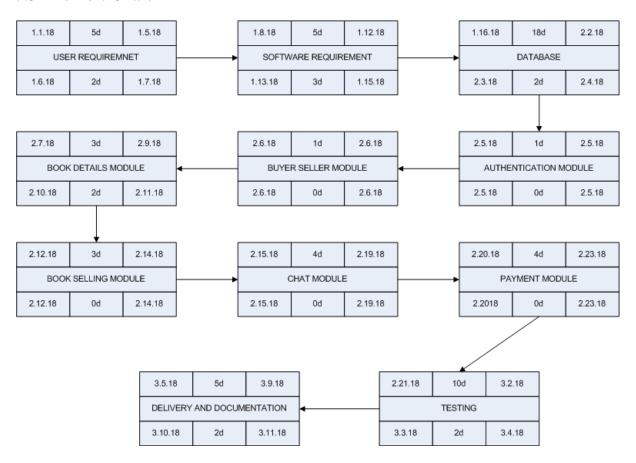
7.1 The Timeline Chart



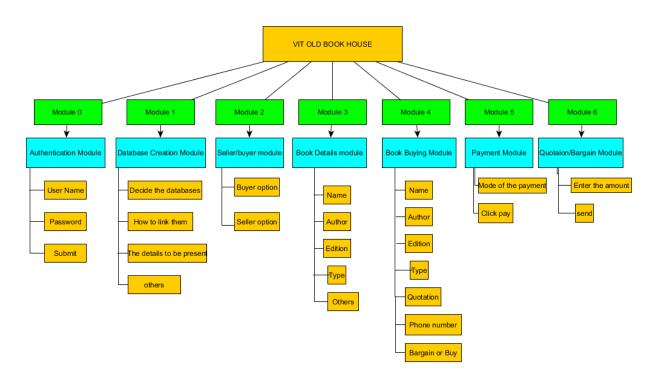
7.2 The Gant Chart



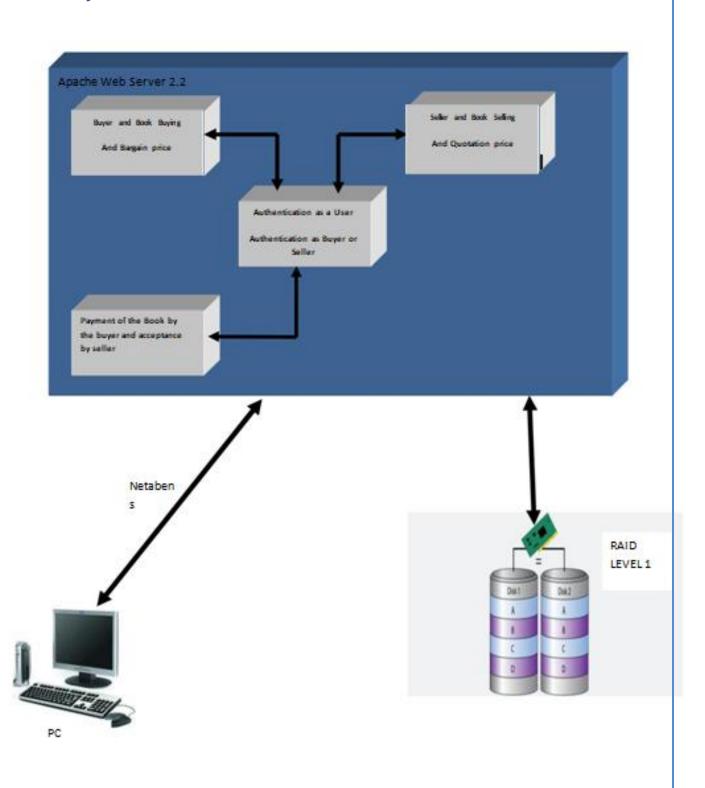
7.3 The Pert Chart



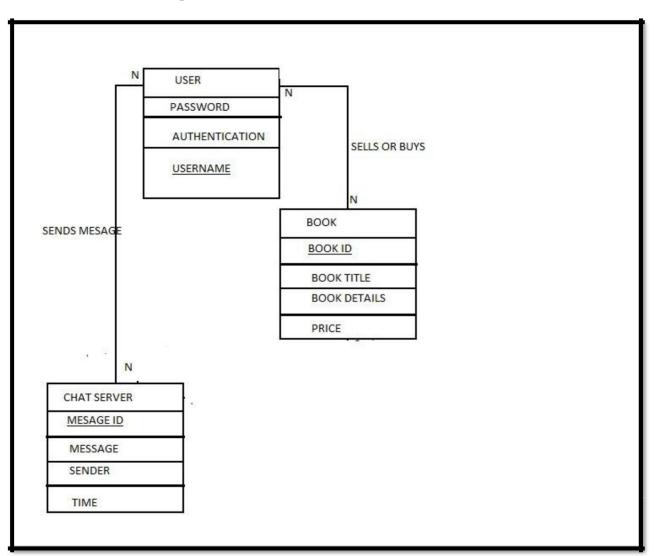
7.4 Work breakdown Structure



Section 8. System Architecture

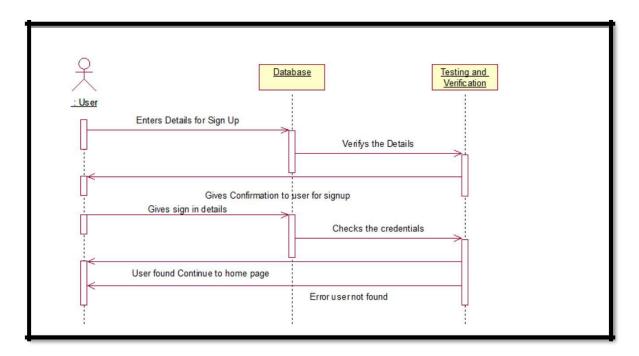


Section 8. Class Diagram

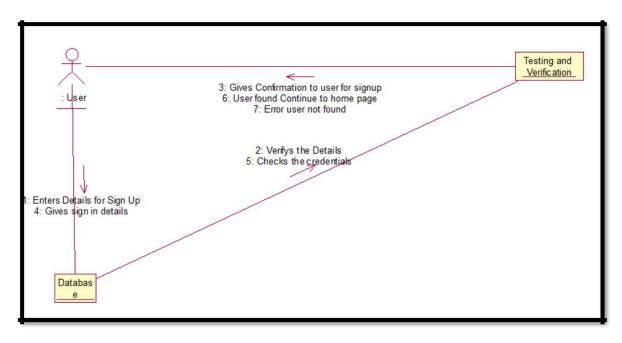


Section 10. Sequence Diagrams and Descriptions

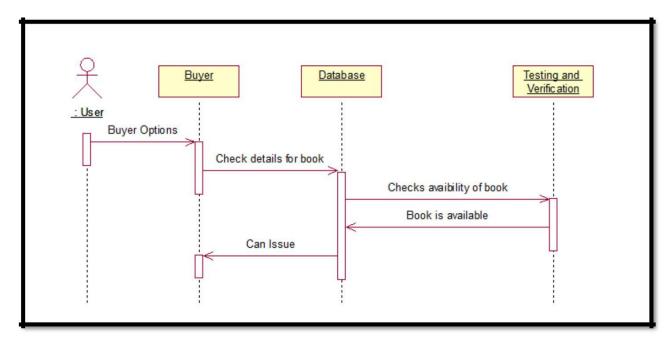
10.1 Sequence Diagram for Authentication



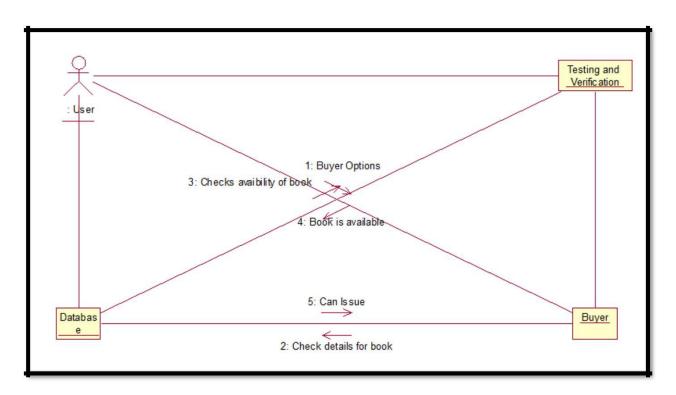
The user first enters the details of his/her into the SIGN UP page and after submission he/she is able to do test and confirm to user for sign up details filled. Then the user logins by giving username and password then the details are checked. The user has two pathways after that: 1) If the user details don't match it gives an error and 2) if user details are found it displays the Home Page.



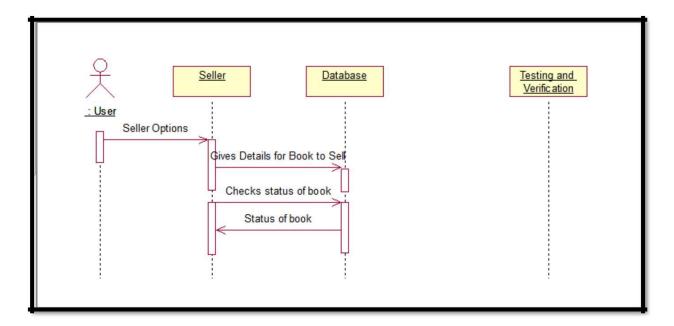
10.2 Sequence Diagram for Buyer Module



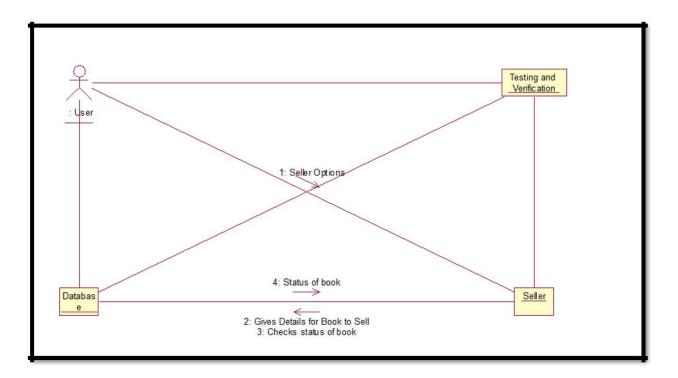
The user after login, if he/she chooses to be as a buyer then he/she can select books that he/she wants from the database. If the book is available then we can issue the books if it is present the database. Then the buyer can buy the book.



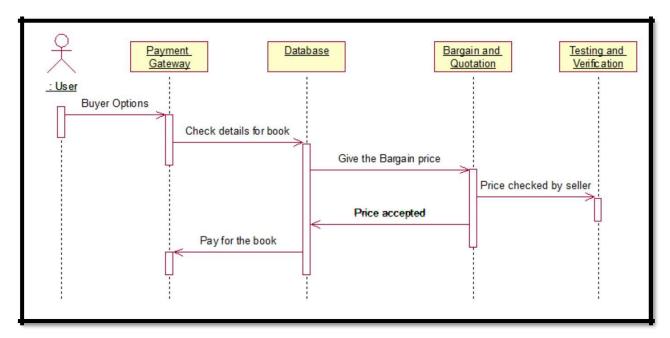
10.3 Sequence Diagram for Seller Module



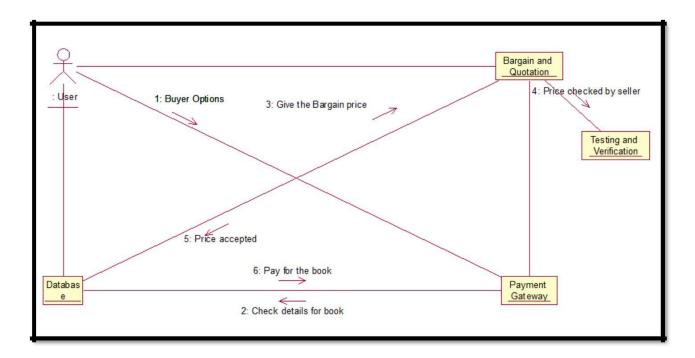
The user as Seller can sell the books through giving the details about the books like name, author, quotation price, edition, type of the book and other details about the book. The Seller is also entitled to check the whether someone has selected to buy the book at the entitled price or at a bargain value is given or not. Then the seller can decide to sell the book at the coated price or not. This is what checking the status is meant here.



10.4 Sequence Diagram for Payment Module

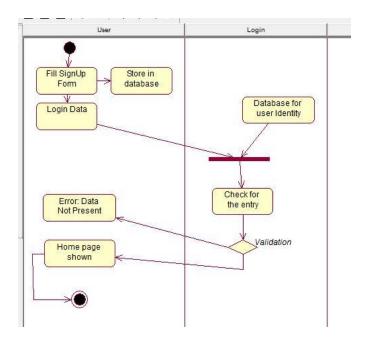


The Buyer after selecting the book goes for buying the book. He checks the details of the selected book and if he/she is not satisfied to pay at the Seller's amount. The Buyer gives the Bargain price. If it is accepted by the Seller then it is allowed to the buyer to buy it from the price accepted price. Otherwise he has to buy it at price originally given by Seller.

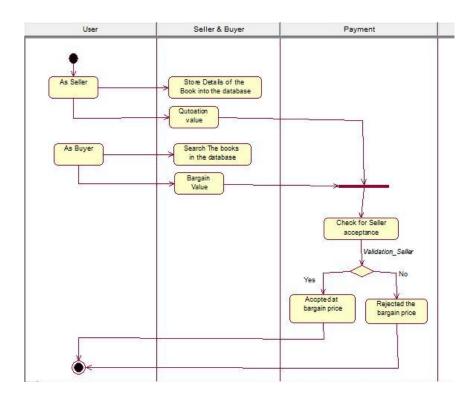


Section 11. Activity Diagram

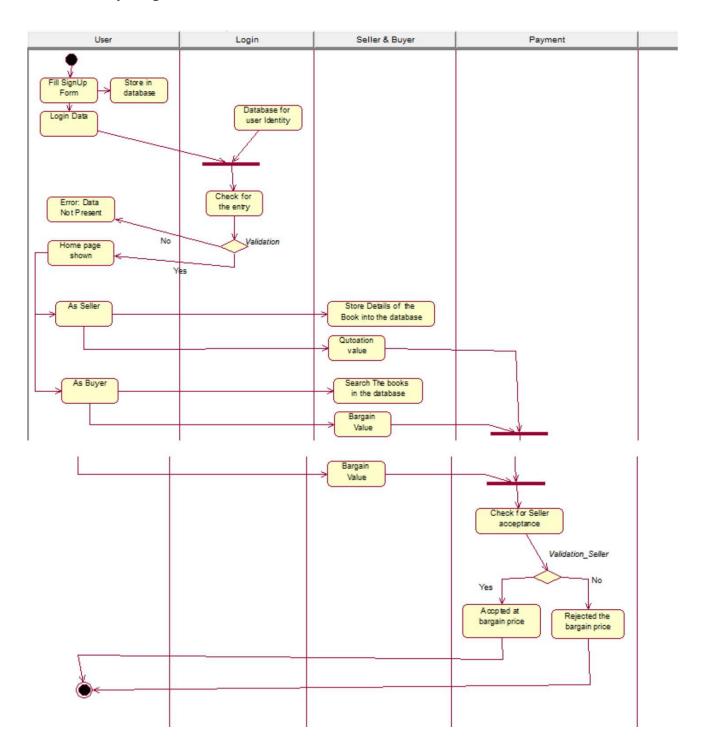
11.1 Activity Diagram for Login/SignUp Module



11.2 Activity Diagram for Seller/Buyer and Payment Module

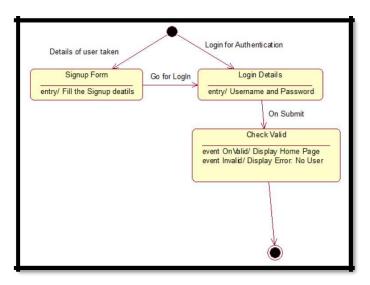


11.3 Activity Diagram as a Whole:

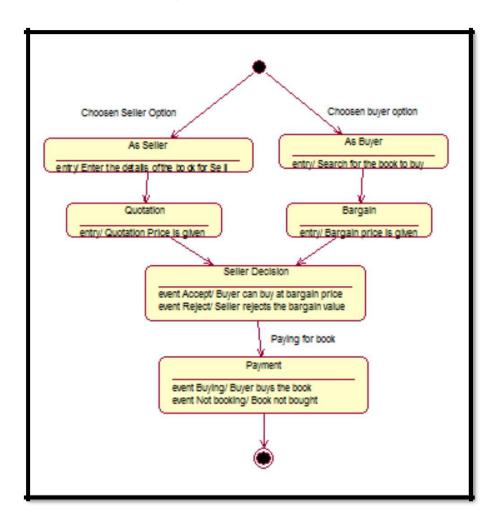


Section 12. State Chart Diagram

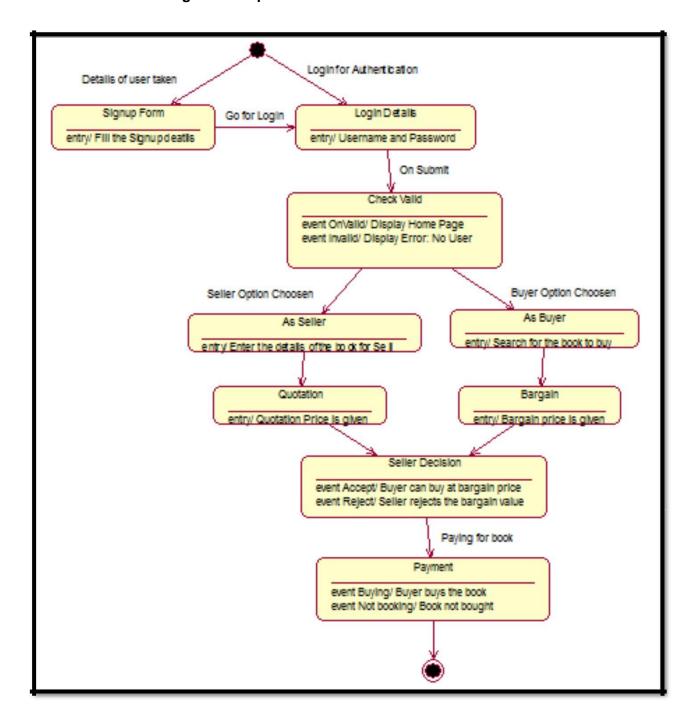
12.1 State Chart Diagram to depict state transitions of the General Authentication



12.2 State Chart Diagram to depict state transitions of the Seller/Buyer and Payment

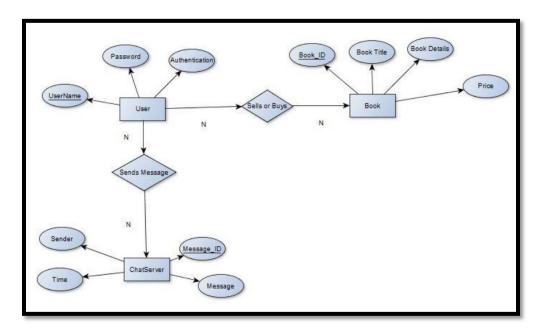


12.3 State Chart Diagram to depict state transitions as a Whole



Section 13. Data Design

13.1 ER Diagram



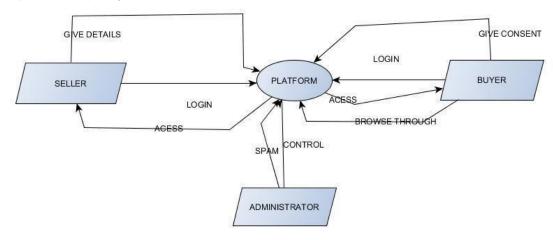
13.2 Table layout

13.2.1. Data Table Layout

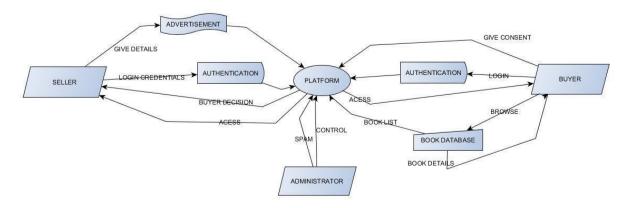
Attribute	Туре
Username	Varchar ,Primary key
Password	Varchar
Authentication	Number
Bookld	Number,Primary key
BookTitle	Varchar
BookDetails	Varchar
Price	Number

Section 14. Data Flow Diagrams

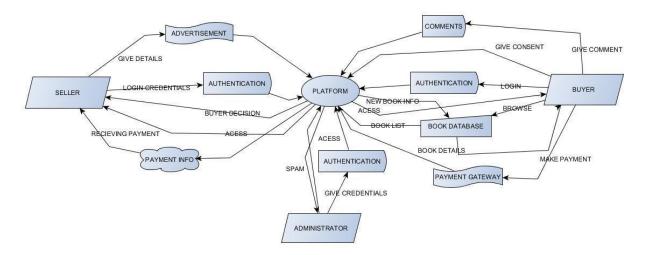
14.1 DFD LEVEL 0-



14.2 DFD LEVEL 1-



14.3 DFD LEVEL 2-



Section 15. Detailed Module Description

15.1 VIT Old BOOK House

15.1.1. Module Description

Authentication module supports the following functions

- 1. Add_details_of_user
- 2. Validate_Sign_Up
- 3. LogIn_detials
- 4. Display_of_Home_Page

Buyer/Seller Option module supports the following functions

- 1. Choose_Buyer_Option
- 2. Choose_Seller_Option

Book Details by Seller Module supports the following functions

- 3. Give_Details(Like book name, author, type)
- 4. Quotation_Price

Book Details by Buyer Module supports the following functions

- 6. Book_Selection
- 7. Bargain_Price(If Any)

Book Details by Payment Module supports the following functions

- 7. Check the chat details
- 8. Payment_Mode
- 9. Payment_Verification

15.1.2. Function Description

15.1.2.1. Function Name – Give_Book_Details, User_Details, Search_Book_Details

15.1.2.2- Input Parameters — Character - Book name, type, author, edition ; User_ID

15.1.2.3- Output Parameters – Quotation_Price and Bargain_Price

15.1.2.4. Called by Functions – Chat with Sender and Receiver

15.1.2.5. Calling Functions – Validate_Login, Validate_Book_Deatils, Update_Database

15.1.2.6 Process

GET input data

CALL Validate_Login (User_ID)

IF valid returned

CALL Update_Database

IF UPDATE successful

DISPLAY Buyer and Seller Successfully

IF SELLER option

Give_Book_Details

ELSE IF BUYER option

Search_Book_Details

ELSE IF PAYMENT option

IF Bargain_Price is accepted THEN

Buy_At_Bargain_Value

ELSE

Buy_At_Quotation_Value

PAYMENT_MODE Successfully done

Validate_Book_Deatils, Update_Database

ELSE

EXIT_FROM_APP

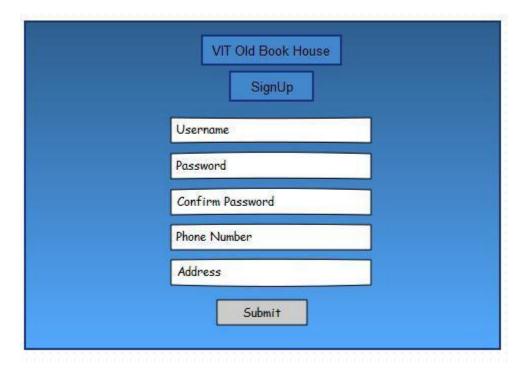
END

Section 16. User Interface Design

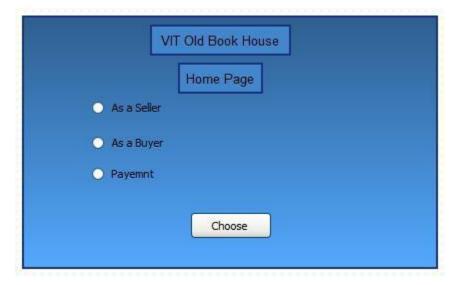
16.1 User Interface Screen for User Login



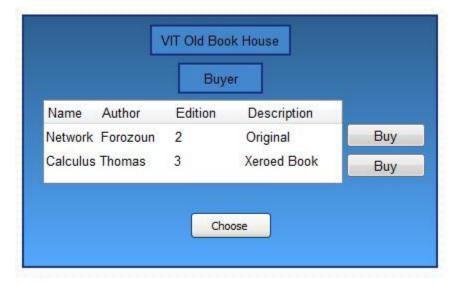
16.2 User Interface Screen for User SignUp



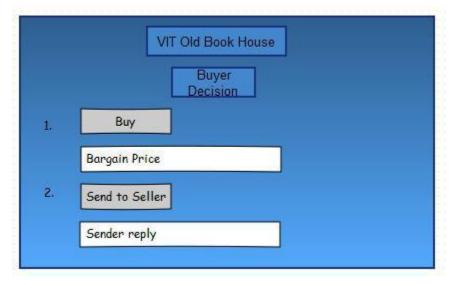
16.3 User Interface Screen for User Home Page



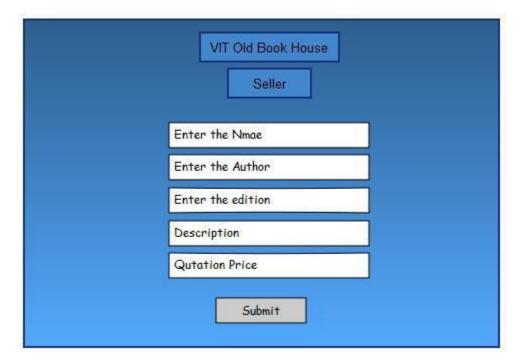
16.4 User Interface Screen for User as Buyer



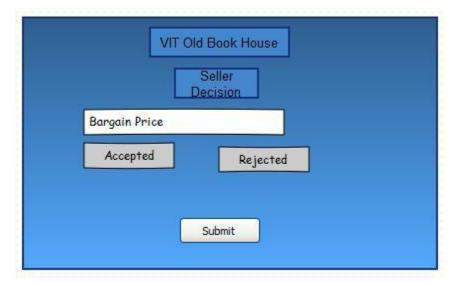
16.5 User Interface Screen for Buyer Decision



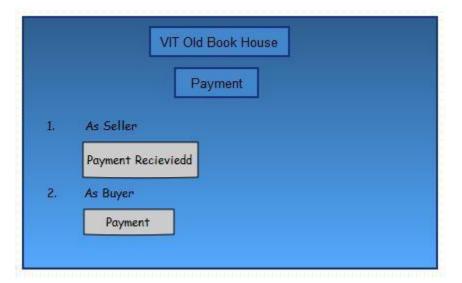
16.6 User Interface Screen for User as Seller



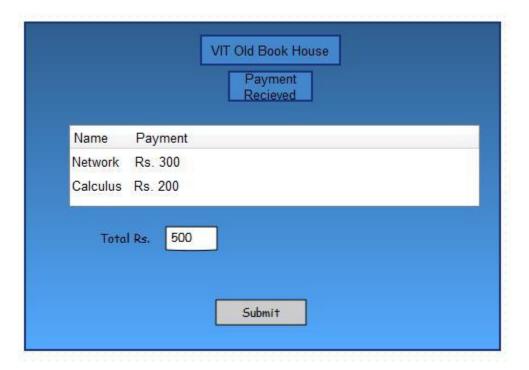
16.7 User Interface Screen for Seller Decision



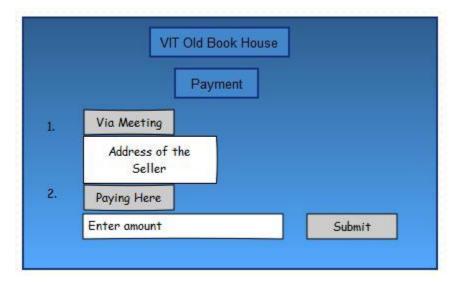
16.8 User Interface Screen for User Payment



16.9 User Interface Screen for Seller View of Payment Details



16.10 User Interface Screen for Buyer View of Payment Details



TESTING MODULE

1.LOGIN MODULE:

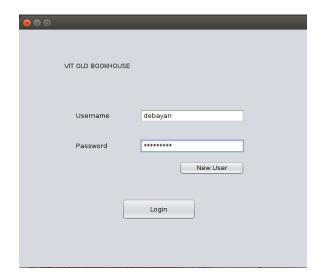
Succesfull sign in:

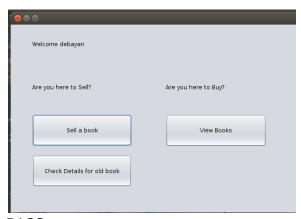
INPUT:

Username: Debayan Password:password1

OUTPUT:

User gets redirected to seller buyer page.





PASS

Test Cases					
Test Case ID: check1	Test Designed by: Debayan				
Test Priority (Low/Medium/High): mediun	Test Designed date: 22/3/18				
Module Name: login module	Test Executed by: Debayan				
Test Title: check the working	Test Execution date: 24/4/18				
Description: checking the login of user					
re-conditions: User has valid username and passwor					

Step	Test Steps	Test Data	Expected Result	Actual Result	Requir ements Validat ed	Status (Pass/Fail)
	Navigate to login page	User= <u>example@gmail.com</u>	User should be able to login	User is navigated to	R2.1	Pass
2	Provide valid username	Password: 1234		dashboard with successful		pass
3	Provide valid password			login		pass
4	Click on Login button					pass

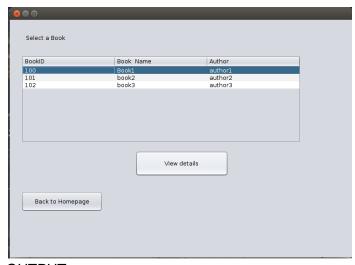
Post-conditions:

User is validated with database and successfully login to account. The account session details are logged in database.

2.Seller Buyer Module:

User is prompted with 3 choices: Sell a new book, View Status of old books, Buy a book User selects to buy a new book





OUTPUT:

User gets redirected to buyer Page.

PASS

Test Cases				
Test Case ID: check1	Test Designed by: Mayank			
Test Priority (Low/Medium/High): mediun	Test Designed date: 22/3/18			
Module Name: reservation	Test Executed by: Mayank			
Test Title: check the working	Test Execution date: 6/4/18			
Description: checking the booking				
re-conditions: User has valid username and password	1			

Step	Test Steps	Test Data	Expected Result	Actual Result	Requir ements Validat ed	Status (Pass/Fail)
1	Navigate to login page	User= <u>example@gmail.com</u>	User should be able to login	User is navigated to	R2.1	Pass
2	Provide valid username	Password: 1234		dashboard with successful		pass
3	Provide valid password			login		pass
4	Click on Login button					pass
5	Select the train and details					pass
6	Confirm your booking and pay					pass

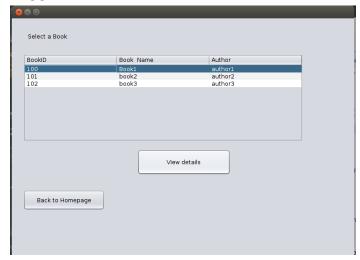
Post-conditions:

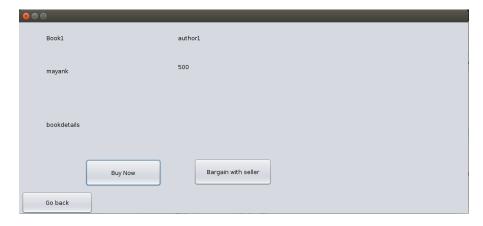
User is validated with database and successfully login to account. The account session details are logged in database.

3.Buyer Module:

INPUT:User Selects one of the books from given list and clicks on view details. OUTPUT:Details of the book gets displayed.

PASS





Test Cases						
Test Case ID: check3 Test Designed by: Om						
Test Priority (Low/Medium/High): medium	Test Designed date: 22/3/18					
Module Name: buyer module	Test Executed by: Om					
Test Title: check the working	Test Execution date: 24/4/18					
Description: user chooses his options						
re-conditions: User has valid username and password						

Step	Test Steps	Test Data	Expected Result	Actual Result	Requir ements Validat ed	Status (Pass/Fail)
1	Select a new book		User should be able to select a book	User is navigated to select	R2.1	Pass
	,View Status of curent books,		Current specification of book	dashboard with successful		
2		To view the current status				

Post-conditions:

 $User is \ validated \ with \ database \ and \ successfully \ login \ to \ account. The \ account \ session \ details \ are \ logged \ in \ database.$

4.Payment Gateway Module:

User enter card number incorrectly by inputting a alphabet. Output:enter numbers only



PASS

Test Cases					
Test Case ID: check4	Test Designed by: Mayank				
Test Priority (Low/Medium/High): medium	Test Designed date: 22/3/18				
Module Name: payment gateway module	Test Executed by: Mayank				
Test Title: check the working	Test Execution date: 24/4/18				
Description: user pays for product					
re-conditions: User has valid username and password					

Step	Test Steps	Test Data	Expected Result	Actual Result	Requir ements Validat ed	Status (Pass/Fail)
1	Input the card details		User should be able to pay for a book	User is navigated to select	R2.1	Pass
	Payment details are checked only numeric chars are allowed		Usershould be able to pay for a book	dashboard with successful		

Post-conditions:

 $User is \ validated \ with \ database \ and \ successfully \ login \ to \ account. The \ account \ session \ details \ are \ logged \ in \ database.$

5. Seller Page Module:

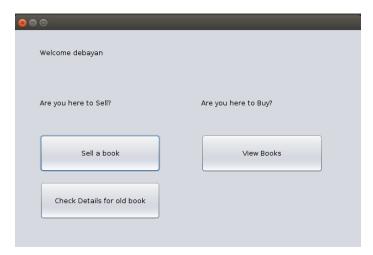
Seller inputs the book name, author name, and price and book details then presses submit. Output:

Book added to database

User gets redirected to seller/buyer page

PASS





Test Cases							
Test Case ID: check5	Test Designed by: Debayan						
Test Priority (Low/Medium/High): medium	Test Designed date: 22/3/18						
Module Name: seller module	Test Executed by: Debayan						
Test Title: check the working	Test Execution date: 24/4/18						
Description: seller gives details of his books							
Pre-conditions: User has valid username and password							

+	Step	Test Steps	Test Data	Expected Result	Actual Result	Requir ements Validat ed	
	1	Input the details of books		User should be able to input data	User is navigated to select	R2.1	Pass
	2	User confirmation	Data input	confirmation	dashboard with successful		

Post-conditions:

User is validated with database and successfully login to account. The account session details are logged in database.