RM AUCTION

(An Online Bidding System)

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This **Project** report has been submitted in fulfillment of the requirements for the Degree of Bachelor of Science in Software Engineering.

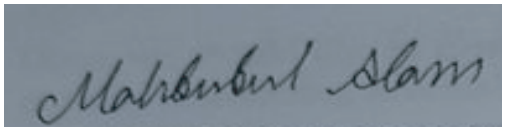
Department of Software Engineering

Daffodil International University

Name of Semester – 2018

DECLARATION

We hereby declare that, this **Project** report has been done by us under the supervision of **Nusart Jahan**, Lecturer, Department of Software Engineering, Faculty of Science and Information Technology, Daffodil International University. We also declare that neither this report nor any part of this report has been submitted elsewhere for award of any degree.



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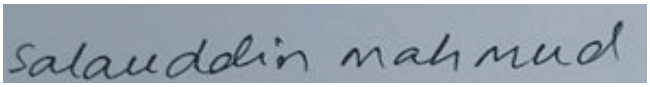

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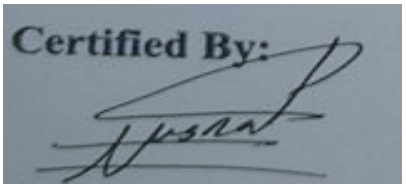

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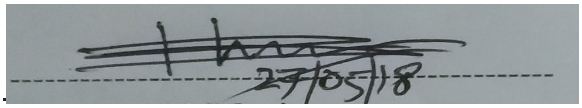

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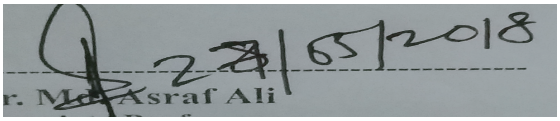

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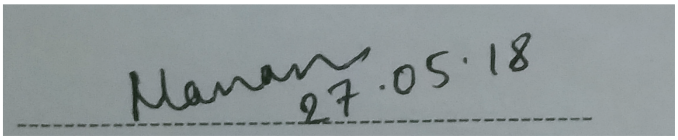

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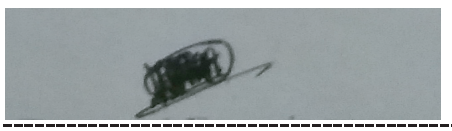

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At the commencement, we would like to praise to the almighty Allah for providing us benediction, motivation, patience, and wisdom to carry out this study as crucial as part of Software Engineering Program. We also gratitude to our guardians for their support and caring at us.

We would like to express our heartfelt gratitude and sincere thanks to my supervisor, **Nusart Jahan**, Lecturer, Department of software Engineering, Daffodil International University. Who giving us the opportunity to work under her guidance and help us gain immensely enriching our project experience throughout the process to make this work a success.

Once, we should like to thank those who co-operated us to collect data and who participated in study considering invaluable time.

EXICUTIVE SUMERY

This project aimed is developing RM Online Auction for online auction system. This is web-based application. Any registered user can sell or bid for antique product through the internet. The user who want to sales there things or item by auction. Bidders who need to buy there things then he will attend the place of bidding. The “RM Online Auction” is online auction house so the seller or bidder doesn’t need to go anywhere, they can take part in the auction just sitting in the comfort of their living room, be it during the day or night. This site also acts as an open house where buyers and sellers can come together and exchange their items.

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CHAPTER 1. INTRODUCTION

1.1 Project Overview

This **"RM Auction"** main goal is developing online auction system. The RM auction is web based application where all products are displayed in different categories and a customer can bid to the category wised product without any problem. The online auction system deals between sellers and bidders. It provides the users for sign up to this application and search for products, manages their accounts. Each customer will have their own account showing their username they have logged in. On the other hand users can also see all product pages without having an access with their account. Signed up users will have to log in first then they can upload products on the site from their account and also can bid for other products which are not owned by them. Users can edit their profile and see their uploaded products and bided products. Administration panel can approve products, update products, delete products, delete user, update and delete all ongoing bids and can also see all the products, categories, users and bids. All particular bids have limited time to finish. After finishing the bids admin can notify the sellers and also the bidders. This is a well secured system and can be easily operated. This is fully dynamic. There is nothing static here. The main aim of this web application is to make a good online system that provides a great alternative of bidding policy for general people that saves both time and money.

1.2 The Purpose of the Project

a. Goals of the Project

The main goals of this system are to sell and bid different types of products to the customers living anywhere around Bangladesh. The website will show all products in categorized manner. Customers can browse any product and their details and can bid on the products. User has to get the order through the delivery policy. Admin can keep track of bids through admin panel.

b. Measurement

The base of our work is on the notion that the reader is familiar with the basic elements of our software measurement environment that structured. Data on post-software product life measurement is retained for analysis leading to improvements for future product and process management.

1.3 The Scope of the Work

1.3.1 The Current Situation

RM Auction System- Bid On will be a web based application which main language of programming will be PHP. Its main aim is to simplify and improve the efficiency of the bidding process for users, minimize data entry and ensure data accuracy and security bid placement process. Users will also be able to view all product menus in categorized way with their full details. Users will also be able to have a visual confirmation that the order was place correctly.

1.3.2 The Context of the Work

RM Online Auction is service in which auction users can sell or bid for antique products through the internet.

1.3.3 Work Partitioning

Table 1.1: Work Partitioning List

No.	Event Name	Input/Output	Summary
1.	Registration	User give potential infomation such as email, phone and confirm verification.	User is save to the database.
2.	Upload product	Give category wise product and seen category wise product.	The product information is save to the database.
3.	All catogory product store in database.	All user can see the product.	Without registration user can see product.
	Product Bidding	Registered user bid the product.	Witout registration user can't bid the product.
4.	When user bidding the product this time must be complete regestration.	Witout registration user can't bid the product.	User need to login main system.

1.4 Beneficiaries and Benefits

Beneficiaries

1. RM auction user saves time and money.
2. Authentic bidder can bid any product.
3. RM Auction user can sell her antique product by bidding.

Benefits

1. Bidder buy the product.
2. Bidder can modify the bidding price.
3. Bidder bid product.
4. Bidder search and view the product.
5. User can get activity notification.
6. Seller can view bid information.
7. Seller set product price and bidding time.
8. Seller upload product.

CHAPTER 2. PROJECT PLANNING

2.1 Project Scenarios

A scenario is a project description is a people came here and search product, known user upload product, bidder buy the product by bidding. Each scenario should include the following elements:

1. Homepage,
2. Registration,
3. Login,
4. Upload product,
5. Bid product and
6. Buy product.

2.1.1 Project Scenarios List

These scenarios demonstrate some of the most common activities for RM auction.

Table 2.1 Project Scenario List

No.	Project Scenario Name	RM Auction
1.	Objective / Vision	We want to create a field where bidders and sellers can come together and exchange their items.
2.	User of the System	Sellers, bidder, normal people and admin.
3.	Functional Requirements	1. The web application based on online auction. 2. There are some main category user such as seller, bidder and admin. 3. Registered user upload product, bid the product, modify bid and buy product. 4. Without registration user can't bid the product. 5. Registered user can update their profile. 6. User email and phone verification after registration. 7. Dynamic report generate such as daily/weekly/ monthly product view, user file.
4.	Non-functional Requirements	1. Support at least 250 concurrently connected users. 2. Robust database design to handle expected users of up to 1, 00,000 customers. 3. Response time for website should be sub-second. 4. Easy backup and recovery of user supplied information.
5.	Optional Features	1. Daily calendar. 2. Online time and date.
6.	User Interface Priorities	1. Professional look and feel. 2. Browser testing and support, Chrome and Firefox.

No.	Project Scenario Name	RM Auction
7.	Reports	1. The number of register user 2. The number of user access of the system every day. 3. The number of active user. 4. The number of new register user. 5. The number of product.
8.	Technologies	PHP, MySQL, Bootstraps, HTML 5, CSS 3, jQuery, JavaScript and plugins.

2.1.2 Individual Scenarios List

The scenario demonstrates some of the most common activities that we expect users (both kitchen the owner and customer) to need do.

Table 2.2: Individual Scenarios List

No.	Scenario	Person	Pre-requisite
1.	Category	User	Both register and non-register user can access the home page of the system. But if anyone want to know more about the system category wise he/she must registered with system. And if anyone register already then he/she have to login the system.
2.	Product	Register User	When a user add product this time must complete registration. Without registration user cannot upload product.
3.	Message	Mr. Shahin	Register user can send message to admin.

2.1.3 Proposed System Model:

It is difficult to note down all the problems manually. Instead it is decided to develop a “RM Auction” to ease the operation. The proposed system is creating online auction system for Bangladesh that allows everyone using it. No matter where they are or when they use it. From now on, there is no need to go anywhere to participate in auction process. Alternatively, they can stay at home and join it. At any time, they are wish to participate in it. The only thing that users have to do to take part in bidding process is registering and confirming their emails and phone number. The email and phone verification will be done through a confirmation link that they will receive in their email inbox after registration. Without this verification the users cannot access to the website.

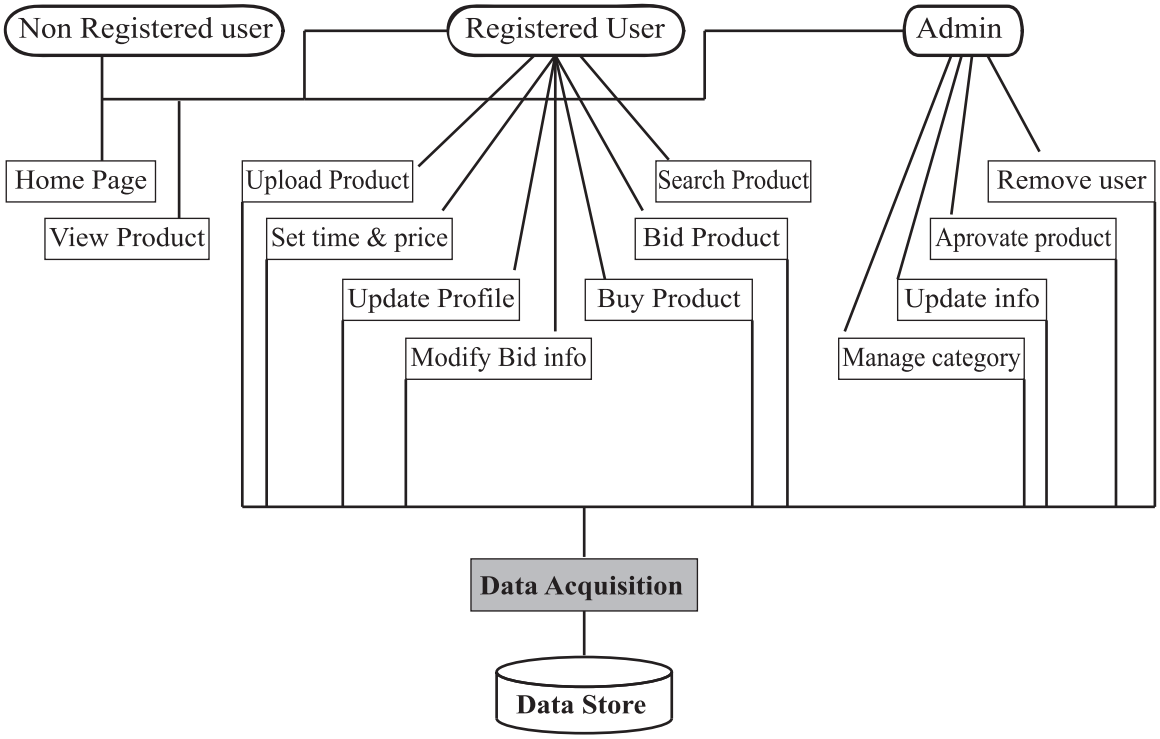


Fig: 2.1 Proposed System Model

2.2 Stakeholders

2.2.1 The seller

Seller who can upload product, set time and price of this product, get all bidding information.

2.2.2 The Bidder

Bidder who can bidding the product, modify bid info and finally buy product.

2.2.3 Hands-on Users of the Project

1. Register and non-register user,
2. Admin,
3. Developer and
4. Owner.

2.2.4 Priorities Assigned to Users

There is three actor normal visitor registered user and admin. In this system registered user will benefited than non-registered user.

2.2.5 User Participation

1. Admin,
2. Registered user and
3. Normal visitor.

2.2.6 Maintenance Users and Service Technicians

There is admin, registered user and non-registered user. The admin will monitoring full system and find out the problem, informed system developer to solve the problem.

2.3 Project Schedule

Table 2.3: Project Timeline

No.	Name	Start	Finish	Duration	December	January	February	March	April
1.	Plan & Proposal	22/12/2017	02/01/2018	11 days					
2.	Requirement Analysis	10/01/2018	25/01/2018	15 days					
3.	System Design /Prototyping/ UI	01/02/2018	18/02/2018	18 days					
4.	Implemantation /Contruction	20/02/2018	30/03/2018	38 days					
5.	Testing	01/04/2018	06/04/2018	6 days					
6.	Documentation /Report	07/04/2018	20/04/2018	13 days					
7.	Delivery	30/04/2018	30/04/2018	1 days					

2.4 HR Planning for Development Phase

From the above analysis, in need the following tasks to operate while the system will implement.

1. Database Management
2. Monitoring the full system
3. Admin
4. Website maintenance.

2.5 Risk Assessment

2.5.1 Risk Assessment

Risk assessment is the determination of quantitative or qualitative estimate of risk related to a Well- defined situation and a recognized threat (also called hazard). Risk assessment involves risk identification, risk analysis, and risk prioritization Risk assessment is the act of determining the probability that a risk will occur and the impact that event would have should it occur.

2.5.2 Risk Management

Risk management involves understanding, analyzing and addressing risk to make sure organizations achieve their objectives. So it must be proportionate to the complexity and type of organization involved.

2.5.3 Risk Monitoring

Risk monitoring is the process which tracks and evaluates the levels of risk in an organization. As well as monitoring the risk itself, the discipline tracks and evaluates the effectiveness of risk management strategies.

Table 2.4: Control and Monitor Risk

Inputs	Tools	Outputs
1. Risk register. 2. Project management plan. 3. Work performance info-r mation. 4. Performance reports.	1. Risk reassessment. 2. Risk audits. 3. Technical performance measurement. 4. Reserve analysis. 5. Status meetings.	1. Risk register updates. 2. Change requests. 3. Project management plan updates. 4. Project document update.

2.5.4 SWOT Analysis

SWOT Analysis is a useful technique for understanding your Strengths and Weaknesses, and for Identifying both the Opportunities open to you and the Threats you face.

Strength:

1. Benefit for local communities.
2. Strong, loyal and rich community.

Weakness:

1. Bad people.
2. Bad consultation.

Opportunity:

1. Bidding opportunity.
2. Quickly getting problem solution.

Threat:

1. Tough competition from local tradition.
2. Intense competition.

CHAPTER 3. REQUIREMENTS SPECIFICATION

3.1 Functional Requirements

Table 3.1: Functional Requirements List

ID	Requirements	Description	Level
RM_01	Login	Admin/user must login to use the system.	High
RM_02	Registration	Users need to register who want to use the system.	High
RM_03	Category	All type of user can see category wise product.	Medium
RM_04	Search	Search module provides category wise search of items.	High
RM_05	Auction	In this module seller can upload product for auction, bidders can bid for the products finally admin decides the winner based on highest bidding price.	High
RM_06	Report	Report generation module can generate reports of past Auctions, view, sellers and bidders.	High
RM_07	Contact	Any user contact with admin.	Medium
RM_08	Logout	When user click to logout button, this button brings the user home page.	High

3.2 Performance Requirements

3.2.1 Speed and Latency Requirements

1. The performance of the system depends upon hardware components.
2. The system based on web and has to be run from a web server.
3. System responses very less time

3.2.2 Precision or Accuracy Requirements

There are no specific Precision or Accuracy requirement.

3.2.3 Capacity Requirements

The system should have high performance rate when executing user's input and should be able to provide response within a short time usually 10 second for highly complicated task and 20 to 25 seconds for less complicated task.

Table 3.2: Capacity Requirements

CR-1	The full system in database.
Description	Registered user information, basic info all are stored in database. Registered user upload product all data saved in database.
Stakeholders	1. Admin 2. User
Fit Criterion	The admin is able to monitor overall database.

3.3 Dependability Requirements

3.3.1 Reliability Requirements

1. The system provides for replication of databases to off-site storage locations.
2. Need secure connection.
3. Object oriented programming.

3.3.2 Availability Requirements

1. The system provides a contractual agreement with an internet service provider who can provide 99.9% availability through their network facilities onto the internet.
2. Available 7 week and 24 hour.

3.3.3 Robustness or Fault-Tolerance Requirements

If there occurred any problem between the user and the system, the system site must refresh itself.

3.4 Maintainability and Supportability Requirements

3.4.1 Maintenance Requirements

1. Admin only can maintain the system.
2. Admin must need to log in.

3.4.2 Supportability Requirements

Supportability requirements are concerned with the ease of changes to the system after deployment, a system log must be produced.

3.4.3 Adaptability Requirements

All mobile version and operating system will support.

3.5 Security Requirements

3.5.1 Access Requirements

Admin and registered user can only access the full system.

Table 3.3: Access Requirements

AR_1	The system decide in which person access the system.
Description	The stage full fill all requirement, give basic info, than user used the system.
Stakeholders	1. User and 2. Admin.
Fit Criterion	The system also improves security for access.

3.5.2 Integrity Requirements

An integrity requirement is any security requirement, ensure the integrity of the system from malicious damage.

Table 3.4: Integrity Requirements

IR_1	The system all password in an encrypted.
Description	The system encrypts all passwords and persist only the encrypted form.
Stakeholders	1. User and 2. Admin.
Fit Criterion	The password is stored as a one-way-hash of the password string. Strong encryption is used to generate the one-way-hash.

3.5.3 Privacy Requirements

The system has some own privacy to protect data.

Table 3.5: Privacy requirements

PR_1	The user all data protected.
Description	The user data (name, email and mobile no), product data and bid info should be kept. The all data is protected.
Stakeholders	1. User and 2. Admin.
Fit Criterion	The system unambiguously distinguish between Users without breaking privacy.

3.6 Usability and Human-Interaction Requirements

3.6.1 Ease of Use Requirements

The system provides to help and support, all interfaces for the user to interact with the system. The user can use the system to build up strong communication.

3.6.2 Personalization and Internationalization Requirements

The system has the ability to deal with product such as search, bidding, modify bid and buy product etc.

3.6.3 Understand ability and Politeness Requirements

This system has the ability so that a user can easily understand the policy and learn to operate the system.

3.6.4 Accessibility Requirements

Accessibility requirements for users with special needs.

3.6.5 User Documentation Requirements

It shall provide specific guidelines to a user how to use this system.

3.7 Look and Feel Requirements

3.7.1 Appearance Requirements

1. The system interface looking attractive.
2. The design is user friendly

3.7.2 Style Requirements

1. This system is web base application.
2. This system interface use in CSS, Bootstrap, Awesome font, JavaScript.
3. The system interface looking attractive and cool.

3.8 Operational and Environmental Requirements

3.8.1 Expected Physical Environment

Table 3.6: Expected Physical Environment

ERR_1	RM Auction give service from any environment.
Description	Since it is online web based application, so any user access anywhere.
Stakeholders	1. User and 2. Admin.
Fit Criterion	System is all time ready to give service.

3.8.2 Requirements for Interfacing with Adjacent Systems

This section describes the co- operative application for interfacing RM auction.

Table 3.7: Requirements for Interfacing with Adjacent Systems

RIAS_1	Adjacent system with external application.
Description	The system successfully operates the registration system.
Stakeholders	1. User and 2. Admin.
Fit Criterion	System completed task her own memory.

CHAPTER 4. SYSTEM ANALYSIS

4.1 Use Cases

4.1.1 Use case diagram (All User Part)

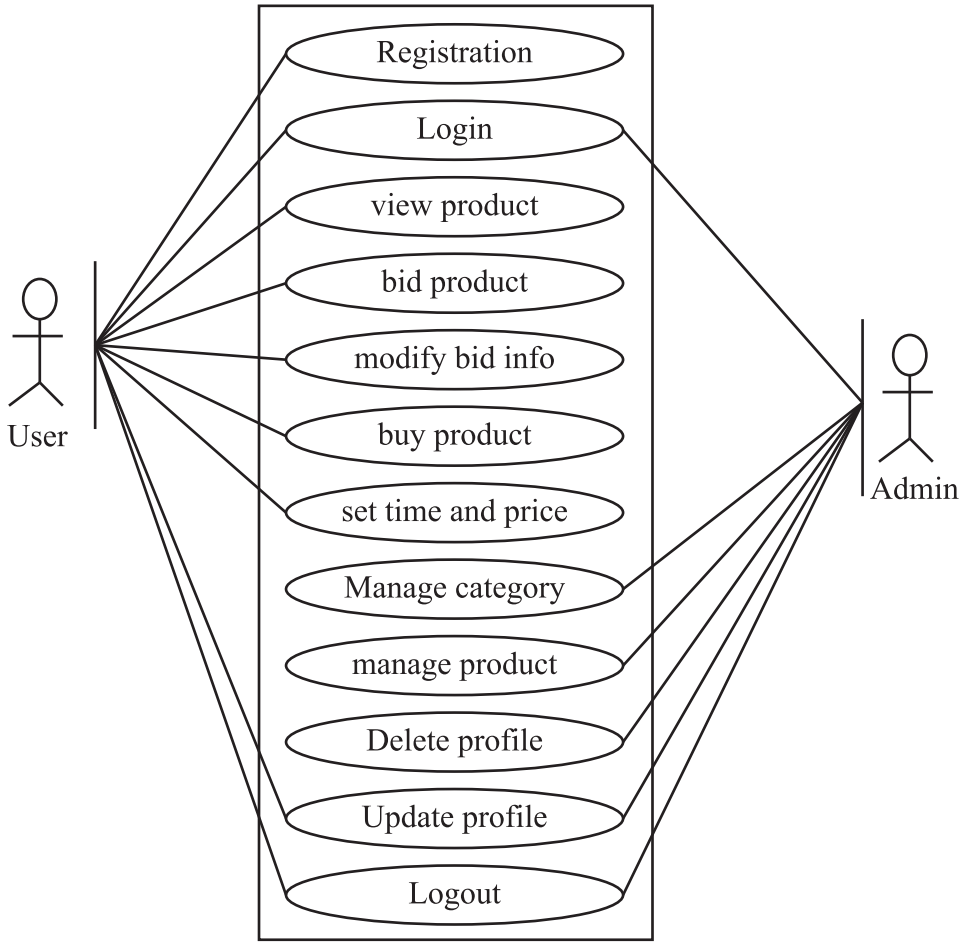


Fig: 4.1 Use Case Diagram for all Stakeholder

4.1.2 Use Case Diagram (User Part)

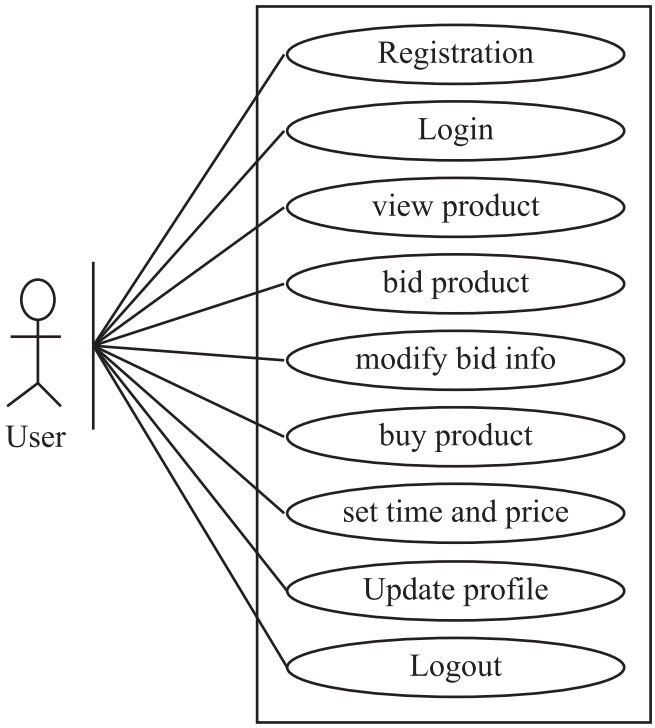


Fig: 4.2 Use Case Diagram for user

4.1.3 Use Case Diagram (Admin part)

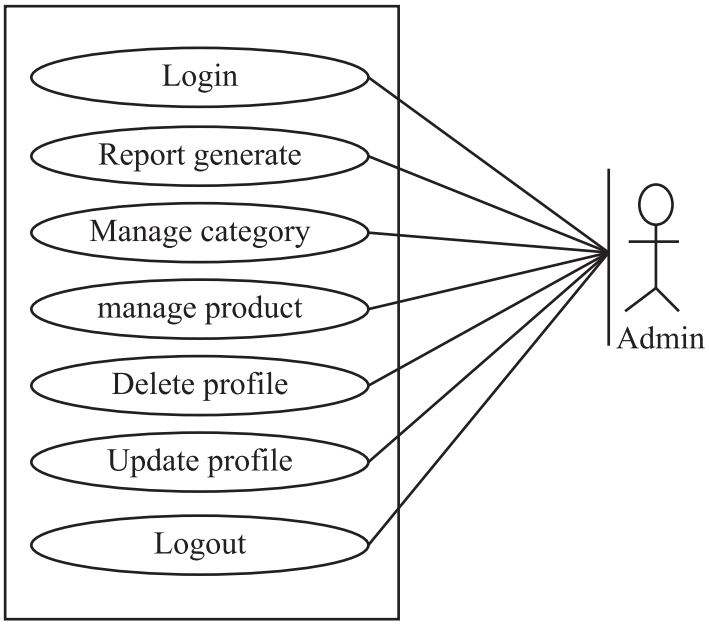


Fig: 4.3 Use Case Diagram for admin

4.1.4 Use Case Diagram (Registration Part)

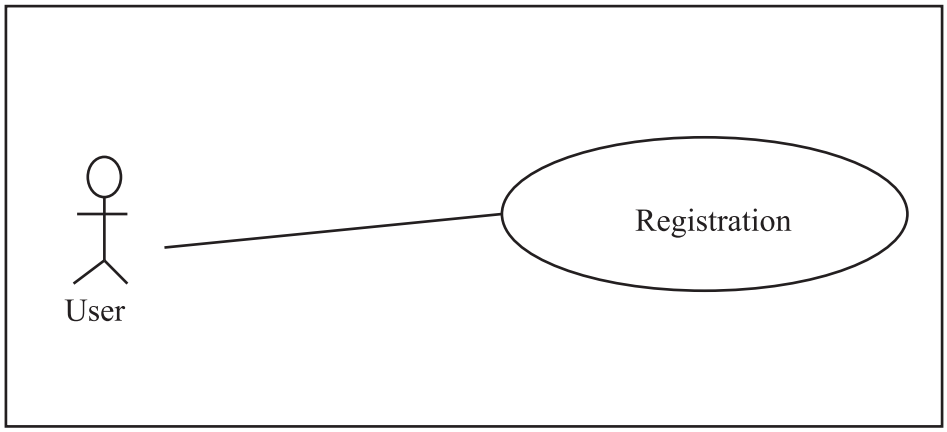


Fig: 4.4 Module-1 Use Case

Description:

1. User give name,
2. User give email,
3. User give password,
4. User give phone number and
5. Click register button for registration.

Table 4.1: Use Case Registration Module

Use Case	Registration.
Trigger	The user wants to registration.
Actor	User.
Pre-Condition	The user accessed the system homepage.
Scenarios	1. The user click the “Sign up” button. 2. The user opens the registration form. 3. The user enters data (name, email, phone number). 4. The users selects the role of this system.
Alternative Path	A registered user cannot create the account. There is no alternative path to create account.

4.1.5 Use Case Diagram (Login Part)

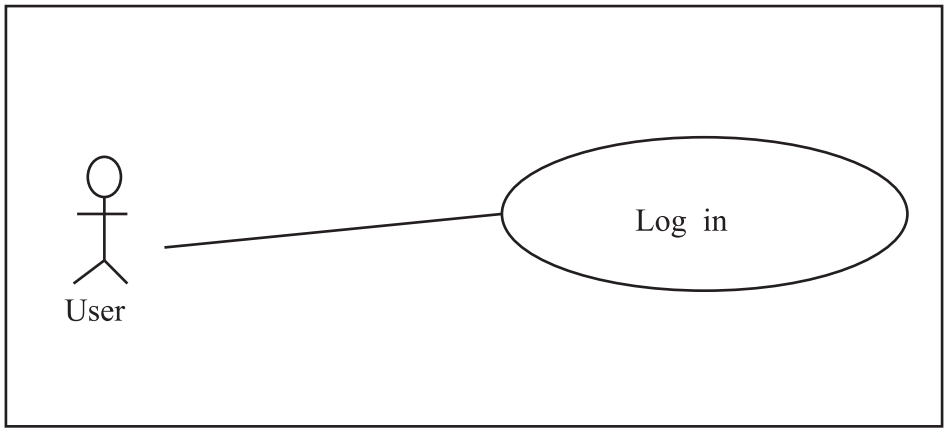


Fig : 4.5 Module-2 Use Case

Description:

1. User give email.
2. User give password.
3. Click submit button, if user give valid email and password, successfully login.
4. Then system automatic brings to main page.

Table 4.2: Use Case Login Module

Use Case	Login.
Trigger	Need to user account to home page.
Actor	User.
Pre-Condition	Need to user account active.
Scenarios	1. The user going to home page. 2. The user click to sign in page. 3. The user enters email and password. 4. The user clicks the submit button. 5. When the system validate email & password and create a new (http) session.
Alternative Path	Automatic forwarding the main page.

4.1.6 Use Case Diagram (Product Part)

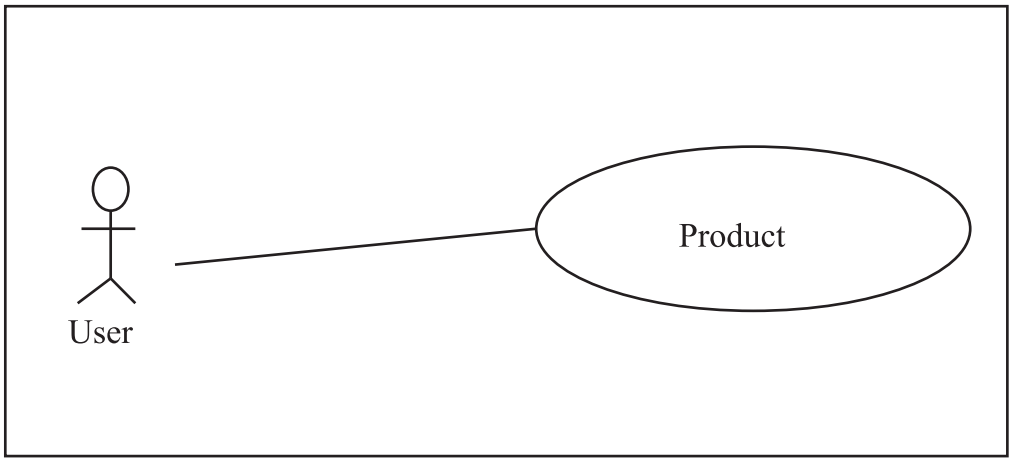


Fig : 4.6 Module-3 Use Case

Description:

1. When user enter into the system, the user see the add product button.
2. User give product image, prize, strat and end time etc.
3. Click submit button, if user fill up all field, successfully add product.
4. Then system automatic brings to main page.

Table 4.3: Use Case Product Module

Use Case	Product.
Trigger	User add the product.
Actor	User.
Pre-Condition	The user need to access main page.
Scenarios	1. The user and admin click the add product button. 2. Give product description. 3. Fill up all required field. 4. Click submit button.
Alternative Path	Automatic forwarding the main page.

4.1.7 Use Case Diagram (Select Category Part)

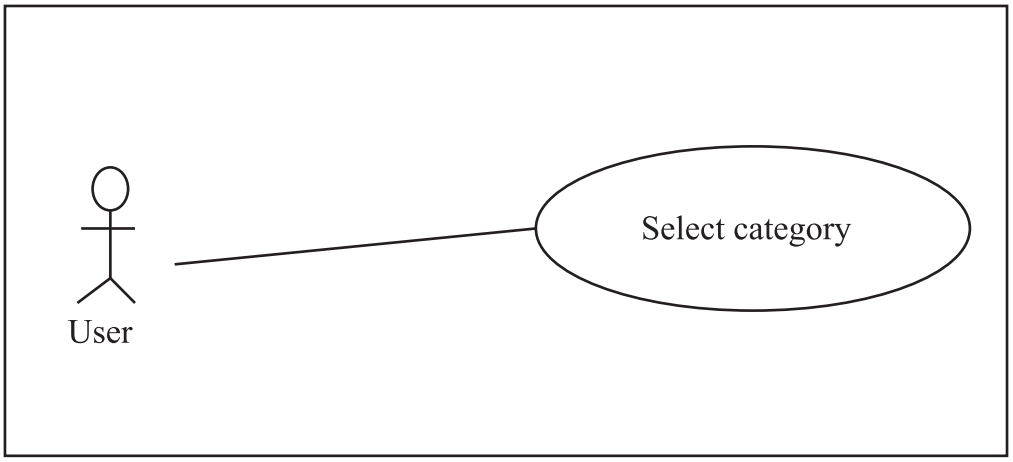


Fig: 4.7 Module-4 Use Case

Description:

When user upload product, this time user can select the category.

Table 4.4: Use Case Select Category Module

Use Case	Select Category.
Trigger	Registered user when upload product this time select category.
Actor	User
Pre-Condition	This time user to need access home page.
Scenarios	1. The user click the category button. 2. Then show dropdown menu. 3. Select the category.
Alternative Path	There is no alternative path for user.

4.1.8 Use Case Diagram (Massage Part)

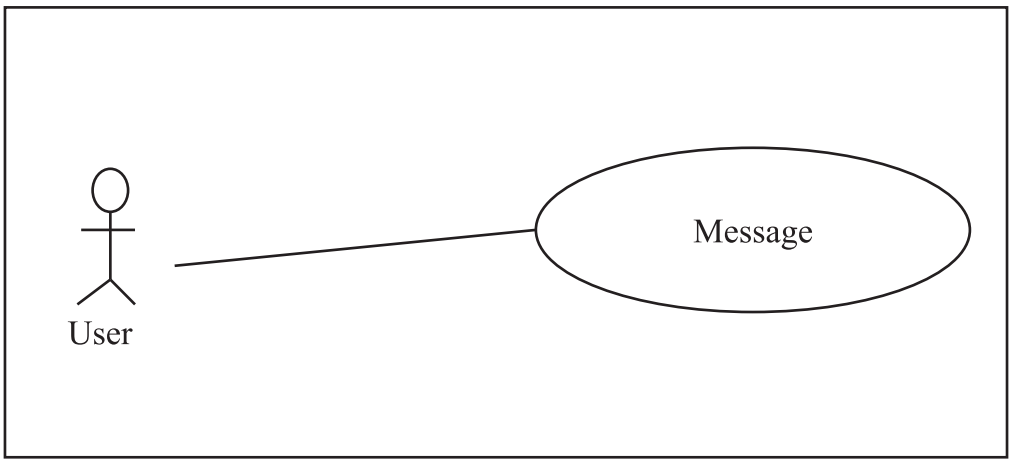


Fig: 4.8 Module-5 Use Case

Description:

User can give message to another register user.

Table 4.5: Use Case Message Module

Use Case	Message.
Trigger	User send message to another register user.
Actor	User
Pre-Condition	The user must need to access to main page.
Scenarios	1. When any user need to contact another person. 2. Go to the home page click message button. 3. Write some text. 4. Click send button.
Alternative Path	When not click send button, again user can go main page.

4.1.9 Use Case Diagram (Logout Part)

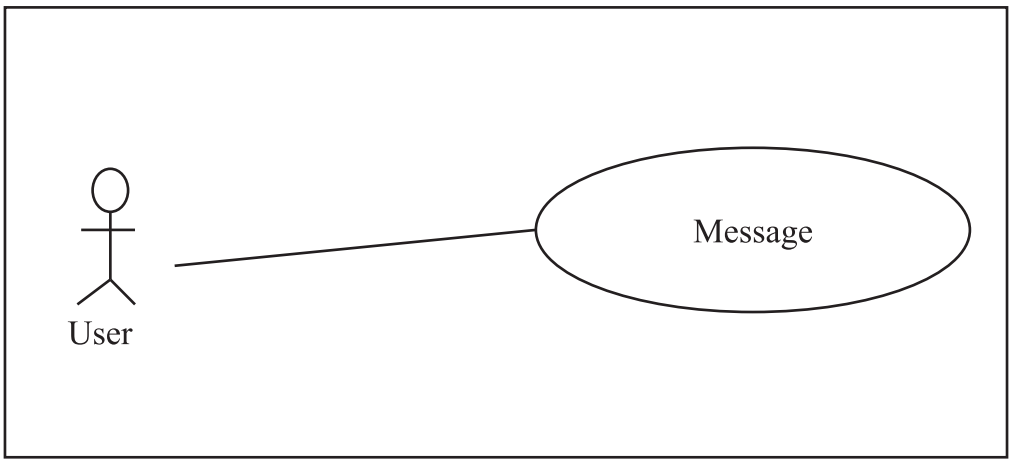


Fig: 4.9 Module-6 Use Case

Description:

When user leave the system, click logout button user automatic go to the home page.

Table 4.6: Use Case Logout Module

Use Case	Logout.
Trigger	The user wants to end the session.
Actor	User.
Pre-Condition	The users is logged into the main system.
Scenarios	1. The user clicks the “sign out” button. 2. The system closes the http session & the system brings to the home page.
Alternative Path	User can although be logged out by a session timeout.

4.1.10 Use Case Diagram (Admin Login Part)

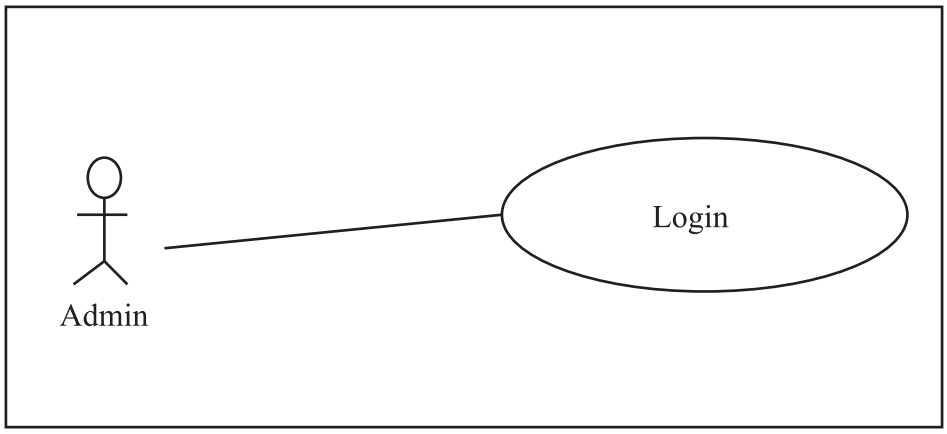


Fig: 4.10 Module-7 Use Case

Description:

Admin will give all valid information and entered into system.

Table 4.7: Use Case Admin Login Module

Use Case	Admin Login.
Trigger	The admin wants to access the system.
Actor	Admin.
Pre-Condition	Need to admin account active.
Scenarios	1. The admin going to home page. 2. The admin click to sign in page. 3. The admin enters email and password. 4. The admin clicks submit button. 5. When the system validate email and password for create a new (http) session.
Alternative Path	Automatic forwarding the main page.

4.1.11 Use Case Diagram (Admin Delete Profile Part)

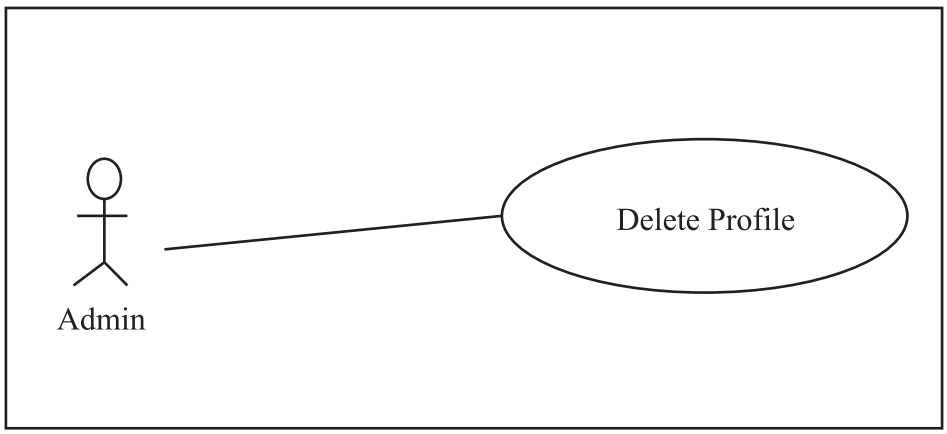


Fig: 4.11 Module-8 Use Case

Description:

Only admin have right any time any user remove the system.

Table 4.8: Use Case Admin Delete User Module

Use Case	Delete profile.
Trigger	User profile will be deleted.
Actor	Admin.
Pre-Condition	Need to admin account active.
Scenarios	1. Admin going to home page. 2. Admin click userlist page. 3. Select the user and click delete button. 4. Admin confirm delete.
Alternative Path	There is no alternative path for user.

4.1.12 Use Case Diagram (Admin Manage Product Part)

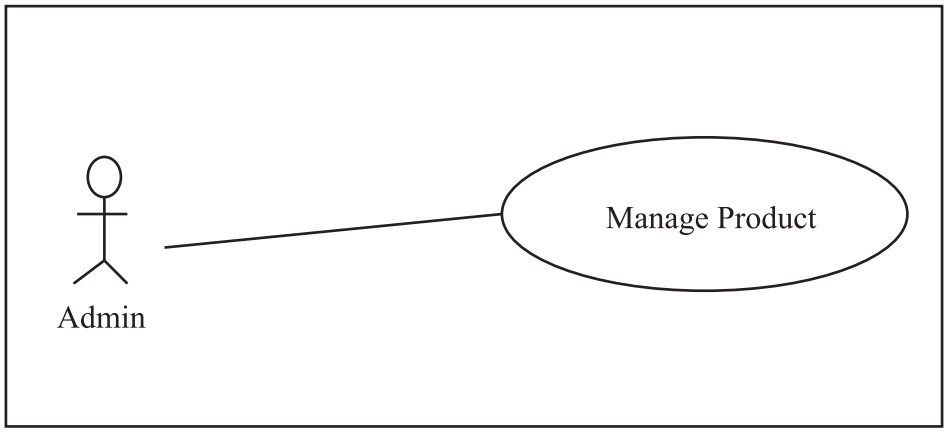


Fig: 4.12 Module-9 Use Case

Description:

If admin found illogical things than admin can delete product.

Table 4.9: Use Case Manage Product Module

Use Case	Manage product.
Trigger	Request product approbate or remove.
Actor	Admin.
Pre-Condition	Need to admin account active.
Scenarios	1. Admin going to panel. 2. Admin click manage product page. 3. Admin select and manage product. 4. Admin confirm any action.
Alternative Path	There is no alternative path for user.

4.1.13 Use Case Diagram (Admin Report Generate Part)

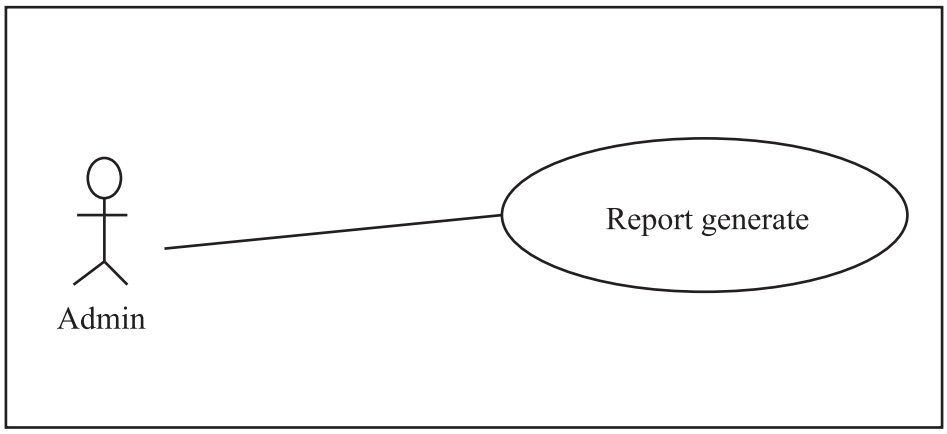


Fig: 4.13 Module-10 Use Case

Description:

Admin can generate system analysis report such as product view, bid etc.

Table 4.10: Use Case Report Generate Module

Use Case	Report Generate.
Trigger	Report generate daily, weekly and monthly wise.
Actor	Admin.
Pre-Condition	Need to admin account active.
Scenarios	1. Admin going to panel. 2. Admin click analysis product page. 3. Admin select button and generate report. 4. Admin can save report by image or pdf.
Alternative Path	There is no alternative path for user.

4.1.14 Use Case Diagram (Admin Logout Part)

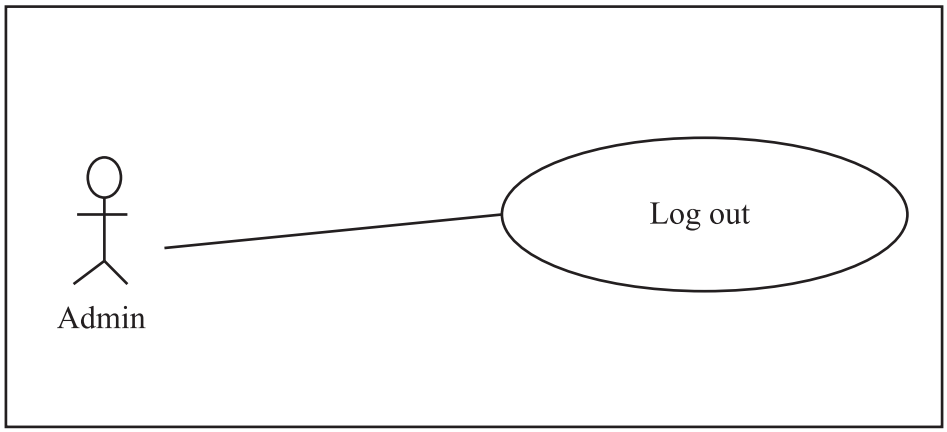


Fig: 4.14 Module-11 Use Case

Description:

Admin can generate system analysis report such as product view, bid etc.

Table 4.11: Use Case Report Generate Module

Use Case	Logout.
Trigger	The admin wants to end the session.
Actor	Admin.
Pre-Condition	The admin is logged into the main system.
Scenarios	1. The admin clicks the “logout” button. 2. The system closes the http session & brings to the home page.
Alternative Path	There is no alternative path, must be logged out for the security purpose.

4.2 Activity Diagram

4.2.1 Module Perspective Activities

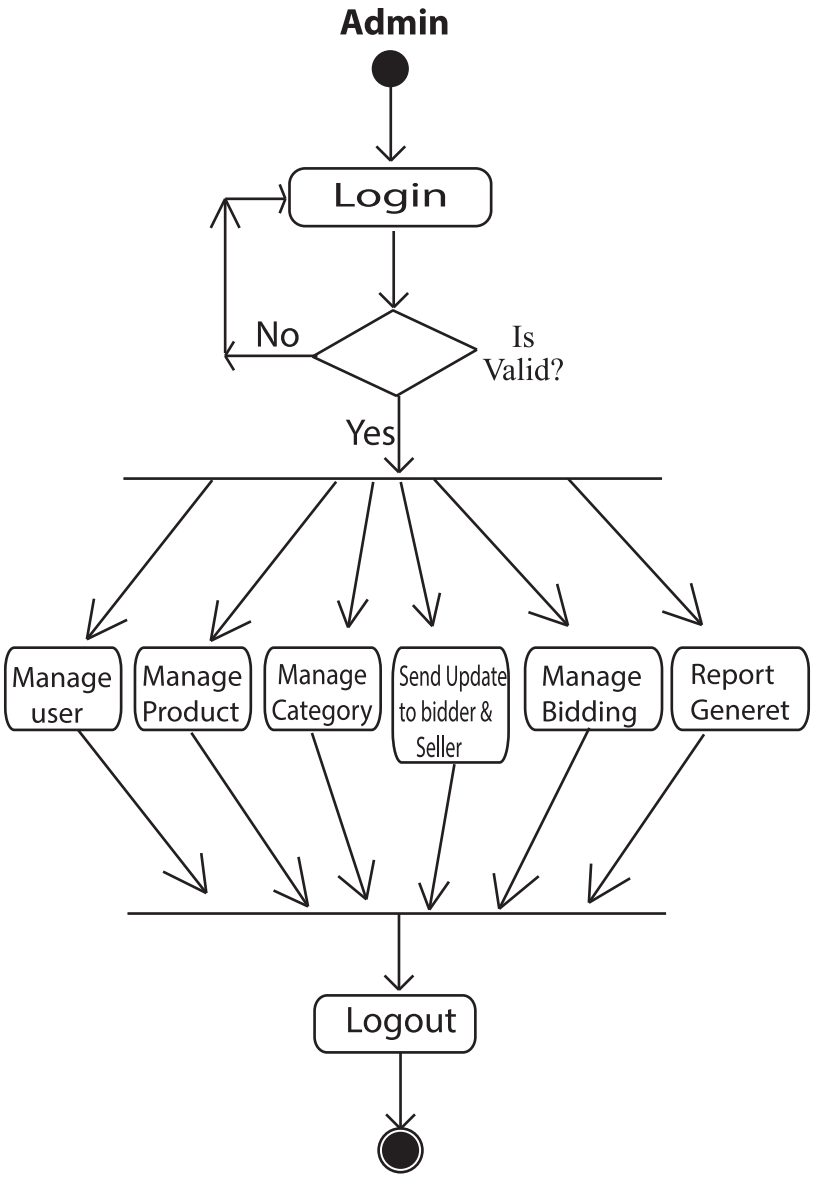


Fig: 4.15 Activity Diagram (Admin Activates Module)

4.2.2 User Perspective Activities

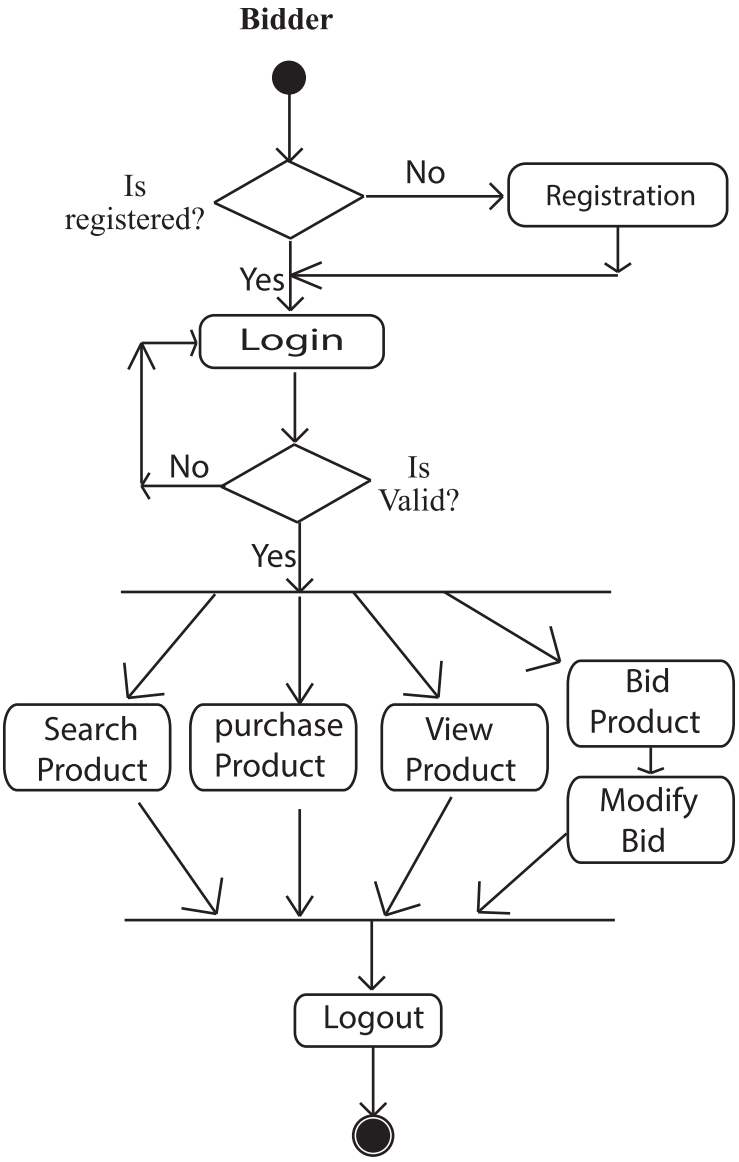


Fig: 4.16 Activity Diagram (Bidder Activities Module)

4.2.3 User Perspective Activities

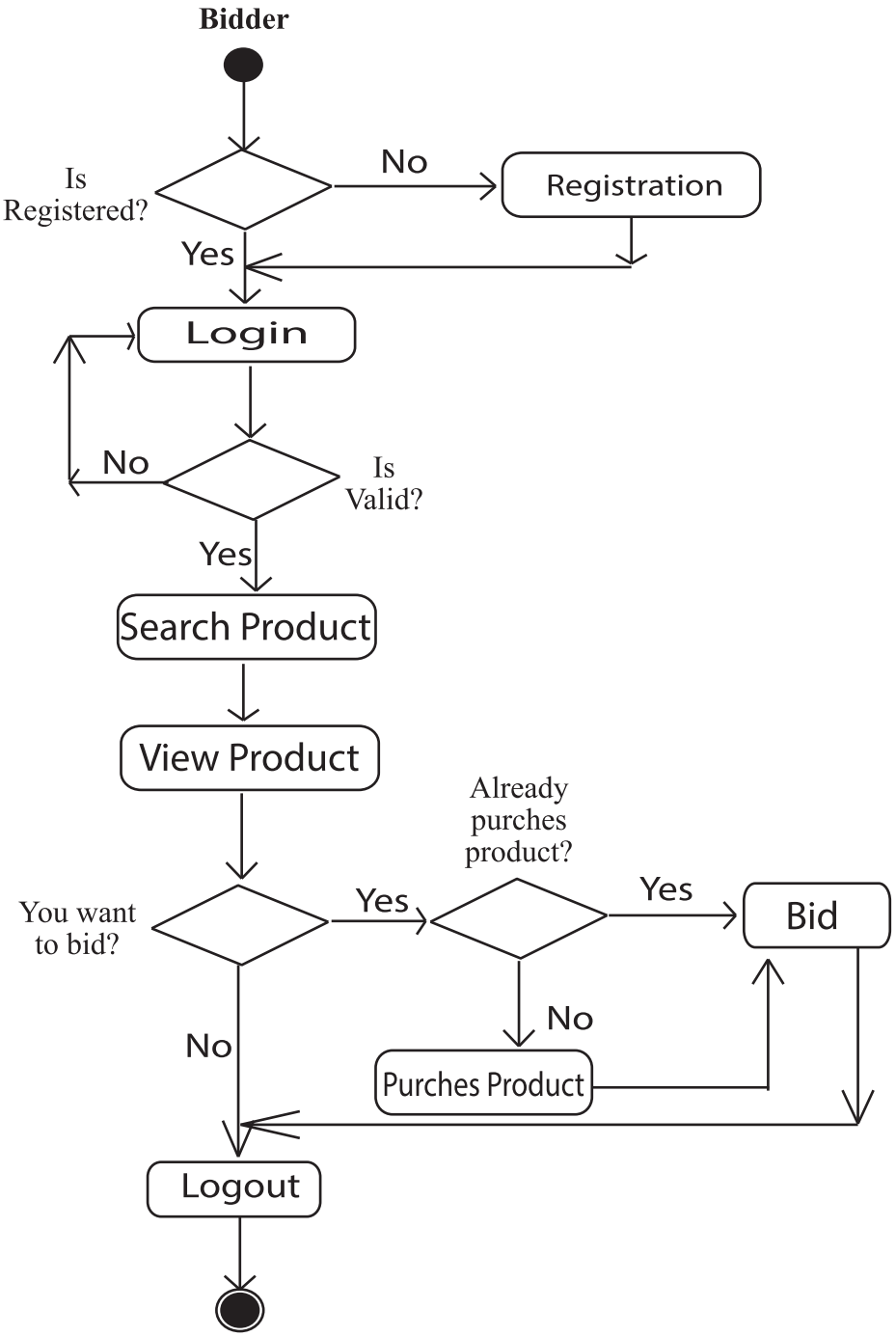


Fig: 4.17 Activity Diagram (Bidding a Product Perspective Activities)

4.2.4 User Perspective Activities

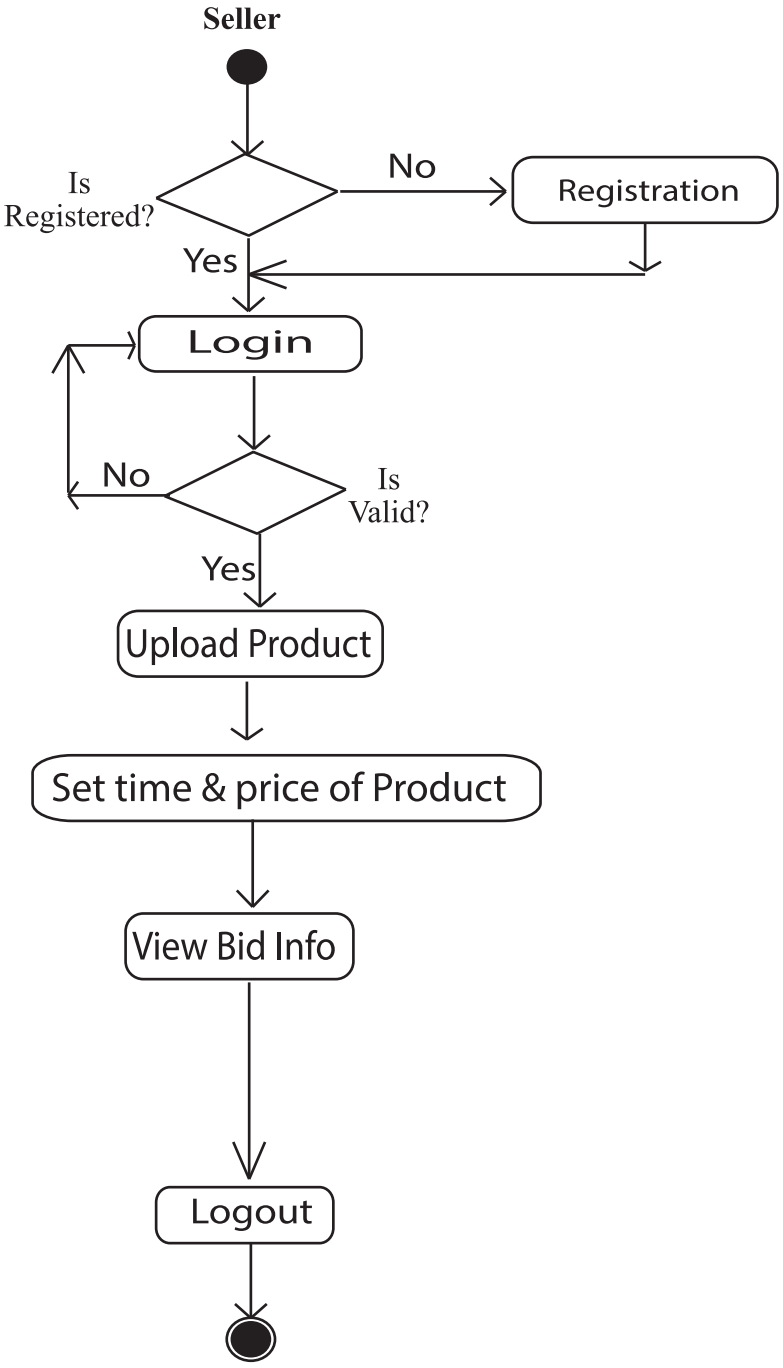


Fig: 4.18 Activity Diagram (Seller Perspective Activities)

4.3 Sequence Diagram

4.3.1 Admin Sequence Diagram

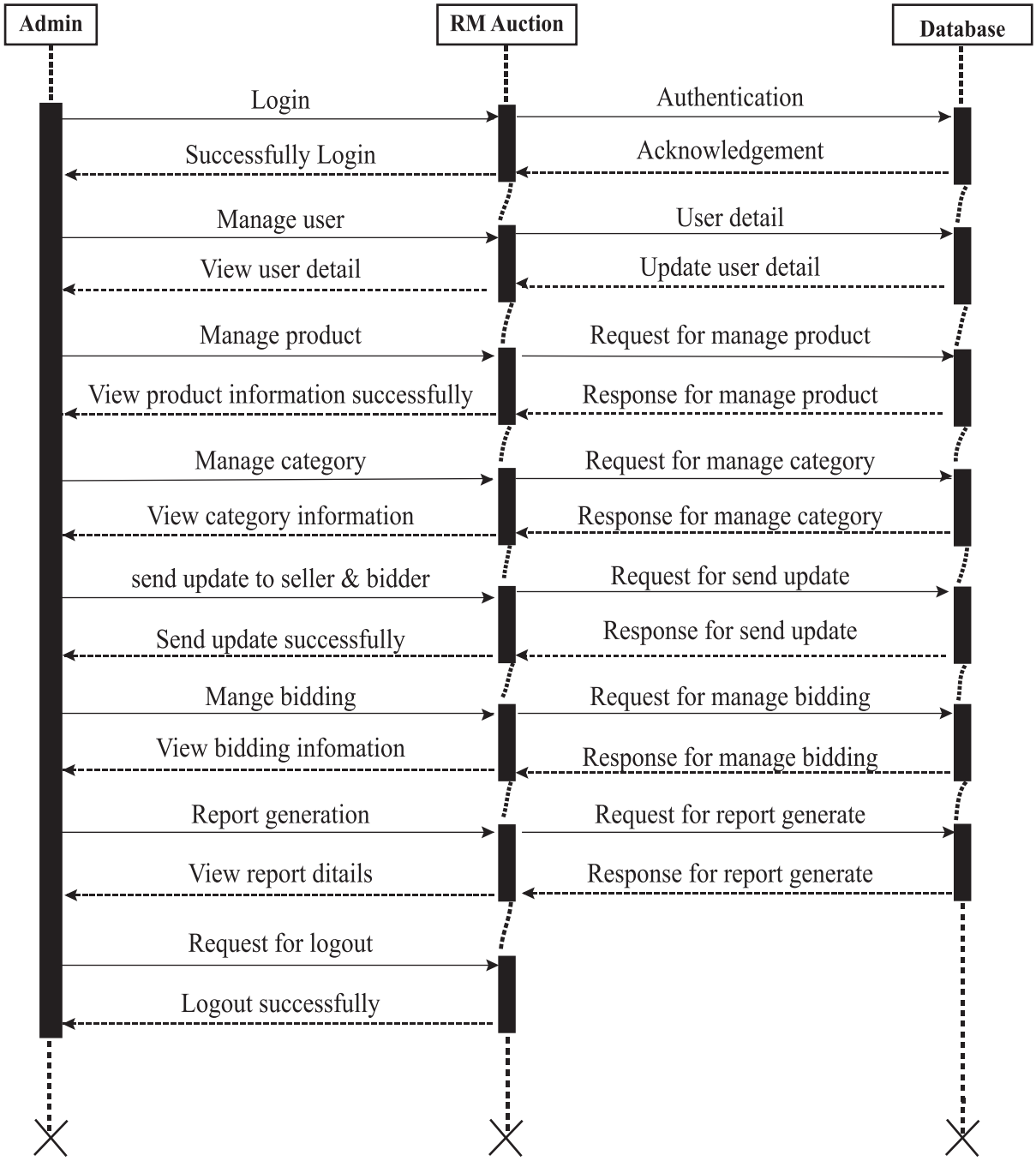


Fig: 4.19 Admin Sequence Diagram

4.3.2 Bidder Sequence Diagram

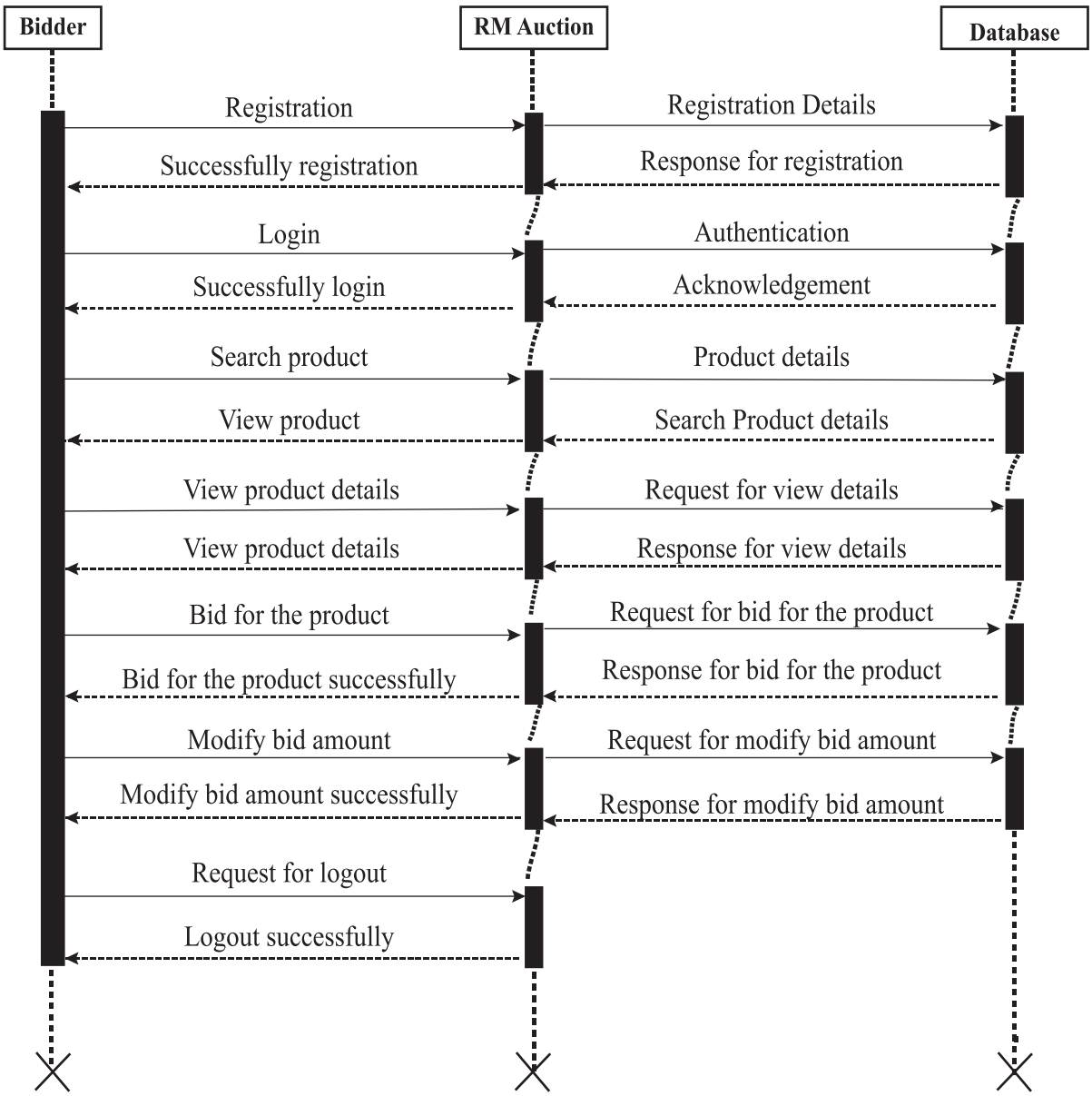


Fig: 4.20 Bidder Sequence Diagram

4.3.3 Seller Sequence Diagram

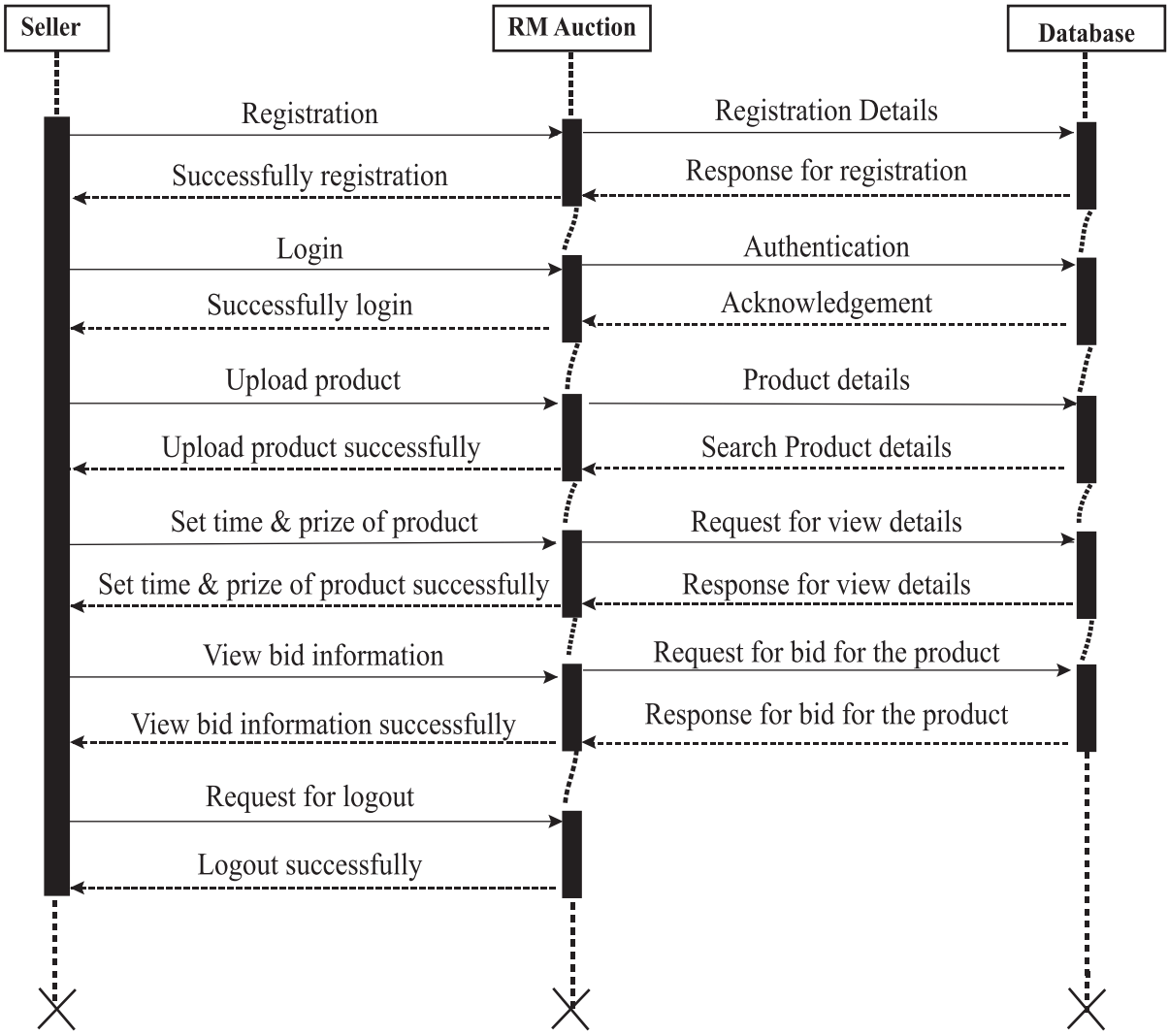


Fig: 4.21 Seller Sequence Diagram

4.4 Context Diagram

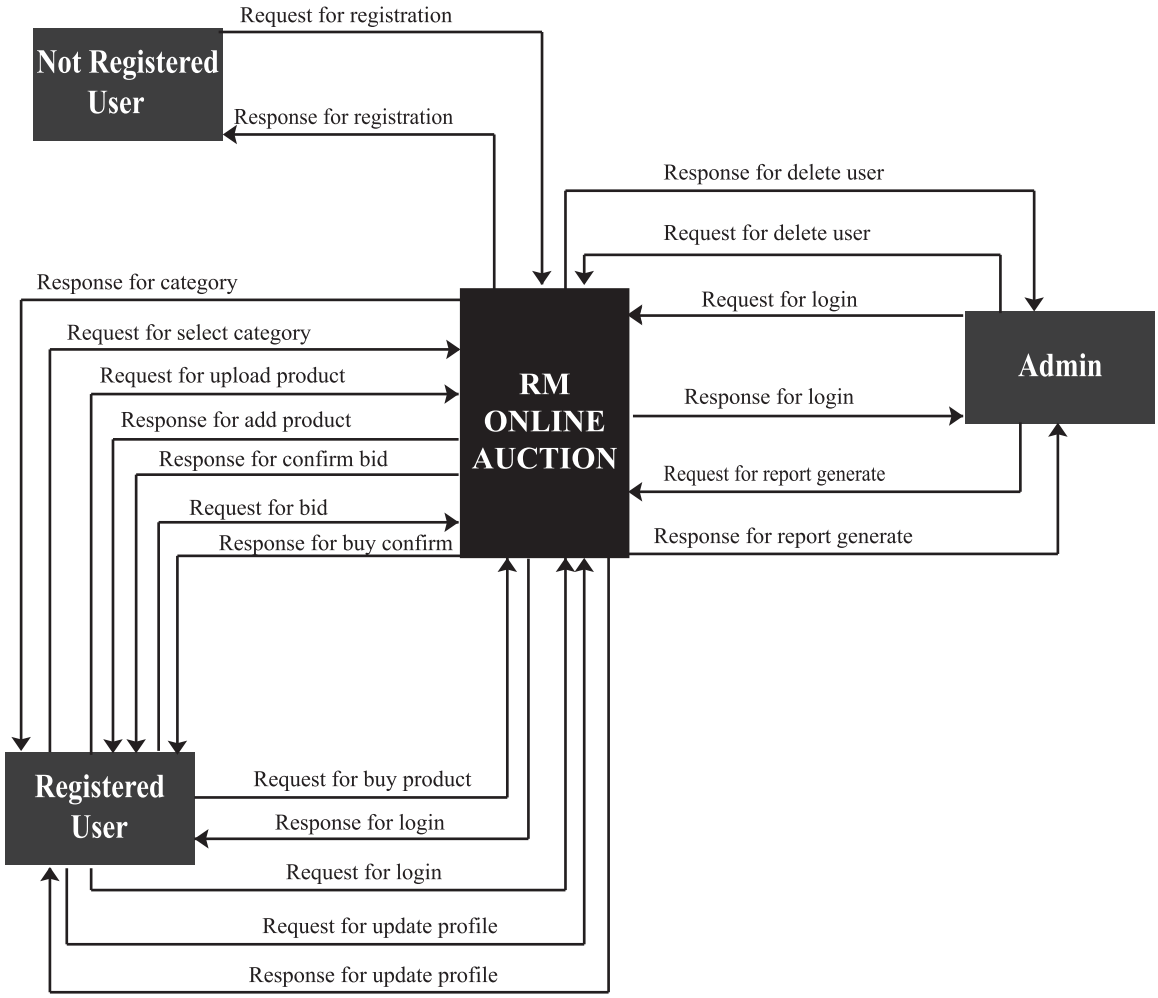


Fig: 4.22 Context Diagram

CHAPTER 5. DESIGN AND DEVELOPMENT

5.1 Design and Implementation Constraints

1. HTML5, CSS3, Bootstrap, PHP, JavaScript (jQuery) and MYSQL.
2. Database Design with MySQL work bench.

Development Environment

1. SQL and Databases support
2. Version control system integration
3. Locate history.

5.1.1 Software Language or Framework

This system is develop in PHP languages. PHP is a server- side scripting language designed primarily for web development but also used as a general- purpose programming language.

5.1.2 Database Design or Architecture

This system back- end use MySQL work bench. MySQL Workbench is a visual database design tool that integrates SQL development.

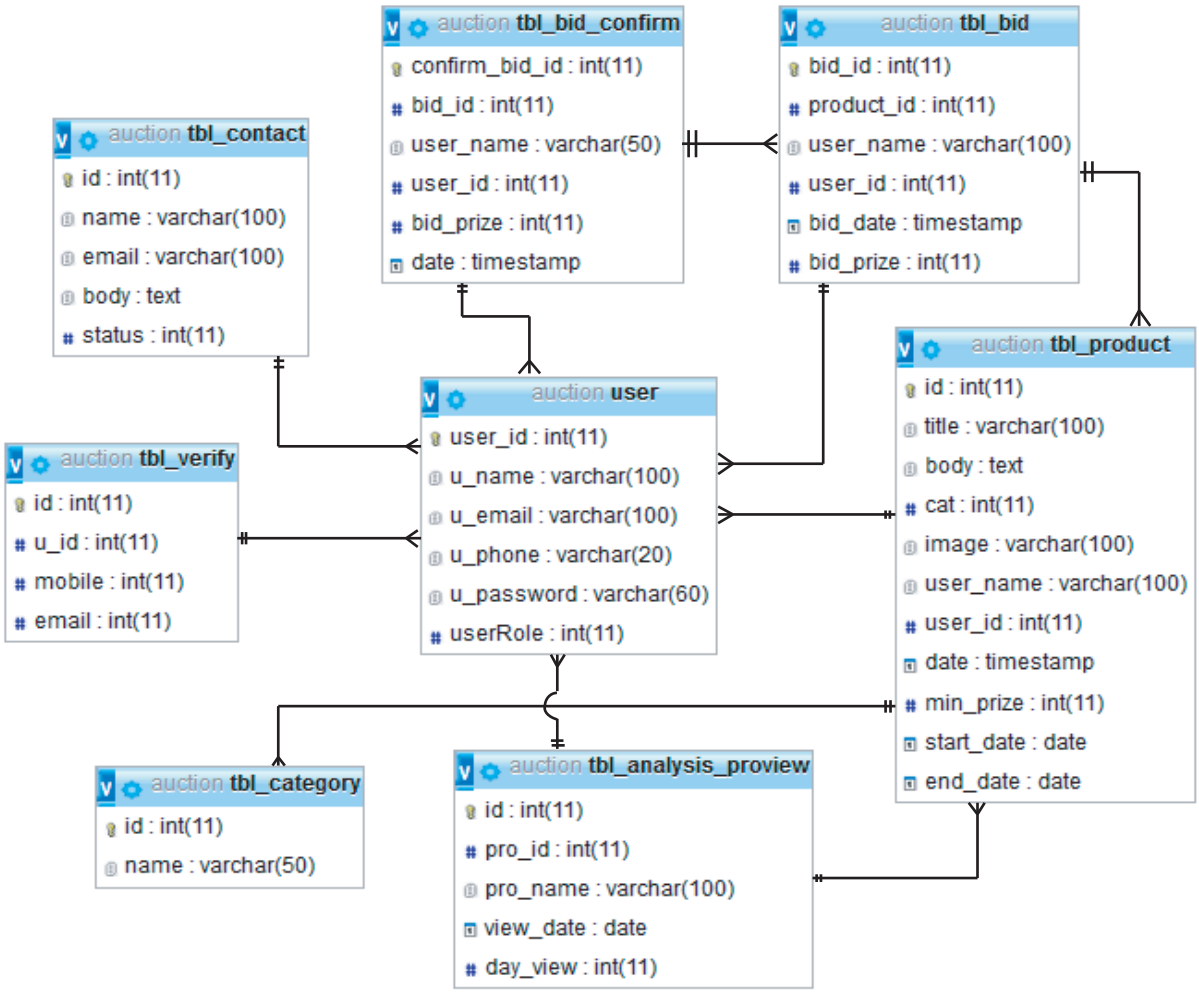


Fig: 5.1 Database Design

5.2 Development Tools and Technology

5.2.1 User Interface Technology

CSS Framework

A framework is a standardized set of concepts, practices and criteria for dealing with a common type of problem, which can be used as a reference to help us approach and resolve new problems of a similar nature.

5.2.2 Implementation Tools and Platforms

1. Notepad++ and Sublime text 3 for UI design, Sublime text 3 for server side development.
2. PHP, MySQL.
3. Apache HTTP Server.

5.2.3 PHP

Jet Brains PHP storm is a professional and intelligent PHP IDE providing developers a mix of powerful intelligent tools. PHP storm provides an editor for PHP, html and java script with code analysis, error prevention and automated reflection for PHP and Java script code.

5.3 Hardware / Software mapping

RM Auction:

1. User workstation, Computer.
2. Web Browser.
3. Communicate (Registered user to another registered user)
4. Database Server/ ADS Server
5. MySQL Database
6. Apache HTTP Server.

5.3.1 Access Control and Security

The Access control Matrix for RM auction:

Table 5.1: Access and Security Table

	Admin	Registered User	Non registered user
Home page	Yes	Yes	Yes
View product	Yes	Yes	Yes
Contuct	Yes	Yes	Yes
Bid info	Yes	Yes	Yes
Login	Yes	Yes	No
Logout	Yes	Yes	No
Profile update	Yes	Yes	No
Upload product	Yes	Yes	No
Bid product	Yes	Yes	No
Modify bid	Yes	Yes	No

Buy product	Yes	Yes	No
Delete profile	Yes	No	No
Delete product	Yes	No	No
Delete user	Yes	No	No
Report generate	Yes	No	No

5.4 Class Diagram

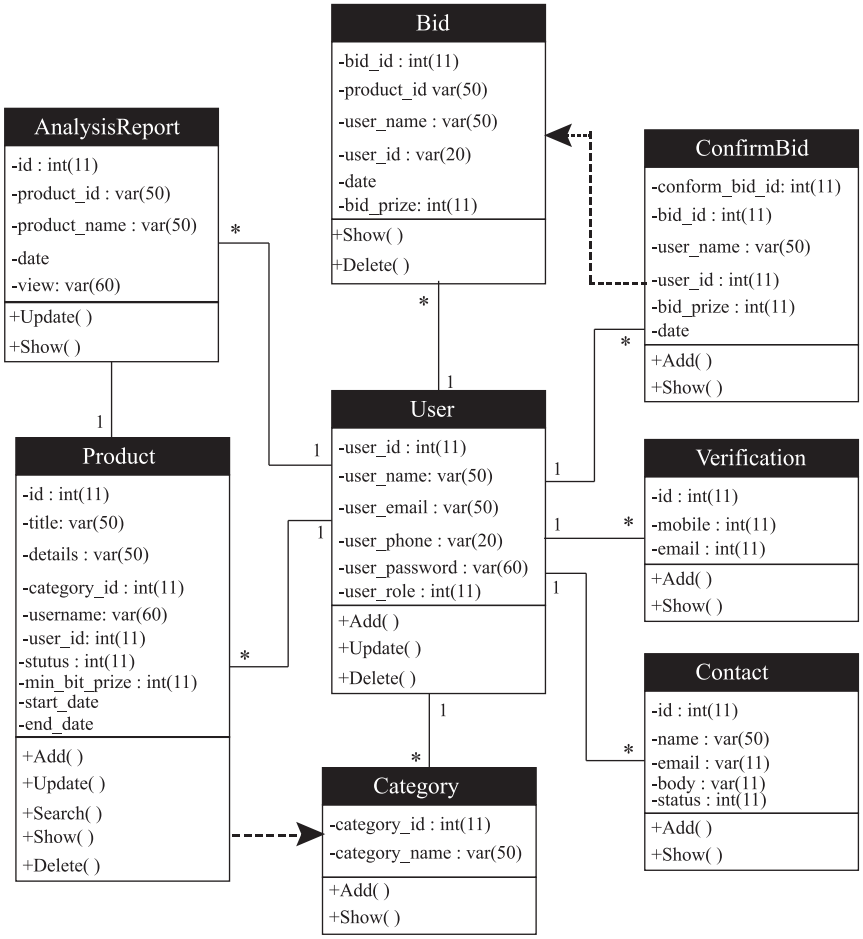


Fig: 5.2 Class Diagram

5.5 Data Dictionary

Table 5.2: Category

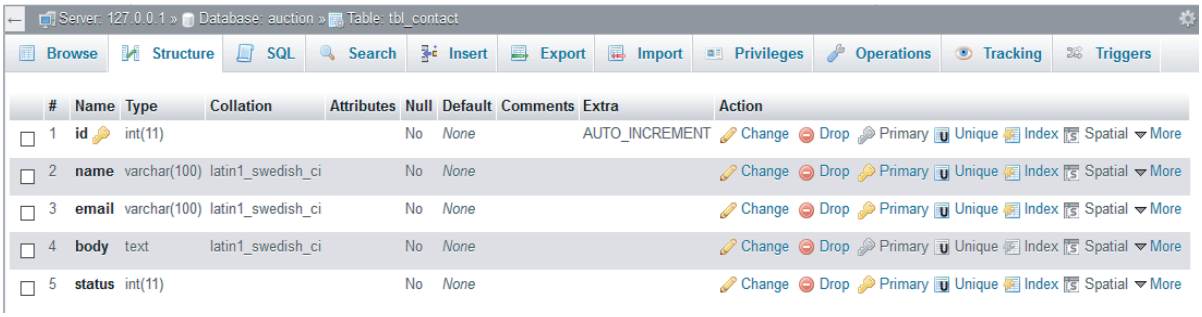
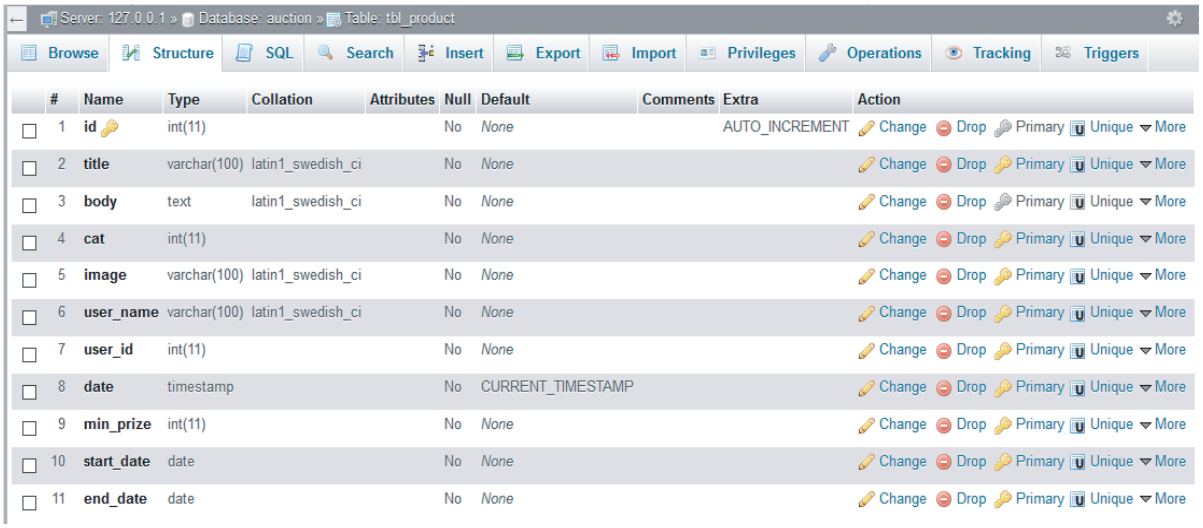
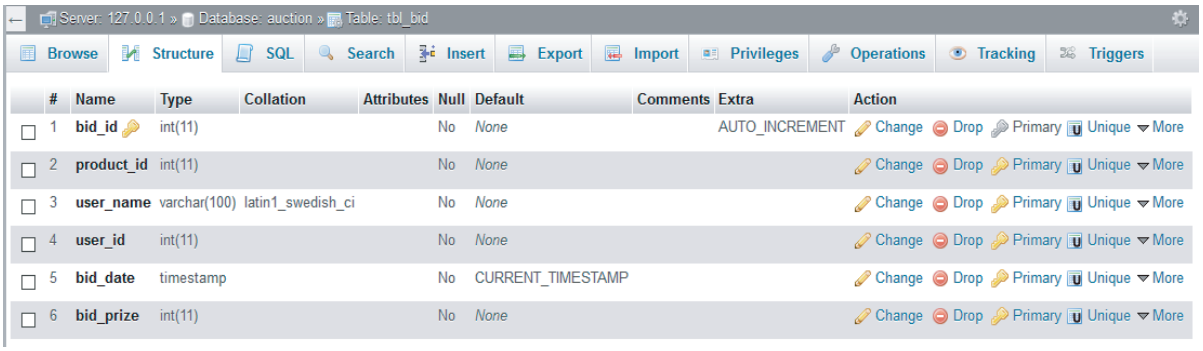


Table 5.3: Product



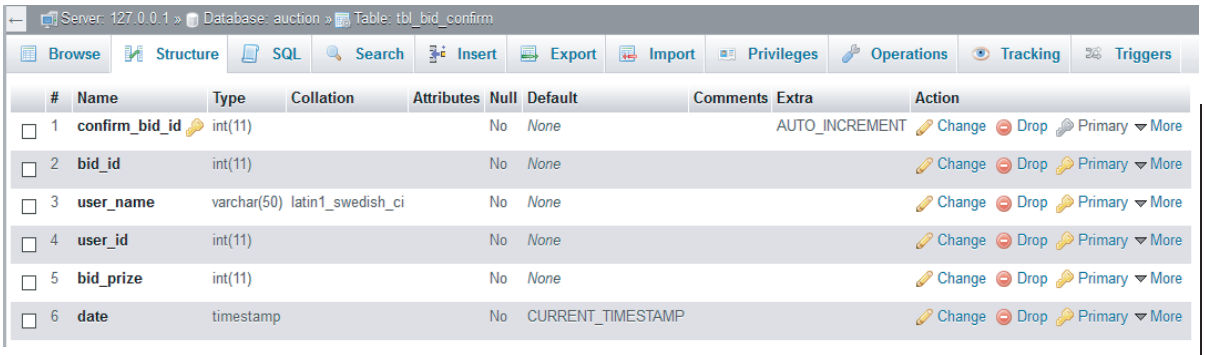
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None		AUTO_INCREMENT	Change Drop Primary Unique More
2	title	varchar(100)	latin1_swedish_ci		No	None			Change Drop Primary Unique More
3	body	text	latin1_swedish_ci		No	None			Change Drop Primary Unique More
4	cat	int(11)			No	None			Change Drop Primary Unique More
5	image	varchar(100)	latin1_swedish_ci		No	None			Change Drop Primary Unique More
6	user_name	varchar(100)	latin1_swedish_ci		No	None			Change Drop Primary Unique More
7	user_id	int(11)			No	None			Change Drop Primary Unique More
8	date	timestamp			No	CURRENT_TIMESTAMP			Change Drop Primary Unique More
9	min_prize	int(11)			No	None			Change Drop Primary Unique More
10	start_date	date			No	None			Change Drop Primary Unique More
11	end_date	date			No	None			Change Drop Primary Unique More

Table 5.4: Bid



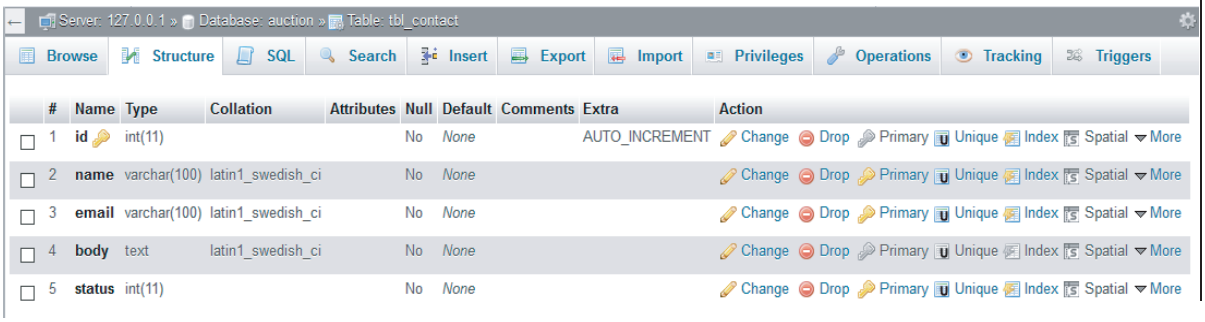
#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	bid_id	int(11)			No	None		AUTO_INCREMENT	Change Drop Primary Unique More
2	product_id	int(11)			No	None			Change Drop Primary Unique More
3	user_name	varchar(100)	latin1_swedish_ci		No	None			Change Drop Primary Unique More
4	user_id	int(11)			No	None			Change Drop Primary Unique More
5	bid_date	timestamp			No	CURRENT_TIMESTAMP			Change Drop Primary Unique More
6	bid_prize	int(11)			No	None			Change Drop Primary Unique More

Table 5.5: Confirm Bid



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	confirm_bid_id	int(11)			No	None		AUTO_INCREMENT	Change Drop Primary More
2	bid_id	int(11)			No	None			Change Drop Primary More
3	user_name	varchar(50)	latin1_swedish_ci		No	None			Change Drop Primary More
4	user_id	int(11)			No	None			Change Drop Primary More
5	bid_prize	int(11)			No	None			Change Drop Primary More
6	date	timestamp			No	CURRENT_TIMESTAMP			Change Drop Primary More

Table 5.6: Contact



#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	id	int(11)			No	None		AUTO_INCREMENT	Change Drop Primary Unique Index Spatial More
2	name	varchar(100)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More
3	email	varchar(100)	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More
4	body	text	latin1_swedish_ci		No	None			Change Drop Primary Unique Index Spatial More
5	status	int(11)			No	None			Change Drop Primary Unique Index Spatial More

Table 5.7: Analysis Report

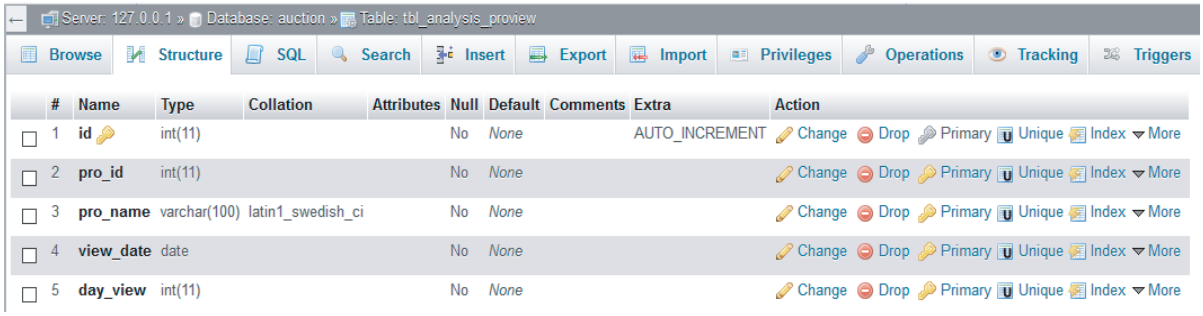


Table 5.8: Verification

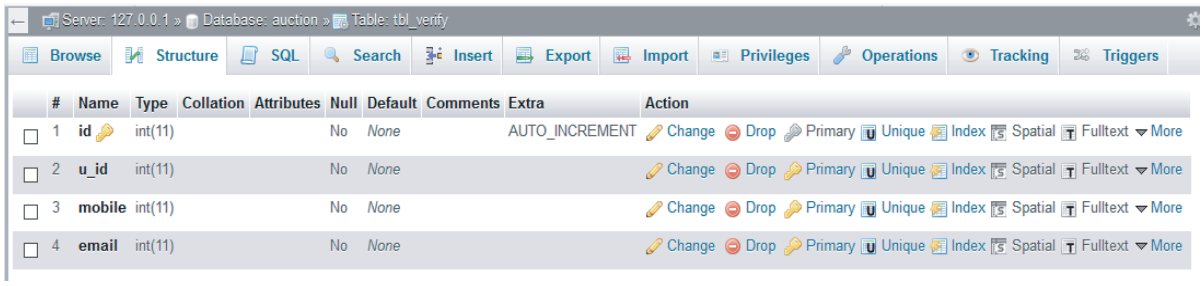
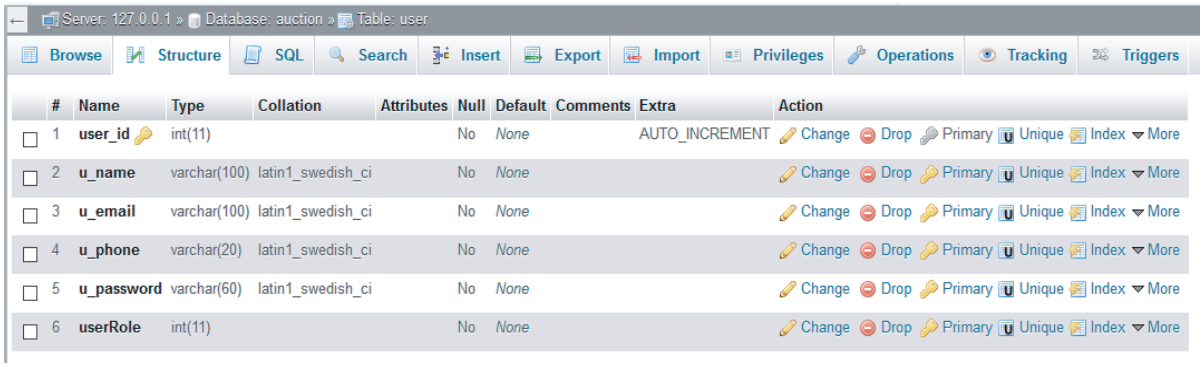


Table 5.9: User



CHAPTER 6. TEST PLANS

6.1 Testing Features

The testing features RM Auction functional and non- functional all are include.

6.1.1 Features to be tested

Features to be tested. The following list focused on RM Auction features.

Table 6.1: Features to be tested

Features	Priority	Description
Registration	1	Get all service from RM auction, user must be complete registration, otherwise user cannot give any product or message.
Login	1	Login as registered user.
Add product	1	Upload product in the system.
Select category	2	When user add product, this time select category.
Contact	2	User can send message to admin.
Bid Product	1	User can bid any product.
Application error	2	It is important for admin as well as user.
Report generate		Admin can generate product analysis report.
Logout	1	Logout from the system.
Technological Features		
Database	1	Access to database is frequently need operation. So this technical feature should be tightly is control for management system.
Quality Features		
	1	This feature should restrict be managed to ensure privacy and reliability.
Authentication	1	Without authentication confidentially and integrity are not guaranteed.
Filtering proper information update.	1	Proper information update procedure should work properly otherwise update info will not work in system.

6.1.2 Features not to be tested

The features which have not been tested.

Table: 6.2: Features not to be tested

Features	Description
Add product	Bad people give authorized product.

6.2 Testing Strategies

6.2.1 Test Approach

Black Box Testing

Black-box testing is a method of software testing that examines the functionality of an application without peering into its internal structures or workings. This method of test can be applied virtually to every level of software testing: unit, integration, system and acceptance. We have decided to perform equivalence partitioning and Boundary value analysis for RM auction.

6.2.2 Pass/ Fail Criteria

1. The entrance criteria's for each phase of testing must be met before the next phase can commence. Now the criteria's for pass and fail are given below.
2. According to the given scenario the expected result need to take place then the scenario will be considered as pass otherwise that criteria should be failed.
3. System crash will be considered as fail case.
4. After submitting a query in the system, if expected page won't appear then it will be considered as fail case.

6.2.3 Testing Schedule

1. This section will describe developer.
2. Specify test milestones.
3. Estimate time required to do each testing task.
4. Schedule all testing tasks and test milestones.

Table 6.3: Testing Schedule

Test Phase	Responsible Person	Time
Test Plan Creation	Developer	1 week
Test specification creation	Developer	1week
Test specification team review	Developer	1 week
Unit Testing	Developer	Developing time
Component testing	Developer	1 week
Integration Testing	Developer	1 week
Use case validation	Developer	1 week
User interface testing	Developer	1 week

Test Phase	Responsible Person	Time
Load testing	Developer	1 week
Performance Testing	Developer	1 week
Release to Production	Developer	1 week

6.2.4 Traceability Matrix

Step 1: Our test cases are verify user, when correct email, name, password entered, it will be registered successfully.

Table 6.4: Traceability Matrix

Test No.	Test case	Test steps	Test data	Expected result
1.	Login verify	1) Go to home page 2) Click "sign up" button. 3) Fill up all required field.	Name: Ratul Mahbub Email: ratul@gmail.com Password: 123456	Registration Successful
2.	Add product	1) Go to dashboard 2) Click add product button. 3) Fill up all required field. 4) Click submit button.	Product: Give product description. Category: Select subject wise category.	Successfully Upload product
3.	Search product	1) Enter into main system. 2) Write connect in search. 3) Click go button	Show result according to search bar.	The order Successfully Granted.

6.3 Testing Environment (Hardware / Software Requirements)

Testing Data

The system provided id, this id should be active and with no exception.

6.3.1 Hardware Requirements

1. Pentium IV or Higher.
2. 1 GB of RAM.
3. 500 Mb of Disk space.
4. LAN to get connected to internet.

6.3.2 Software requirements:

1. PHP
2. Apache http server
3. MySQL database

6.4 Test Cases

Module A: User Registration
1 List of Test Case

Test Case # 1:1	Test case name:Signup
System: RM Auction	Sub-system: N/A
Designed by: Mahbubul Alam	Design Date: 02/01/2018

Description: The user wants to use the system, this time complete signup page.

Pre-condition: The user needs to brows RM auction home page and click signing button.

Step	Username	Password	Email	Expected Response	Pass/Fail	Comments
1.	mahbub	123456	mahbub@gamil.com	Username is available.	Pass	successful
2.	ratul		ratul@gmail.com	All field should be complete.	Fail	Unsuccessful
3.	mahbub	P123456789	mahbub@gamil.com	Email is available. Please insert unique email id.	Fail	Unsuccessful
4.		P11223344	ratul@gamil.com	All field should be complete.	Fail	Unsuccessful

Post-condition: Registered and the user will be able to access main page all function.

State Transition Diagram:

Test Case # 1.2	Test case name: Registration
System: RM Auction	Sub-system: N/A
Designed by: Salauddin Mahmud	Design Date: 02/01/2018

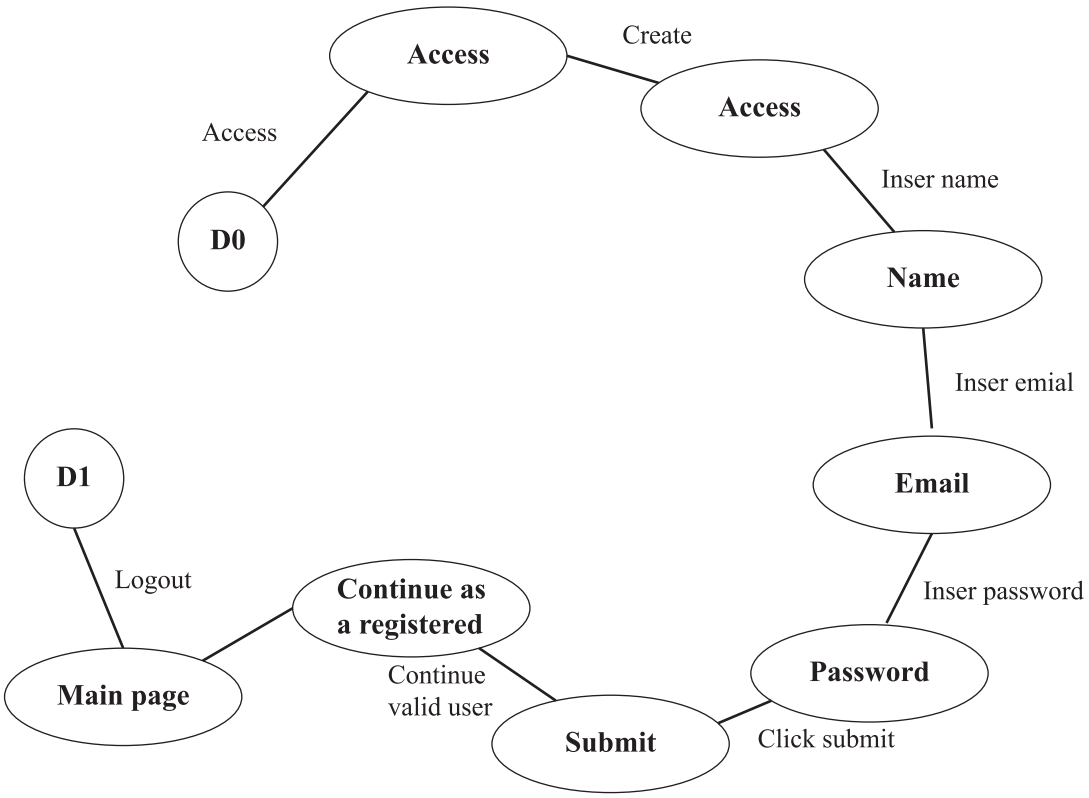


Fig: 6.1 State transition diagram

Module B: Product

Test Case # 2.1	Test case name: Add Product
System: RM Auction	Sub-system: N/A
Designed by: Salauddin Mahmud	Design Date: 15/01/2018

Description: The user complete the registration process and enter into the main system.

Pre-condition: The user needs to be registered.

Step	Action	Expected System Response	Pass/ Fail
1.	Click add product button.	Upload produc.	
2.	Give detail description.	Give detail description.	
3.	Add category	Select category.	
4.	Tags	Product related keywords.	
5.	Click “submit” button.	When user click submit button, the product is successfully done.	Pass

Post-condition: User must be login main system.

Sate Transition Diagram

Test Case # 2.2	Test case name: Add Product
System: RM Auction	Sub-system: N/A
Designed by: Salauddin Mahmud	Design Date: 20/01/2018

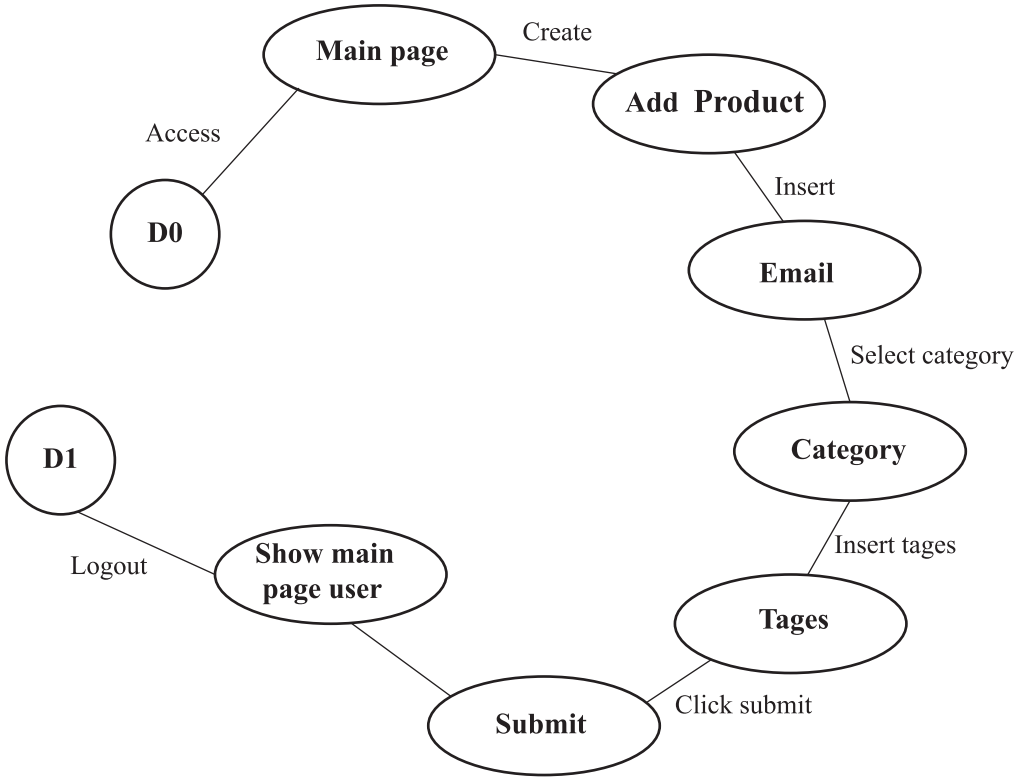


Fig: 6.2 Sate Transition Diagram

Module C: Bid Product

Test Case # 3.1	Test case name: Bid Product
System: RM Auction	Sub-system: N/A
Designed by: Mahbubul Alam	Design Date: 20/01/2018

Description: The user complete the registration process and enter into the main system.

Pre-condition: The user needs to be registered.

Step	Action	Expected System Response	Pass/Fail	Comment
1.	Click view button.	View product.	Pass	Successful
2.	Write the prize.	Write down prize in input field.	Pass	Successful

Post-condition: User must be login in the system.

State Transition Diagram

Test Case # 3.2	Test case name: Bid Product
System: RM Auction	Sub-system: N/A
Designed by: Salauddin Mahmud	Design Date: 25/01/2018

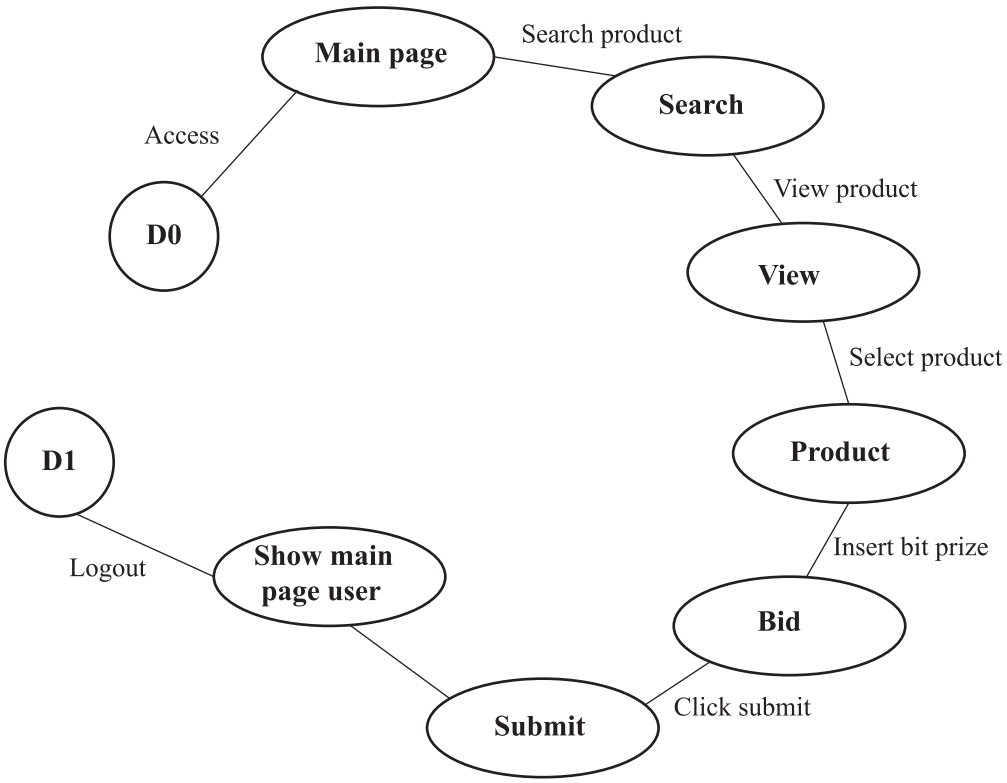


Fig: 6.3 State Transition Diagram

Module D: Report

Test Case # 4.1	Test case name: Report
System: RM Auction	Sub-system: N/A
Designed by: Mahbubul Alam	Design Date: 30/03/2018

Description: The user complete the registration process and enter into the main system.

Pre-condition: When user want to generate report must be select day/month category.

Step	Action	Expected System Response	Pass/Fail	Comment
1.	Click analysis report.	View analysis report.	Pass	Successful
2.	Save the report.	Collect report by selecting image or pdf.	Pass	Successful

Post-condition: User must be login in the main system.

State Transition Diagram

Test Case # 4.2	Test case name: Report
System: RM Auction	Sub-system: N/A
Designed by: Mahbubul Alam	Design Date: 30/03/2018

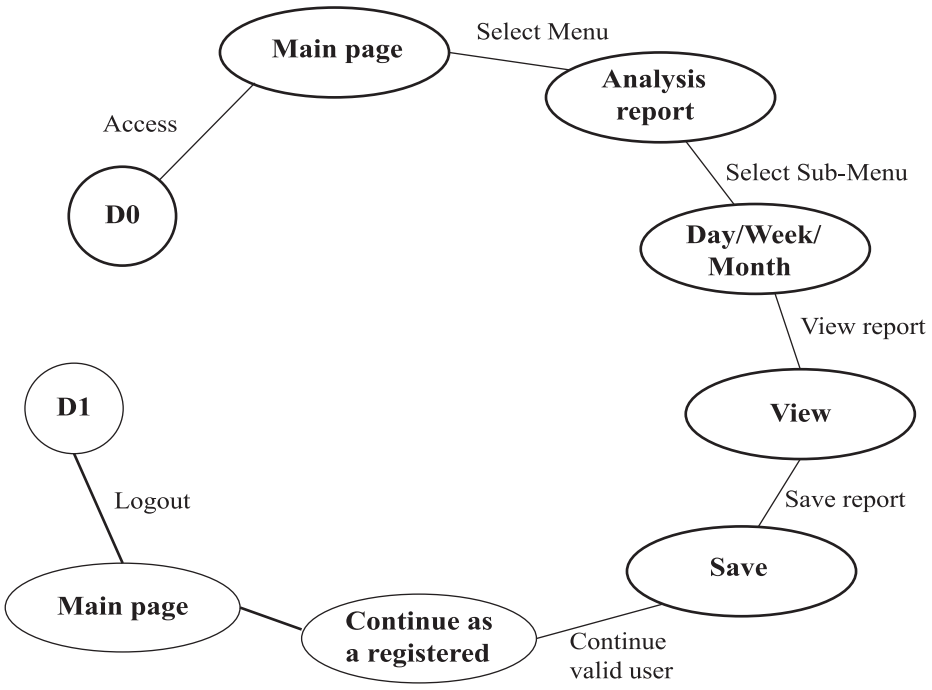


Fig: 6.4 State Transition Diagram

6.5 Testing Deliverables

6.5.1 UAT (User Acceptance Test) Report

The purpose of User Acceptance Testing is to assure that the project fulfills the functional and non-functional requirements. UAT may also identify issues that have not been specified in Business Requirements Document (BRD) such as those relating to usability. UAT is the ultimate step before rolling out the solution. UAT is usually carried out by end users in an environment that closely models the real world.

6.5.2 Roles and Responsibilities

Table 6.5: Roles and Responsibilities

Role	Responsibilities
Project developer	1. Ensure acceptance criteria are agreed prior to commencing UAT. 2. Communication the user for feedback.
User Developer	1. Review cases and scenarios for accuracy, completeness and sequencing. 2. Assist business assurance co-ordination with the creation with the creation of a detailed test plan. 3. Ensure that all the test data is correct.
User : IT Help Desk	1. Ensure that a detailed test scripts/cases, scenarios and instruction are available for test users prior to the start of testing, 2. Ensure that issues identified during UAT are logged in the test log.
Administrator .Net Team	1. Execute test scripts/cases. 2. Document test result.

CHAPTER 7. USER MANUAL

7.1 User Manual

Descroption: This is the main home page RM auction sustem.

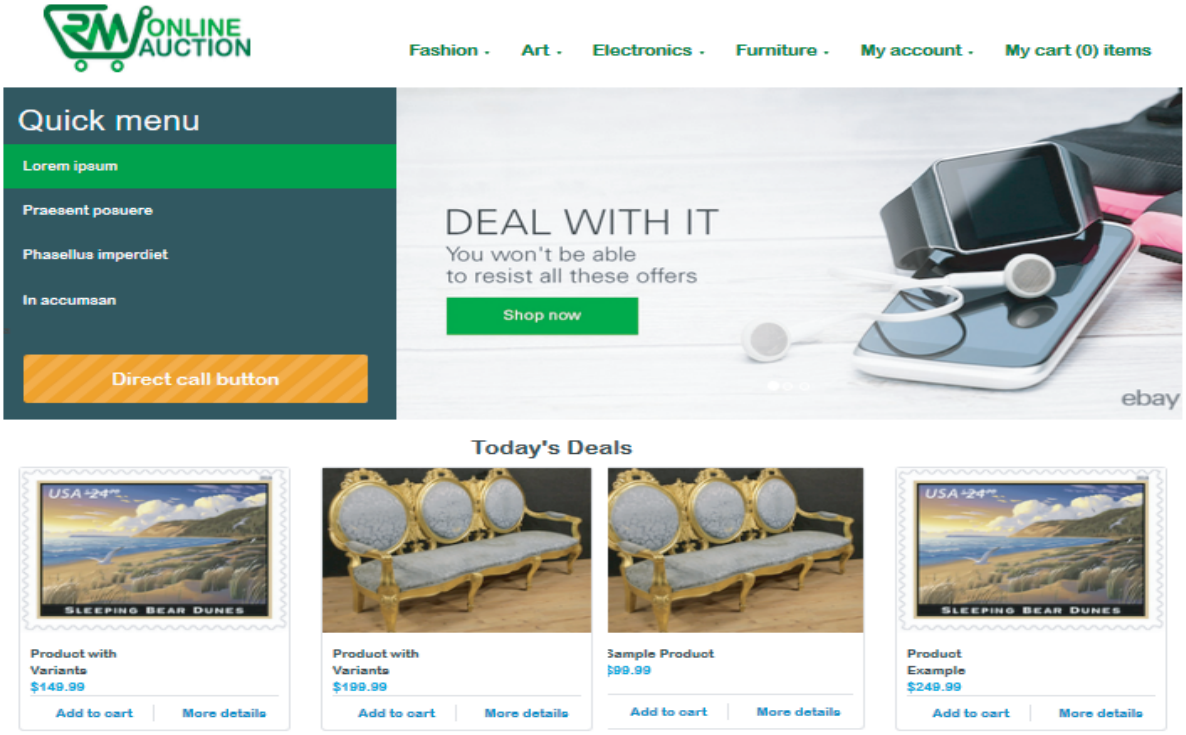


Fig: 7.1 Home Page

Description: This is the registration page of the system.

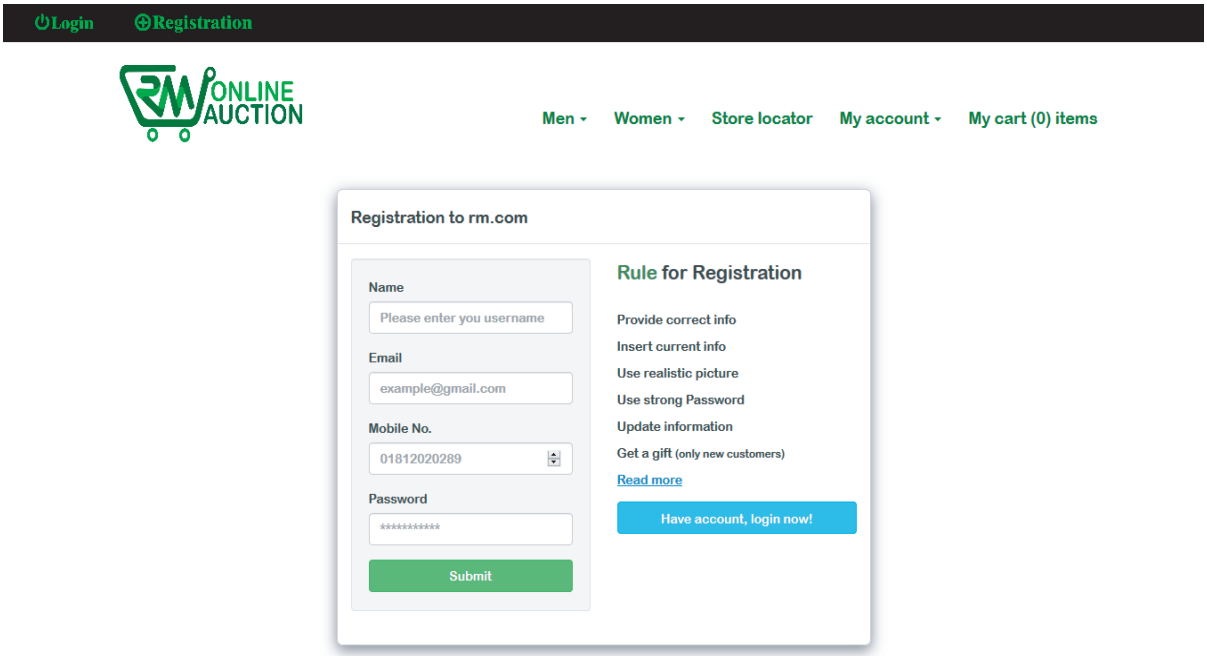


Fig: 7.2 Registration Page

Description: This is login page, when user want to access the main system this time need to login.

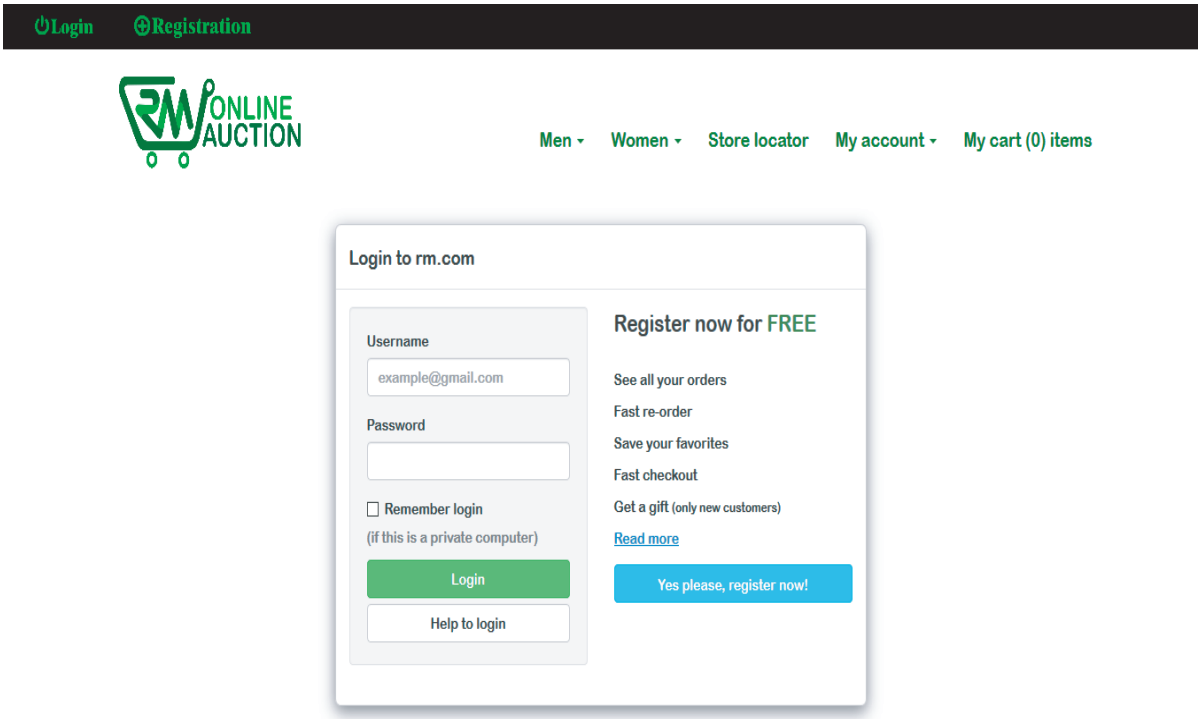


Fig: 7.3 Login Page

Description: When user click bid button from product gallery then open this view of product and registered user bidding here.

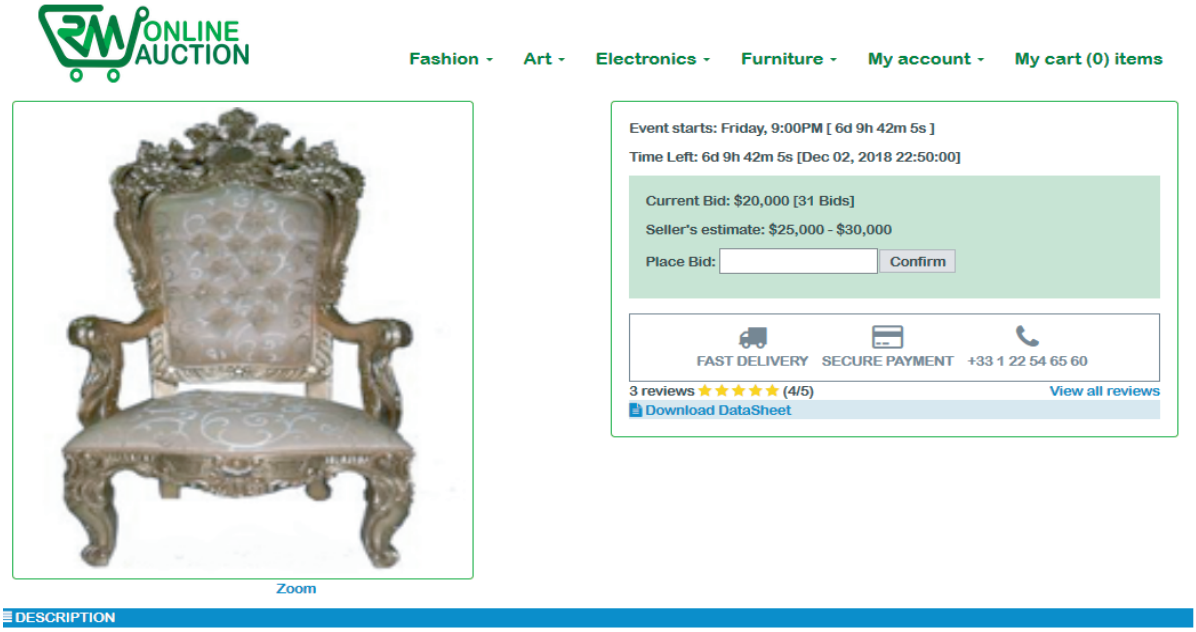


Fig: 7.4 Product View

Description: When admin login by this time open this dashboard.

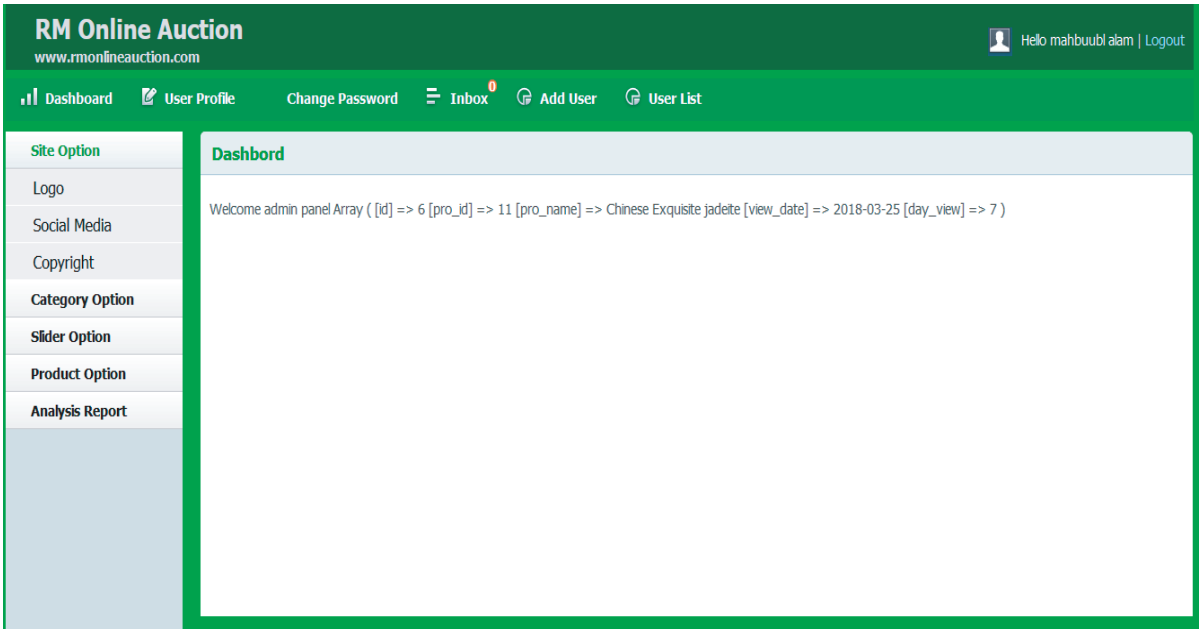


Fig: 7.5 Dashboard

Description: When user or admin click product list menu from dashboard by this time show this page where user (own products) or admin (all products) can manage product.

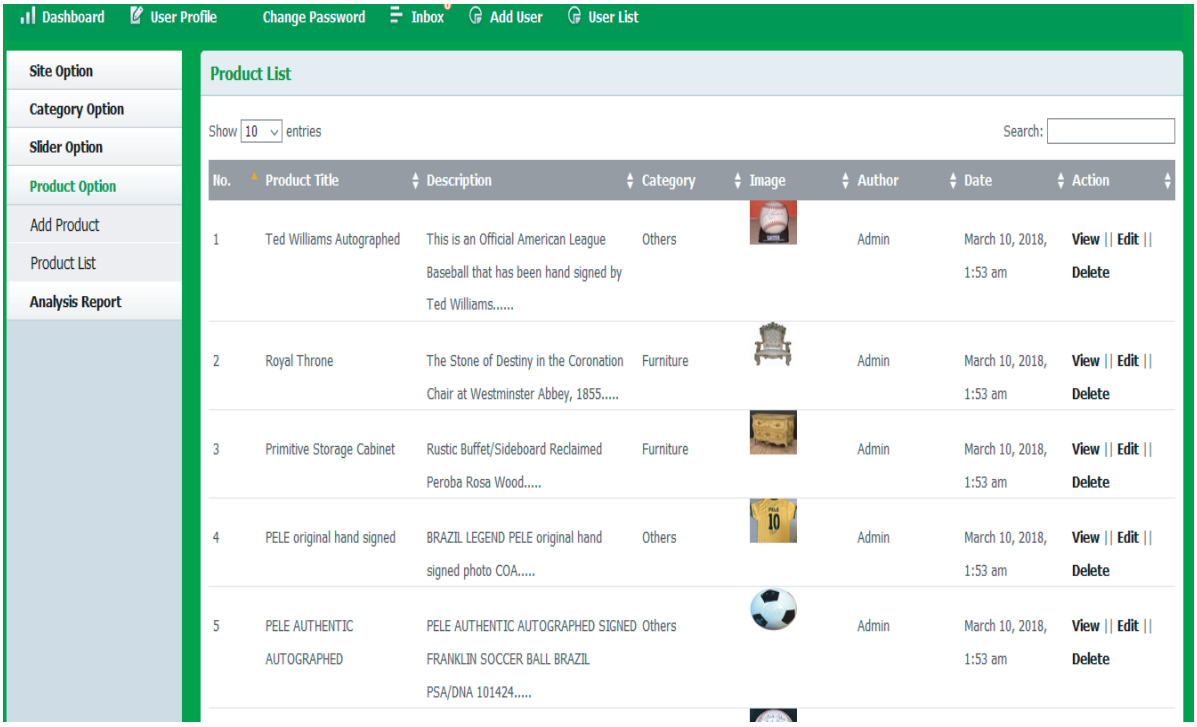


Fig: 7.6 Product List

Description: When user click add product by this time open this window where user upload product by fulfilling all required input field.

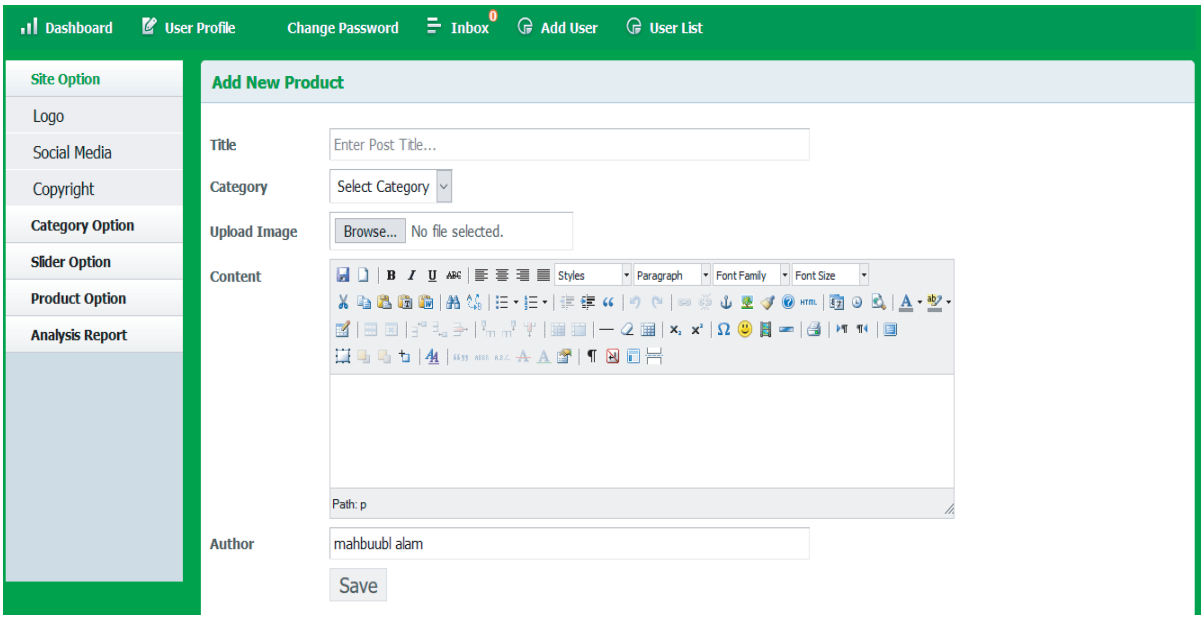


Fig: 7.7 Add Product

Description: When admin click analysis report from sidebar menu by this time open this window where report generate with two way graph and table and admin can collect this report with image(graph) and pdf(table).

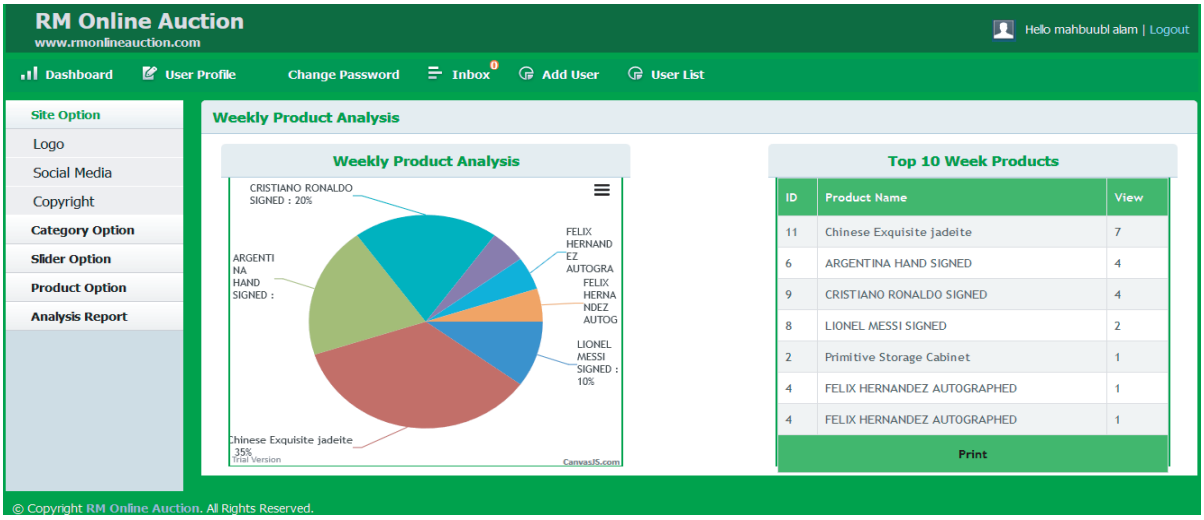


Fig: 7.8 Analysis Report

CHAPTER 8 CONCLUSION

8.1 Final Synopsis

RM Auction is a new experience and has enormously impacted the lives of consumers in its short time of existence. It is look forward to grow constantly in years to come with advancements in technology. RM Auction System has made consumers more effective and efficient in their behavior and has driven businesses to a new level, forcing many to make the necessary adjustments and changes to reach the new market of knowledgeable consumers. The results of this survey underscore the need for businesses to take the online market seriously. The survey conducted revealed a positive attitude and behavior toward online Auction System even by those consumers who still like traditional stores. Therefore, continuous efforts have to be devoted to studying consumer online Auction System 230 behavior in a dynamic way. With the knowledge of consumer online Auction System behavior, it is believed that e-auction will continue to grow and it will become not only an important business revenues channel, but also a part of people's daily life.

8.2 Future Scope:

The following section discusses the work that will be implemented in future:
Detailed Categories: Future work could involve adding subtopic. This time registered user give post according's to subtopic.
Add rating: In this section the registered user can give rating the post and comment, they can also like the product.
Credit card: Future work could involve credit card such as pay pal, master card etc.
Dynamic: We will try to 100% dynamic of our existing sites.
Plugins: Avoid all plugins in future and make own way.
App: Mobile application of the existing sites.
Security: Protect shell bidding.

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