

Sharing Economy Platform

*Dissertation report submitted in complete fulfillment of the requirement
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BACHELOR OF TECHNOLOGY

IN

**ELECTRONICS AND COMMUNICATION ENGINEERING
&
COMPUTER SCIENCE ENGINEERING**

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Dissertation Approval Sheet

The dissertation entitled “Sharing Economy Platform” submitted by Mahima Suri Enroll no.-151019 and Prashant Chaudhary Enroll 151316 is approved as complete fulfillment for the award of Bachelor of Engineering in Electronics and Communication Engineering and Computer Science Engineering.

Internal Examiner

External Examiner

Jaypee University Of Information and Technology, Solan

Candidate Declaration

We hereby declare that the work which is being presented in this project entitled Sharing Economy Platform in partial fulfillment of degree of Bachelor of Engineering in Electronics and Communication Engineering and Computer Science Engineering is an authentic record of our own work carried out under the supervision and guidance of Vinay Agnihotri, Trainer.

We are fully responsible for the matter embodied in this project in case of any discrepancy found in the project and the project has not been submitted for the award of any other degree.

Date:

Place:

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ABSTRACT

These days increasing market demands have led to increase in necessity of internet. Sharing Economy Platform allows the vendors to sell or rent a product or service to the user from any part of the world. It allows a two way communication process where the vendor can sell a product or service and the user borrows or buys a product or service.

In this project we have made a website (Mr. Mojo Bazzar : Online Furniture Site) which allows the vendor to add a product/service and allows users to look for the desired product/service. Firstly the vendor / user is registered .Then the vendor/user can login to Mr.MojoBazzar .After successful login the vendor can update his/her personal details and can add or update the product/service using drop down menus. After successful login user can view product/service categorically. The data of vendor/user is retrieved from the database. Data in the database can be updated or deleted or modified accordingly. Database is managed with respective tables and retrieved using respective queries. The user interface is user friendly; every page has required home and logout buttons. The user/vendor can easily navigate throughout. Invalid user/vendor is given warnings for adding valid details. Alert messages pop up for invalid credentials. Mr. Mojo Bazzar gives the vendor the freedom to add new categories in product/service and the user can view all those new categories also.

Chapter 1

Introduction

1.1 Objectives

To stay in line with the ever growing markets, internet has become the important part of business that brings vendors and consumers very close.

To address the need, designing a site that lets users share those items or other products or services with other consumers.

1.2 Project Overview

This Project aims at:

- Providing the required inputs to the meticulous requirements gathering phase and further for the SDLC processes.
- Serving to create the traceability between the Business Objectives and the requirements acknowledged in the proposed solution and how they satisfy the specified objectives.
- Providing a user friendly interface.

The purpose of this is to systematically capture requirements for the project and the system to be developed. Functional requirements are captured. It also serves as the input for the project scoping.

1.3 Intended Audience

- Project Team Members
- Mentor

1.4 Significance

Sharing Economy platforms allows people to share their properties through websites without any complicated challenges as compared to traditional Business. The concept is two way communications where in users and vendors can both have economic, social and financial benefit from it to stay in line with the ever growing markets, internet has become the important part of business that brings vendors and consumers very close. To address the need, designing a site that lets users share those items or other products or services with other consumers provides expected traceability in accordance with the requirements and user expectations. It is easy to use and provide much more accessibility to the user to see the product without going anywhere and also provide ease to the vendor to showcase their product and update it according to the requirements. This Sharing

economy platform also helps vendor to know the current requirements and update their product according to that.

The Sharing Economy Platform has given online enterprises a great opportunity to overcome the current offline market problems as these sharing economy platform has its working cycle by using innovation and proactive platform where vendors from all over the places can sell their product and can also provide services for the same without need of any shop. This platform has proved to be a great benefit for the Buyer too as they get a vast variety at a very reasonable price without going out and getting tired of pollution, traffic. This also provided a secure business between the vendor and buyer as they have all the required information about the buyer and vendor, here guarantee of getting a genuine product is high because here before going to the buyer the product got checked in warehouse in assurance of providing a genuine product.

Chapter 2

Process Architecture

Below is the overall functional flow of the project including the components of interaction

2.1 Methodology

- **SDLC:**

Software development method is that the method of dividing software development work into distinct phases to enhance style, product management, and project management. It's conjointly referred to as a software system development life cycle. The methodology could embrace the pre-definition of specific deliverables associate degree artifacts that area unit created and completed by a project team to develop or maintain an application. Most modern development processes is mistily delineate as agile. Alternative methodologies embrace falls, prototyping, repetitive and progressive development, spiral development, speedy application development, and extreme programming. Some people contemplate a life-cycle "model" a additional general term for a class of methodologies and a code development "process" a additional specific term to check with a selected method chosen by a selected organization.

- **Agile:**

"Agile code development" refers to a group of software development methodologies supported reiterative development, wherever needs and solutions evolve via collaboration between self-organizing cross-functional groups. Agile code development uses reiterative development as a basis however advocates a lighter and additional people-centric viewpoint than traditional approaches. Agile processes essentially incorporate iteration and also the continuous feedback that it provides to in turn refine and deliver a software package.

- **Client-server model:**

Client-server model may be a distributed application structure that partitions tasks or workloads between the suppliers of a resource or service, referred to as servers, and repair requesters, referred to as clients. Usually clients and servers communicate over a network on separate hardware; however each client and server might reside within the same system. A server host runs one or additional server programs that share their resources with clients.

A client doesn't share any of its resources, however requests a server's content or service perform. Clients thus initiate communication sessions with servers that wait incoming requests.

2.2 MVC Framework

Model View Controller is a framework that works using three logical components:

- Model
- View
- Controller

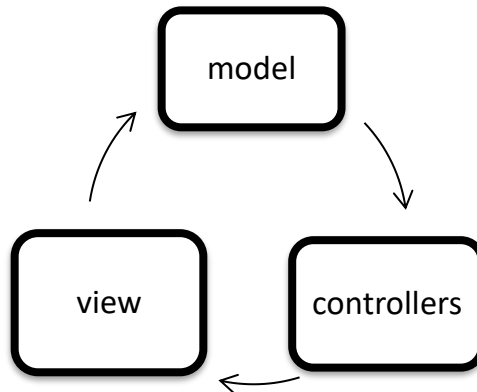


Fig 2.1 Components of MVC

Model:

All the data logic work is done here. User/Vendor can retrieve the information and can edit and update the information to the database.

View:

View component helps in viewing the User interface with all the dropdowns and required fields.

Controllers:

Controller works as bridge in between views and model component. The processing of incoming requests and business logics is done by controller. The interaction with the view component for the end output and manipulation of data by using Model Component is also done by the controller.

2.3 Technology and tools used

Table 2.1 Tools Used

Front End	HTML5,CSS3, JavaScript
Middleware	Java (Java Servlet, JSP,JDBC)
Backend	Oracle Server

Front End-

HTML, CSS, JavaScript

- **HTML**

Standard markup Language that is been used for implementation of web application and web pages is HTML (Hypertext Markup Language).For creating a triad of cornerstone technologies in World Wide Web and Cascading Style Sheets (CSS)and JavaScript is been used.Web browsers receive hypertext markup language documents from local storage or from a web server and also concentrate the documents into multimedia system website. Hypertext markup language is used for detailing the structure of a web page sequentially and initially comprised cues for the appearance of the document.

- **CSS**

Cascading Style Sheets (CSS) could be a piece of paper style language used for illustrating the presentation of a document written in an exceedingly nomenclature like hypertext markup language. CSS could be a cornerstone technology of the World Wide Web, aboard hypertext markup language and JavaScript. CSS is meant to modify the separation of presentation and content, as well as design, colors, and fonts. This separation will improve content availability, give supplementary flexibility and managing within the specification of presentation characteristics, and change numerous websites to share data structuring by specifying the related CSS in an exceedingly separate .css file, cut back complexness and replication within the fundamental content.

- **JavaScript**

JavaScript typically abbreviated as JS, may be one of the high-level, taken computer language which imitates to the ECMA Script requirement. It's a

computer language which is categorized as dynamic, feeble typewritten, multi-paradigm and sample-based alongside hypertext mark-up language and CSS, JavaScript is one amongst the essential technologies of the World Wide net. JavaScript permits collaborating websites and is an important part of net applications. The prodigious majority of internet sites use it, and major net browsers have an infatuated JavaScript engine to implement it.

Middleware-

Java (Java Servlet, JSP, JDBC)

- **Java Servlet**

It does the processing or storing of a Java category in Java EE that imitates to the Java Servlet API, a customary for executing Java categories which reply to requests. Servlets might in theory communicate over any client–server protocol; though they're utmost frequently used with the HTTP.

Hence servlet is usually use as shorthand for HTTP servlet. So, the computer code developer might use a servlet to feature dynamic content to online server victimization the Java platform. Servlets can maintain state in session Variables across many server transactions by using HTTP cookies, or URL mapping.

- **JSP**

Java Server Pages (JSP) is the technology which has allowed the web developers and designers to apace simply maintain and develop, information-rich, dynamic web content that influence current business systems. So, as one of the part of the Java technology family, Java Server Pages technology permits speedy progress of Web-based applications that area unit platform freelance. Java Server Pages technology divides the computer programmer from generation of content, facultative designers to alter the general page design while not sterilization the primary dynamic content.

- **JDBC**

The application programming interface (API) for the programming language Java is Java Database Connectivity which defines that however a consumer could access a database. JDBC is a Java-based information access technology that is been use for Java database connectivity. It is one of the Java customary Edition platform, from Oracle Corporation. It offers ways to question and update information in a very info, and is bound towards relative databases. A JDBC-to-ODBC bridge permits connections to any ODBC-available information supply within the Java virtual machine (JVM) host surroundings.

Backend-

Oracle Server

- **Oracle Server**

Oracle is an open source relational database management system (RDBMS) which provides an open, comprehensive and integrated approach to information management.

2.4 Hardware and Software Requirements

Table 2.2 Hardware and Software Requirements

Technology	Hardware	Software
Java	Desktop PC with 8GB RAM	1. Node.js 10.15.1 2 Visual Studio Code 1.30 3. Eclipse IDE for Java EE Developers (Oxygen) 4.Tomcat 9 5.Oracle11g express version

Chapter 3

Detailed Business Requirements

3.1 High Level Business Requirement

Table 3.1 Business Requirement

S.No	Business Requirement ID	Short Description	Description in detail
1	Req_1	Initial Selection	Ability of the system to allow to user to choose Vendor/User Login/Registration
2	Req_2	User Registration	Ability of the system to procure the fundamental details of the user
3	Req_3	User Authentication	Ability of the system to authenticate the user credentials of the registered user
4	Req_4	Vendor Registration	Ability of the system to procure the fundamental details of the vendor
5	Req_5	Vendor Authentication	Ability of the system to authenticate the Vendor credentials of the registered Vendor
6	Req_6	Vendor details	Ability of the system to procure the Vendor contact details

7	Req_7	Product/Service details	Ability of the system to procure the Product/Service details
8	Req_8	Categorize Product/ Service	Ability of the system to group the Product /Services available based on the category
9	Req_9	Display Product/ Service	Ability of the system to display the Product /Services available based on the category
10	Req_10	User logoff	Ability of the system to enable User to logoff
11	Req_11.1	Category listing	Ability of the system to list / update category by Vendor

3.2 Flowchart

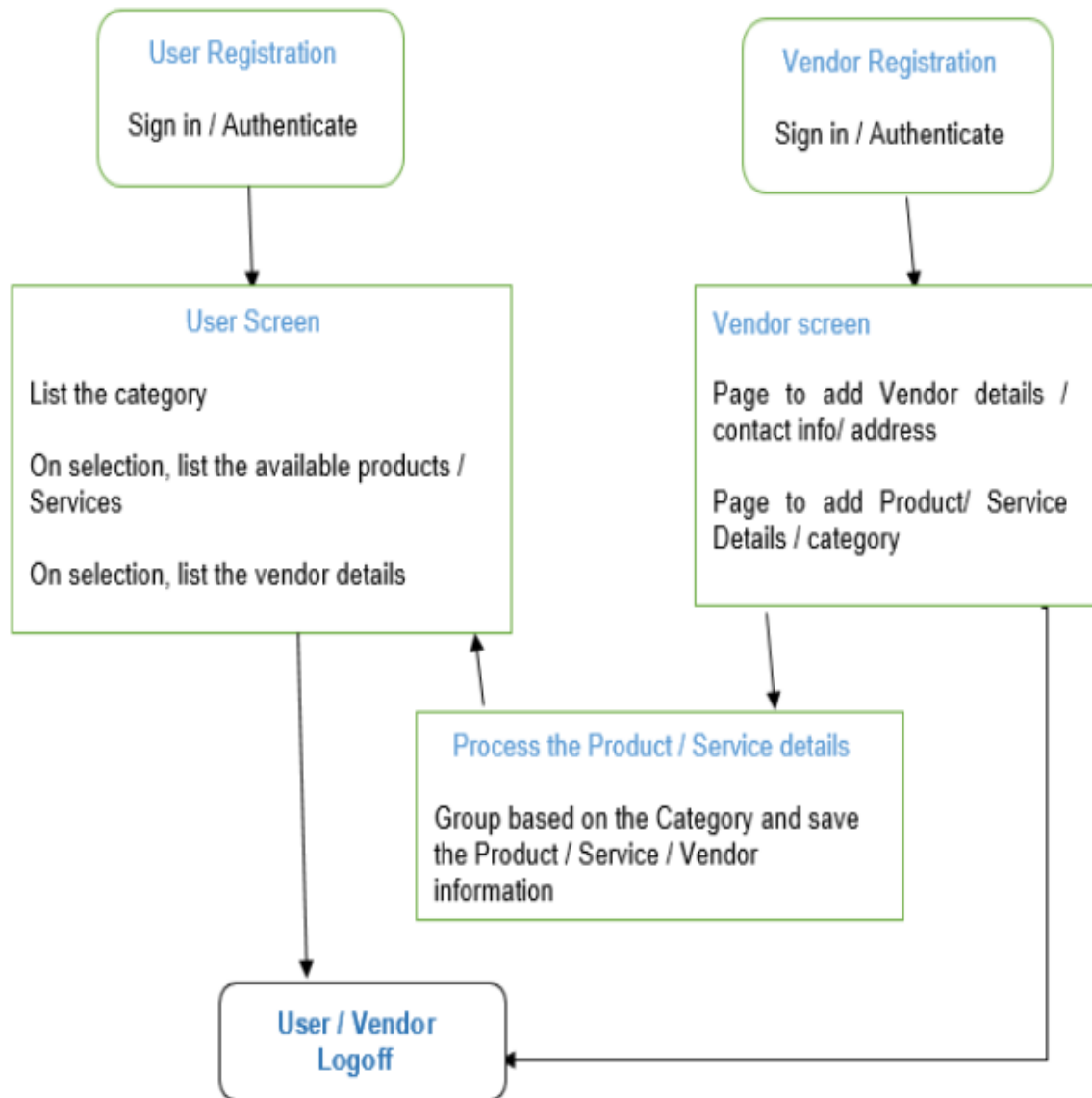


Fig 3.1 User/Vendor Flow

3.3 Mechanism

- An interface for User/Vendor is created.
- User/Vendor registration links are given.
- Registration is only possible if the data is entered according to the instructions given.
- After Registration User/Vendor has to go to the login Portal.
- In case of invalid Registration an alert pops out.
- At the time of login, if invalid Password or User ID/Vendor ID is entered then User/Vendor is redirected to the home page with Invalid User/Vendor alert.
- After successful login User can view the Product/Services.
- After successful login Vendor can add or update Product/Services.
- Vendor can add new Product/Services or can edit previously added Product/Services.
- The User data, Vendor data and Product/Service data is stored in the database in their respective database tables with unique ids.
- The databases data can be updated or edited accordingly.
- Logout or Sign-out options also available for User/Vendor.

Chapter 4

User Interface

- Index page

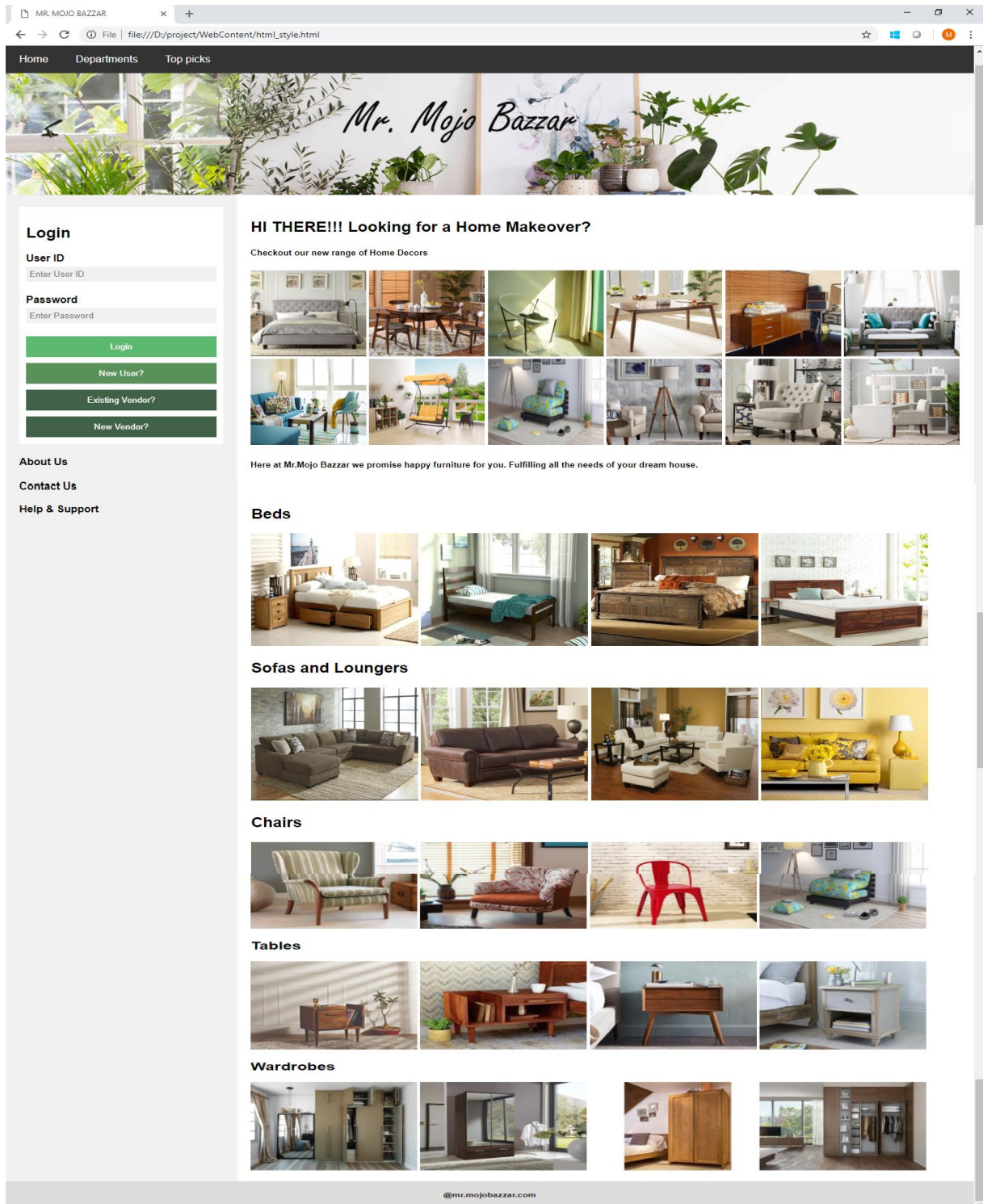
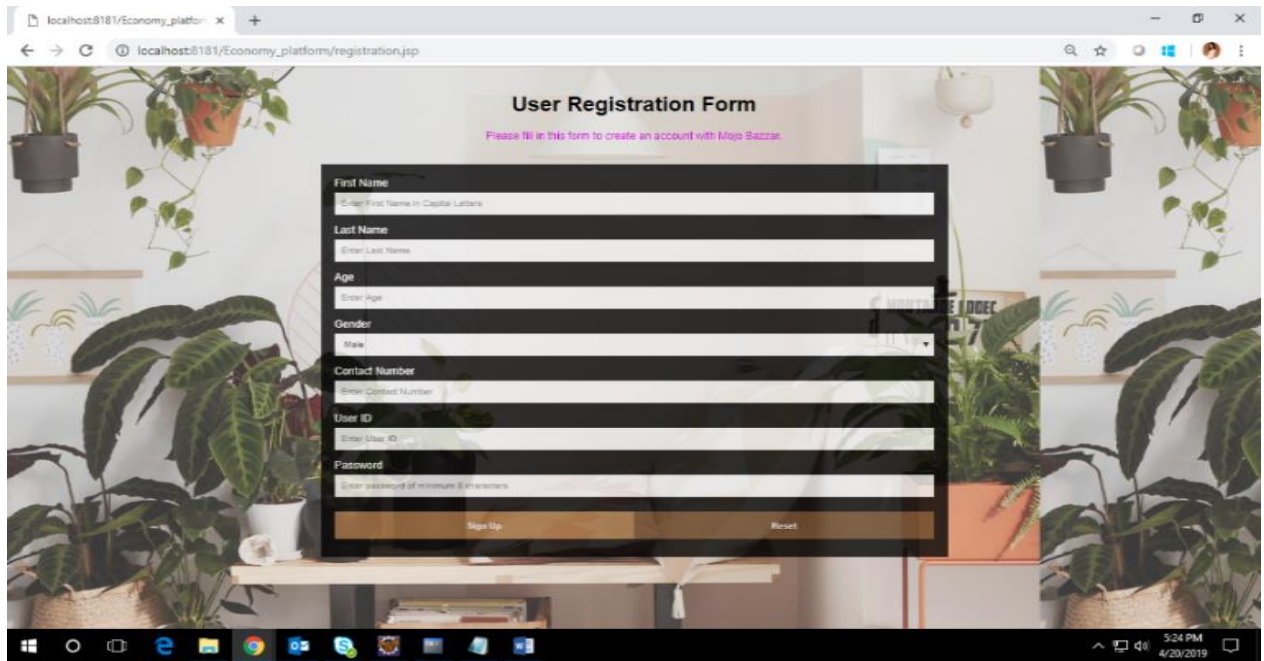


Fig 4.1 Index Page

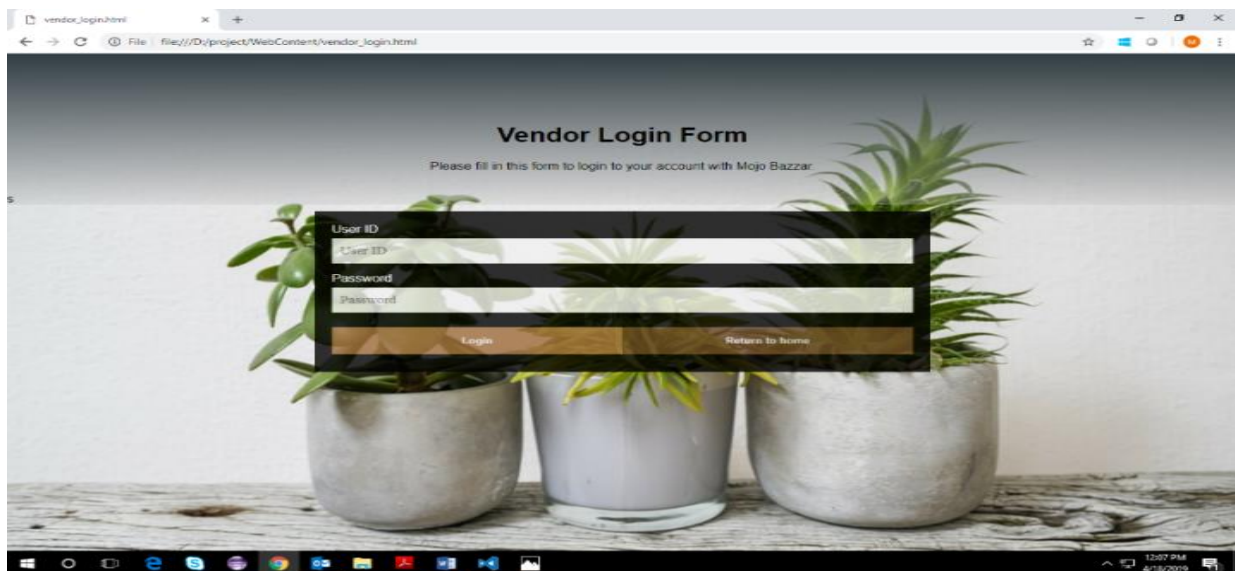
- **User Registration Page**



The screenshot shows a web browser window with the address bar displaying 'localhost:8181/Economy_platform/registration.jsp'. The page features a 'User Registration Form' with a background image of indoor plants. The form includes the following fields: 'First Name' (with a hint 'Enter First Name in Capital Letters'), 'Last Name' (with a hint 'Enter Last Name'), 'Age' (with a hint 'Enter Age'), 'Gender' (a dropdown menu with 'Male' selected), 'Contact Number' (with a hint 'Enter Contact Number'), 'User ID' (with a hint 'Enter User ID'), and 'Password' (with a hint 'Enter password of minimum 8 characters'). At the bottom of the form are two buttons: 'Sign Up' and 'Reset'.

Fig 4.2 User Registration Page

- **Vendor Login Form**



The screenshot shows a web browser window with the address bar displaying 'File: file:///D:/project/WebContent/vendor_login.html'. The page features a 'Vendor Login Form' with a background image of three potted plants on a wooden surface. The form includes the following fields: 'User ID' (with a hint 'Enter ID') and 'Password' (with a hint 'password'). At the bottom of the form are two buttons: 'Login' and 'Return to Home'.

Fig 4.3 User Login Page

- **Wrong Credentials**

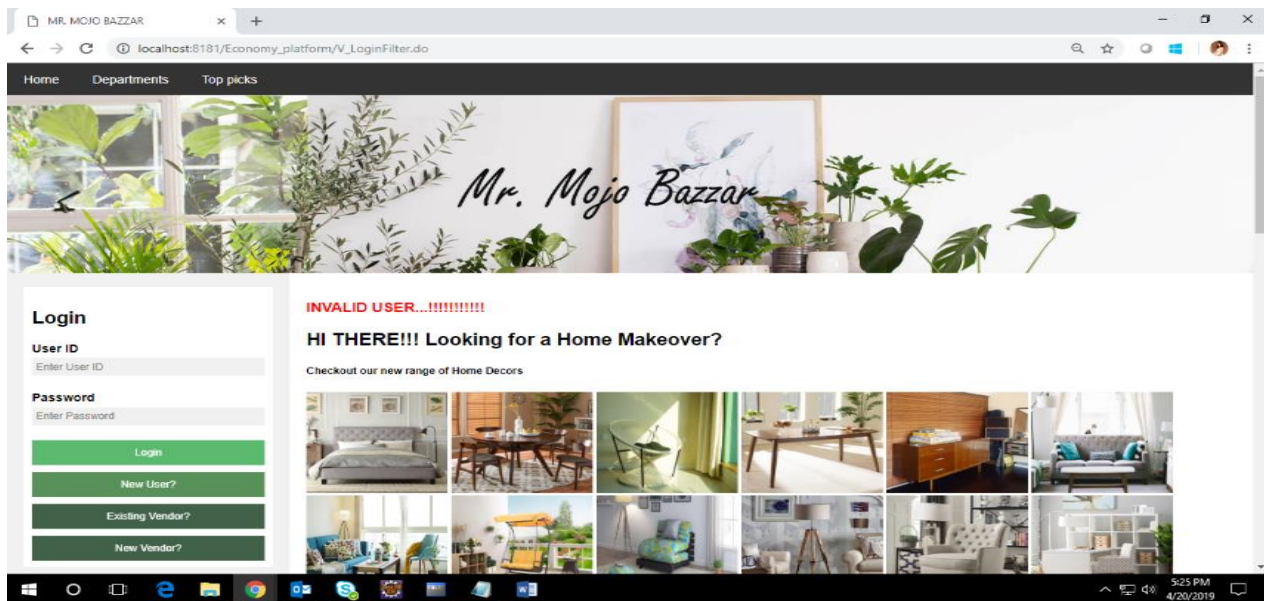


Fig 4.4 Wrong Credentials Page

- **Data Added in Database**

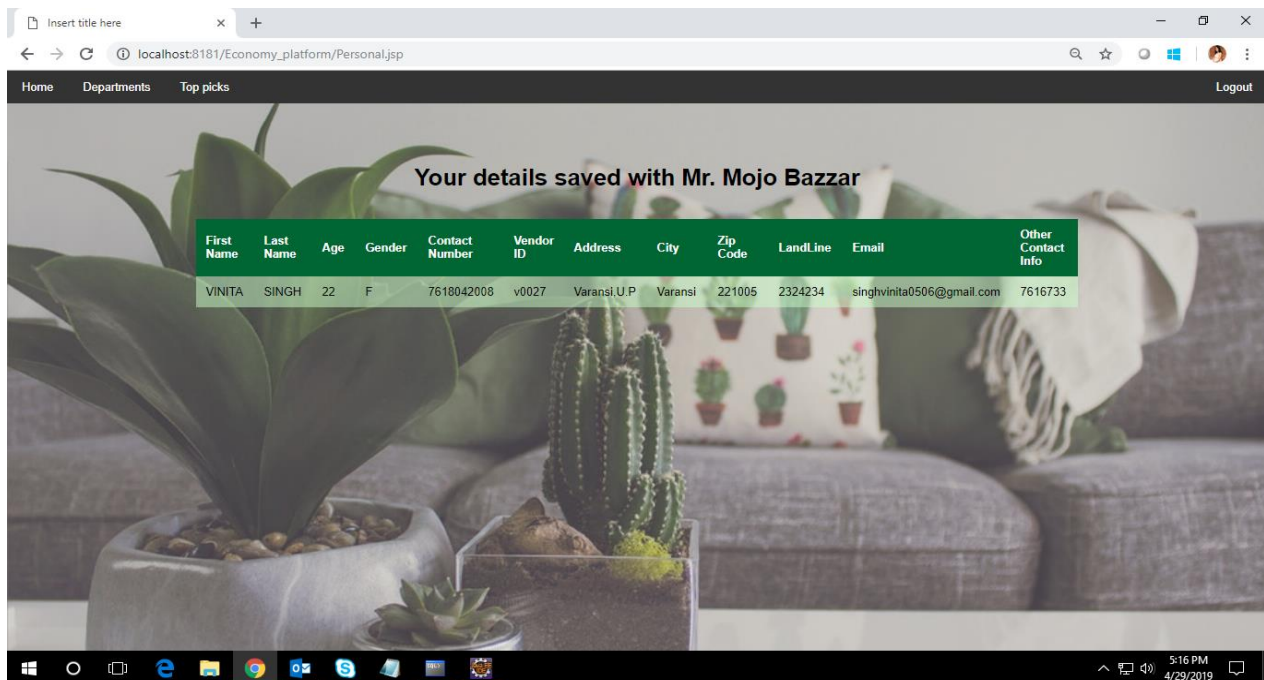


Fig 4.5 Database Updated

- **Update Details**

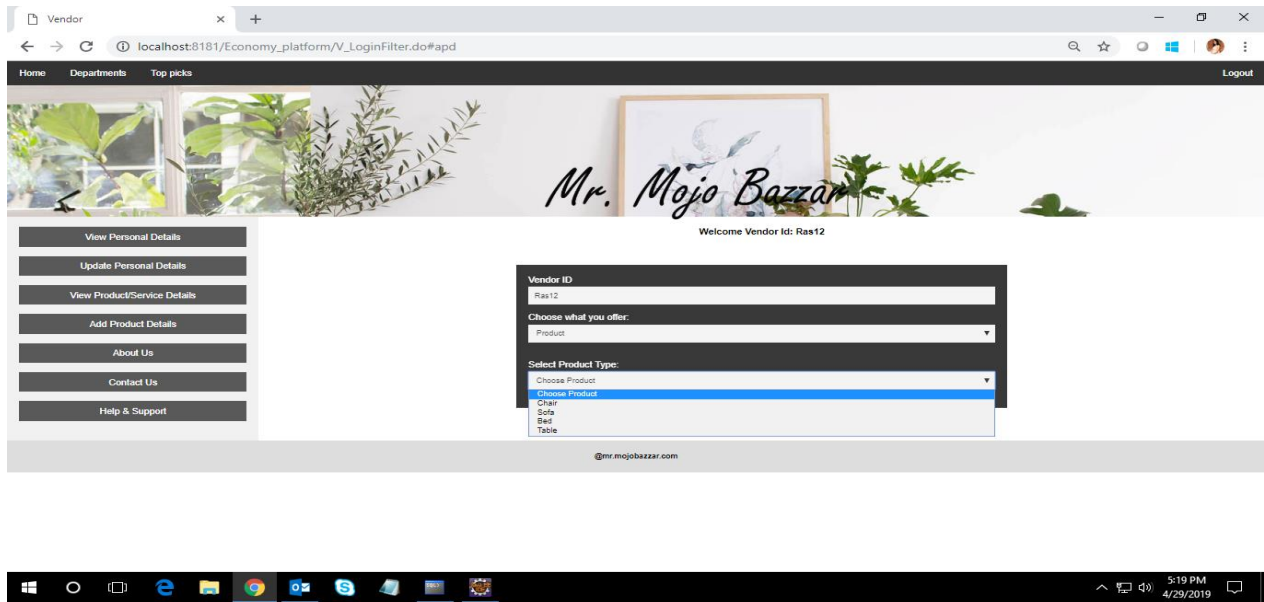


Fig 4.6 Update Details

- **List of Products Available**

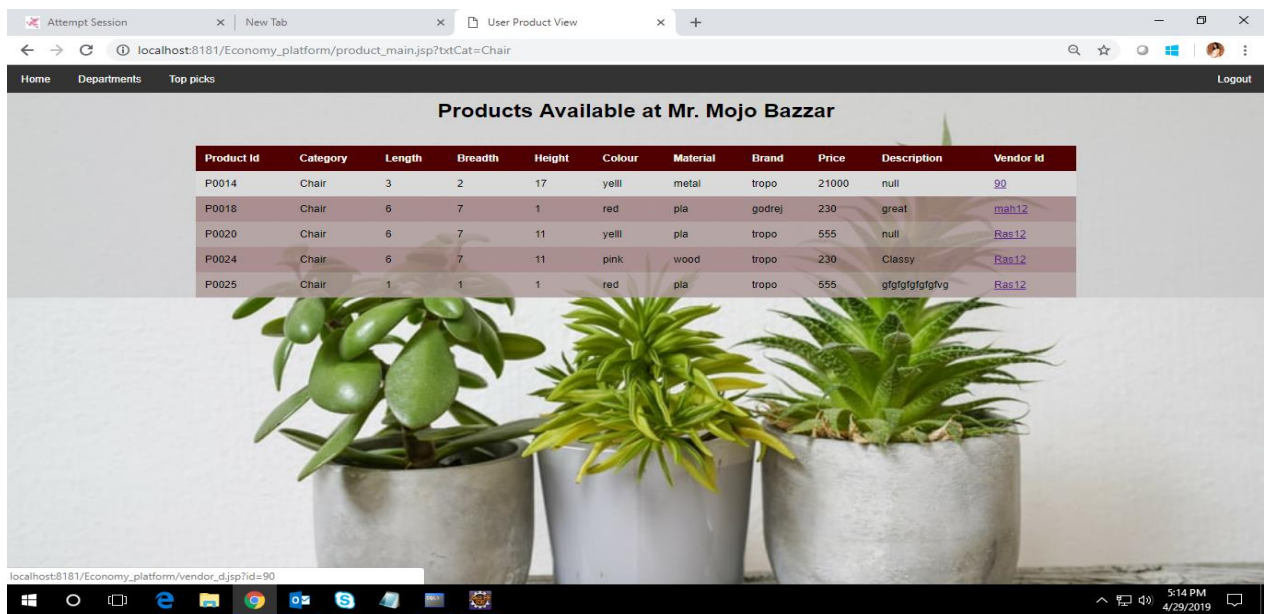


Fig 4.7 List of Products Available

Chapter 5

Conclusions

Sharing Economy platforms allows people to share their properties through websites without any complicated challenges as compared to traditional Business. The concept is two way communications where in users and vendors can both have economic, social and financial benefit from it to stay in line with the ever growing markets, internet has become the important part of business that brings vendors and consumers very close. We were able to make a website for User and Vendor.

Where the User can Register, login and view the Products and Services. Also the vendor can register, Login and add or Update his/her own Products and provide Services. The User data, Vendor data and product/service data is stored in the database in their respective database tables with unique ids. The databases data can be updated or edited accordingly. Logout or Sign-out option is also available for User/Vendor.

Chapter 6

Raw Data Used

Table 6.1 User Table

Field Name	Field Type	Data Type	Mandatory	Possible Values
First Name	Text(50)	Alphabetic	Yes	
Last Name	Text(50)	Alphabetic	Yes	
Age	Numeric(2)	Numeric	Yes	
Gender	Drop Down	NA	Male, Female, Transgender	
Contact Number	Text(10)	Numeric	No	
User ID	Text(15)	Alphanumeric	Yes	
Password	Text(15)	Alphanumeric	Yes	

Table 6.2 Vendor Table

Field Name	Field Type	Data Type	Mandatory	Possible Values
First Name	Text(50)	Alphabetic	Yes	
Last Name	Text(50)	Alphabetic	Yes	
Age	Numeric(2)	Numeric	No	
Gender	Drop Down	NA	Male, Female, Transgender	
Contact Number	Text(10)	Numeric	Yes	
Vendor User Id	Text(15)	Alphanumeric	Yes	

Password	Text(15)	Alphanumeric	Yes	
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Table 6.3 Vendor Details Table

Field Name	Field Type	Data Type	Mandatory	Possible Values
Vendor User Id	Text(15)	Alphanumeric	Yes	
First Name	Text(50)	Alphabetic	Yes	
Last Name	Text(50)	Alphabetic	Yes	
Age	Drop Down	NA	No	18-120
Gender	Drop Down	NA	Male, Female, Transgender	
Contact Number	Text(10)	Numeric	Yes	
Vendor ID	Auto-generated(5)	Numeric	Yes	Non-editable
Address	Scrolling text box(100)	Alphanumeric	Yes	
City	Text(50)	Alphabetic	Yes	
Zip Code	Text(10)	Numeric	Yes	
Landline	Text(10)	Numeric	No	
E Mail	Text(50)	Alphanumeric	Yes	
Other contact info	Text(100)	Alphanumeric	No	

