ONLINE BUSINESS MARKETING

MINOR PROJECT

Submitted in Partial Fulfilment of the Requirements for the Award of the Degree of

MASTER OF COMPUTER APPLICATIONS

(M.C.A.)

BY

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MCA – 1st SEMESTER

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GURU GOBIND SINGH INDRAPRASTHA UNIVERSTY(GGSIPU)

April, 2021

CANDIDATE'S DECLARATION

I hereby declare that the work which is being presented in this project work entitled "**online business marketing**" in partial fulfilment of the requirements for the award of the degree of **Master in Computer Applications at Bharati Vidyapeeth's Institute of Computer Applications and Management (BVICAM), New Delhi** is an authentic record of my own work carried out during the period January 2021 to April 2022 under the supervision and guidance of **Mrs Parul Arora (Assistant/Associate Professor, BVICAM)**.

I have not submitted the matter embodied in this project work anywhere for the award of any degree or diploma.

Aniket Bhatnagar
00635304420

ACKNOWLEDGEMENT

It is my proud privilege to express my profound gratitude to the entire management of Bharati Vidyapeeth's Institute of Computer Applications and Management and teachers of the institute for providing me with the opportunity to avail the excellent facilities and infrastructure. The knowledge and values inculcated have proved to be of immense help at the very start of my career. Special thanks to Hon'ble Founder, Bharati Vidyapeeth, Pune for having provided us an excellent infrastructure at BVICAM.

I am grateful to Mrs Parul Arora (Project Guide, BVICAM, New Delhi) for her astute guidance, constant encouragement and sincere support for this project work.

I feel pride and privileged in expressing my deep sense of gratitude to all those who have helped me in presenting this assignment. I would be failing in my endeavour if I do not place my acknowledgement**.**

Aniket Bhatnagar

00635304420

ABSTRACT

In this minor project, we have developed an online application for managing advertisements. The application is developed using technology with java programming with jsp. MySQL database management system (DBMS) is used to manage the database for the application. The development of application is carried out by following the waterfall model of software development. The application follows Model-View-Controller (MVC) architecture for providing robust and reliable services. There are mainly 4 modules of the system: **registration,updation,business record management and reporting**. All the modules are tested by following unit testing mechanism and found correct in all respects. After successful testing, the system is implemented online, and can be accessed by visiting the following link

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CHAPTER 1 INTRODUCTION

1.1 Introduction about project

1.2 Proposed System

1.3 Team structure and roles

INTRODUCTION

Project is performing all the advance functionality which is necessary for spreading the business.

Efforts are made to provide a platform on which businessmen can easily advertise their business and spread it.

All the facilities provided by us will **be free** of cost. It is very easy and simple to connect with us.

It has following modules:

1) Login for existing users : users can log into the **"online business marketing"**
2) Registration for new user: scope for the new users is also available; i.e. they can register themselves.
3) Add business by the existing users: existing users already add their business with **"online business marketing"**.
4) Update: Provide the scope to update their and their business detail as well.
5) Remove: users can remove their and their business from **"online business marketing"** a well.
6) Search business by any user(no login and registration is required for that)
7) Admin can view all the info about the user
8) Admin can view all the info about the business
9) Admin can block or unblock business

Proposed Solution

"Online business marketing" provide a framework to their users to show-up their business. It has the following objectives:

1) Different users from different country can register themselves

2) They can show their business to the whole world

3) Provides platform to connect with people

4) They can grow-up their business

Focusing on the problem of business entity where to go and how to spread the business in an easy way. Provides a platform where their queries are being solved. It will work well on desktop as well as on Mobiles phones i.e. impressible. All the facilities are provided are absolutely free.

Team Structure and Roles

S.NO	NAME	ROLES
1	Aniket Bhatnagar	Update,delete,add,modify(modules)
2	Sandesh Sapra	Block,unblock,search(modules)

CHAPTER 2 PROJECT DESCRIPTION

Backend

- ✓ Advance Java
- ✓ HTML
- ✓ Javascript
- ✓ CSS
- ✓ SQL

Frontend:

- ✓ Web Browser (Internet Explorer ,Google Chrome, Mozilla)

Hardware and software Specifications

- ✓ **HARDWARE**:

  Intel core ™ 15-2450 M Processor 2.50GHz with turbo Boost up to3.10GHz

  Windows® 10 64 bit

  Memory 4GB/Hard disk Drive 500GB

- ✓ **SOFTWARE:**

  SQL server management studio

  NetBeans IDE 7.4

One on One Interview: It is conducted by the requirement engineer to understand the customer's expectation from the software. Requirement Engineer must be open minded and should not approach from preconceived notion. Interview should be structural means it should related to the topic. In open ended and one to one interviews, there is no pre-set agenda as the questions are asked to understand what exactly the customer wants. In order to understand the needs what the customers wants from the system and how it should work, open ended questions fits perfectly. We have conducted this one to one session with the local seller and tried to understand what they want and what could be done in order to increase the production, where he told about the problem that he couldn't advertise their products to nearby areas even and we told him what problems would be solved if the system would come. In one on one interview, every minute detail that the customer wants is marked.

Observation: It is effective technique to gather the requirements. It is also used to verify requirements and deliver instant module as per defined by the customers. Before implementing this technique, it is assured that every observation must be guided by clearly stated objectives. The analyst who is conducting this technique must know how the data will be collected and what the data will be used after analysis. It not helps in making the system successful within that time, but also removes the uncertainty that could arise. Analyst would also know when to conduct the observation which means during which peak time, the observations should sum up to give the desired result. It should be collective efforts as in order to eliminate the bias. We have observed during high load on servers, mapping becomes false and it may lead to the confusion among the customers.

Brain Storming Session- It is a group technique that leads to new ideas and helps to promote creative thinking. It generates lot of ideas providing a long list of requirements that can be prioritize and short listed. All the participants are encouraged to promote creative thinking, generate new ideas and share views without being criticized. This technique is carried out with specialized group of stakeholders by the highly trained facilitator who may handle group conflicts, dominance and cautious about the individual egos by conducting the sessions smoothly. Every idea is documented with the help of using white boards, projectors so that each participant should see to it and before finalizing can give suggestions and help to make the system better.

2.2 ANALYSIS METHODOLOGY

It is important to give the final check to the system before implementing it on real time systems. It is important as system may not be compatible with the requirements of the customers, so it's important to check it and use it and made changes if there would be any and according to it make changes. Before we start working on a new system, it is important to study the system and work on real time environment. We need to analyze how this system uses hardware, software, network and the people resources to convert data resources, such as transaction data, into information products, such as reports and displays. Thus we should document how the information system activities of input, processing, output, storage and control are accomplished. They provide the summaries and measures about the system and how we can efficiently use the system for the smooth functioning of the system. It is basically a procedure which the developer would follow to make the system as per told by the customer according to his/her requirements.

It is a method or procedure in which we can follow to analyze the system or application performance. We analyze in order to make sure that the software could cope in real time environment and can be easily maintainable and modifiable. These are also done to ensure the customer expectations could be met and the project would get completed within the stipulated time and within the budget. Analysis are also done on the project so as the system requirements are in compliance with the specifications.

4.1 Testing Methodology: Testing is done to ensure the software is error free and it is important to ensure the completeness, correctness, and quality of the developed software. It is the sequential process in which each and every part of the software is tested from the unit testing, integration testing, system testing till acceptance testing. It is process in which it is ensure that whether the actual results match the expected results and software is bug free. Software testing methodology are various strategies and techniques to check whether the software is giving the expected result or not.

Unit Testing- It is the first level of testing and is mostly done by the developers themselves. It is the process of ensuring individual components of a software at the code level are functional and work as they were to. Developers will write and run the tests prior to the software or feature being passed over to the test team. It will also make debugging easier because finding errors/bugs in the early phase saves time and resources, and cost means they take less time to fix than if they were discovered later in the testing process. It is the smallest testable part of the software and it usually has few inputs and one output only.

Integration Testing: After each unit is thoroughly tested, it is integrated with other units to create modules or components that are designed to perform specific tasks or activities. These are then tested as group through integration testing to ensure whole segments of an application behave as expected. Integration Testing is conducted by either the developers or independent testers. In this all the units are combined together and are checked that whether they are giving the result what they are expected. Integration Testing focuses on checking data communication amongst these modules means how different modules will communicate with each other

whether it is related to data sharing or others. It is done in two ways-Bottom up and Top down.

System Testing: It is black box testing in which it is concern only with the desired output and input. It is not concerned with the internal working or with the logic. System testing is a discovery testing technique used to check whether it is fulfilling the requirements given by the customer or not as a whole, in general, to guarantee it meets indicated prerequisites. The usefulness of the product is tried from start to finish means it is tested from the stating to the end and is ordinarily directed and tested by a different testing group rather than the development group before the item is pushed into the use.

Acceptance Testing: It is done by the user who has requested the software and he/she will check whether the all the requirements which were told to developers are being fulfilled or not. If user is not satisfied, he/she will tell the developer to make some changes. It is the last phase of functional testing and is used to assess whether or not the final piece of software is ready for delivery or put into use. It involves ensuring that the product is in compliance with all of the original business criteria and that it meets the end user's needs. This requires the product be tested both internally and externally, meaning you'll need to get it into the hands of your end users for beta testing along with those of your QA team. Beta testing is key to getting real feedback from potential customers and can address any final usability concerns. Beta testing is done at the customer's site and it is done in the real environment and the feedback by them is directly told to the developer to do changes, while in the alpha testing, it is done at the developer site and in controlled environment and feedback is directly given to the developer.

4.2 Testing Methodology (Applied): Testing methodologies are the strategies and approaches used to test a particular product to ensure it is fit for purpose. Testing methodologies usually involve testing that the product works in accordance with its specification, has no undesirable side effects when used in ways outside of its design parameters and worst case will fail-safely. Software testing methodologies are the different approaches and ways of ensuring that a software application in particular is fully tested and would be error free. Software Testing Methodology covers from unit testing, integration testing, system testing and till acceptance testing. As the applications gets complex with increasing functionalities, it is important to test each and every module for the robust functioning. It is applied to ensure that software should be balanced, deterministic, and traceable. It is also applied to the software to ensure that there would not be duplication as it leads to increase in time and cost only. It is also done to ensure that software would be moderate means it shouldn't be too complex for naïve user or too simple for sophisticated user.

4.3 Test Cases: A TEST CASE is a set of conditions or factors under which an tester will decide if a framework under test fulfills prerequisites or works effectively in real environment or not. The way toward creating test cases can likewise help to discover issues/errors in the necessities or structure of an application before it gets into the use.

A test case has following elements-

Test Suite ID- The ID of the test suite to which test case belongs to.

Test Case ID- The ID of test case.

Test Case Summary- The objective of test case.

Test Procedure- The procedure to carry out the test.

Test Data- The data that are to be used to conduct the test.

Expected Result- What results should come.

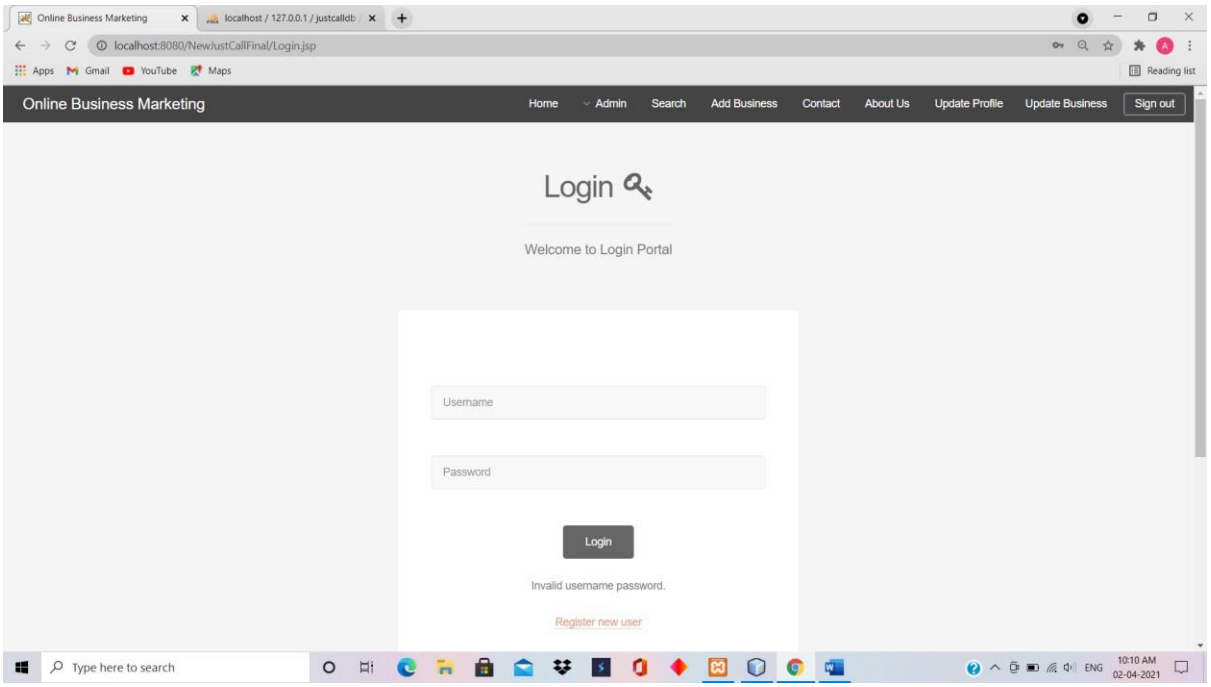
Actual Result- What results are coming after the execution and testing of software.

Remarks- Comments on the test cases and test execution.

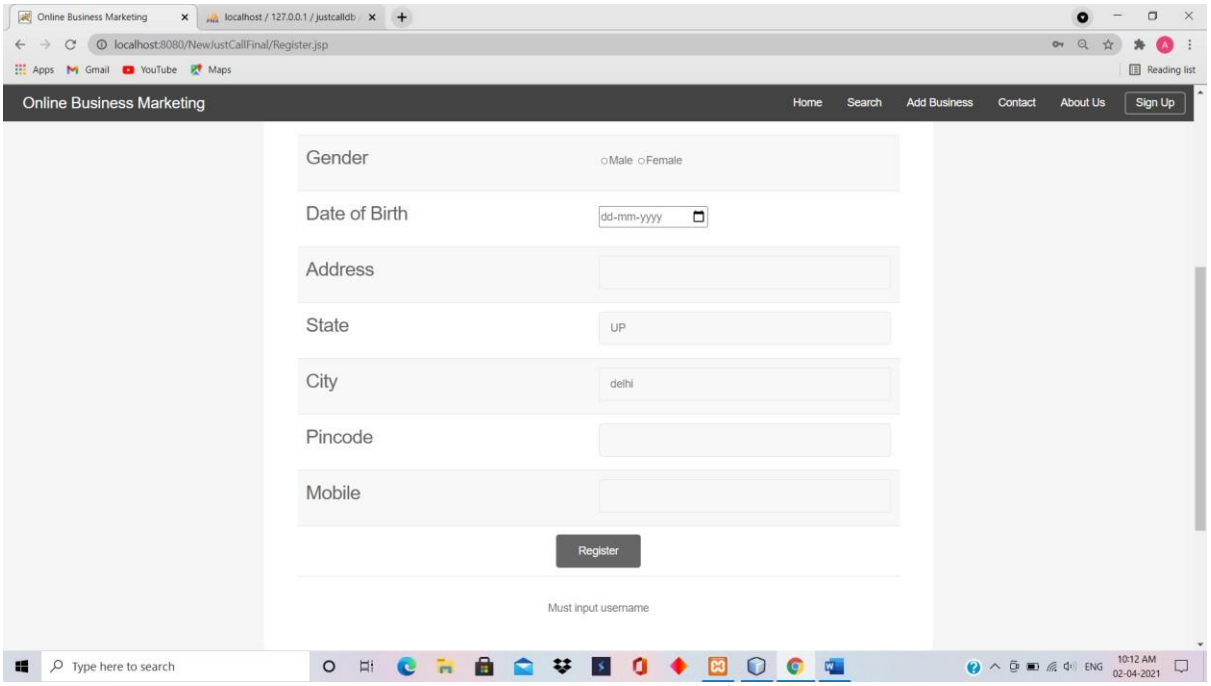
Status- Pass or Fail. Other status could be Not Executed if the test has not been performed.

Test Environment- Environment in which test has been conducted or executed.

SCENARIO	TEST STEP	EXPECTED RESULT	ACTUAL OUTCOME
Check Login	Ask to enter username and password. If entered input is correct	It will allow to do the operations like adding, modifying, deleting	Login is successful
Check Login	Ask to enter username and password. If entered input is incorrect.	It should ask to reenter the password and username.	Invalid username and password



SCENARIO	TEST STEP	EXPECTED OUTPUT	ACTUAL OUTCOME
Check the conditions imposed on username	Make sure to add character	It will allow to make the changes.	Record updated successfully.
Check the conditions imposed on user number	Till the username doesnot get any character, it will not allow to get updated	Not updated.	No changes were made


Online Business Marketing
localhost / 127.0.0.1 / justcalldb
localhost:8080/NewJustCallFinal/Register.jsp
Apps
Gmail
YouTube
Maps
Reading list
Online Business Marketing
Home
Search
Add Business
Contact
About Us
Sign Up
Gender
Male
Female
Date of Birth
dd-mm-yyyy
Address
State
UP
City
delhi
Pincode
Mobile
Register
Must input username
Type here to search
ENG
10:12 AM
02-04-2021

Modules and their description-

Login- It will ask the admin for the username and password and validate with the database and if found correct, it will logged into the system. For user/seller, one has to register it first and then login. Each business will be allocated one business id against seller.

Search- It will allow the admin to search user, their advertisement and categorise accordingly and delete if found not not adhering to the privacy and policy.

Delete- It will allow the user to delete the advertisement. It will also allow to delete the user account against it.

Update- It will allow the user to modify the changes in the advertisement like offers expired on 31st March 2021, after that it offers validity get expired. One can overwrite the old advertisement and update the same for it.

CHAPTER-3

Entity Relation Diagram

An ERD is a logical representation of an organization's data, and consists of three primary components:

- **Entities** – Major categories of data and are represented by rectangles
- **Attributes** – Characteristics of entities and are listed within entity rectangles
- **Relationships** – Business relationships between entities and are represented by lines

An **Entity** is a person, place, object, event, or concept that an organization wants to maintain data on. Each entity has a unique identity that differentiates it from other entities. A point of distinction must be made between entity *types* and entity *instances*.

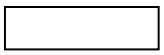
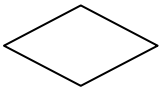
- An **entity type** is a collection of entities that share common properties Entity types are also known as entity *classes.*

- An **entity instance** is an individual occurrence of an entity type. A data model describes an entity type only once; however there may be numerous instances of that type within a database.

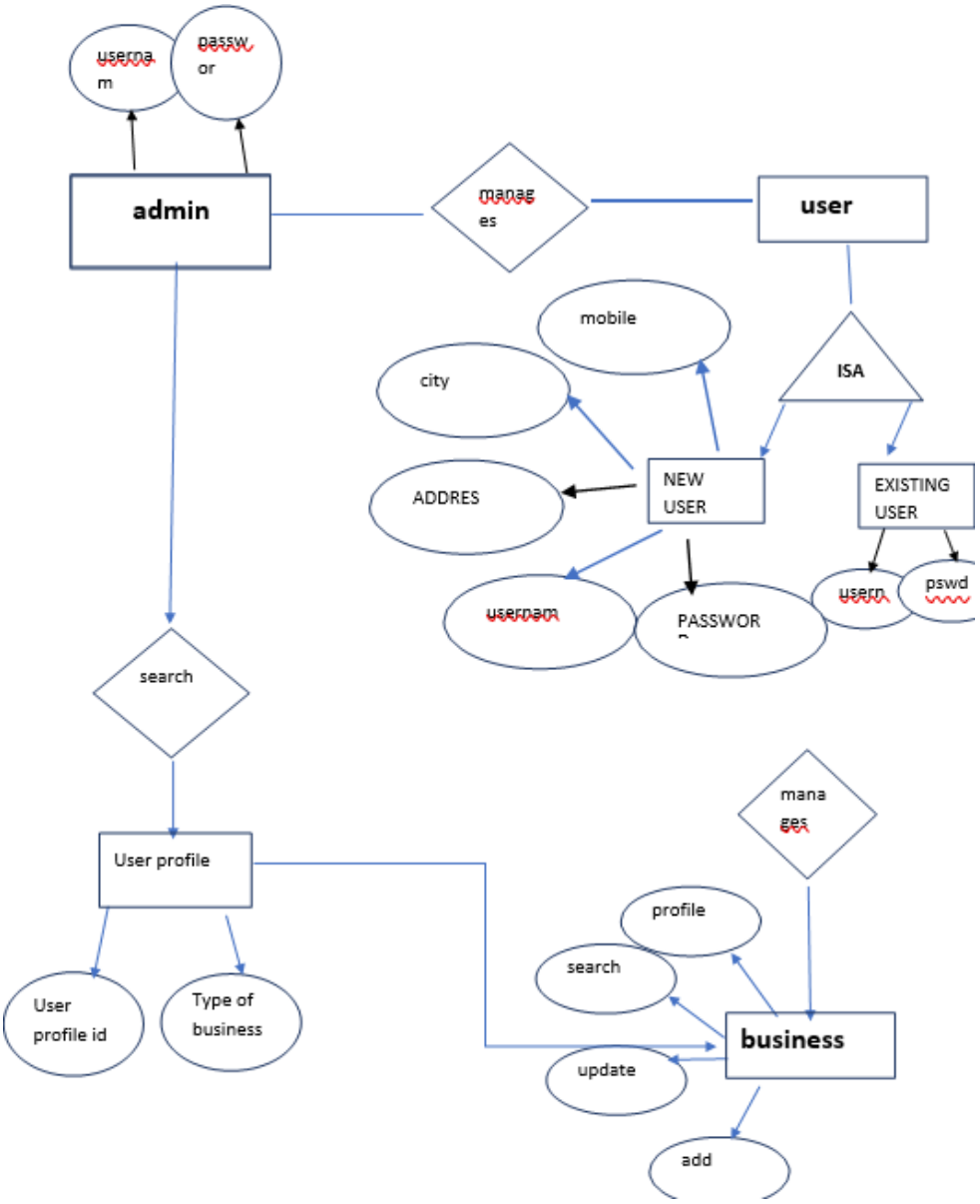
An **Attribute** is a characteristic of an entity that is relevant to the organization. When defining an attribute, an analyst should state why the attribute is important, what is included in the attribute's value, the source of the value, and whether or not that value can change. Again, a sound understanding of an organization's business should assist the analyst in compiling relevant attributes.

Relationships link the various components in an E-R diagram together. It is usually best to think of relationships as verbs and entities as nouns, which together comprises a complete sentence.

Following Table represents the components of ER-Diagram

SYMBOL NAME	SYMBOL	MEANING
Rectangle		It represents entity sets.
Diamond		It represents relationship sets.
Arrow		It represents relationship

ER-DIAGRAM


userna
m
passw
or
admin
manag
es
user
mobile
city
ISA
ADDRES
NEW
USER
EXISTING
USER
usern
pswd
PASSWOR
search
User profile
mana
ges
profile
search
User
profile id
Type of
business
business
update
add

Flow Diagram

The ***Data Flow Diagram*** **(DFD)** is a graphical representation of the flow of data through an information system. It enables you to represent the processes in your information system from the viewpoint of data. The DFD lets you visualize how the system operates, what the system accomplishes and how it will be implemented, when it is refined with further specification.

Data flow diagrams are used by systems analysts to design information-processing systems but also as a way to model whole organizations. You build a DFD at the very beginning of your business process modeling in order to model the functions your system has to carry out and the interaction between those functions together with focusing on data exchanges between processes. You can associate data with conceptual, logical, and physical data models and object-oriented models.

DFDs can also be grouped together to represent a sub-system of the system being analyzed.

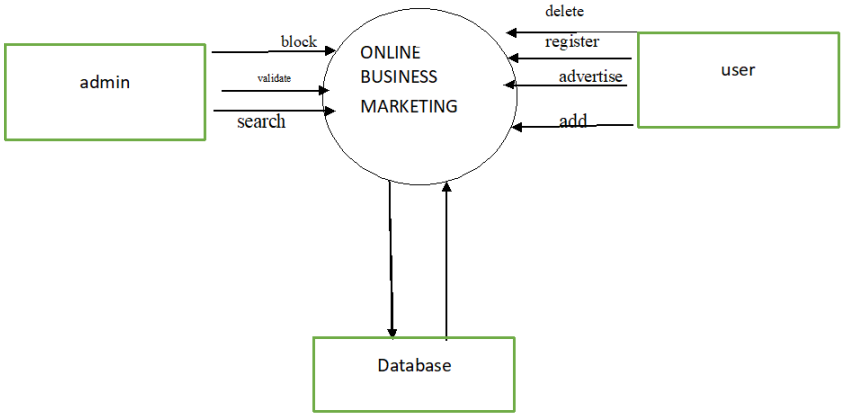
EXTERNAL ENTITY

An external entity is a source or destination of a data flow. Only those entities which originate or receive data are represented on a data flow diagram. The symbol used is an oval containing a meaningful and unique identifier

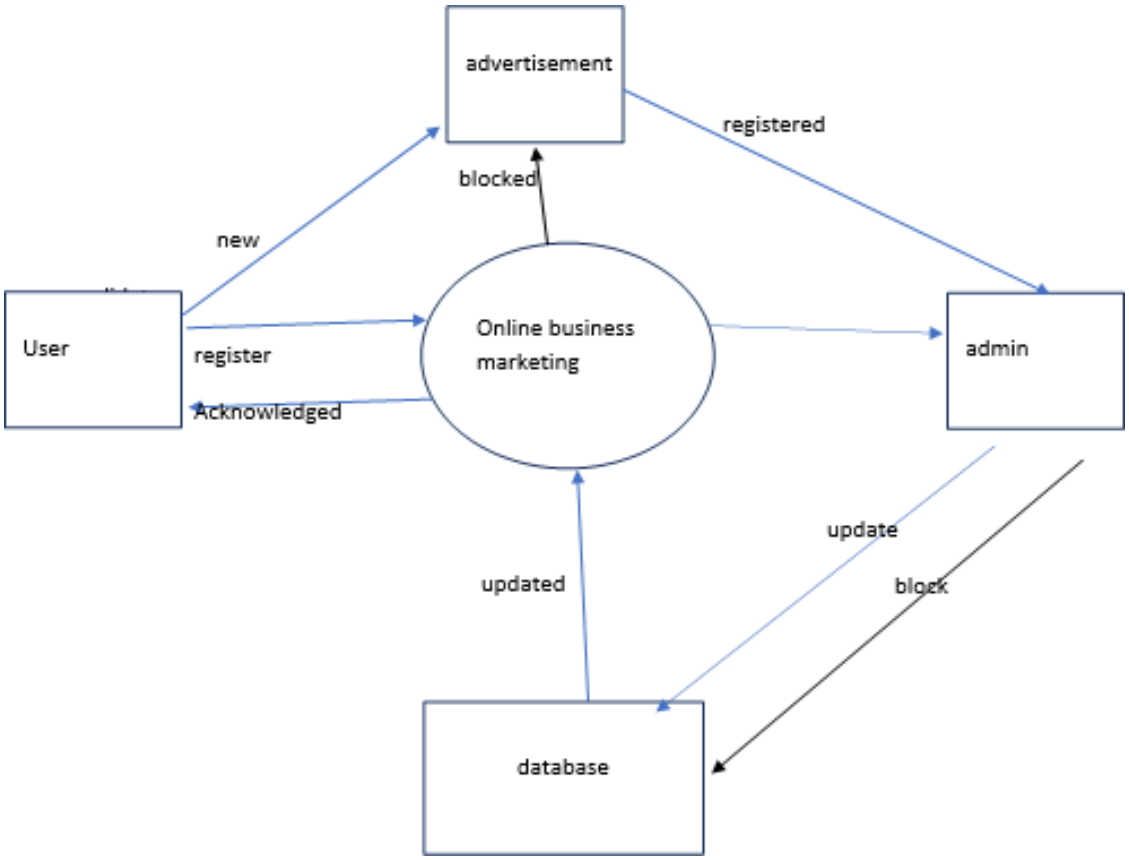
PROCESS

A process shows a transformation or manipulation of data flows within the system. The symbol used is a rectangular box

DFD LEVEL 0-


admin
block
validate
search
ONLINE
BUSINESS
MARKETING
delete
register
advertise
add
user
Database

DFD LEVEL-1

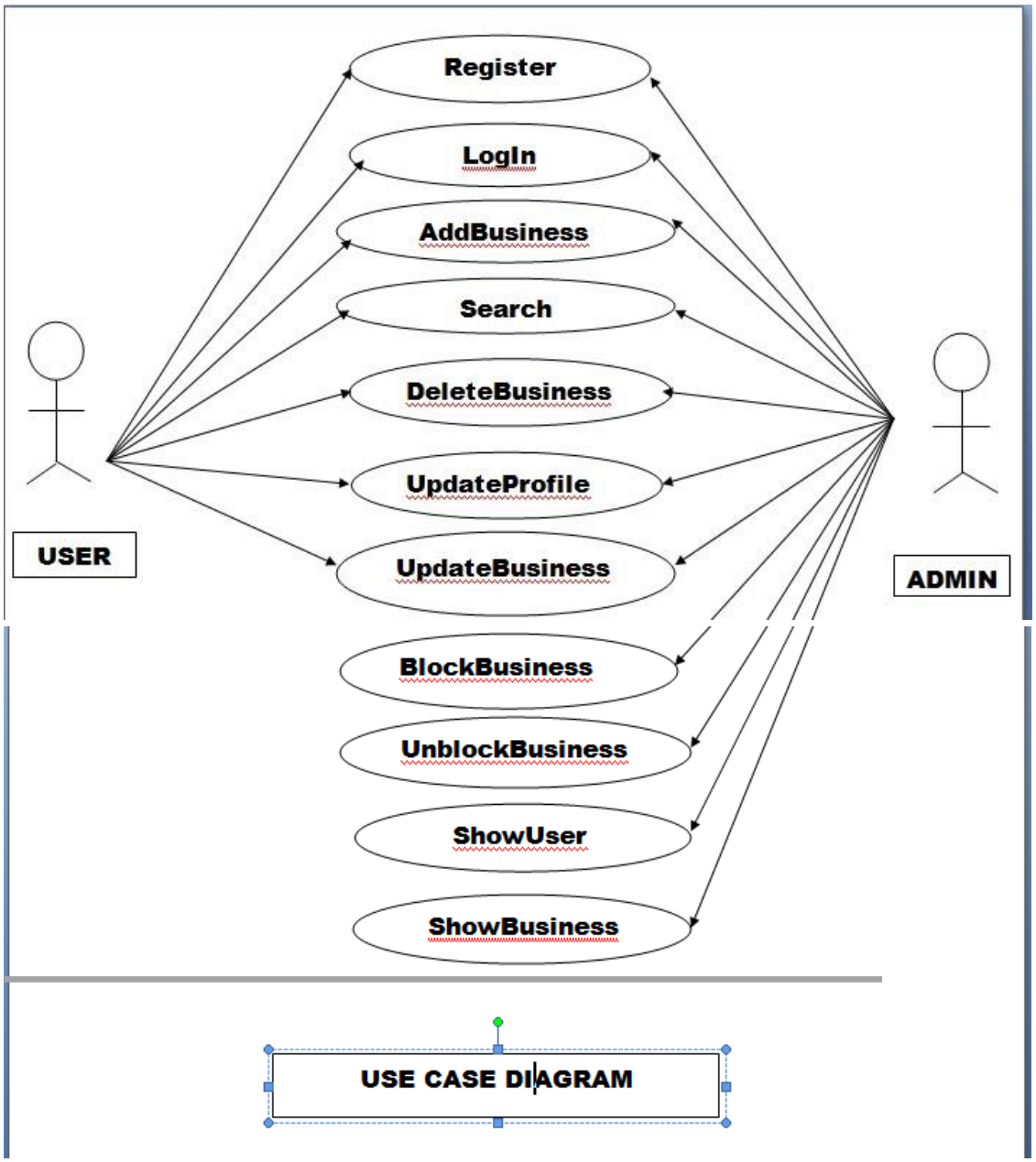

advertisement
registered
blocked
new
User
register
Acknowledged
Online business
marketing
admin
update
block
updated
database

USE CASE DIAGRAMS

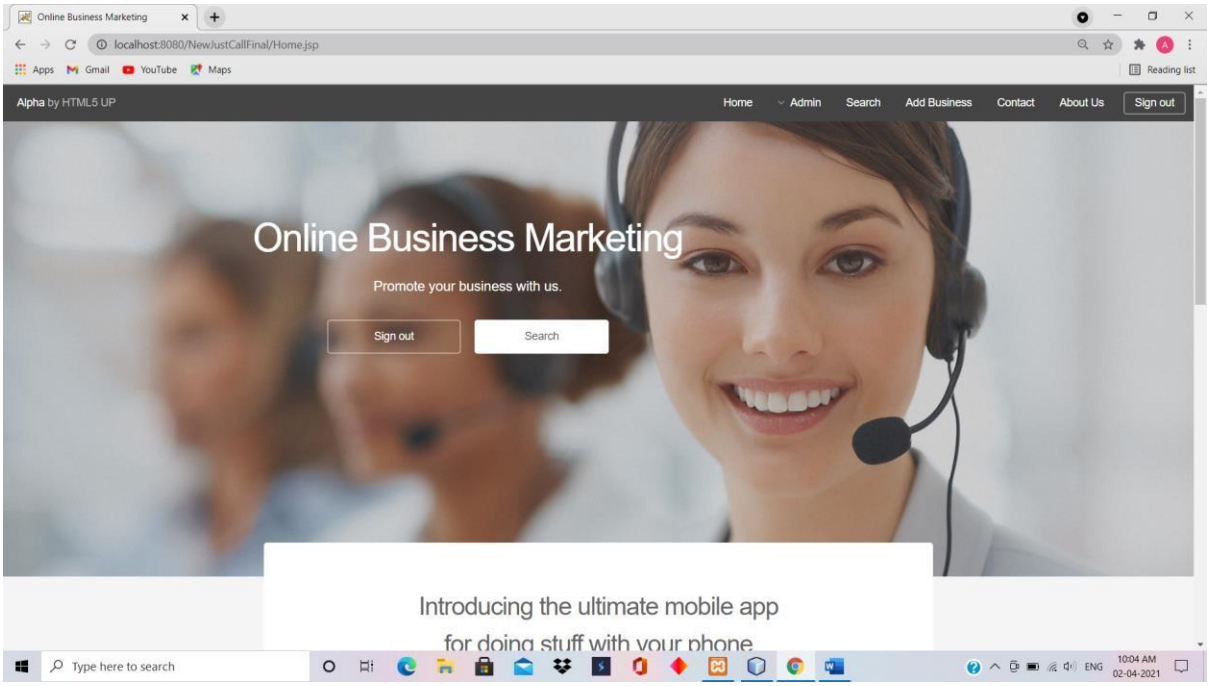
A use case is a methodology used in system analysis to identify, clarify, and organize system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal. It consists of a group of elements (for example, classes and interfaces) that can be used together in a way that will have an effect larger than the sum of the separate elements combined. The use case should contain all system activities that have significance to the users. A use case can be thought of as a collection of possible scenarios related to a particular goal, indeed, the use case and goal are sometimes considered to be synonymous.

Use case diagram consists of use cases and actors and shows the interaction between them. A use case (or set of use cases) has these characteristics:

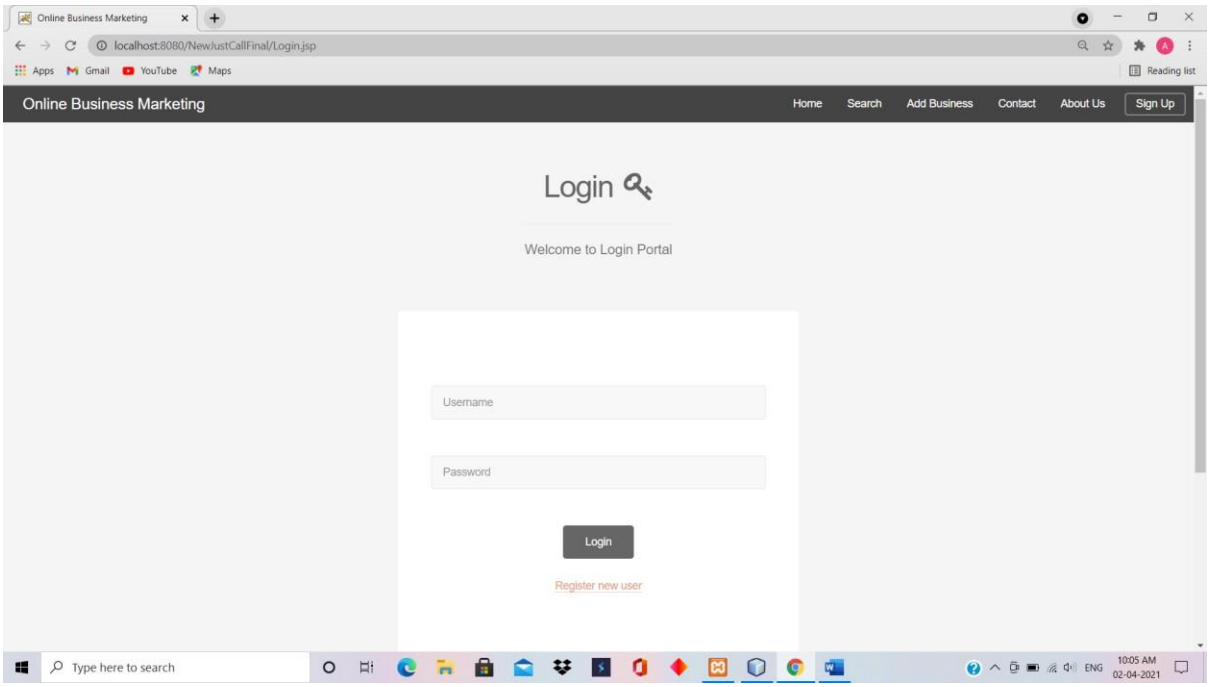
- Organizes functional requirements.
- Models the goals of system/actor (user) interactions
- Records paths (called scenarios) from trigger events to goals
- Describes one main flow of events (also called a basic course of action), and possibly other ones, called exceptional flows of events (also called alternate courses of action)
- Is multi-level, so that one use case can use the functionality of another one.
- The main purpose is to show the interaction between the use cases and the actor.


Register
LogIn
AddBusiness
Search
DeleteBusiness
UpdateProfile
UpdateBusiness
BlockBusiness
UnblockBusiness
ShowUser
ShowBusiness
USER
ADMIN
USE CASE DIAGRAM

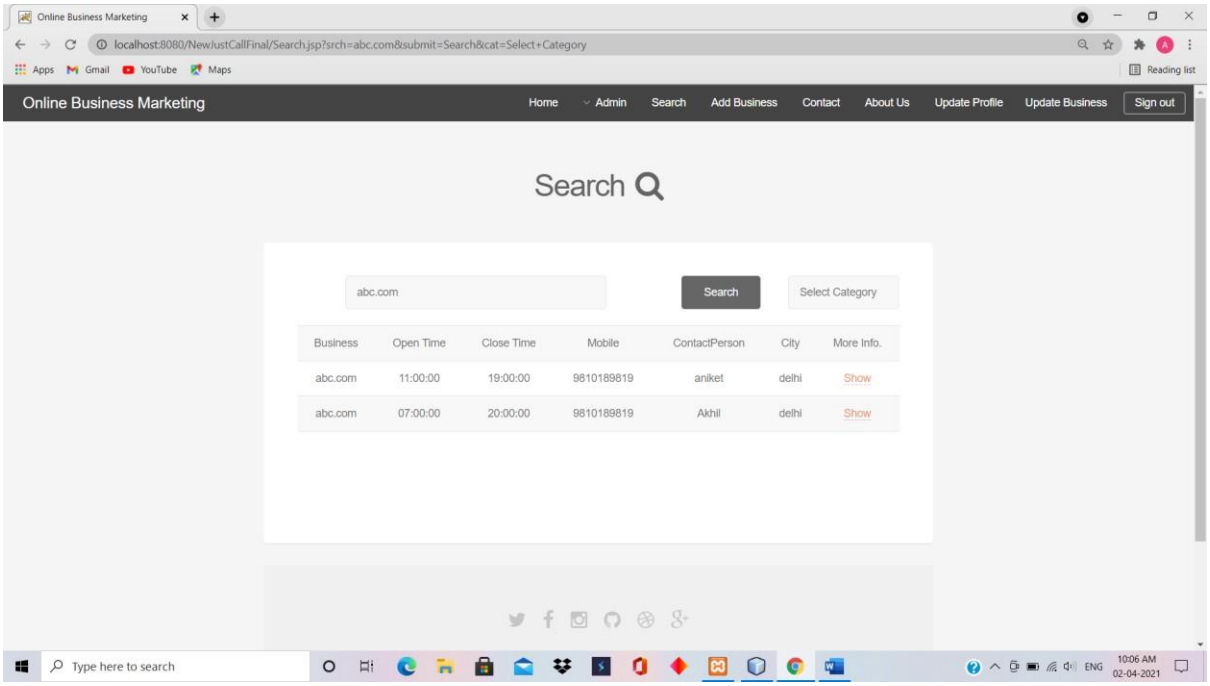
ScreenShots



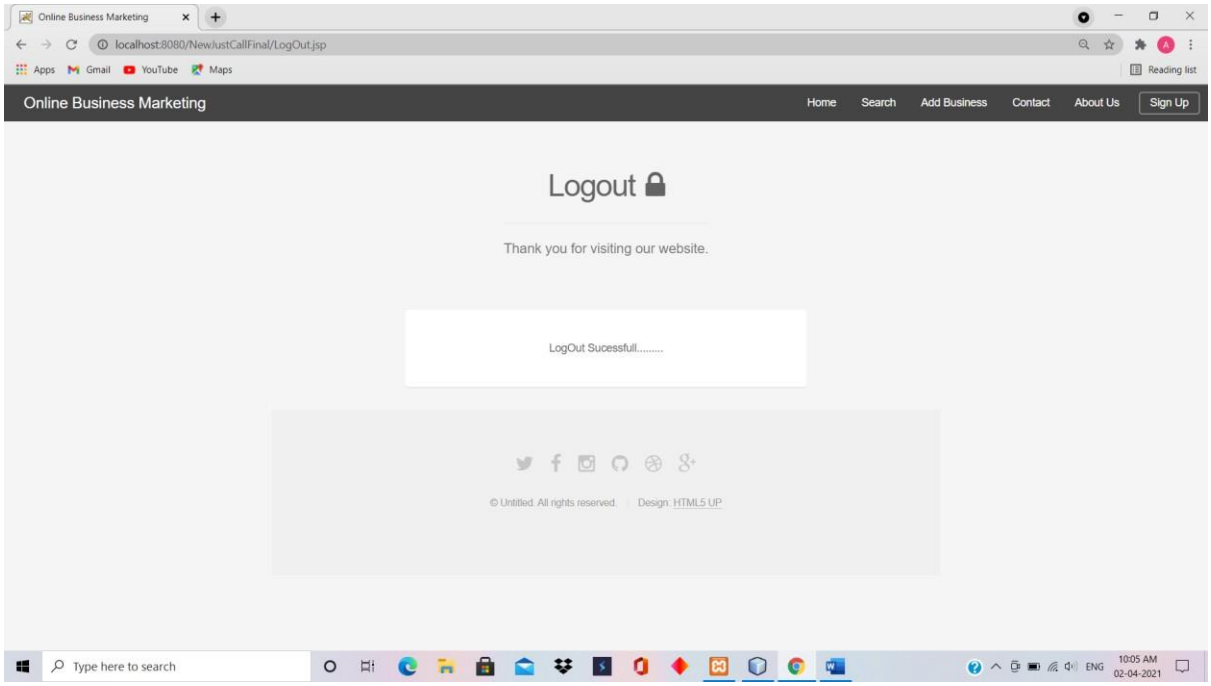
Logged in



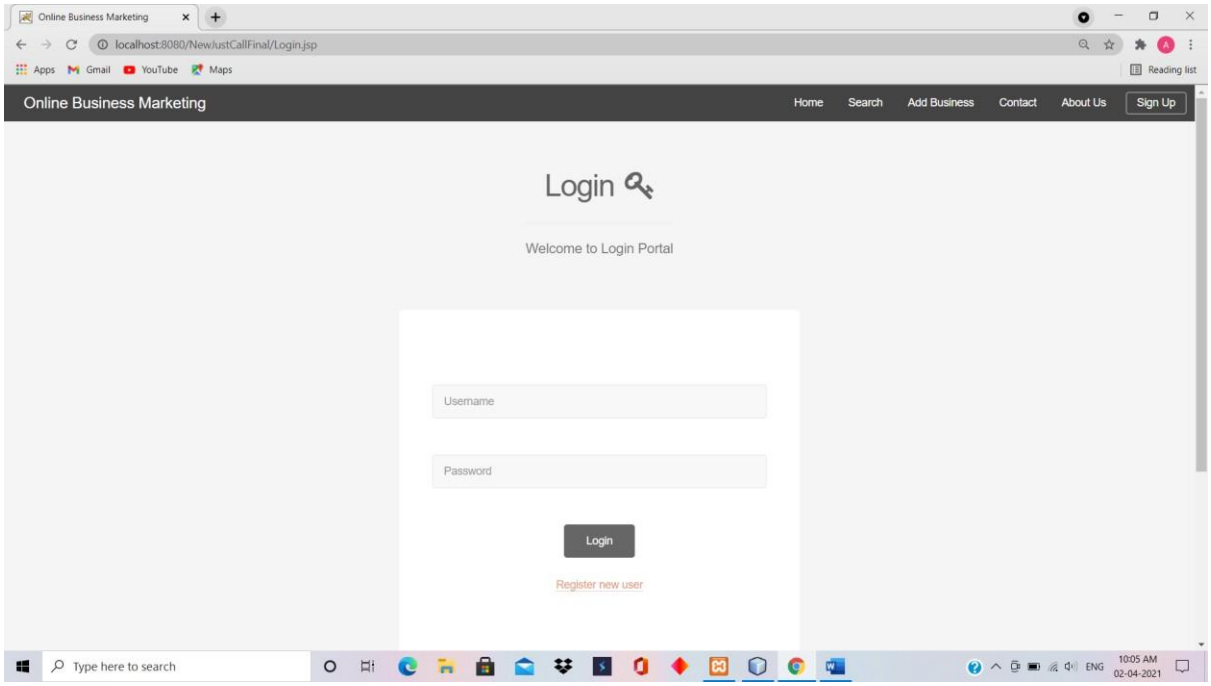
SEARCH


Online Business Marketing
localhost:8080/NewJustCallFinal/Search.jsp?srch=abc.com&submit=Search&cat=Select+Category
Apps
Gmail
YouTube
Maps
Reading list
Online Business Marketing
Home
Admin
Search
Add Business
Contact
About Us
Update Profile
Update Business
Sign out
Search
abc.com
Search
Select Category
Business
Open Time
Close Time
Mobile
ContactPerson
City
More Info.
abc.com
11:00:00
19:00:00
9810189819
aniket
delhi
Show
abc.com
07:00:00
20:00:00
9810189819
Akhil
delhi
Show
Type here to search
ENG
10:06 AM
02-04-2021

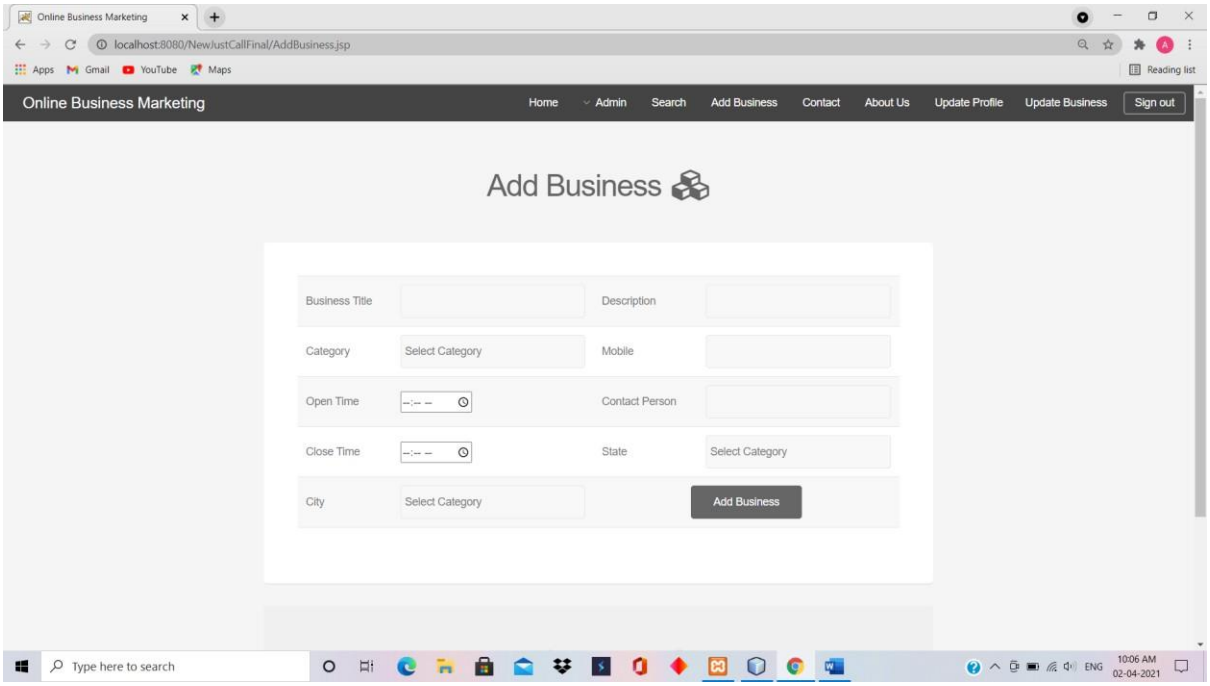
Log out

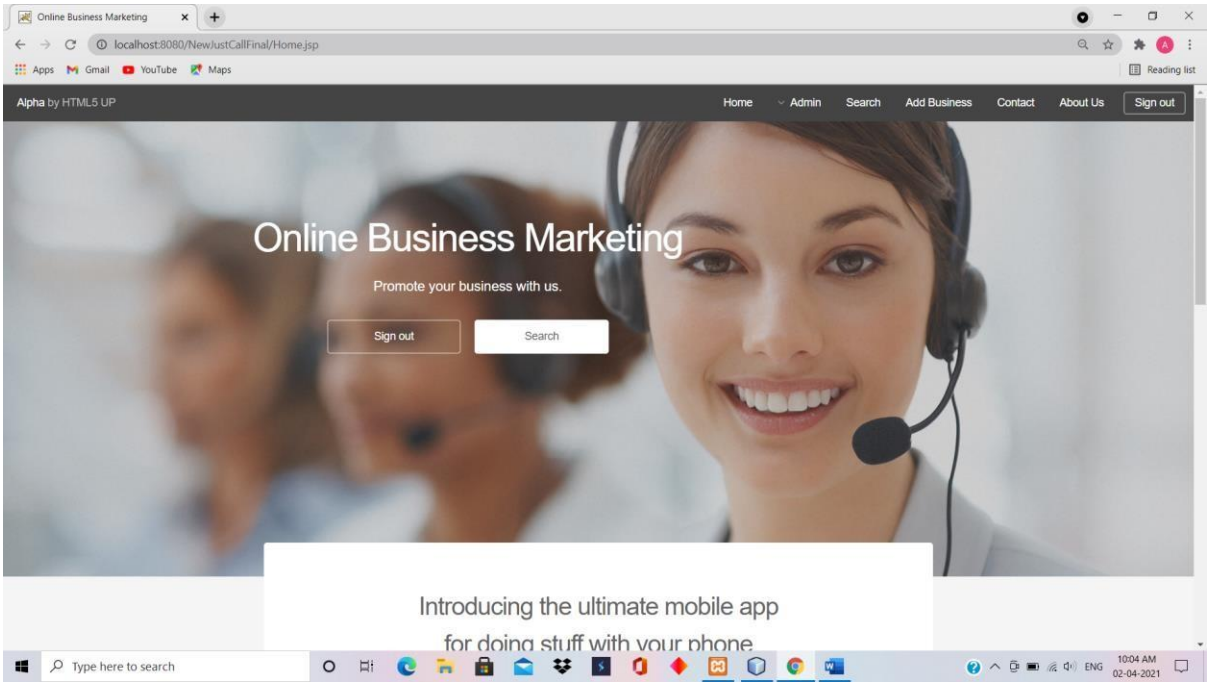


Log in User

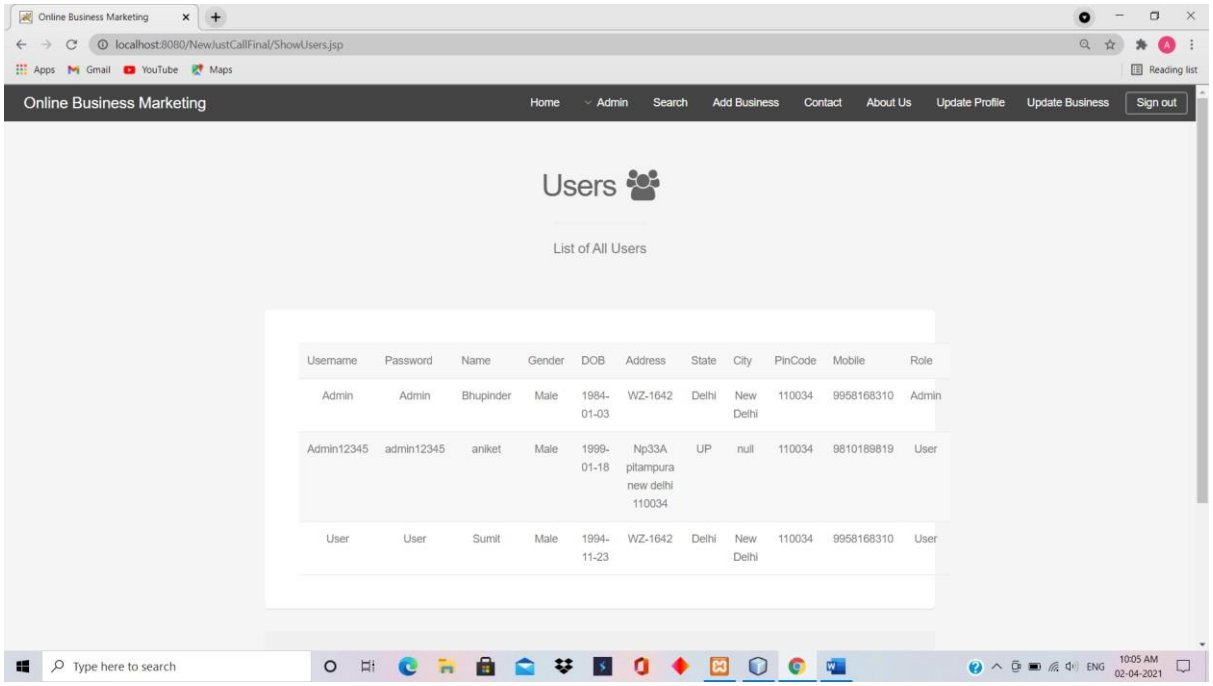


Add business

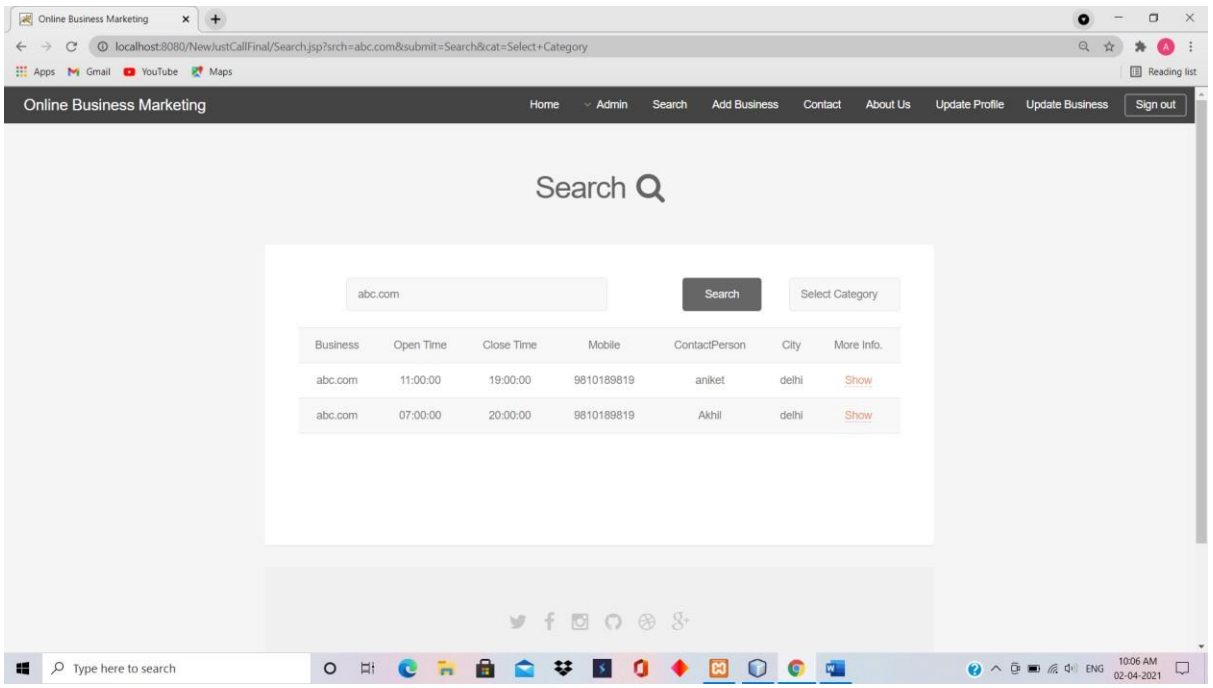




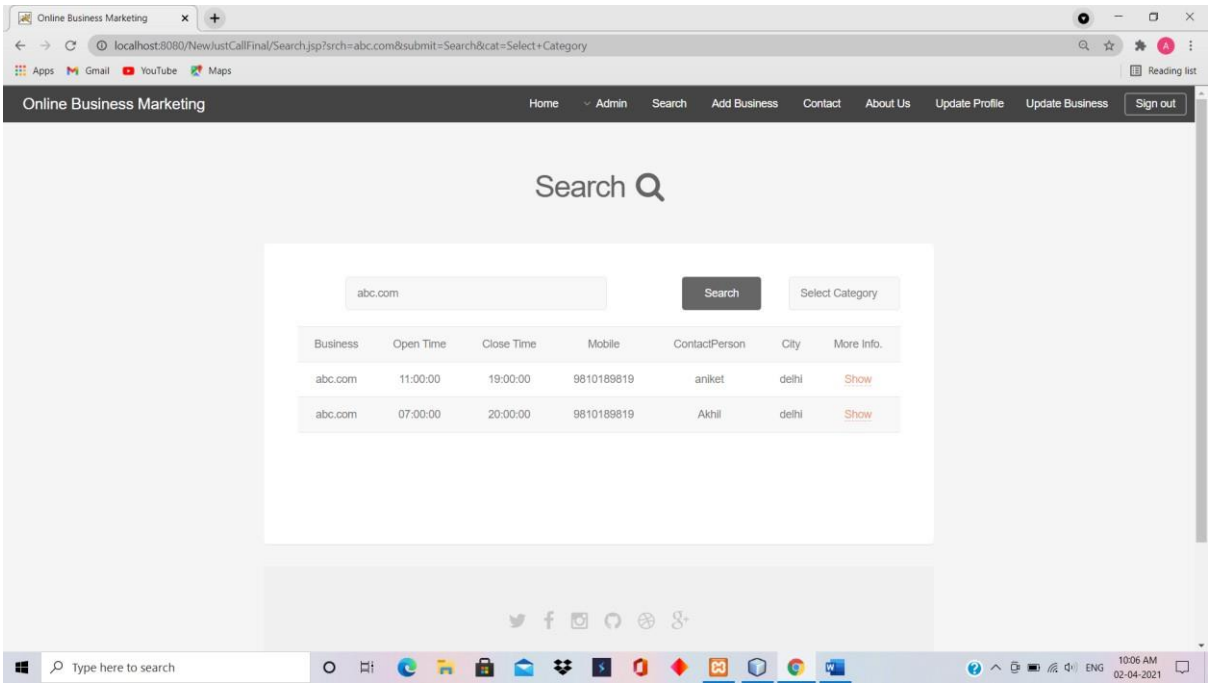
Show users



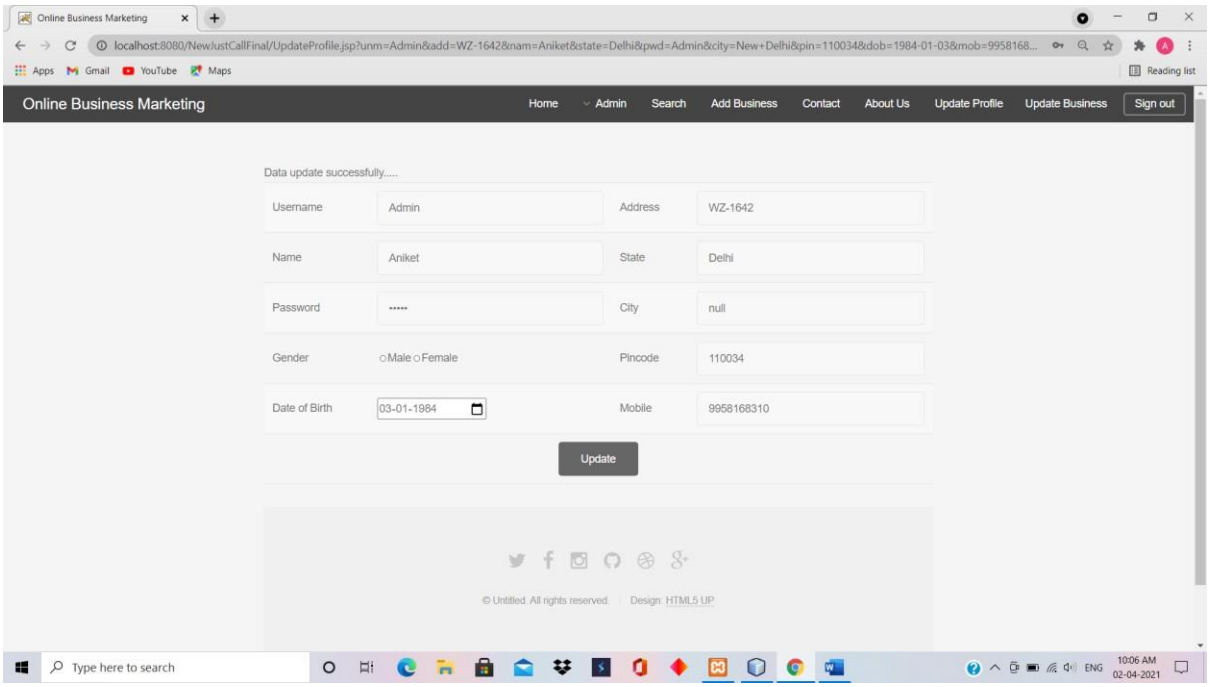
Show business



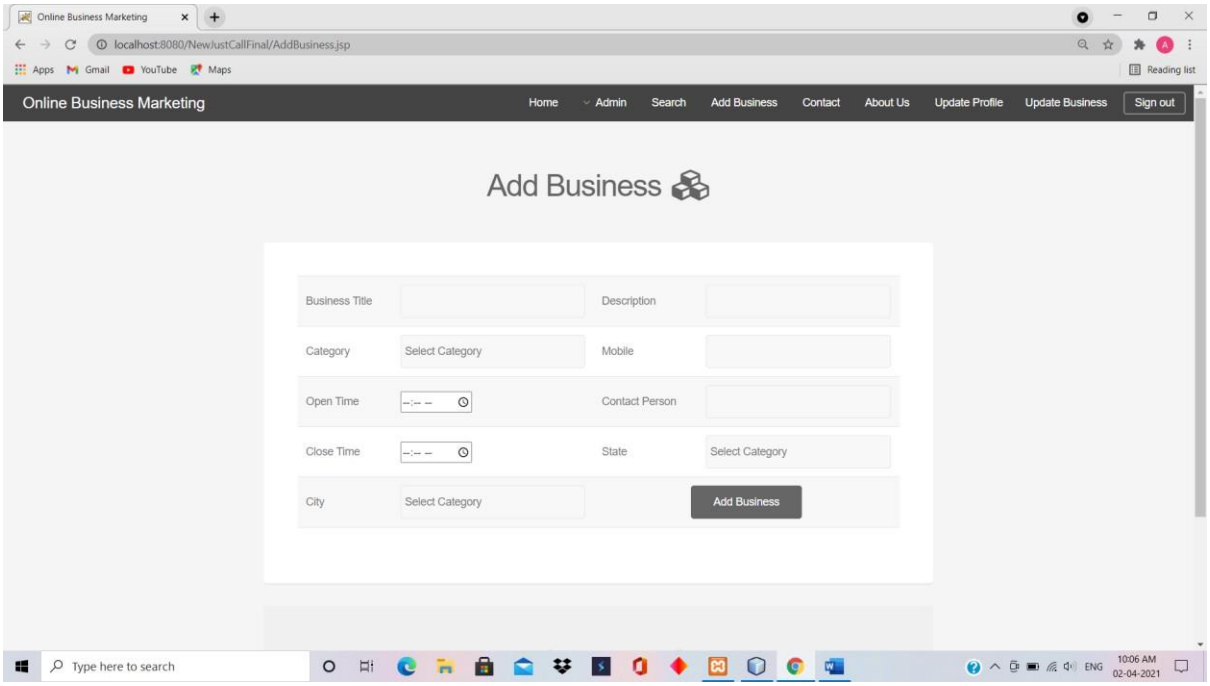
Search Business



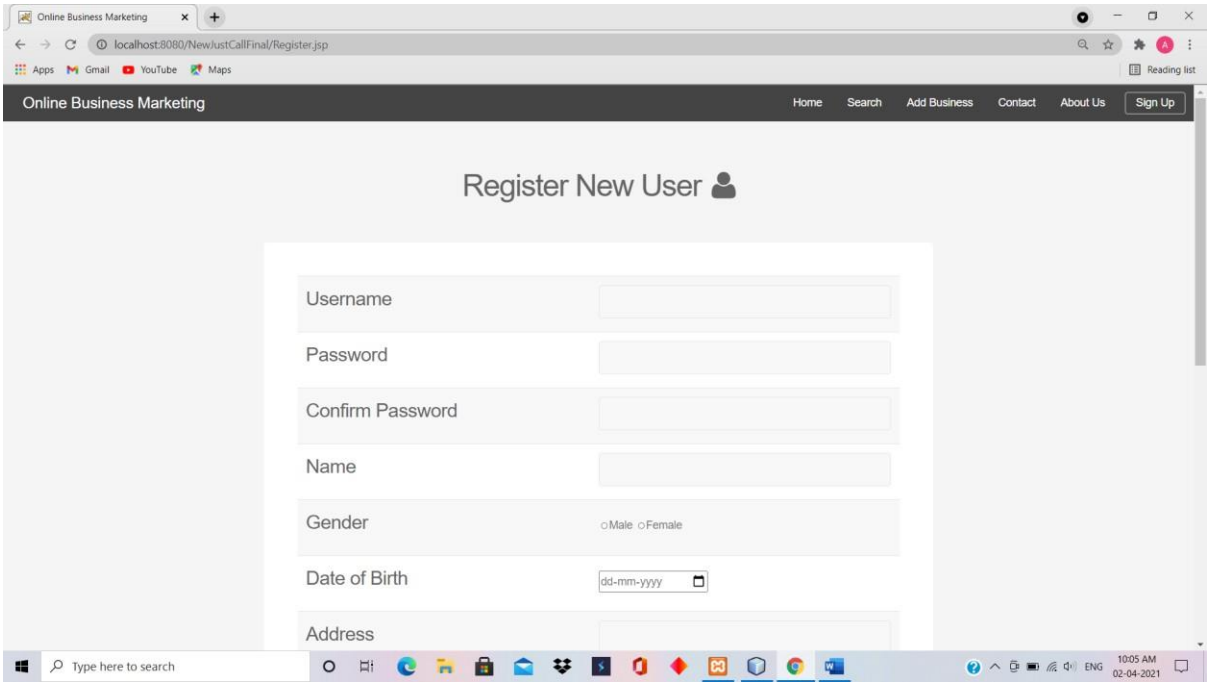
Update



Add business



Register new user



Advantages and Disadvantages of the System:

Advantages

- It is distributed which can be accessed from different location anytime with login credentials.
- No, need to pay the cost for advertisement
- Can add or delete products anytime
- Can advertise any company and product
- Can change the description
- Can add multiple business against single user.
- Can categorise the products according to categories
- Advertisement first need to get validated.

Disadvantages

- Can’t handle many users at a time
- Stored limited data at a time.
- It’s not secured
- Can’t take orders online.

Conclusion and Future scope-

Conclusion-

By this project we have conclude that at anyone can be seller and reach out to large customers and without indurring any cost. One can easily list or delist the products and can advertise upto its minute details like return, exchanges, cards accepted like Sodexo acceptable. Every changes in the databases would be passed to admin to validate and then approves. The user has to adhere the privacy policy and cant vioalate the rules. Founding violating, would be blocked and cant use the services any more.

Future Scope-

Future scope is in the era of internet, one wouldn't need to step out of their home and by comparing the offers done through advertisements, they can easily orders and get the product delivered. They can also report to the admin if the seller is selling fake products and wants to debarred from it.

The project is compatible means it can be combined with that platform which needs to advertise. The customer can chat with the seller regarding the advertisement and chat would be monitor in case the seller refuses later.

BIBLIOGRAPHY

Books

Programming with java by **Balaguruswami**

JDBC DATABASE ACCESS WITH JAVA BY **Graham Amelton**

Online Reference

http://www.w3schools.com

https://www.tutorialspoint.com/jsp/index.htm

https://www.javatpoint.com/