

TELEPHONE DIRECTORY MANAGEMENT

IT7613 – INTEGRATED PROGRAMMING LABORATORY

PROJECT REPORT

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BONAFIDE CERTIFICATE

Certified that this project report titled **“Telephone Directory Management”** is the bonafide work of **Rizwan Jaffer S** (RegNo:**2018506096**), **Karthikeyan J M** (RegNo:**2018506049**) who carried out the project work under my supervision. Certified further that to the best of my knowledge the work reported herein does not form part or full of any other thesis or dissertation on the basis of which a degree or award was conferred on an earlier occasion on this to any other candidate.

Submitted for the examination held on 08.06.2021

COURSE IN CHARGE

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CHAPTER 1

INTRODUCTION

1.1 Abstract

In today's world we are in the realm of a fast paced life and one of the major communication devices is our mobile phones/smartphones. We are not sophisticated as in the past decades to remember all the phone numbers that we are used to, so there is an emerging need to remember the phone numbers so that in case of emergency we can be able to communicate in critical events in our lifetime. This is the reason that telephone directory/phone book applications were introduced and the main reason that we want to develop this web application during this time is that, there is a need during this pandemic that we must be able to contact to the government and other agencies in the need for help and support and there is a rise in demand/need for remembering the phone/telephone numbers. But since phone numbers can be actually stored in mobile phones, the case of contacting agencies and governments phone numbers needs some global maintenance of phone numbers for the legitimate numbers and the main purpose is to keep a directory of public phone numbers listed so that it helps those who are in need and will reduce their burdens. So normally, a phone book is a listing of telephone subscribers in a geographical area or subscribers to services provided as well as the telephone numbers of peoples added as contacts in the directory in alphabetical order. Earlier there was a manual system which requires a lot of paperwork and required a lot of time to maintain the contact records in a database. The records stored were also not secured as anyone can view it. So there was a risk of storing records. Besides this, if any changes were to be made then all things needed to be updated which was very difficult to do. There was also a risk for loss of information in this system. This also led to errors so there was a need for the new system to be developed.

The telephone directory system allows storing contact details in a database which is handled by the administrator. So this provides a secure system which could easily search, insert or delete any records. It also allows the users to easily update the contact details without modifying much. The records can be modified only by the administrator. In this, the user can easily log in and view the contact details. This reduces dependence on the manual system which earlier required a

lot of paperwork. This also saves time and the cost of paper. All the records are safely stored in a database.

1.2 Aim

The main aim of the project lies in developing a phonebook application with the concepts of integrated programming in java and to persist the application with a database to store the details for future use.

1.3 Objective

The main objective of this system is to store the contact details of the desired persons in a database. It is a friendly easy to use interface developed in Java with MySql as the backend to store the details. This application stores all the details like name, telephone number, address, email id in a database. This system was developed to reduce the errors that creep up in manual systems. It was very difficult to store all the details manually when such a system was developed. This software also allows users to edit, update and search various contact details. It is a secure, easy to use and reliable software system. It also provides a good level of security as there is an admin who can only edit and update details. Earlier there was only a manual system which required a lot of paperwork but now an automated system is developed which meets all the requirements.

1.4 Hardware and Software Requirements

Hardware:

Hard Disk	: 2 GB.
RAM required	: 1 GB (minimum)
Processor	: Dual Core or Above

Software:

OS	: Windows
Platform	: Java
Domain	: Sessions, JDBC, Servlets, Hibernate
Front-end	: Jsp, Html with Bootstrap, CSS

Framework : Hibernate
Database : MySQL
Workspace : Netbeans IDE 8.2

CHAPTER 2

PROPOSED WORK

2.1 System Architecture:

The architecture of our proposed phone book web application is as follows:

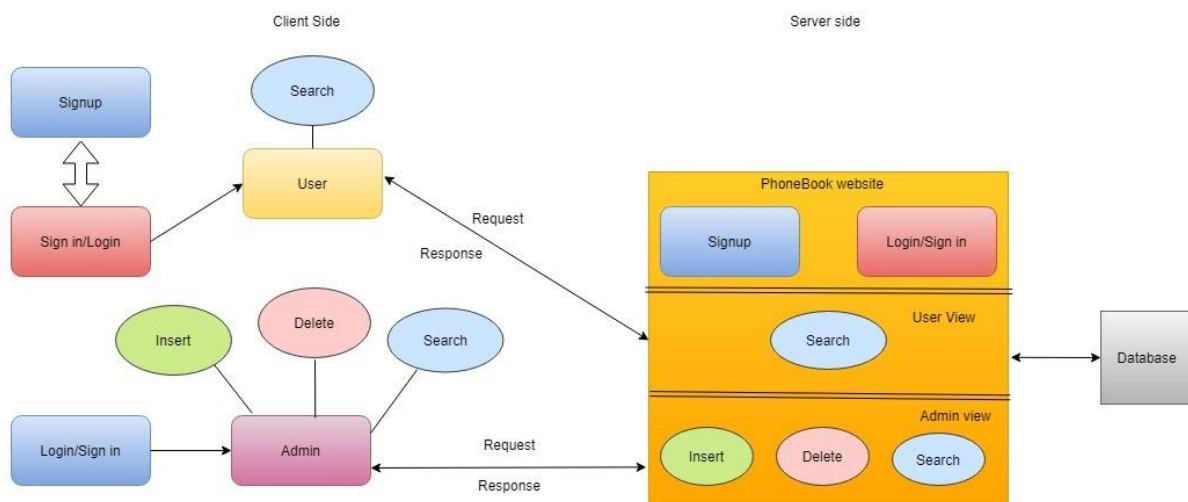


Fig 1. Phonebook web application architecture

2.2 Phonebook web application:

The phonebook web application is built using java with web technologies such as jsp ,servlet, ejb and frameworks such as hibernate and handling with session management and including frontend web technologies such as html,bootstrap and css. The main purpose of the application is to search for the requested phone numbers from the server/website to the user and to maintain the database and website by the admin by managing the user details and phone numbers in the database and periodically maintaining it.

CHAPTER-3

IMPLEMENTATION

3.1 Implementation of Modules:

- **Signup module:**

The signup module is the first webpage to enter into the web application where the user registers himself/herself by mentioning his/her name, username and password and gets redirected to the login page module.

- **Sign-in/Login module:**

The sign-in/login module is the page where user/admin access the website by providing the legitimate credentials such as username and password and logging in to his/her respective accounts and will be able to access his/her privileges based on his/her role.

- ❖ **User View:**

- **Search module:**

The user on successful login after registration can be able to search the phone numbers and details of other users based on queries such as first name, last name, phone number, address, city and pincode of the user where the data is fetched from the database which is persistable.

- ❖ **Admin View:**

- **Insert module:**

The admin on successful login can insert the user details into the database based on first name, last name, phone number, address, city, pincode of the user.

- **Delete module:**

The admin can delete the user details from the database based on the phone number of the user.

- **Search module:**

The admin can search the phone numbers and details of other users based on queries such as first name, last name, phone number, address, city and pincode of the user where the data is fetched from the database

which is persistable.

❖ Database:

- **Admin table:**

The admin table stores the details with related to the admin of the web application.

- **User table:**

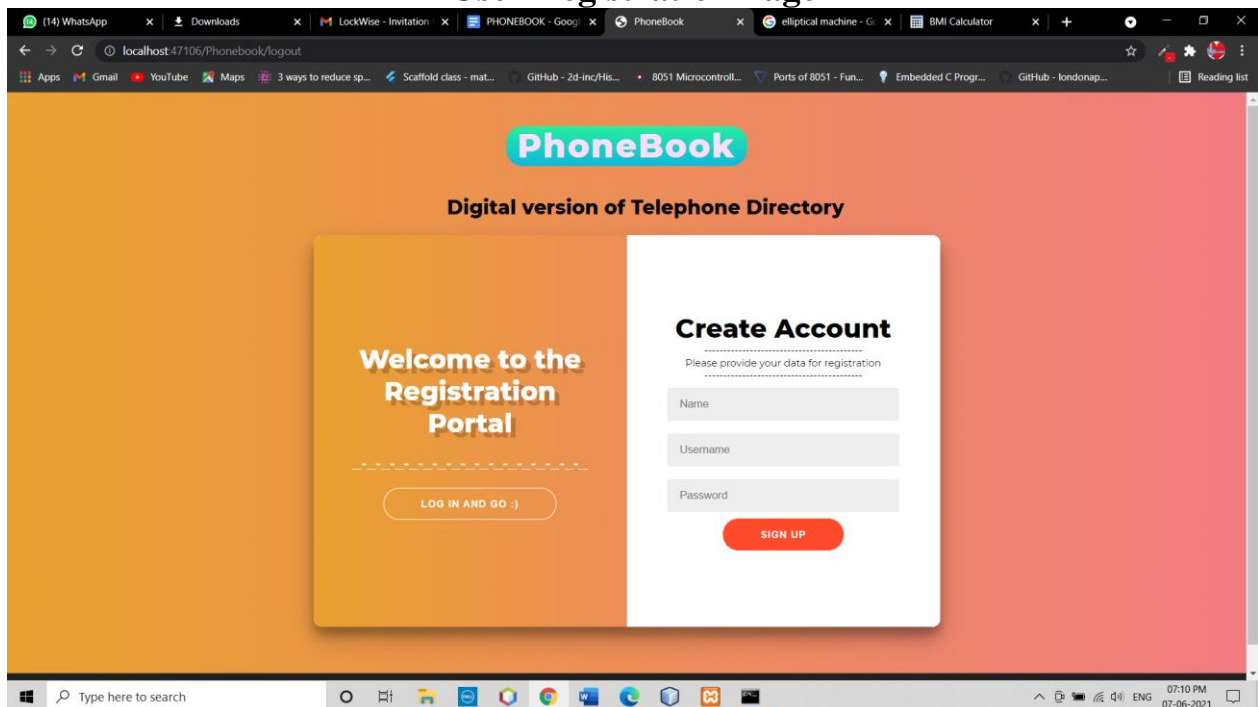
The user table stores the details related to the users.

- **Userdetails table:**

The userdetails table is the main table in which users/admin queries for insertion, deletion and searching of the data from the database.

3.2 Result Snapshots:

User Registration Page



The screenshot displays a web browser window with the URL `localhost:47106/Phonebook/logout`. The page features a gradient background transitioning from orange to pink. At the top, the "PhoneBook" logo is centered in a blue pill-shaped box, with the tagline "Digital version of Telephone Directory" below it. The main content area is divided into two sections: on the left, a "Welcome to the Registration Portal" message with a "LOG IN AND GO :)" button; on the right, a "Create Account" form titled "Please provide your data for registration". The form includes input fields for "Name", "Username", and "Password", followed by a red "SIGN UP" button. The browser's address bar and various open tabs are visible at the top, and the Windows taskbar is at the bottom.

PhoneBook

Digital version of Telephone Directory

Welcome to the Registration Portal

LOG IN AND GO :)

Create Account

Please provide your data for registration

Name

Username

Password

SIGN UP

User Login Page

PhoneBook

Digital version of Telephone Directory

Sign in

Please enter your valid credentials

UserName

Password

Administrative Login?

SIGN IN

Not a User Yet?
Nothing to worry

Registration portal right this way.

SIGN UP - IT'S FREE :)

Admin Login Page

PhoneBook

Digital version of Telephone Directory

Sign in

Please enter your valid credentials

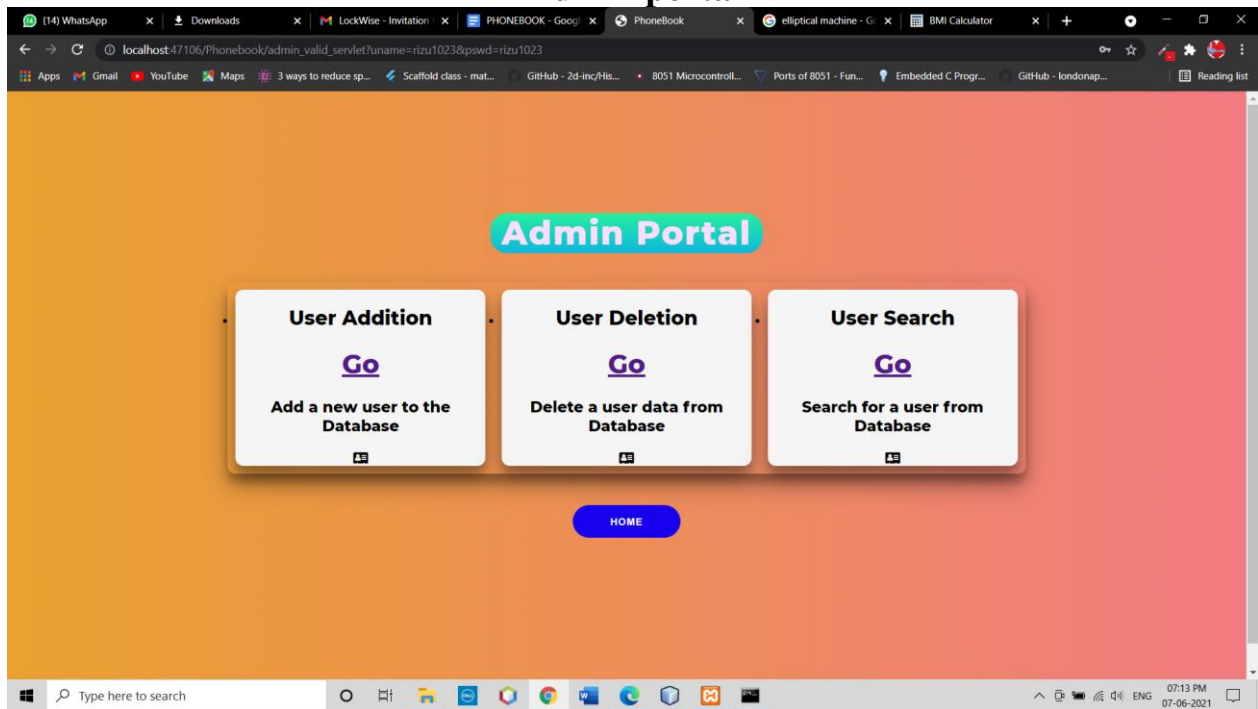
UserName

Password

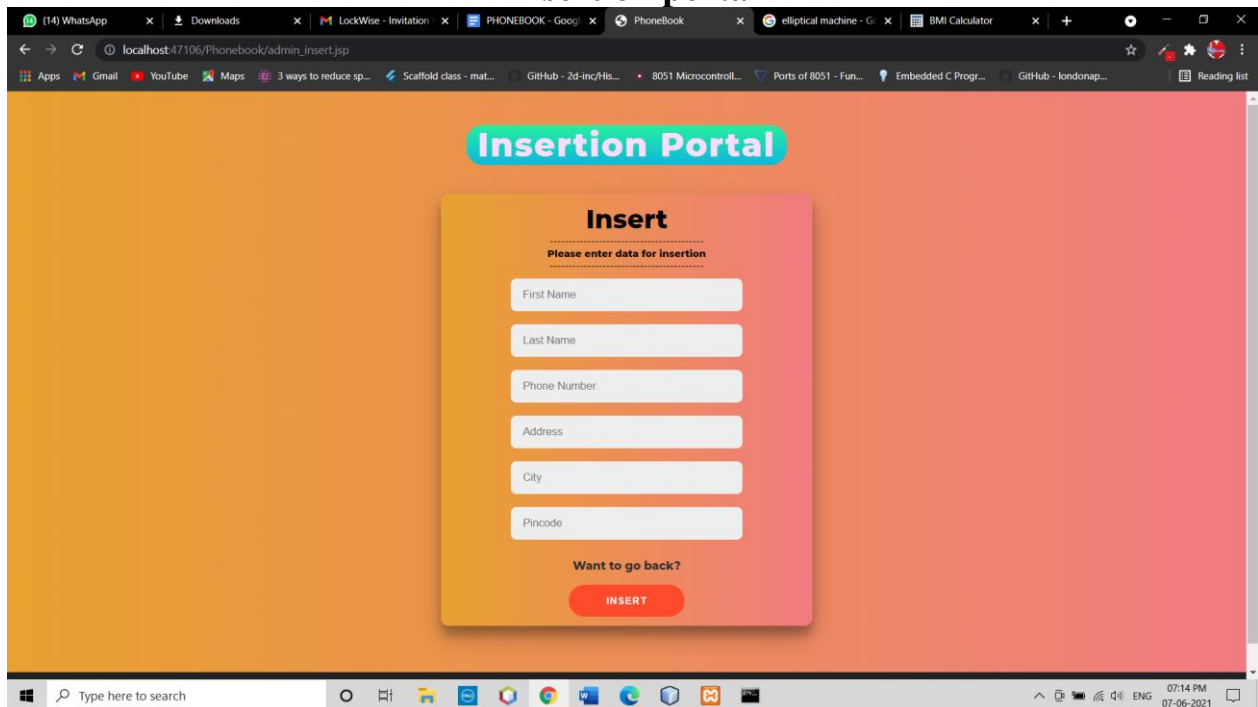
Not an Admin?

SIGN IN

Admin portal



Insertion portal



Deletion portal

The screenshot shows a web browser window with the URL `localhost:47106/Phonebook/admin_delete.jsp`. The page has a gradient orange-to-pink background. At the top, a blue pill-shaped button contains the text "Deletion Portal". In the center, a white card with a gradient border contains the following elements: the word "Delete" in bold, the instruction "Please enter phone number to proceed", a text input field labeled "Phone Number", the question "Want to go back?", and a red button labeled "DELETE". The browser's taskbar at the bottom shows various open applications and the system clock indicating 07:14 PM on 07-06-2021.

User Search Portal

The screenshot shows a web browser window with the URL `localhost:47106/Phonebook/search_portal.jsp`. The page has a gradient orange-to-pink background. At the top, a blue pill-shaped button contains the text "Search Portal". Below this, there are six white cards arranged in a 2x3 grid. Each card has a title, a "Search" link in purple, and a description: "First Name" (Search by a person's first name), "Last Name" (Search by a person's last name), "Phone Number" (Search by a person's phone number), "Address" (Search by a person's address), "City" (Search by a person's city), and "Pin Code" (Search by a person's pincode). Each card also features a small "Add" button at the bottom. A blue "HOME" button is centered at the bottom of the page. The browser's taskbar at the bottom shows various open applications and the system clock indicating 07:15 PM on 07-06-2021.

FirstName Search

The screenshot shows a web browser window with the address bar displaying `localhost:47106/Phonebook/user_search_fname.jsp`. The browser's tab bar includes several open tabs: WhatsApp, Downloads, LockWise - Invitation, PHONEBOOK - Google, PhoneBook, elliptical machine - Google, BMI Calculator, and a plus sign for more tabs. The browser's bookmark bar shows various links like Apps, Gmail, YouTube, Maps, and others. The main content area of the browser displays a web page titled "PhoneBook" in a blue rounded rectangle. Below the title, the text "Start Searching" is centered. A large white rounded rectangle in the center of the page contains the search form. The form has the title "Search" in bold, followed by the instruction "Please enter the first name to shortlist" in a smaller font. Below this is a text input field with the placeholder text "First Name". Under the input field, the text "Want to go back?" is displayed. At the bottom of the white box is a red rounded rectangle button with the text "START" in white. The browser's taskbar at the bottom shows the Windows search bar with the text "Type here to search", several application icons (File Explorer, Edge, etc.), and the system tray on the right showing the time as 07:23 PM on 07-06-2021.

PhoneBook

Start Searching

Search

Please enter the first name to shortlist

First Name

Want to go back?

START

CHAPTER 4

CONCLUSION AND FUTURE WORK

Conclusion:

As of now we have developed a web application which helps the users to search the details and phone numbers from a central repository of details of the users with their phone numbers listed in the database with the concepts of integrated programming in java, front end technologies and frameworks. We hope this application serves the needs of the users who are in burden during this pandemic to contact their loved ones and to seek the help from government and other agencies. We are sure that it helps the society that makes their life easier without any remembrance of the details of others and we are sure that it brings prosperity and well being of the society.

Future Work:

Our further work involves a plan to integrate billing services by establishing a payment gateway so that they can be able to manage their cost of communication between them and we also plan to deploy it using AWS cloud services and to host it in the web so that anyone in this world can access and we plan to integrate services for different country with providing linguistic translation support so that users from other countries can be serviced without any problems. We also plan to integrate the map details of the users location which can be helpful to the user in locating the target location to the service needed. So with these improvements in the future we hope that we would be able to provide software which is very useful to everyone and provide the services that they need.
