DECLARATION

We, the undersigned, declare that the project entitled **"MYTEL APPLICATION"** being submitted in partial fulfilment for the award of Degree in Engineering in Computer Science & Engineering, affiliated to BPUT, Odisha is the work carried out by me.

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BIJU PATTNAIK UNIVERSITY OF
ODISHA

CERTIFICATE

This is to certify that the dissertion work entitled is done by **BIBHUDATTA BEHERA (1901299026), SOMIT DAS (1901299064), LIPSITA BEHERA (1901299046), RANJIT ROUT (1901299057)**

"MYTEL APPLICATION" submitted the partial fulfilment for the award of "BACHELOR IN ENGINEERING" in CSE from TITE, Khordha affiliated to BPUT.

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<u>ACKNOWLEDGEMENT</u>

The project report on **MYTEL APPLICATION** is an outcome of guidance, moral support and devotion bestowed on me through my work. For this let me acknowledge and express our performance sense of gratitude and thanks to everybody who have been source of inspiration during the project preparation.

First and foremost, I offer my sincere phrases of thanks with innate humility to **Prof. Namita Das (H.O.D)** Computer Science, Templecity Institute of Technology & Engineering, Khordha and my project guide for providing help whenever needed.The consistence guidance and support provided by **Ruchismita Sahu,** Templecity Institute of Technology & Engineering. So, we are very thankful to acknowledged for key role played by him in providing me with his precious ideas, suggestion and help that enabled in shaping project work.

If I can say in words, I must at the outset tender my intimate and receipt of affectionate care to Templecity Institute of Technology & Engineering for providing such stimulating atmosphere & work environment.

I acknowledge here our debt to those who contributed significantly to one or more steps. I take full responsibility for any remaining sins of omission and commission.

<u>ABSTRACT</u>

The Project **"MYTEL APPLICATION"** is a web application which presents a dynamic approach for online mobile phone recharge. Over the past several years, percentage of overall prepaid users has increased rapidly. However, the recharging process is still somehow manual. The system proposed in this paper shows an automated way to recharge the prepaid account. This approach will have a great business impact both in local and global aspects. The effectiveness has been proved with a SMSC server and a recharge SIM.

It is a Mobile recharge application aiming to give the reliable facilities to users to enjoy all recharge & bill services. The most useful and reliable functions which can't be found in another system. The project is built in Java platform with the help of IDE Eclipse IDE and JDBC(Oracle) Derby database.

In order to make the best product possible, insight in languages like. Java, SQL for database, and another one is inevitable.

However, all of us final year students with limited knowledge and to be adept in all those languages is never an easy deal. Since then, although we do try our best, there are still some small malfunctions in our product.

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CHAPTER-1 INTRODUCTION

This **"MYTEL APPLICATION"** Web Application, we have been developed Completely Java Language in Backend Programming. In real time how the users recharge their mobiles, how they pay all due bills and how they get their own balance details that we have represented it through a Web Application. There are many other ways there to represent How to do mobile recharges, how to pay bills, how to know balance details like through Standalone Application, through Enterprise application also. As I know Java very well So I Have mentioned it through a web application because Java is Most popular for developing large internet Applications in world now a Days. As I have represented it through a Web Application now What is the web Application.

MYTEL APPLICATION a web-based application developed in Java Technology to recharge mobile phones. The project focuses at providing an easy and reliable platform to recharge mobile of any telecommunication company through online without buying recharge card. The registered users of the system can recharge their prepaid mobile phones from anywhere at any time. The proposed project for recharging mobiles developed to automate the mobile recharging process. It roots out the manual card system of recharge and introduces a new and genuine online recharge process. The online mobile recharge system is beneficial to both the admins and users. Using the online application, the admin can add new operators, tariff plans, offers and update or modify the existing tariff plans. It helps the users in creating their account, and then recharging the mobiles phones at any time.

What is a Web Application ?

Web Application is an application that runs on a web or Internet and provides dynamic web pages to interact with the user. It runs on server but not in command prompt. There are 2 types of web pages. Static webpage & dynamic web page. Static web page means the user can see and read the informations but cannot interact with it. Dynamic web page means the user can see & read all the information as well as interact with it. Dynamic web page is specific to all users where as Static web page is common for all users.

CHAPTER-2 MAIN OBJECTIVE

The main objective of this project is to give the users to do their mobile recharge safely with best plans, the user can pay the due bills safely for their post-paid sims, the user can see his/her own plan details, the user can convert his/her sim from prepaid to post-paid or vice-versa, after the conversion the user can get his/her converted sim with a very less no of days along with home delivery. The user can see his/her profile details along with current pack details.

This application gives us the information about all the mobile service providers. Also this provides us the complete information in a service provider wise.

➢ Database is used to store All the new user details, pack details along with all numbers plan validity details. Handles all Recharge support features & the technical works in the application.
➢ Database stores all the MyTel user information so that there is no paper work needed.

CHAPTER-3 SYSTEM REQUIREMENT STUDY

3.1 Function Requirement

* Function Requirement 1:

* Description:

Ask user to enter details in order to become a registered user.

- Input:

Name in characters, email and password in alphanumeric values.

- Processing

Storing the values entered in database and check if a person with same username and mobile number is available or not if not then stored in database else and error message is generated.

- Output

Confirmation message registered successfully.

* Function Requirement 2:

* Description:

Initialize username and password for login.

- Input:

Username in characters and password in alphanumeric values with special characters.

- Processing

Storing the values and checking whether true or not.

- Output

Confirmation message login successful else login failed.

* Function Requirement 3:

﹡ Description:

 Form validation.

- Input:

 Name in characters started with uppercase letters, password in alphanumeric values along with a special character.

- Processing

Storing the values entered and checking whether they are valid or invalid.

- Output

 Confirmation message Valid.

﹡ **Function Requirement 4:**

 ﹡ Description:

 Recharge your mobile as a registered user.

- Input:

 Mobile number in 10 digits, enter the mobile number is prepaid or post-paid, enter the sim type.

- Processing

Storing the values and checking whether the entered mobile number data is correct or not.

- Output

Will show the plan details according to the operator. After that entering a valid credit card details you can make your mobile recharge.

﹡ **Function Requirement 5:**

 ﹡ Description:

 Pay your bills as a post-paid user.

- Input:

Mobile number in 10 digits, the mobile number must be a post-paid number.

- Processing

Storing the values and checking whether the entered mobile number is post-paid or not.

- Output

Will show the due bill details so that the user can pay the bills after entering a valid credit card details.

＊ Function Requirement 6:

＊ Description:

 Know your own balance details.

- Input:

Mobile number in 10 digits.

- Processing

Storing the values and checking whether the entered mobile number is already exists in the profile or not.

- Output

Will show the current pack details if the user has done any mobile recharge for this number otherwise it will show that you don't have any active plans.

＊ Function Requirement 7:

＊ Description:

 Check your profile details.

- Input:

Click on the profile details link.

- Processing

Storing the values and checking whether the entered mobile number is already exists in the profile or not.

- Output

If the number exists in the profile then it will show the corresponding profile details.

* Function Requirement 8:

* Description:

Get in touch with or interact with the customer care service for help.

- Input:

Enter the proper query, email id, subject and message.

- Processing

Storing the messages in database and the customer service will show all the queries.

- Output

Will send the solution of the queries to the registered email address.

2.2 Non-Functional Requirement:

* Safety Requirements:

• Highly recommended Quick Heal 2023 internet security to been installed in to users Pc to prevent the harm that may occurs by unwanted malicious software's, phishing URLs and all the types of viruses attacks during using these website.

*Security requirements:

• All users should be properly authenticated before allowed entry into the system authentication will be based on an E-mail address and a password. All activities must be logged.

Non-Functional Requirements:

- Secure access of confidential data(user's details).SSL can be used.

- 24x7 availability.

- Better component design to get better performance at the peak time.

- Flexible service based architecture will be highly desirable for future extensions.

3.3 User characteristics:

- **Guest/anonymous**: non members can visit the pages of website only.

- **Registered members(customers):**

 Registered members can access all the functionalities provides on website. Registered members have their own profiles.

- **Administrator/developer:** Admin has authority to grant/delete registered members as well as view profiles. The Administrator will be provided with special functionalities like:

 * Checking converted sims and delivery it with the proper registered address with a limited period of time.

 * Checks the mobile recharges and pay bills.

 * Checks all the queries and sending the solutions to the users.

CHAPTER-4 WHAT ARE THE TECHNOLOGIES USED

Object & Vision:

1. A Mytel application where the user can recharge his/her mobile numbers, pay the due bills, convert the sims from prepaid to postpaid, get the converted sims with home delivery facility, check his/her own plan details, check his/her profile details, interact with customer care service, logout to the system. and at last enjoy all the facilities provided by this application.

Users Of The Project:

1. Registered User

1. Registered User

2. Can login
3. Can Do the mobile recharge
4. Can pay the remaining due bills for the post-paid sim.
5. Can Convert his/her sim from prepaid to post-paid and vice versa.
6. Can see/check his/her current pack details.
7. Can see their registered profile details.
8. Can interact with the customer service care for any querries.
9. Can logout to the system.

Tools To Be Used:

1. I have used Eclipse IDE To Develop This Project. You can use any Java IDE.
2. Oracle for the database. Here I have used Oracle 19c database. Assuming that username is system and password is Jilucse@2002.

Technologies Used:

FrontEnd Technologies:

HTML: Page Layout has been designed using HTML.

CSS: CSS has been used in all designing part.

Bootstrap: Bootstrap is used for both designing and making the page Responsive.

BackEnd Technologies:

Servlet: All the Business logics has been developed using Servlet. Servlet is a Server side technology used for building Web Applications.

Database Used:

Oracle 19c: Oracle 19c Database has been used as database for the project.

CHAPTER-5 REQUIREMENT SPECIFICATION

Software

Operating System : Windows 10/11

Database : Oracle Database

IDE : Eclipse IDE

Server : Apache Tomcat Server

Hardware

Processor: 1 GHz or greater

Hard Disk Space*: 16GB

Memory: 4 GB (64-bit)

Graphics: intel iRIS Xe graphics with minimum 128MB RAM.

CHAPTER-6 ANALYSIS & SYSTEM DESIGN

Analysis:

Today also we have to go to the diagnostic center, wait in the queue to get our COVID19 test done. As Technology is growing rapidly we are also moving to a technical world where everything we want to be online. So with the help of this project we are bringing the use of technology in the field of medical diagnosis where patients can avail all the diagnosis facilities at their door steps. This project makes the diagnosis process easy and reduces the burden of patients. At a same time its help the diagnostic center to track all their patients details with their test reports.

Disadvantage of present system:

- **Not user friendly:** The present system not user friendly because data is not stored in structure and proper format.
- **Manual Control:** All report calculation is done manually so there is a chance of error.
- **Lots of paper work:** Visitors maintain in the register so lots of paper require storing details.
- **Time consuming**

Design Introduction:

Design is the first step in the development phase for any techniques and principles for the purpose of defining a device, a process or system in sufficient detail to permit its physical realization. Once the software requirements have been analyzed and specified the software design involves three technical activities - design, coding, implementation and testing that are required to build and verify the software.

The design activities are of main importance in this phase, because in this activity, decisions ultimately affecting the success of the software implementation and its ease of maintenance are made. These decisions have the final bearing upon reliability and maintainability of the system. Design is the only way to accurately translate the customer's requirements into finished software or a system.

Design is the place where quality is fostered in development. Software design is a process through which requirements are translated into a representation of software. Software design is conducted in two steps. Preliminary design is concerned with the transformation of requirements into data.

UML Diagrams:

Actor: A coherent set of roles that users of use cases play when interacting with the use cases.
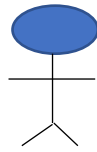
Use case: A description of sequence of actions, including variants, that a system performs that yields an observable result of value of an actor.

UML stands for Unified Modeling Language. UML is a language for specifying, visualizing and documenting the system. This is the step while developing any product after analysis. The goal from this is to produce a model of the entities involved in the project which later need to be built. The representation of the entities that are to be used in the product being developed need to be designed.

USECASE DIAGRAMS

Use case diagrams model behavior within a system and helps the developers understand of what the user require. The stick man represents what's called an actor.

Use case diagram can be useful for getting an overall view of the system and clarifying that can do and more importantly what they can't do.

Use case diagram consists of use cases and actors and shows the interaction between the use case and actors.

- The purpose is to show the interactions between the use case and actor.
- To represent the system requirements from user's perspective.
- An actor could be the end-user of the system or an external system.

6.1 USECASE DIAGRAM:

A Use case is a description of set of sequence of actions. Graphically it is rendered as an ellipse with solid line including only its name. Use case diagram is a behavioral diagram that shows a set of use cases and actors and their relationship. It is an association between the use cases and actors. An actor represents a real-world object. Primary Actor - Sender, Secondary Actor Receiver.

Use case Diagrams:

Registered User

Login to MYTEL Main Page

Do Mobile Recharge

Pay the remaining Due Bills

Convert Sim from Prepaid to Postpaid and Viceversa

Know the Current Active Plans

See all the registered Profile Details

Can Interact with MYTEL Customer Care Service

Can Logout from the Application
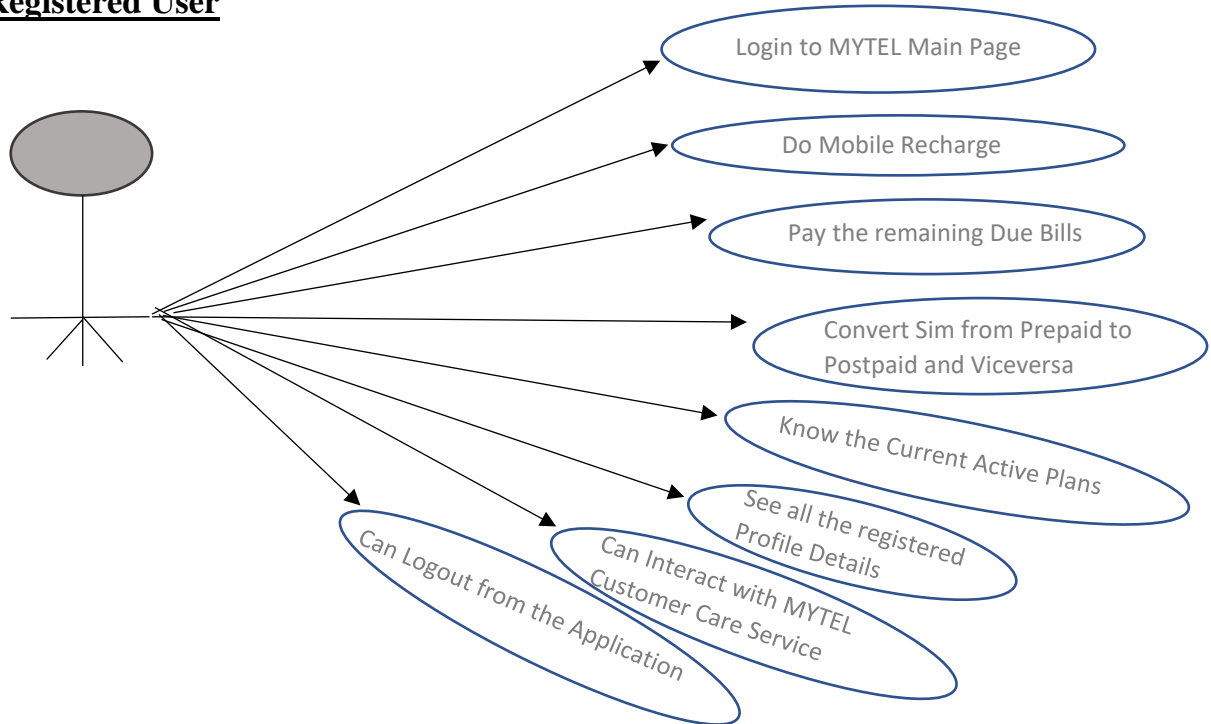
6.2 <u>CLASS DIAGRAM</u>

A Description of set of objects that share the same attributes operations, relationships & semantics.
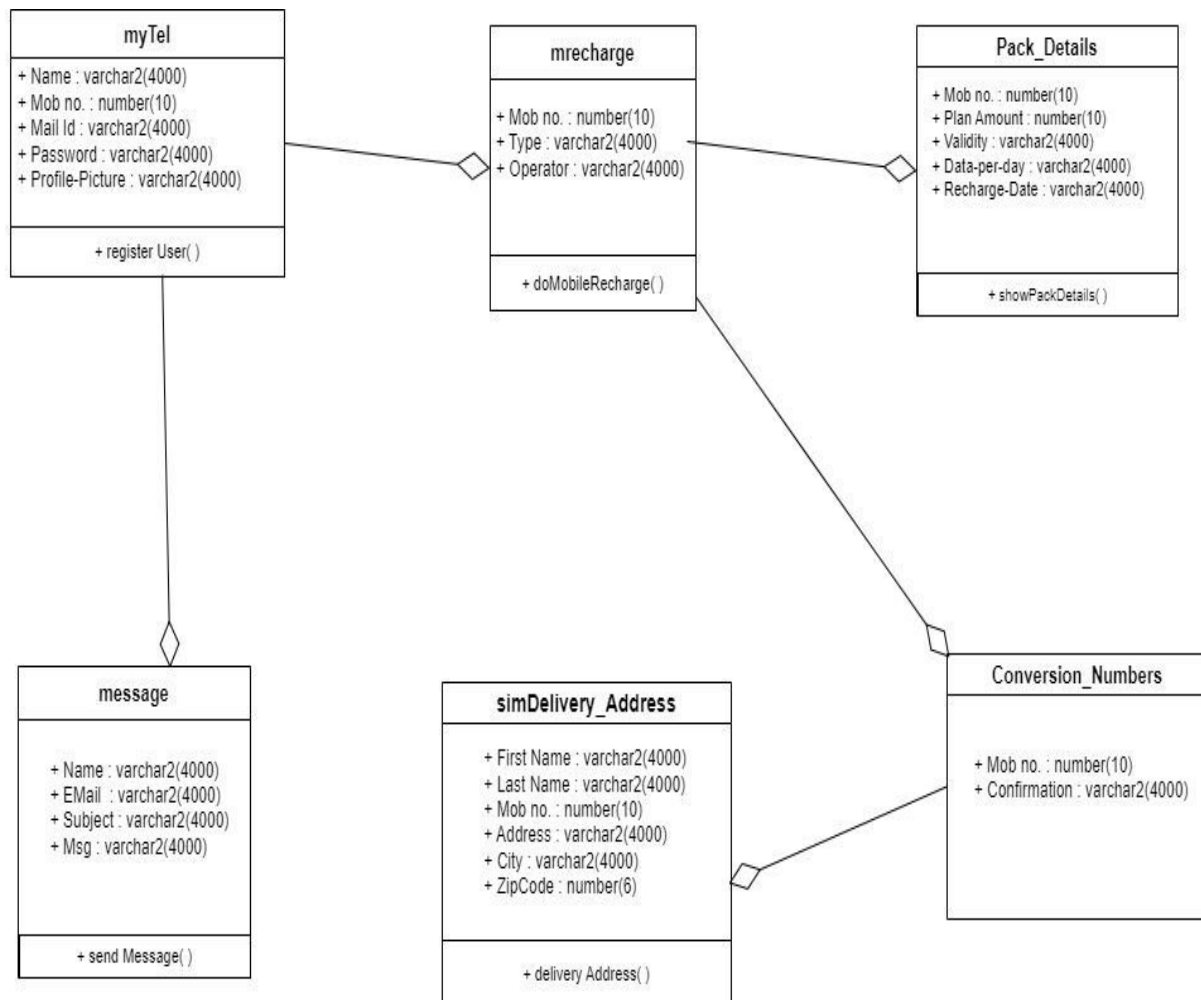
6.3 <u>ACTIVITY DIAGRAM:</u>

Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system.

The control flow is drawn from one operation to another. This flow can be sequential, branched, or concurrent.

Existance of Account

Yes

No → Create Account

Login

Mobile Recharge

Enter Recharge Amount

Enter Card Details

Valid card Details

Make Payment

Pay Bills

No

Enter Mobile Number

Valid Postpaid Number

No

Enter Card Details

Valid Card Details

Pay Due Amount

Sim Conversion

Convert Prepaid to Postpaid

No

Enter the Mobile Number

Valid Prepaid Details

Enter Sim Delivery details

Convert Number to Postpaid

Convert Postpaid to Prepaid

No

Enter the Mobile Number

Valid Postpaid Number

Enter Sim Delhivery Details

Convert Number to Postpaid

Logout

4. Know the Active Plans

Enter the Mobile Number

Yes

no

Show "You don't have Active Plan"

Show the Active Plans

5.Click on Profile

Will show the current logged profile details

6. Click on About us

Will show all the details about the application

7. Contact Details

Write Your Queries

Sent it to Customer Care Service

Logout

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6.4 <u>ER DIAGRAM:</u>

The Entity-Relationship (ER) model was originally proposed by Peter in 1976 [Chen76] as a way to unify the network and relational database views. Simply stated the ER model is a conceptual data model that views the real world as entities and relationships. A basic component of the model is the Entity-Relationship diagram which is used to visually represent data objects. Since Chen wrote his paper the model has been extended and today it is commonly used for database design for the database designer, the utility of the ER model is:

- It maps well to the relational model. The constructs used in the ER model can easily be transformed into relational tables.
- It is simple and easy to understand with a minimum of training. Therefore, the model can be used by the database designer to communicate the design to the end user.
- In addition, the model can be used as a design plan by the database developer to implement a data model in specific database management software.

ER Notation:

There is no standard for representing data objects in ER diagrams. Each modeling methodology uses its own notation. The original notation used by Chen is widely used in academics texts and journals but rarely seen in either CASE tools or publications by non-academics. Today, there are a number of notations used; among the more common are Bachman, crow's foot, and IDEFIX.

All notational styles represent entities as rectangular boxes and relationships as lines connecting boxes. Each style uses a special set of symbols to represent the cardinality of a connection. The notation used in this document is from Martin. The symbols used for the basic ER constructs are:

- **Entities** are represented by labelled rectangles. The label is the name of the entity. Entity names should be singular nouns.
- **Relationships** are represented by a solid line connecting two entities. The name of the relationship is written above the line. Relationship names should be verbs.
- **Attributes**, when included, are listed inside the entity rectangle. Attributes which are identifiers are underlined. Attribute names should be singular nouns.
- **Cardinality** of many is represented by a line ending in a crow's foot. If the crow's foot is omitted, the cardinality is one.

- **Existence** is represented by placing a circle or a perpendicular bar on the line. Mandatory existence is shown by the bar (looks like a 1) next to the entity for an instance is required. Optional existence is shown by placing a circle next to the entity that is optional.

ER Diagram:
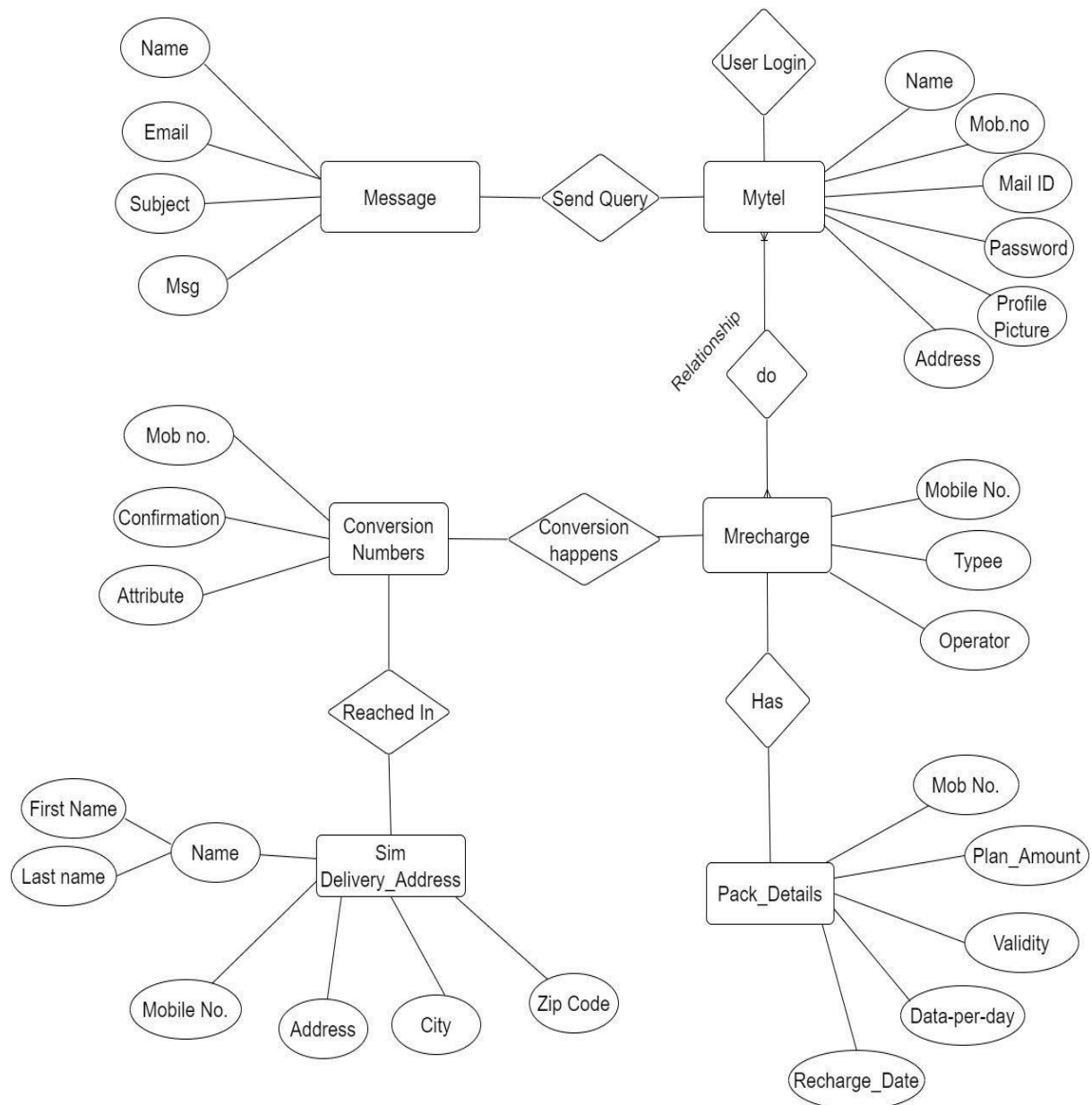
CHAPTER-7 ORACLE DATA TABLES(STRUCTURE OF EACH TABLE)

1. Registered User Table: (Table Name is MYTEL)

This table stores the new user registration details.

Name	Null?	Type
NAME	NOT NULL	VARCHAR2(20)
MOBNO	NOT NULL	NUMBER(10)
MAILID		VARCHAR2(30)
PASSWORD		VARCHAR2(20)
PROFILE_PICTURE		VARCHAR2(4000)
ADDRESS		VARCHAR2(40)

2. Mobile Recharge Table: (Table Name is MRECHARGE)

This table stores all mobile recharge along with their type and operator details.

Name	Null?	Type
MOBNO	NOT NULL	VARCHAR2(10)
TYPEE		VARCHAR2(10)
OPERATOR		VARCHAR2(10)

3. Recharged Pack Details Table: (Table Name is PACK_DETAILS)

This table stores all the recharge mobile pack details.

Name	Null?	Type

Name	Null?	Type
MOBNO	NOT NULL	VARCHAR2(20)
PLAN_AMOUNT	NOT NULL	VARCHAR2(20)
VALIDITY		VARCHAR2(20)
DATA_PERDAY		VARCHAR2(20)
RECHARGE_DATE		VARCHAR2(20)

4. Conversion Number Table: (Table Name is CONVERSION_NUMBERS)

This table stores the information of converted numbers.

Name	Null?	Type
--------	--------	-------------------
MOBNO		VARCHAR2(10)
CONFIRMATION		VARCHAR2(20)

5. Conversed SIM Delivery Address Table: (Table Name is SIMDELIVERY_ADDRESS)

This table stores the address information of converted SIM.

Name	Null?	Type
--------	--------	-------------------
FIRST_NAME		VARCHAR2(40)
LAST_NAME		VARCHAR2(40)
MOBNO		VARCHAR2(10)
ADDRESS		VARCHAR2(40)
CITY		VARCHAR2(40)
ZIPCODE		VARCHAR2(6)

6. Sending Query Table: (Table Name is MESSAGE)

This table stores all the queries sent by the registered user.

Name	Null?	Type
NAME	NOT NULL	VARCHAR2(30)
EMAIL	NOT NULL	VARCHAR2(30)
SUBJECT	NOT NULL	VARCHAR2(30)
MSG	NOT NULL	VARCHAR2(4000)

CHAPTER-8 LIST OF PROJECT FIGURES

1. Login Page:

This is the MYTEL Login page which contains an Login box in which the user can con login to the MYTEL main page through putting the proper credentials like Username(MailID/Mobile Number) and password.

2. Registration Page:

This is the New user registration page, the user have to register first before login into the system.

3. Forgot Password Page:

This is the User forgot password page. If the user forget the password for some reason then he/she can reset a new password through putting the existing mobile number or email id.

4. Main Page Page:

This main page contains the Header part which contains the title of MYTEL Application. Then in the left side it contains one navbar which contains all the navbars(links).

- After the Navbar in the main section this page contains list of all recharge related image banners so that users can see all the images by sliding it.
- At the main Section It contains some static UI items like still looking for help template, After that some FAQs about this MYTEL application so that the user can read it to know more details about this application.
- At the bottom of this page contains the footer part which contains
    i.   About MYTEL Application
    ii.   Product and services, inside it contains Mobile Packages, VAS services, Fixed broadband & devices.
    iii.   Supports, inside it contains News, FAQs, find a store, repair and warranty.
    iv.   Some description about this MYTEL application.
    v.   Some Social Media icons & links like Facebook, Youtube & Twitter etc.
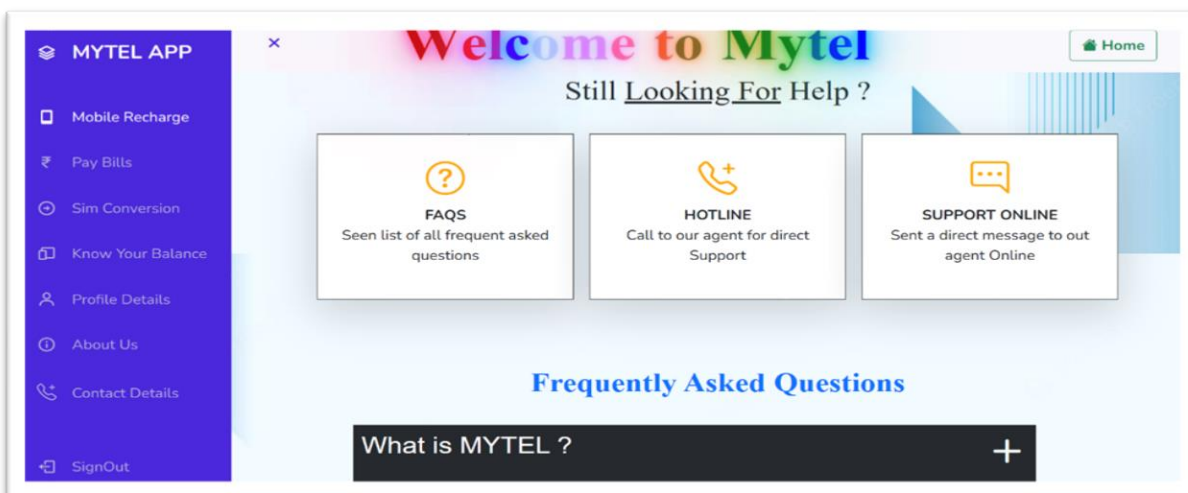
5. Mobile Recharge Page:

This page will come when the user click on Mobile recharge link or icon. This page contains the title of the page then the navbar.

- In the main section this page contains the Mobile recharge form so that the user can make this/her phone recharge through putting the mobile number, sim type and operator.
- In the bottom of this page contains the footer part of the project.
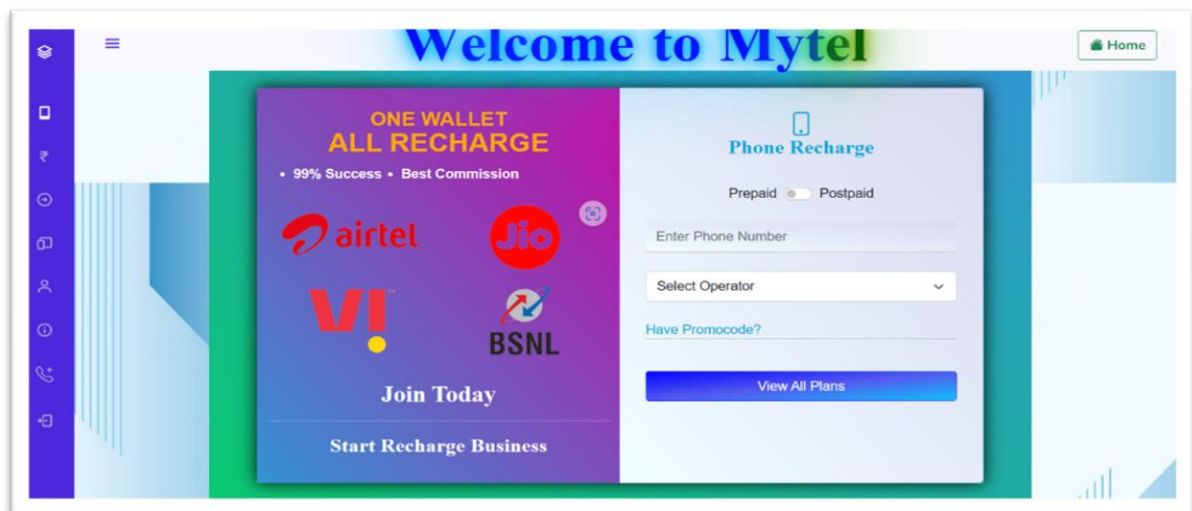
6. Pack Details Page:

This page will come after the user putting his mobile number, sim type and operator in the mobile recharge form. So that the user can choose the appropriate plans then will click on appropriate choose plan button.

According to the operator the appropriate plans will show here. If the operator is Airtel then here only the Airtel plans will show here. If the operator is BSNL then here only the BSNL plans will show here.

Similarly this pack details page contains title of the project then navbar & in the last it contains footer part.
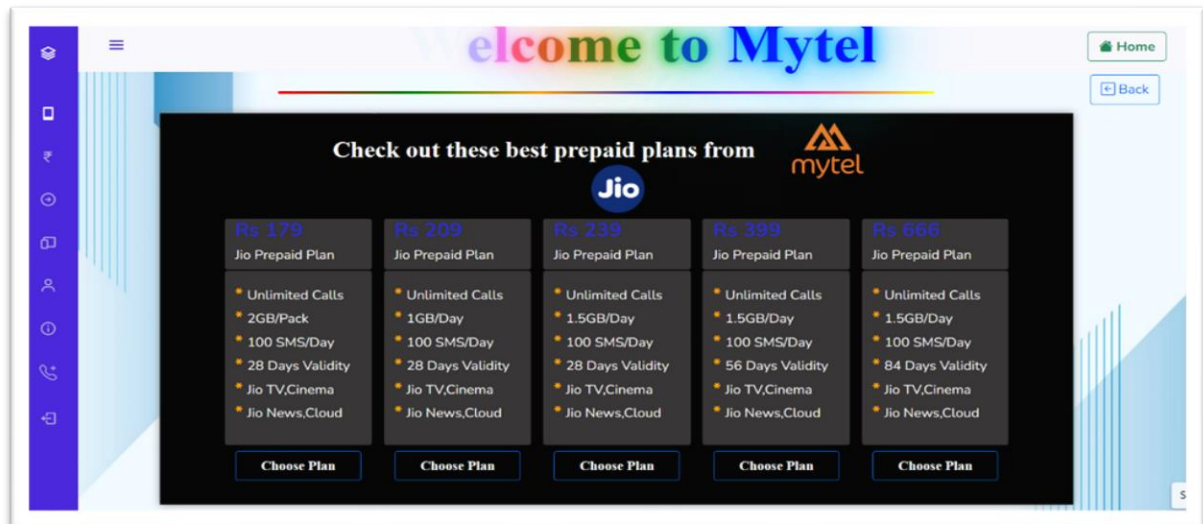
7. Mobile Recharge Payment Page:

This is the Mobile recharge payment page in which the user can make the payments through putting a valid credit card details like card number, expiry date & cvv etc. After putting the proper card details if the user click on Pay button then the mobile recharge will be done.

- After the card there is a static UI template there which contains all the card and their ratings.
- Similarly this mobile recharge payment page contains title of the project then navbar & in the last it contains footer part.

8. Mobile Recharge Success Page:

This is the mobile recharge success page which contains the recharge details receipt. In the bottom of the receipt this page contains a make another recharge button so that the user can make another mobile recharge through clicking on it.

- Similarly this mobile recharge success page contains title of the project then navbar & in the last it contains footer part.

9. Pay Bills Page:

This is the pay bills page which comes when the user click on pay bills icon/link. This page contains a pay bills form in which the user can input the mobile number, then inside it the server will check the whether the mobile number is a postpaid number or not if it is not a postpaid number then one error message will come that the entered number is not a postpaid number.

- If the entered mobile number is a postpaid number and if the bill is already paid then also it will show an error message that your number does not have any due bill & the bill is already paid.
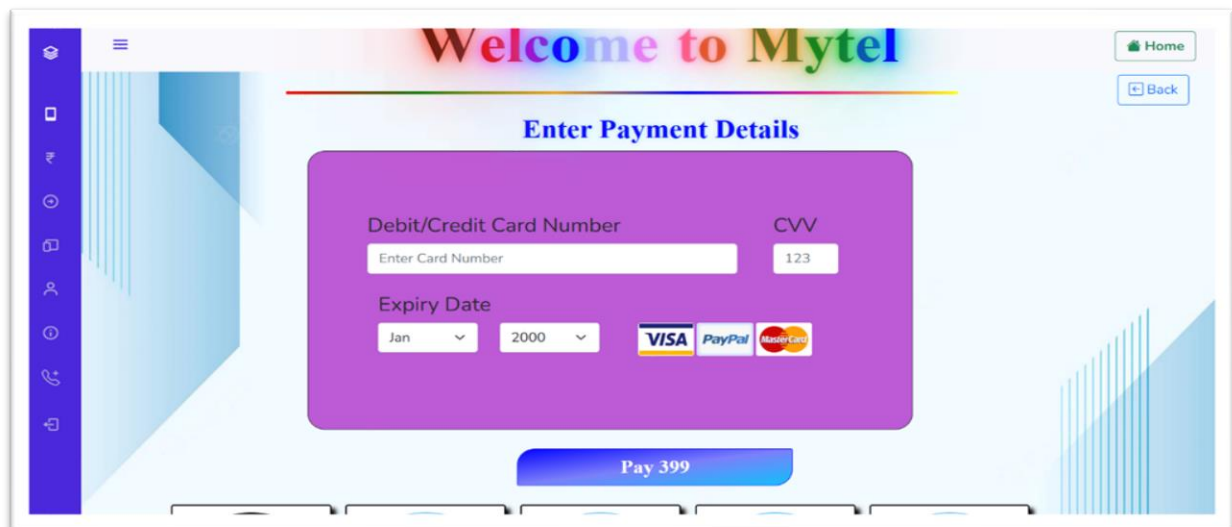- Similarly this pay bills page contains title of the project then navbar & in the last it contains footer part.

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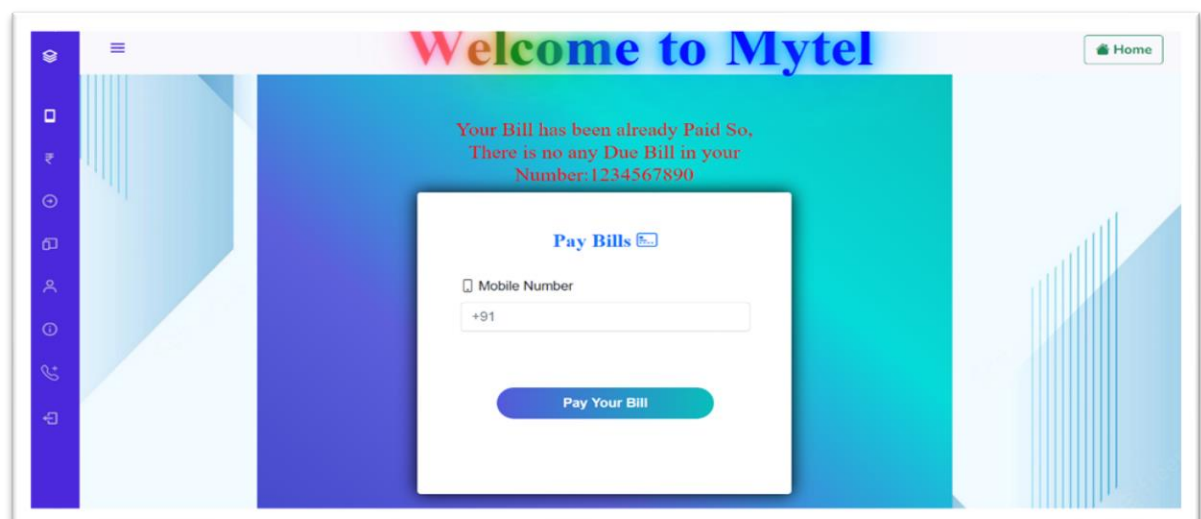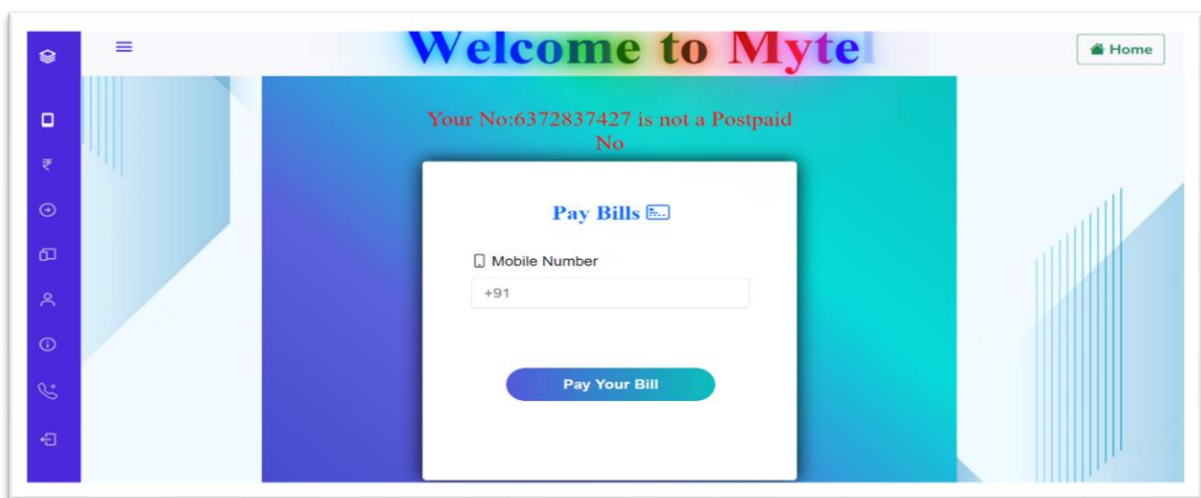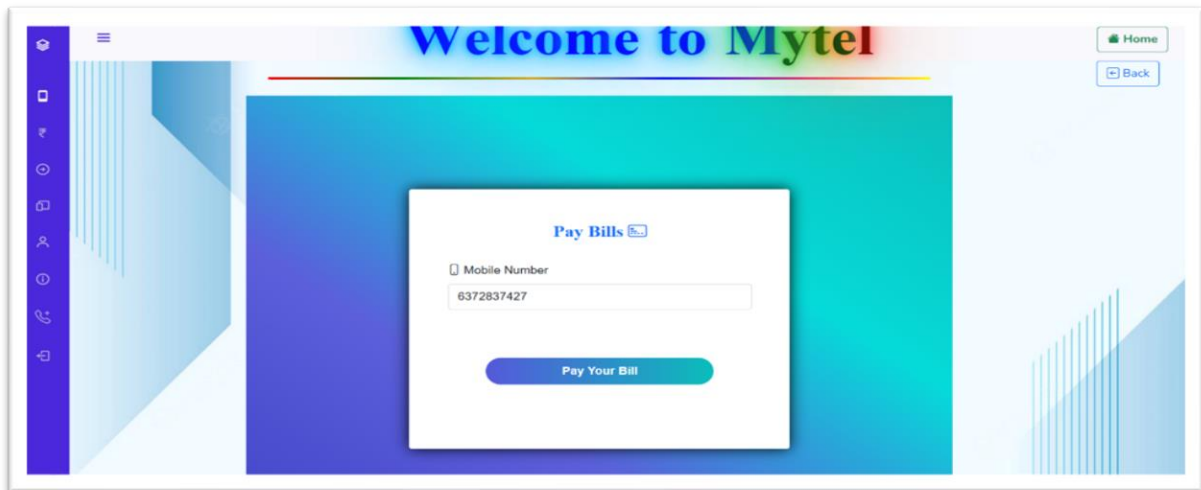
10.   Pay Bill Payment Page:

This is the Pay Bill payment page in which the user can make the payments through putting a valid credit card details like card number, expiry date & cvv etc. After putting the proper card details if the user click on Pay button then the due bill payment will be done.
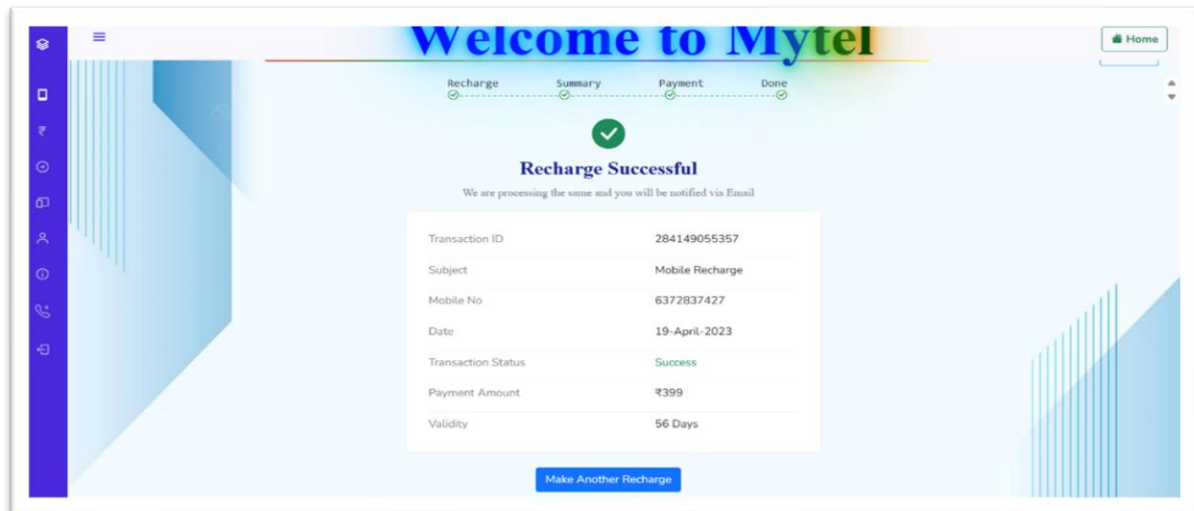
- This page will come after the user entering a valid postpaid number in the pay bill page.
- Similarly this pay bills payment page contains title of the project then navbar & in the last it contains footer part.

11.   Bill Payment Success Page:

This is the pay bills success page which contains the Bill Payment receipt.
In the bottom of the receipt this page contains a make another bill payment button so that the user can make another postpaid sims due bill payment through clicking on it.

- Similarly this bill payment success page contains title of the project then navbar & in the last it contains footer part.
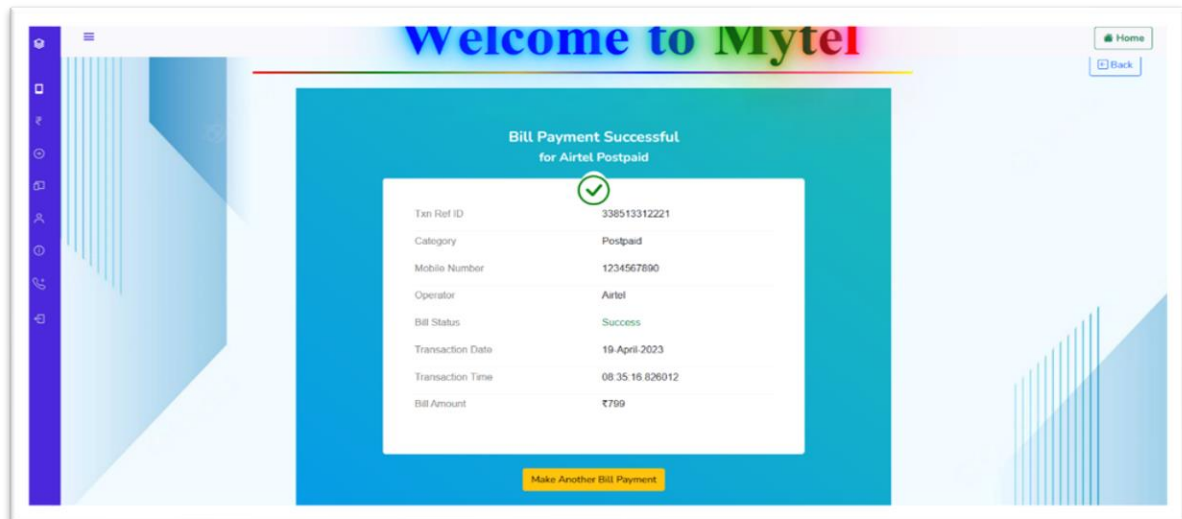
12.   SIM Conversion Page:

This page will come when the user click on the sim conversion page or link.

- This page contains two combined forms so that the user can convert their sims from prepaid to postpaid and viceversa through outing his numbers here.

- In the first form if the user enters a postpaid number then one error message will come that your number is not a prepaid one. Similary in the second form if the user enters a prepaid number then one error message will come that your number is not a postpaid one.

- Similarly this Sim conversion page contains title of the project then navbar & in the last it contains footer part.

13.   Conversion SIM Delivery Page:

This page will come after the user putting the appropriate number inside the appropriate conversion form inside the sim conversion page.

- In the main section of this page it contains a sim delivery box in which the user will enter the delivery detans, in the same delivery address the converted sim will be delivered with a limited period of time.

- Similarly this Conversion Sim Delivery page contains title of the project then navbar & in the last it contains footer part.

14. SIM Conversion Success Page:

This is the sim conversion success page. In the bottom of the receipt this page contains go to conversion page button so that the user can go to the conversion page and can make another conversion.

- Similarly this bill payment success page contains title of the project then navbar & in the last it contains footer part.
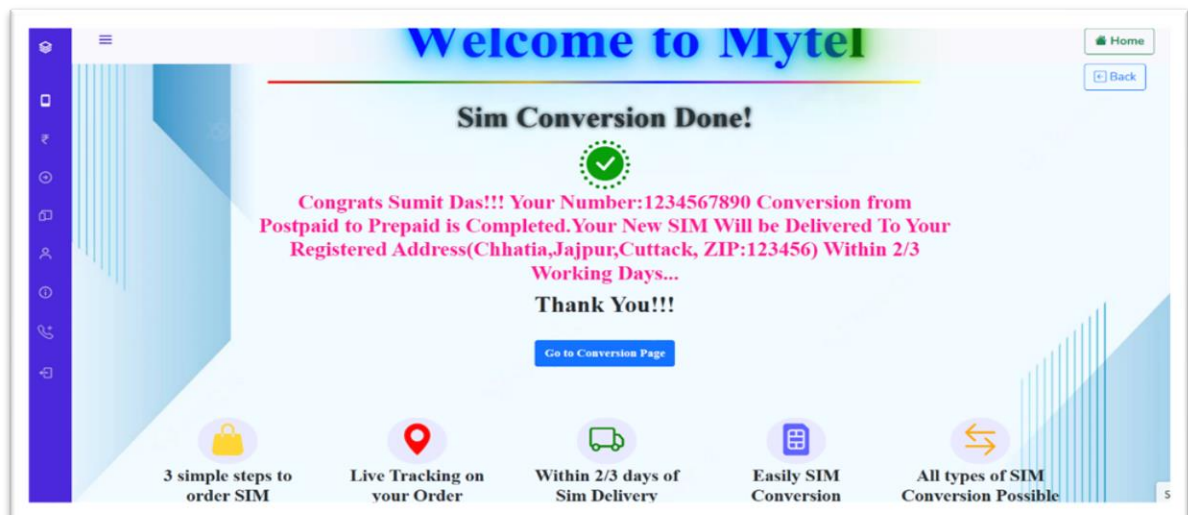
15. Check Active Plan Page:

This is the Checking Active plan page, this page will come when the user click on know your balance link or icon.

- In the main section this page contains a form so that the user can check their current numbers active plans through putting his/her mobile number.
- If the entered number is not exists in the profile then you will get an error message like this number does not exists in the profile.
- Similarly this check active plan page contains title of the project then navbar & in the last it contains footer part.

- This page will come if the entered mobile number does not exists in your mytel profile.

- This page will come if the entered mobile number is exists in your mytel profile and have already plans.
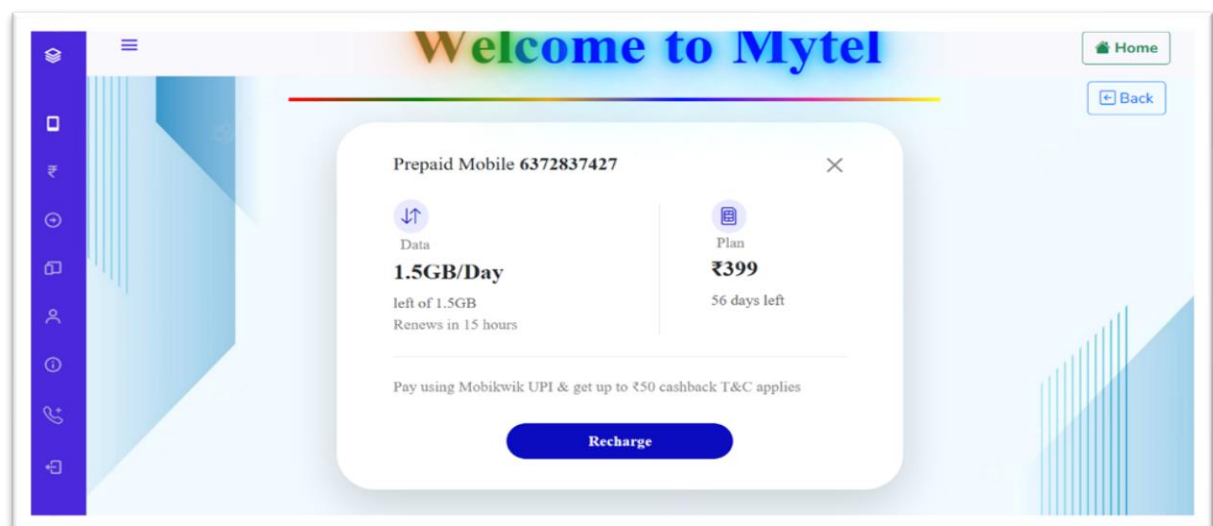
- This page will come if the entered mobile number is exists in your mytel profile and don't have any plans.
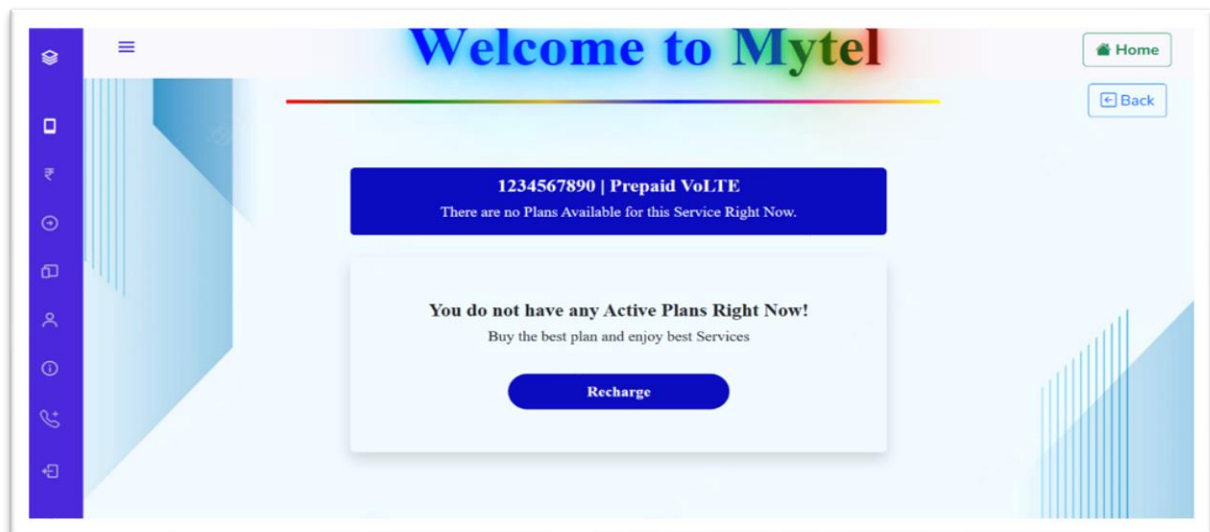
16. Profile Details Page:

This is the Profile page that will come when the currently logged user click on profile details link or icon.

- This profile details page shows the profile details in which the new user had given the information at the time of registering.
- Similarly this profile details page contains title of the project then navbar & in the last it contains footer part.

17. Mytel About Us Page:

This is the About Mytel page which will come when the user clicks on about us link or icon. In this page the user can read all the information.

- After the information some FAQs about mytel application is there so that the user can read all the execution details of this FAQs.
- In the bottom of this page one image is there in which it contains all members of this project and which member has handled which part.
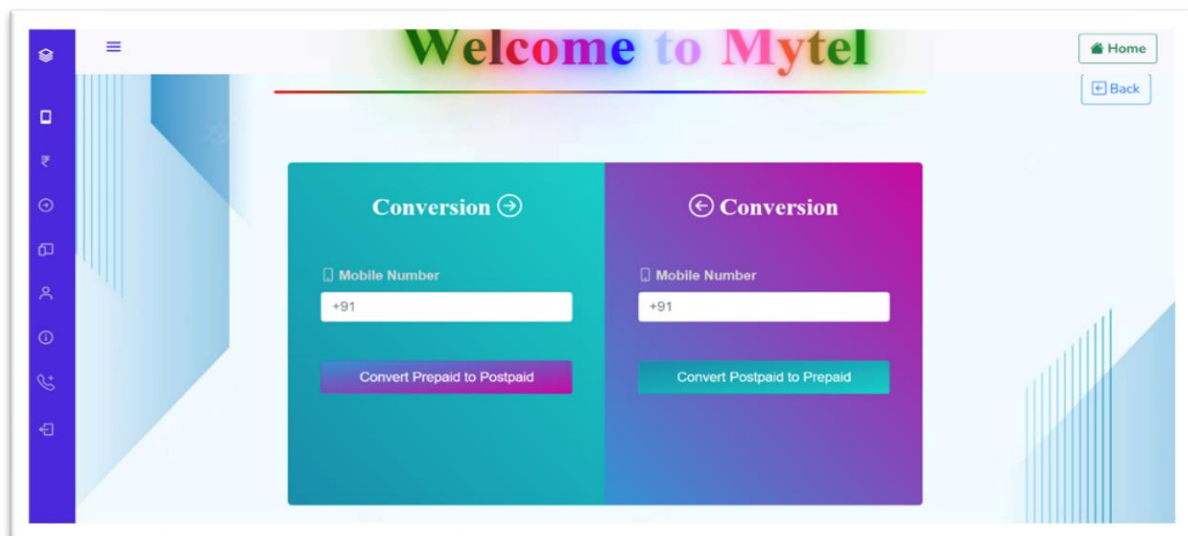- Similarly this About Us page contains title of the project then navbar & in the last it contains footer part.

18.   Mytel Contact Details Page:

This is the Contact details page which will come when the user clicks on Contact details link or icon. In this page the user can get in touch with mytel customer care service.

- In the main section one box is there so that the user can write their queries and send it to the mytel customer care service and get the response/solution back to the user.
- Similarly this Contact details page contains title of the project then navbar & in the last it contains footer part.
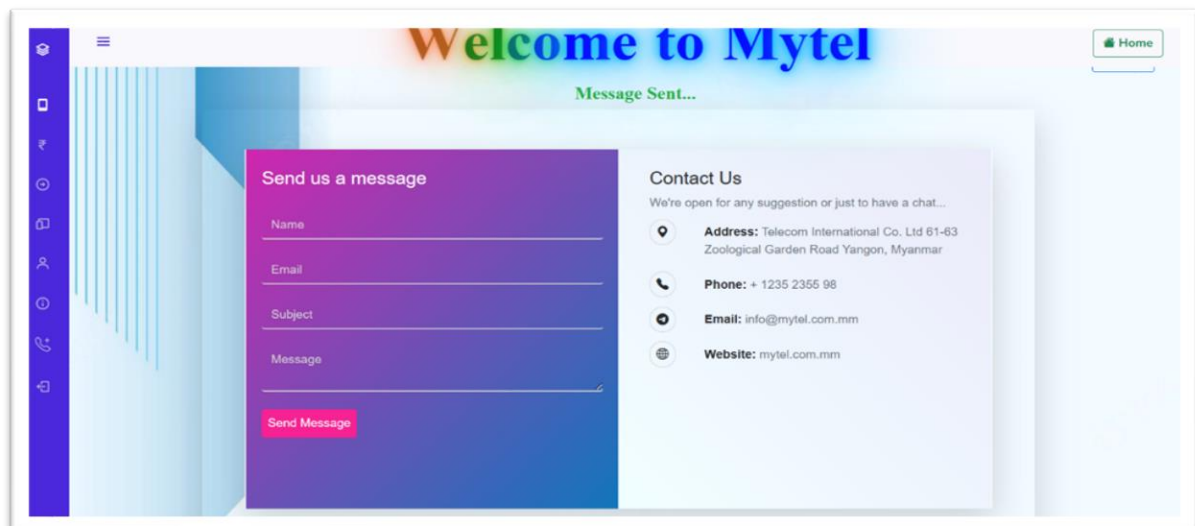
CHAPTER-9 MODULES & DESCRIPTION

Here the Complete project has been developed based on CRUD (Create, Read, Update, Delete) Operations. All the Recharge, pay bills, conversion sims, profile details are stored in Oracle 19c Database in a tabular form.

- Here there is one main modulee present in this project "MYTEL APPLICATION"
  1. Mytel User Module

1. Mytel User Module:
First in the main page(Home page) There is a Mytel user login form. In that form the Mytel user once putting the proper credentials he will enter into the Mytel main Page. If the user new then first he/she has to register.

- The main aim of developing this module is to provide all the recharge, pay bills, converting sims, knowing active plans functionality to the Mytel User. The admin tracks all the information & details of User Mobile Number.
- This is a role based module where the Mytel user can perform all mobile number operations on data such as mobile recharge, pay bills, converting sims, knowing active plans, profile details, get in touch with mytel customer care service and at last he she can logout to the Mytel Application.

Features of Mytel User Module:

- The user can login to the Mytel Main page.
- The user can do his/her mobile recharge through putting the proper number, type and operator.
- The user can pay the due bills for his/her postpaid number.
- The user can convert his/her sim from prepaid to postpaid and viceversa at any time he/she wants.
- The user can see his/her sim's active plans through putting his/her number.
- The user can check his/her profile details which she/he has entered at the time of registration.
- The User can get in touch with Mytel customer care service for solving any queries.
- At last the user can logout from the Mytel main page.

CHAPTER-10 CODE OF THE PROJECT WITH DATABASE
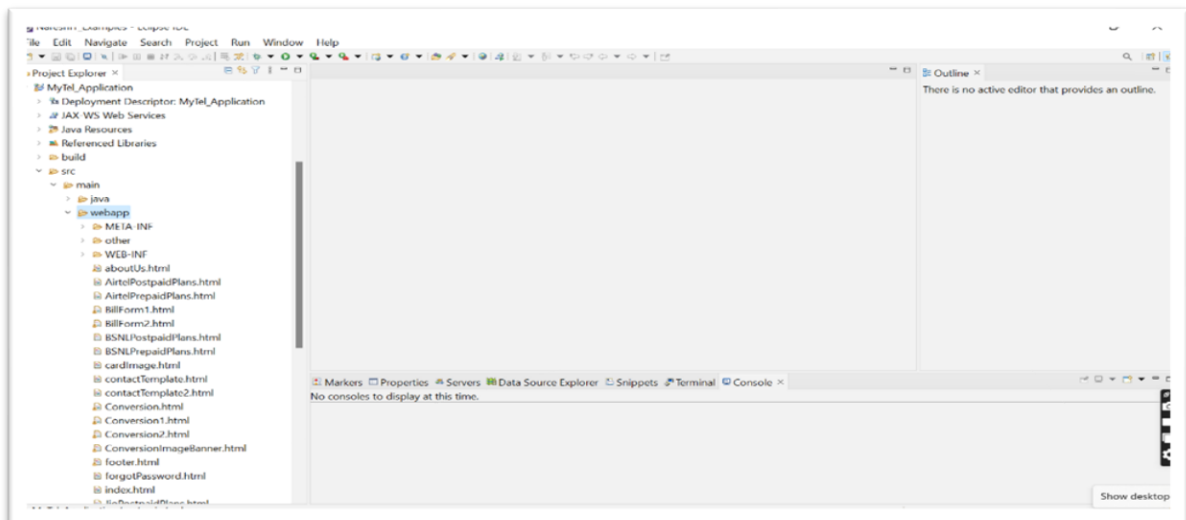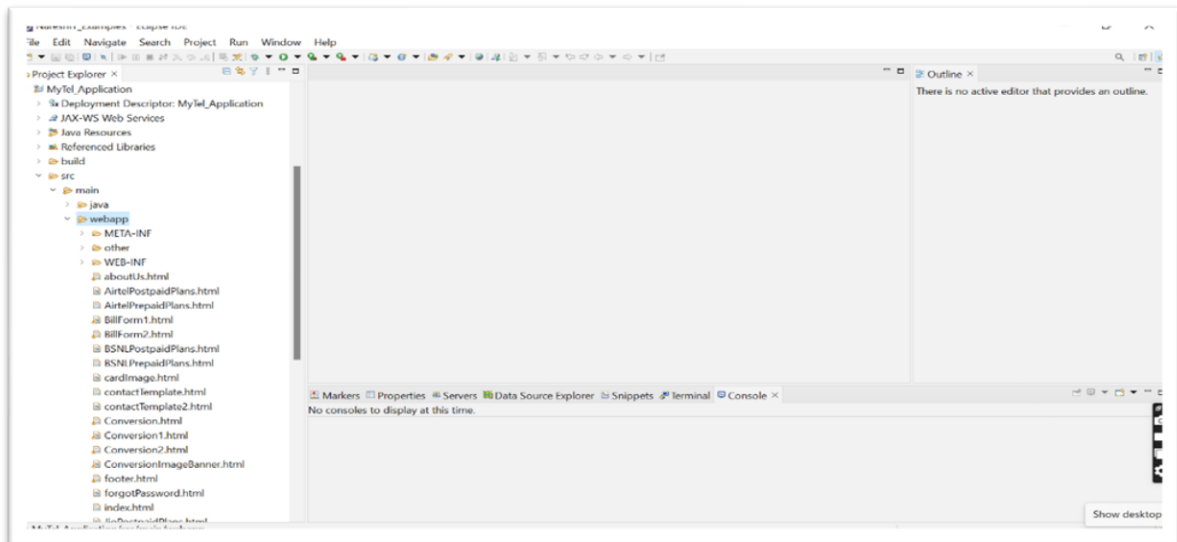
This is the directory structure of the project "MYTEL Application" that has been developed in Eclipse IDE.

This MYTEL Application is a web application that has been Developed in Eclipse IDE through Dynamic Web Project option.

The Directory Structure a web Application is defined in the below diagram.

In this project there are a lot of files (HTML,CSS,Bootstrap,Java Class Files), folders, images present. The files that are used here I am defining in the below;

1. Code for main page (Index.html)

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Welcome to Mytel Application</title>
        <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css">
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/js/bootstrap.bundle.min.js"
></script>
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-
icons@1.5.0/font/bootstrap-icons.css">
    <link rel="icon" href="other/images/mm.jpg">
    <link rel="stylesheet" href="other/login.css">
    <script src="other/loginValidations.js"></script>
</head>
<body>
    <h2 class="slide">
        <span style="--i:1;">W</span>
        <span style="--i:2;">e</span>
        <span style="--i:3;">l</span>
        <span style="--i:4;">c</span>
        <span style="--i:5;">o</span>
        <span style="--i:6;">m</span>
        <span style="--i:7;">e</span>
        <span style="--i:8;margin-left: 1.5vw;">t</span>
        <span style="--i:9;">o</span>
        <span style="--i:10;margin-left: 1.5vw;">M</span>
        <span style="--i:11;">y</span>
```

```
        <span style="--i:12;">t</span>
        <span style="--i:13;">e</span>
        <span style="--i:14;">l</span>
    </h2><div class="box">
          <img src='other/images/logomytel.webp'height='90'width='90' class="img-
fluid d-block mx-auto" style="border-radius:50%;">
          <h3>MyTel Application</h3>
      <form action="loginPage" method="post">
        <div>
            <span id="errorMsg1"></span>
            <input class="form-control" type="text"name="nm" onkeyup="fun1()"
id="txt" required>
            <label>Enter Mail ID/Mobile Number</label>
        </div><div>
             <span id="errorMsg2"></span>
            <input  class="form-control" type="password" name="password"
onkeyup="fun2()" id="txt2" required>
            <label>Enter Password</label>
        </div>
      <button type="submit" id="btnn" class="w-100">Login <span class="bi bi-box-
arrow-right"></span></button><br><br>
        <div class="link">
            <a href="forgotPassword.html">Forgot Password?</a><br>
             <div>New User? <a href="newuser.html">Sign Up</a></div>
        </div></form></div></body></html>
```

2. <u>Code for Registration page (newuser.html)</u>

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Mytel Signup Page</title>
    <link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.css">
    <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.2.1/dist/js/bootstrap.bundle.min.js"
></script> <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap-
icons@1.5.0/font/bootstrap-icons.css">
    <link rel="icon" href="other/images/mm.jpg">
    <link rel="stylesheet" href="other/register.css">
    <script src="other/registerValidations.js"></script>
</head>
<body>
    <h2 class="slide">
        <span style="--i:1;">W</span>
        <span style="--i:2;">e</span>
        <span style="--i:3;">l</span>
        <span style="--i:4;">c</span>
```

```
        <span style="--i:5;">o</span>
        <span style="--i:6;">m</span>
        <span style="--i:7;">e</span>
        <span style="--i:8;margin-left: 1.5vw;">t</span>
        <span style="--i:9;">o</span>
        <span style="--i:10;margin-left: 1.5vw;">M</span>
        <span style="--i:11;">y</span>
        <span style="--i:12;">t</span>
        <span style="--i:13;">e</span>
        <span style="--i:14;">l</span>
    </h2>
    <div class="box">
         <img src='other/images/usersignup.jpg'height='70'width='70' class="img-
fluid d-block mx-auto" style="border-radius:50%;margin-top:-16%;">
   <br><form action="newUser" method="post" >
      <br>
      <div class='d-flex justify-content-between'>
         <div>
          <div id="errorMsg1"></div>
     <input class="form-control"  type="text" name="nm" onkeyup="fun1()" id="txt"
required>
        <label>Name <span class="bi bi-hand-thumbs-up"></span></label>
      </div>
      <div>  <div id="errorMsg2"></div>
         <input class="form-control" type="tel" name="mobno"
onkeyup="mobileValidations()" id="mob" required>
         <label>Mobile Number <span class="bi bi-telephone-
outbound"></span></label>
      </div>
        </div>

      <div class='d-flex justify-content-between'>
        <div>
          <div id="errorMsg22"></div>
          <input class="form-control"  type="email" name="mail" onkeyup="fun22()"
id="txt22" required>
          <label>Mail ID <span class="bi bi-envelope"></span></label>
      </div>
      <div>
          <span id="errorMsg3"></span>
        <input class="form-control" type="password" name="password"
onkeyup="fun3()" id="txt3" title="Must contain atleast 1 number and 1 upper and
lowercase letter, and atleast 6 or more Chars" required>
         <label>Password <span class="bi bi-lock"></span></label>
      </div>
     </div>
     <div>
```

```html
        <input class="upload-box form-control" type="file"  name="profile"
required>
     </div>
    <div>
        <textarea class="form-control"  name="address" required></textarea>
        <label>Address <span class="bi bi-geo-alt"></span></label>
    </div><br><br>

 <button id="btnn1" type="submit">Register <span class="bi bi-box-arrow-
right"></span></button>
   <button id="btnn2"  onclick="window.location.href='index.html'"><span class="bi
bi-box-arrow-left"></span> Back</button>
       </form>
    </div>
</body></html>
```

3. **Code for Database Connection Class (src.codes.DB.java)**

```java
 package src.codes;

import java.sql.*;
public class DB {
public static Connection getCon(){
      Connection con = null;
      try{
            Class.forName("oracle.jdbc.driver.OracleDriver");

      con=DriverManager.getConnection("jdbc:oracle:thin:@localhost:1521:orc
l","system","Jilucse2002");
      }catch(Exception ex){System.out.println(ex);}
      return con;
}}
```

4. **Code for User Login Class (src.codes.loginPage.java)**

```java
package src.codes;
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/loginPage")
public class loginPage extends HttpServlet {
    Statement st;
      Connection con;
    public void doPost(HttpServletRequest req, HttpServletResponse rs) throws
ServletException, IOException {
        rs.setContentType("text/html");
        PrintWriter pw=rs.getWriter();
        ServletContext sc=getServletContext();
```

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```java
        String uname=req.getParameter("nm");
        String pass =req.getParameter("password");
       try
        {
         con=DB.getCon();
         if(uname.endsWith("@gmail.com")) {
             PreparedStatement ps=con.prepareStatement("select
MailID,Mobno,Password from mytel where MailID=? and Password=?");
             ps.setString(1, uname);
             ps.setString(2, pass);
             ResultSet res=ps.executeQuery();
             if(res.next()) {
                 req.getRequestDispatcher("Mainpage.html").include(req, rs);
             }
             else {
                 req.getRequestDispatcher("index.html").include(req, rs);
                 pw.println("<h5 style='color:rgb(255, 65, 65);z-index:1;px;font-
weight:bold;font-family: Times New Roman, Times, serif;margin-left:490px;margin-
top:-137px;'>Invalid Username & Password</h5>");
             }
         }
         else {
             PreparedStatement ps=con.prepareStatement("select
MailID,Mobno,Password from mytel where Mobno=? and Password=?");
             ps.setString(1, uname);
             ps.setString(2, pass);
             ResultSet res=ps.executeQuery();
             if(res.next()) {
                 req.getRequestDispatcher("Mainpage.html").include(req, rs);
             }
             else {
                 req.getRequestDispatcher("index.html").include(req, rs);
                 pw.println("<h5 style='color:rgb(255, 65, 65);z-index:1;px;font-
weight:bold;font-family: Times New Roman, Times, serif;margin-left:490px;margin-
top:-137px;'>Invalid Username & Password</h5>");
             }
         }
         if(uname.endsWith("@gmail.com")) {
         PreparedStatement ps2=con.prepareStatement("select
NAME,MOBNO,MAILID,PROFILE_PICTURE,ADDRESS from mytel where MailID=?");
         ps2.setString(1, uname);
         ResultSet res2=ps2.executeQuery();
         res2.next();
         String pname=res2.getString(1);
         sc.setAttribute("profileName", pname);
         String pmobno=res2.getString(2);
         sc.setAttribute("profileMobileNo", pmobno);
         String pmailid=res2.getString(3);
```

```java
            sc.setAttribute("profileMailid", pmailid);
            String ppp=res2.getString(4);
            sc.setAttribute("profilePicture", ppp);
            String paddress=res2.getString(5);
            sc.setAttribute("profileAddress", paddress);
            }
            else {
                    PreparedStatement ps2=con.prepareStatement("select
NAME,MOBNO,MAILID,PROFILE_PICTURE,ADDRESS from mytel where Mobno=?");
                    ps2.setString(1, uname);
                    ResultSet res2=ps2.executeQuery();
                    res2.next();
                    String pname=res2.getString(1);
                    sc.setAttribute("profileName", pname);
                    String pmobno=res2.getString(2);
                    sc.setAttribute("profileMobileNo", pmobno);
                    String pmailid=res2.getString(3);
                    sc.setAttribute("profileMailid", pmailid);
                    String ppp=res2.getString(4);
                    sc.setAttribute("profilePicture", ppp);
                    String paddress=res2.getString(5);
                    sc.setAttribute("profileAddress", paddress);
             }con.close();}
            catch(SQLException e) {
               e.printStackTrace();
               pw.close();
            } }}
```

5. <u>Code for New User Registration(src.codes.newUser.java)</u>

```java
package src.codes;
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/newUser")
  public class newUser extends HttpServlet{
public void doPost(HttpServletRequest req,HttpServletResponse rs) throws
ServletException,IOException{
            Connection con;
          Statement st;
          ServletContext sc=getServletContext();
          PrintWriter pw=rs.getWriter();
             rs.setContentType("text/html");
             String name=req.getParameter("nm");
```

```java
                String mno=req.getParameter("mobno");
                String email=req.getParameter("mail");
                String pwd=req.getParameter("password");
                String add=req.getParameter("address");
                String picture=req.getParameter("profile");
                try {
                        con=DB.getCon();
                    st=con.createStatement();
                        PreparedStatement ps=con.prepareStatement("select Name,MobNo
from mytel where Name=? and MobNo=?");
                    ps.setString(1,name);
                    ps.setString(2,mno);
                    ResultSet res=ps.executeQuery();

                    PreparedStatement ps2=con.prepareStatement("select MobNo from mytel
where MobNo=?");
                    ps2.setString(1,mno);
                    ResultSet res2=ps2.executeQuery();
                    if(res.next()) {
                            req.getRequestDispatcher("newuser.html").include(req, rs);
                            pw.println("<h4 style='border: 1px solid grey; color:red;box-
shadow:rgb(246, 44, 44); black;border-radius:6px;background-
color:rgba(0,0,0,0.6);padding:10px 25px;margin-top:-465px;margin-left:-590px;font-
weight:bold;font-family: Times New Roman, Times, serif;'>This Username:"+name+" &
MobileNo:"+mno+"<br>Already Exists.Please Try Another!!</h4>");
                            con.close();
                                st.close();
                    }
                    else if(res2.next()){
                            req.getRequestDispatcher("newuser.html").include(req, rs);
                            pw.println("<h4 style='border: 1px solid grey;color:red;box-
shadow:15px 15px 15px black;border-radius:6px;background-
color:rgba(0,0,0,0.6);padding:10px 25px;margin-top:-465px;margin-left:-660px;font-
weight:bold;font-family: Times New Roman, Times, serif;'>This MobileNo:"+mno+"
Already Exists.<br>Please Try With Another Number!!</h4>");
                            con.close();
                                st.close();
                    }
                    else {
                            st.executeUpdate("insert into mytel
values('"+name+"','"+mno+"','"+email+"','"+pwd+"','"+picture+"','"+add+"')");
                            req.getRequestDispatcher("newuser.html").include(req, rs);
                            pw.println("<h4 style='border: 1px solid grey;color:white;box-
shadow:15px 15px 15px black;border-radius:6px;background-
color:rgba(0,0,0,0.6);padding:10px 12px;margin-top:-458px;margin-left:-695px;font-
weight:bold;font-family: Times New Roman, Times, serif;'>Congrats:"+name+",<br>
Your Mytel Account is Created Successfully <span class='bi bi-check-circle-
fill'></span></h4>");
```

```
                    con.close();
                    st.close();
                }}
                catch(Exception ee) {
                pw.println("<p>"+ee+"</p>");
                }
                pw.close();
                } }
```

6. <u>Code for Forgot Password Class(src.codes.forgotPassword.java)</u>

```
package src.codes;
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/forgotPassword")
public class forgotPassword extends HttpServlet {
        Statement st;
        Connection con;
    private static final long serialVersionUID = 1L;

    public void doPost(HttpServletRequest req, HttpServletResponse rs) throws
ServletException, IOException {
        rs.setContentType("text/html");
        PrintWriter pw=rs.getWriter();
        ServletContext sc=getServletContext();
        String uname=req.getParameter("nm");
        String pass =req.getParameter("password");
        String pass2 =req.getParameter("password2");
        try
        {
            con=DB.getCon();
        if(uname.endsWith("@gmail.com")) {
            PreparedStatement ps=con.prepareStatement("update mytel set
password=? where mailID=?");
            ps.setString(1, pass);
            ps.setString(2, uname);
            ResultSet res=ps.executeQuery();
            if(res.next()) {
             req.getRequestDispatcher("forgotPassword.html").include(req, rs);
             pw.println("<h6 style='color:lightgreen;z-index:1;px;font-
weight:bold;font-family: Times New Roman, Times, serif;margin-left:540px;margin-
top:-185px;'>Your Password has been Reset Successfully</h6>");
            }
          else {
             req.getRequestDispatcher("forgotPassword.html").include(req, rs);
```

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```
                    pw.println("<h6 style='color:rgb(255, 65, 65);z-index:1;px;font-
weight:bold;font-family: Times New Roman, Times, serif;margin-left:530px;margin-
top:-185px;'>There is no such MailId exists in Your Profile</h6>");
                    }
          }
          else {
                PreparedStatement ps=con.prepareStatement("update mytel set
password=? where mobno=?");
               ps.setString(1, pass);
               ps.setString(2, uname);
               ResultSet res=ps.executeQuery();
               if(res.next()) {
                req.getRequestDispatcher("forgotPassword.html").include(req, rs);
                pw.println("<h6 style='color:lightgreen;z-index:1;px;font-
weight:bold;font-family: Times New Roman, Times, serif;margin-left:540px;margin-
top:-185px;'>Your Password has been Reset Successfully</h6>");
                       }
           else {
                req.getRequestDispatcher("forgotPassword.html").include(req, rs);
                pw.println("<h6 style='color:rgb(255, 65, 65);z-index:1;px;font-
weight:bold;font-family: Times New Roman, Times, serif;margin-left:530px;margin-
top:-185px;'>There is no such PhNo exists in Your Profile</h6>");
             }
          }
            con.close();
            }
          catch(SQLException e) {
                 e.printStackTrace();
                 pw.close();
          } }}
```

7. <u>Code for Mobile Recharge Class (src.codes.mobileRecharge.java)</u>

```
package src.codes;
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/mobileRecharge")
public class mobileRecharge extends HttpServlet {   protected void
doGet(HttpServletRequest req, HttpServletResponse rs) throws ServletException,
IOException {
       rs.setContentType("text/html");
       PrintWriter pw=rs.getWriter();
            pw.println("<!DOCTYPE html>");
            pw.println("<html>");
            pw.println("<head>");
            pw.println("<title>Mytel Mobile Recharge</title>");
```

```
                pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
                pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
                pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
                pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
                pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></script>"
);
                pw.println("<link rel='icon' href='other/images/mm.jpg'>");
                pw.println("<link rel='stylesheet' href='other/style.css'/>");
                pw.println("<script src='other/fun.js'></script>");
                pw.println("<style>.cardimgg img:hover{ box-shadow:0px 0px 0px 3px
rgb(59, 106, 237);}.cardiv:hover{ background-color: lightgray;></style>");
                pw.println("</head>");
                pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);'>");
                req.getRequestDispatcher("navbar.html").include(req, rs);
                pw.println("<br><div style='margin-left:16%;height:4px;background-
image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
                pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span class='bi bi-
arrow-left-square'></span> Back</button>");
                req.getRequestDispatcher("cardImage.html").include(req, rs);
                pw.println("<br><br><br>");
                req.getRequestDispatcher("mRechargeForm.html").include(req, rs);
                pw.println("<br><br><br>");
                req.getRequestDispatcher("template1.html").include(req, rs);
              pw.println("<br><br>");
                req.getRequestDispatcher("footer.html").include(req, rs);
                pw.println("</body>");
                pw.println("</html>");
                pw.close();
        }}
```

8. <u>Code for Recharge Success Class(src.codes.RechargeSuccess.java)</u>

```
package src.codes;
import java.sql.*;
import java.io.*;
import java.text.*;
```

```java
import java.util.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/rechargeSuccess")
public class rechargeSuccess extends HttpServlet {
        protected void doPost(HttpServletRequest req, HttpServletResponse rs)
throws ServletException, IOException {
          rs.setContentType("text/html");
          PrintWriter pw=rs.getWriter();
          ServletContext sc=getServletContext();
          Object oo=(Object)sc.getAttribute("mobno1");
          String mobno=(String)oo;
          Object oo2=(Object)sc.getAttribute("payment1");
          String payment=(String)oo2;
          Object oo3=(Object)sc.getAttribute("validity1");
          String validity=(String)oo3;
          Object oo4=(Object)sc.getAttribute("datapack1");
          String datapack=(String)oo4;
        Calendar cal=Calendar.getInstance();
              SimpleDateFormat simpleformat = new SimpleDateFormat("dd-MMMM-
yyyy");
              String rechargeDate=simpleformat.format(cal.getTime());
              try {
                 Connection con=DB.getCon();
                 PreparedStatement ps=con.prepareStatement("select MOBNO from
pack_details where MOBNO=?");
                   ps.setString(1, mobno);
                   ResultSet res=ps.executeQuery();
                   if(res.next()) {
                       PreparedStatement ps2=con.prepareStatement("Update
pack_details set
plan_amount='"+payment+"',validity='"+validity+"',Data_Perday='"+datapack+"',Recha
rge_Date='"+rechargeDate+"' where mobno=?");
                         ps2.setString(1, mobno);
                         ps2.executeUpdate();
                   }
                   else {
                       PreparedStatement ps3=con.prepareStatement("insert into
pack_details
values('"+mobno+"','"+payment+"','"+validity+"','"+datapack+"','"+rechargeDate+"')
");
                       ps3.executeUpdate();
                   }}
                catch(Exception ee){
                   ee.printStackTrace();
                 }
              pw.println("<!DOCTYPE html>");
```

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```
pw.println("<html>");
pw.println("<head>");
pw.println("<title>Mytel Recharge Success</title>");
pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></script>"
);
pw.println("<link rel='icon' href='other/images/mm.jpg'>");
pw.println("<link rel='stylesheet' href='other/style.css'/>");
pw.println("<script src='other/fun.js'></script>");
pw.println("</head>");
pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);'>");
req.getRequestDispatcher("navbar.html").include(req, rs);
pw.println("<br><div style='margin-left:16%;height:4px;background-
image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span class='bi bi-
arrow-left-square'></span> Back</button>");
pw.println("<br>");
pw.println("<div style='text-align:center; margin-left:-
2%;'><pre><h6>Recharge        Summary        Payment        Done</h6>");
pw.println("<div style='color:green;font-size:14px;margin-top:-
2%;'><span class='bi bi-check-circle'><span>-----------------<span class='bi bi-
check-circle'><span>----------------<span class='bi bi-check-circle'><span>------
------------<span class='bi bi-check-circle'><span></div></div>");
pw.println("<div style='display:flex;justify-content:center;margin-
left:-5%;'><span class='bi bi-check-circle-fill text-success' style='font-
size:45px;'></span></div>");
pw.println("<h3 style='font-family: Times New Roman, Times,
serif;font-weight:bold;text-align:center;margin-left:-5%;color:rgb(24, 34,
143);'>Recharge Successful</h3></div>");
pw.println("<p style='font-family: Times New Roman, Times,
serif;color:grey;text-align:center;margin-left:-5%;'>We are processing the same
and you will be notified via Email</p></div>");
```

```java
            pw.println("<div style='margin-left:29%;background-color:white;box-
shadow:0px 0px 2px rgb(228, 228, 228);border-radius:2px;width:38%;padding:2%;'>");
            pw.println("<div class='row'><div class='col-6'><p
style='color:grey; display:inline;'>Transaction ID</p></div><div class='col-
1'></div><div class='col-
5'>"+(Math.round(Math.random()*1000000000))*439+"</div></div><hr
style='color:rgb(191, 190, 190);'>");
            pw.println("<div style='margin-top:-2%;' class='row'><div
class='col-6'><p style='color:grey; display:inline;'>Subject</p></div><div
class='col-1'></div><div class='col-5'>Mobile Recharge</div></div><hr
style='color:lightgrey;'>");
            pw.println("<div style='margin-top:-2%;' class='row'><div
class='col-6'><p style='color:grey; display:inline;'>Mobile No</p></div><div
class='col-1'></div><div class='col-5'>"+mobno+"</div></div><hr
style='color:lightgrey;'>");
            pw.println("<div style='margin-top:-2%;' class='row'><div
class='col-6'><p style='color:grey; display:inline;'>Date</p></div><div
class='col-1'></div><div class='col-5'>"+rechargeDate+"</div></div><hr
style='color:lightgrey;'>");
            pw.println("<div style='margin-top:-2%;' class='row'><div
class='col-6'><p style='color:grey; display:inline;'>Transaction
Status</p></div><div class='col-1'></div><div class='col-5 text-
success'>Success</div></div><hr style='color:lightgrey;'>");
            pw.println("<div style='margin-top:-2%;' class='row'><div
class='col-6'><p style='color:grey; display:inline;'>Payment Amount</p></div><div
class='col-1'></div><div class='col-5'>&#8377;"+payment+"</div></div><hr
style='color:lightgrey;'>");
            pw.println("<div style='margin-top:-2%;' class='row'><div
class='col-6'><p style='color:grey; display:inline;'>Validity</p></div><div
class='col-1'></div><div class='col-5'>"+validity+"</div></div>");
            pw.println("</div><br>");
            pw.println("<div style='display:flex;justify-content:center;margin-
left:-5%;'><button class='btn btn-primary' onclick='recharge()'>Make Another
Recharge</button></div>
        pw.println("<br><br><br><img src='other/images/rsuccess.webp' class='img-
fluid w-100 rounded-2'><br><br>");
            req.getRequestDispatcher("footer.html").include(req, rs);
            pw.println("<script>function
backk(){window.location.href='mobileRecharge';}function
recharge(){window.location.href='mobileRecharge';}</script>");
        pw.println("</body>");
            pw.println("</html>");
            pw.close();
    }}
```

9. Code for Pay Bills Class(src.codes.payBill.java)

```java
package src.codes;
```

```java
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/payBill")
public class payBill extends HttpServlet {
      private static final long serialVersionUID = 1L;
      protected void doGet(HttpServletRequest req, HttpServletResponse rs)
throws ServletException, IOException {
        rs.setContentType("text/html");
        PrintWriter pw=rs.getWriter();
          pw.println("<!DOCTYPE html>");
            pw.println("<html>");
            pw.println("<head>");
            pw.println("<title>Mytel Bill Payment</title>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
            pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
            pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></scri
pt>");
            pw.println("<link rel='icon' href='other/images/mm.jpg'>");
            pw.println("<link rel='stylesheet' href='other/style.css'/>");
            pw.println("<script src='other/fun.js'></script>");
            pw.println("<style>#bbttnn{background-image: linear-gradient(to
right,#5155d8,#05bcb9);border:none;border-radius:25px;color:white;font-
weight:bold;} #bbttnn:hover{background-image: linear-gradient(to
right,#05bcb9,#5155d8);}</style>");
            pw.println("</head>");
            pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);'>");
            req.getRequestDispatcher("navbar.html").include(req, rs);
            pw.println("<br><div style='margin-
left:16%;height:4px;background-image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
          pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span class='bi
bi-arrow-left-square'></span> Back</button>");
            pw.println("<br>");
            req.getRequestDispatcher("PayBill.html").include(req, rs);
```

```
                pw.println("<br><br><br><br>");
                req.getRequestDispatcher("template1.html").include(req, rs);
            pw.println("<br><br>");
        req.getRequestDispatcher("footer.html").include(req, rs);
        pw.println("<script>function
backk(){window.location.href='Mainpage.html';} function mobileVal(){var
num=document.getElementById('txt').value; if (isNaN(num)){
document.getElementById('eMsg').innerHTML='Mobile No Doesnot Contain
Letters'.italics().fontcolor('red'); }else if(num.length==10){
document.getElementById('eMsg').innerHTML='';}
else{document.getElementById('eMsg').innerHTML='Enter A Valid Mobile
Number'.italics().fontcolor('red');}}</script>");
            pw.println("</body>");
        pw.println("</html>");
        }}
```

10.   Code for Bill Success Class(src.codes.billSuccess.java)

```java
package src.codes;
import java.sql.*;
import java.text.*;
import java.io.*;
import java.util.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;


@WebServlet("/billSuccess")
public class billSuccess extends HttpServlet {
      protected void doPost(HttpServletRequest req, HttpServletResponse rs)
throws ServletException, IOException {
        rs.setContentType("text/html");
        PrintWriter pw=rs.getWriter();
        Connection con=DB.getCon();
        ServletContext sc=getServletContext();
        Object oo=(Object)sc.getAttribute("Mobilenumber1");
        String mobno=(String)oo;
        Object oo2=(Object)sc.getAttribute("BillAmount");
        String amount=(String)oo2;
        Calendar cal=Calendar.getInstance();
            SimpleDateFormat simpleformat = new SimpleDateFormat("dd-MMMM-
yyyy");
            String BillDate=simpleformat.format(cal.getTime());
          pw.println("<!DOCTYPE html>");
            pw.println("<html>");
            pw.println("<head>");
            pw.println("<title>Mytel Bill Payment Success</title>");
```

```java
                pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
                pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
                pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
                pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
                pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></scri
pt>");
                pw.println("<link rel='icon' href='other/images/mm.jpg'>");
                pw.println("<link rel='stylesheet' href='other/style.css'/>");
                pw.println("<script src='other/fun.js'></script>");
                pw.println("<style>#bbttnn{background-image: linear-gradient(to
right,#5155d8,#05bcb9);border:none;border-radius:25px;color:white;font-
weight:bold;} #bbttnn:hover{background-image: linear-gradient(to
right,#05bcb9,#5155d8);}</style>");
                pw.println("</head>");
                pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);'>");
                req.getRequestDispatcher("navbar.html").include(req, rs);
                pw.println("<br><div style='margin-
left:16%;height:4px;background-image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
            pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span class='bi
bi-arrow-left-square'></span> Back</button>");
                pw.println("<br>");

                pw.println("<div style='width:55%; margin-left:20%;padding:4%
8%;background-image: linear-gradient(to top right,#0097e6,#16b8b5)'>");

            try {
                    PreparedStatement ps=con.prepareStatement("select
MOBNO,OPERATOR from mrecharge where MOBNO=?");
                        ps.setString(1, mobno);
                    ResultSet res=ps.executeQuery();
                    if(res.next()) {

                pw.println("<h4 class='text-center text-white' style='font-
weight:bold;'>Bill Payment Successful</h4><h5 class='text-center text-white'
style='font-weight:bold;'>for "+res.getString(2)+"
Postpaid</h5></b><center><span class='bi bi-check-circle' style='font-
```

```java
weight:bold;color:green; background-color:white;border-radius:60% 60% 60%
50%;font-size:50px;'></span></center>");
            pw.println("<div class='p-5 w-100' style='border-left:2px solid
white;font-family: Arial, Times, serif;background-color:white;border-
radius:5px;margin-top:-9%;'>");
            pw.println("<div class='row'><div class='col-6'><p
style='color:grey; display:inline;'>Txn Ref ID</p></div><div class='col-
6'>"+(Math.round(Math.random()*1000000000))*439+"</div></div><hr
style='color:rgb(191, 190, 190);'>");
        pw.println("<div style='margin-top:-2%;' class='row'><div class='col-
6'><p style='color:grey; display:inline;'>Category</p></div><div class='col-
5'>Postpaid</div></div><hr style='color:lightgrey;'>");
        pw.println("<div style='margin-top:-2%;' class='row'><div class='col-
6'><p style='color:grey; display:inline;'>Mobile Number</p></div><div
class='col-6'>"+mobno+"</div></div><hr style='color:lightgrey;'>");
        pw.println("<div style='margin-top:-2%;' class='row'><div class='col-
6'><p style='color:grey; display:inline;'>Operator</p></div><div class='col-
6'>"+res.getString(2)+"</div></div><hr style='color:lightgrey;'>");

        PreparedStatement ps2=con.prepareStatement("Update Pack_Details set
Plan_Amount=0 where Mobno=?");
            ps2.setString(1, mobno);
          ps2.executeUpdate();

                }
            }
            catch(Exception e) {
                  e.printStackTrace();
            }
        pw.println("<div style='margin-top:-2%;' class='row'><div class='col-
6'><p style='color:grey; display:inline;'>Bill Status</p></div><div
class='col-6 text-success'>Success</div></div><hr style='color:lightgrey;'>");
        pw.println("<div style='margin-top:-2%;' class='row'><div class='col-
6'><p style='color:grey; display:inline;'>Transaction Date</p></div><div
class='col-6'>"+BillDate+"</div></div><hr style='color:lightgrey;'>");
        pw.println("<div style='margin-top:-2%;' class='row'><div class='col-
6'><p style='color:grey; display:inline;'>Transaction Time</p></div><div
class='col-6'>"+java.time.LocalTime.now()+"</div></div><hr
style='color:lightgrey;'>");
        pw.println("<div style='margin-top:-2%;' class='row'><div class='col-
6'><p style='color:grey; display:inline;'>Bill Amount</p></div><div
class='col-6'>&#8377;"+amount+"</div></div>");
        pw.println("<br></div><br><center><button class='btn btn-warning'
onclick='backk()'>Make Another Bill Payment</button></center></div><br>");
        pw.println("<br><img src='other/images/billSuccess.png' class='img-
thumbnail w-100 rounded-2'><br><br>");
        req.getRequestDispatcher("footer.html").include(req, rs);
```

```
        pw.println("<script>function
backk(){window.location.href='payBill';}</script>");
    pw.println("</body>");
        pw.println("</html>");
        }}
```

11.   Code for Sim Conversion Class(src.codes.Sim_Conversion.java)

```
package src.codes;
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/Sim_Conversion")
public class Sim_Conversion extends HttpServlet {
      protected void doGet(HttpServletRequest req, HttpServletResponse rs)
throws ServletException, IOException {
        rs.setContentType("text/html");
        PrintWriter pw=rs.getWriter();
          pw.println("<!DOCTYPE html>");
            pw.println("<html>");
            pw.println("<head>");
            pw.println("<title>Mytel Sim Conversion</title>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
            pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
            pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></scri
pt>");
            pw.println("<link rel='icon' href='other/images/mm.jpg'>");
            pw.println("<link rel='stylesheet' href='other/style.css'/>");
            pw.println("<script src='other/fun.js'></script>");
            pw.println(" <style> #btn1{color:white;background-image:linear-
gradient(to bottom right,rgb(47, 144, 209),rgb(198, 3, 159));}
#btn1:hover{color:white;background-image:linear-gradient(to bottom
right,#12CBC4,#1289A7);} #btn2{color:white;background-image:linear-gradient(to
bottom right,#1289A7,#12CBC4);} #btn2:hover{color:white;background-
image:linear-gradient(to bottom right,rgb(47, 144, 209),rgb(198, 3,
159));}</style>");
```

```
              pw.println("</head>");
              pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);'>");
              req.getRequestDispatcher("navbar.html").include(req, rs);
              pw.println("<br><div style='margin-
left:16%;height:4px;background-image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
           pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span class='bi
bi-arrow-left-square'></span> Back</button>");
              pw.println("<br>");
              req.getRequestDispatcher("Conversion.html").include(req, rs);
              pw.println("<br><div class='row w-100 h-25'><div class='col-
6'><img src='other/images/pretopost.jpg' class='rounded-2 m-2 img-
thumbnail'></div><div class='col-6'><img src='other/images/postpre.jpg'
class='rounded-2 m-2 img-thumbnail'></div></div><br>");
              req.getRequestDispatcher("footer.html").include(req, rs);
              pw.println("<script>function
backk(){window.location.href='Mainpage.html';} function mobileVal(){var
num=document.getElementById('txt').value; if (isNaN(num)){
document.getElementById('eMsg').innerHTML='Mobile No Doesnot Contain
Letters'.italics().fontcolor('red'); }else if(num.length==10){
document.getElementById('eMsg').innerHTML='';}
else{document.getElementById('eMsg').innerHTML='Enter A Valid Mobile
Number'.italics().fontcolor('red');}}");
              pw.println("function mobileVal2(){var
num2=document.getElementById('txt2').value; if (isNaN(num2)){
document.getElementById('eMsg2').innerHTML='Mobile No Doesnot Contain
Letters'.italics().fontcolor('red'); }else if(num2.length==10){
document.getElementById('eMsg2').innerHTML='';}
else{document.getElementById('eMsg2').innerHTML='Enter A Valid Mobile
Number'.italics().fontcolor('red');}}</script>");
    pw.println("</body>");
       pw.println("</html>");
       }}
```

12. <u>Code for Prepaid to Postpaid Sim Conversion Class(src.codes.Prepaid_Postpaid.java)</u>

```
package src.codes;
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/Prepaid_Postpaid")
public class Prepaid_Postpaid extends HttpServlet {
```

```java
        protected void doPost(HttpServletRequest req, HttpServletResponse rs)
throws ServletException, IOException {
        rs.setContentType("text/html");
        PrintWriter pw=rs.getWriter();
        String mobno=req.getParameter("preno");
        ServletContext sc=getServletContext();
        sc.setAttribute("conversionNo", mobno);
        Connection con=DB.getCon();
          pw.println("<!DOCTYPE html>");
            pw.println("<html>");
            pw.println("<head>");
            pw.println("<title>Mytel Conversion Prepaid to
Postpaid</title>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
            pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
            pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></scri
pt>");
            pw.println("<link rel='icon' href='other/images/mm.jpg'>");
            pw.println("<link rel='stylesheet' href='other/style.css'/>");
            pw.println("<script src='other/fun.js'></script>");
            pw.println(" <style> #btn1{color:white;background-image:linear-
gradient(to bottom right,rgb(47, 144, 209),rgb(198, 3, 159));}
#btn1:hover{color:white;background-image:linear-gradient(to bottom
right,#12CBC4,#1289A7);} #btn2{color:white;background-image:linear-gradient(to
bottom right,#1289A7,#12CBC4);} #btn2:hover{color:white;background-
image:linear-gradient(to bottom right,rgb(47, 144, 209),rgb(198, 3, 159));}
#button1{font-weight:bold;background-
color:white;padding:8px;width:50%;border:1px solid black;border-radius:45px;}
#button1:hover{color:white;background-image:linear-gradient(to bottom
right,#00a8ff,#1d22bf);} #button2{float:right;color:white;background-
image:linear-gradient(to
right,#1d22bf,#00a8ff);padding:7px;width:33%;border:1px solid #1d22bf;border-
radius:45px;} #button2:hover{color:white;padding:7px;width:33%;border:1px
solid black;border-radius:45px;background-image:linear-gradient(to bottom
right,#00a8ff,#1d22bf);}@media screen and (max-width:
600px){.cimg{width:99%;height:310px;}</style>");
            pw.println("</head>");
```

```java
                pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);'>");
                req.getRequestDispatcher("navbar.html").include(req, rs);
                pw.println("<br><div style='margin-
left:16%;height:4px;background-image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
            pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span class='bi
bi-arrow-left-square'></span> Back</button>");
                pw.println("<br>");

            try {
                    PreparedStatement ps=con.prepareStatement("select
MOBNO,Typee from mrecharge where MOBNO=?");
                    ps.setString(1, mobno);
                    ResultSet res=ps.executeQuery();
                    if(res.next()) {
                        if(res.getString(2).equals("Prepaid")) {

    req.getRequestDispatcher("ConversionImageBanner.html").include(req,
rs);

    pw.println("<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br
><br><br><br><br><br><br>");

    req.getRequestDispatcher("SimDelivery.html").include(req, rs);
                            pw.println("<br><br><br>");
                        }
                        else {

    req.getRequestDispatcher("Conversion1.html").include(req, rs);
                            pw.println("<div class='row text-center mx-
1'><div class='col-6'><h4 style='color:red;font-family: Times New Roman,
Times, serif;'>Your No:"+mobno+" is not a Prepaid No So, You Cannot Convert it
to Postpaid <span class='bi bi-x-circle'></span></h4></div><div class='col-
6'></div></div>");

    req.getRequestDispatcher("Conversion2.html").include(req, rs);
                            pw.println("<br><div class='row w-100 h-
25'><div class='col-6'><img src='other/images/pretopost.jpg' class='rounded-2
m-2 img-thumbnail'></div><div class='col-6'><img
src='other/images/postpre.jpg' class='rounded-2 m-2 img-
thumbnail'></div></div><br>");
                            pw.println("<br>");
                        }
                    }
                    else {
```

```
        req.getRequestDispatcher("Conversion1.html").include(req, rs);
                        pw.println("<div class='row text-center mx-1'><div
class='col-6'><h4 style='color:red;font-family: Times New Roman, Times,
serif;'>Sorry, You do not have any Prepaid No for Conversion <span class='bi
bi-x-circle'></span></h4></div><div class='col-6'></div></div>");

        req.getRequestDispatcher("Conversion2.html").include(req, rs);
                        pw.println("<br><div class='row w-100 h-25'><div
class='col-6'><img src='other/images/pretopost.jpg' class='rounded-2 m-2 img-
thumbnail'></div><div class='col-6'><img src='other/images/postpre.jpg'
class='rounded-2 m-2 img-thumbnail'></div></div><br>");
                        pw.println("<br>");
                }
            }
            catch(Exception ee) {
                    ee.printStackTrace();
            }

        req.getRequestDispatcher("footer.html").include(req, rs);
            pw.println("<script>function
backk(){window.location.href='Sim_Conversion';} function mobileVal(){var
num=document.getElementById('txt').value; if (isNaN(num)){
document.getElementById('eMsg').innerHTML='Mobile No Doesnot Contain
Letters'.italics().fontcolor('red'); }else if(num.length==10){
document.getElementById('eMsg').innerHTML='';}
else{document.getElementById('eMsg').innerHTML='Enter A Valid Mobile
Number'.italics().fontcolor('red');}}");
            pw.println("function mobileVal2(){var
num2=document.getElementById('txt2').value; if (isNaN(num2)){
document.getElementById('eMsg2').innerHTML='Mobile No Doesnot Contain
Letters'.italics().fontcolor('red'); }else if(num2.length==10){
document.getElementById('eMsg2').innerHTML='';}
else{document.getElementById('eMsg2').innerHTML='Enter A Valid Mobile
Number'.italics().fontcolor('red');}}</script>");

    pw.println("</body>");
        pw.println("</html>");
        }}
```

13. <u>Code for Postpaid to Prepaid Sim Conversion Class(src.codes.Postpaid_Prepaid.java)</u>

```
package src.codes;
import java.sql.*;
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
```

```java
import javax.servlet.http.*;
@WebServlet("/Postpaid_Prepaid")
public class Postpaid_Prepaid extends HttpServlet {
       protected void doPost(HttpServletRequest req, HttpServletResponse rs)
throws ServletException, IOException {
         rs.setContentType("text/html");
         PrintWriter pw=rs.getWriter();
         String mobno=req.getParameter("postno");
         ServletContext sc=getServletContext();
         sc.setAttribute("conversionNo", mobno);
         Connection con=DB.getCon();
           pw.println("<!DOCTYPE html>");
             pw.println("<html>");
             pw.println("<head>");
             pw.println("<title>Mytel Conversion Postpaid to
Prepaid</title>");
             pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
             pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
             pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
             pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
             pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></scri
pt>");
             pw.println("<link rel='icon' href='other/images/mm.jpg'>");
             pw.println("<link rel='stylesheet' href='other/style.css'/>");
             pw.println("<script src='other/fun.js'></script>");
             pw.println("<style> #btn1{color:white;background-image:linear-
gradient(to bottom right,rgb(47, 144, 209),rgb(198, 3, 159));}
#btn1:hover{color:white;background-image:linear-gradient(to bottom
right,#12CBC4,#1289A7);} #btn2{color:white;background-image:linear-gradient(to
bottom right,#1289A7,#12CBC4);} #btn3:hover{color:white;background-
image:linear-gradient(to bottom right,rgb(47, 144, 209),rgb(198, 3,
159));}#button1{font-weight:bold;background-
color:white;padding:8px;width:50%;border:1px solid black;border-radius:45px;}
#button1:hover{color:white;background-image:linear-gradient(to bottom
right,#00a8ff,#1d22bf);} #button2{float:right;color:white;background-
image:linear-gradient(to
right,#1d22bf,#00a8ff);padding:7px;width:33%;border:1px solid #1d22bf;border-
radius:45px;} #button2:hover{color:white;padding:7px;width:33%;border:1px
solid black;border-radius:45px;background-image:linear-gradient(to bottom
```

```java
right,#00a8ff,#1d22bf);}@media screen and (max-width:
600px){.cimg{width:99%;height:310px;}</style>");
            pw.println("</head>");
            pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);'>");
            req.getRequestDispatcher("navbar.html").include(req, rs);
            pw.println("<br><div style='margin-
left:16%;height:4px;background-image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
          pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span class='bi
bi-arrow-left-square'></span> Back</button>");
            pw.println("<br>");

            try {
                    PreparedStatement ps=con.prepareStatement("select
MOBNO,Typee from mrecharge where MOBNO=?");
                    ps.setString(1, mobno);
                    ResultSet res=ps.executeQuery();
                    if(res.next()) {
                        if(res.getString(2).equals("Postpaid")) {

     req.getRequestDispatcher("ConversionImageBanner.html").include(req,
rs);

     pw.println("<br><br><br><br><br><br><br><br><br><br><br><br><br><br><br
><br><br><br><br><br><br>");

     req.getRequestDispatcher("SimDelivery.html").include(req, rs);
                                pw.println("<br><br><br>");
                        }
                        else {

     req.getRequestDispatcher("Conversion1.html").include(req, rs);
                                pw.println("<div class='row text-center mx-
2'><div class='col-6'></div><div class='col-6'><h4 style='color:red;font-
family: Times New Roman, Times, serif;'>Your No:"+mobno+" is not a Postpaid No
So, You Cannot Convert it to Prepaid <span class='bi bi-x-
circle'></span></h4></div></div>");

     req.getRequestDispatcher("Conversion2.html").include(req, rs);
                                pw.println("<br><div class='row w-100 h-
25'><div class='col-6'><img src='other/images/pretopost.jpg' class='rounded-2
m-2 img-thumbnail'></div><div class='col-6'><img
src='other/images/postpre.jpg' class='rounded-2 m-2 img-
thumbnail'></div></div><br>");
                                pw.println("<br>");
                        }
```

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```
                              }
                              else {

          req.getRequestDispatcher("Conversion1.html").include(req, rs);
                                pw.println("<div class='row text-center mx-2'><div
class='col-6'></div><div class='col-6'><h4 style='color:red;font-family: Times
New Roman, Times, serif;'>Sorry, You do not have any Postpaid No for
Conversion <span class='bi bi-x-circle'></span></h4></div></div>");

          req.getRequestDispatcher("Conversion2.html").include(req, rs);
                                pw.println("<br><div class='row w-100 h-25'><div
class='col-6'><img src='other/images/pretopost.jpg' class='rounded-2 m-2 img-
thumbnail'></div><div class='col-6'><img src='other/images/postpre.jpg'
class='rounded-2 m-2 img-thumbnail'></div></div><br>");
                                pw.println("<br>");
                          }
                    }
                    catch(Exception ee) {
                          ee.printStackTrace();
                    }

              req.getRequestDispatcher("footer.html").include(req, rs);
                  pw.println("<script>function
backk(){window.location.href='Sim_Conversion';} function mobileVal(){var
num=document.getElementById('txt').value; if (isNaN(num)){
document.getElementById('eMsg').innerHTML='Mobile No Doesnot Contain
Letters'.italics().fontcolor('red'); }else if(num.length==10){
document.getElementById('eMsg').innerHTML='';}
else{document.getElementById('eMsg').innerHTML='Enter A Valid Mobile
Number'.italics().fontcolor('red');}}");
                  pw.println("function mobileVal2(){var
num2=document.getElementById('txt2').value; if (isNaN(num2)){
document.getElementById('eMsg2').innerHTML='Mobile No Doesnot Contain
Letters'.italics().fontcolor('red'); }else if(num2.length==10){
document.getElementById('eMsg2').innerHTML='';}
else{document.getElementById('eMsg2').innerHTML='Enter A Valid Mobile
Number'.italics().fontcolor('red');}}</script>");

      pw.println("</body>");
        pw.println("</html>");
        }}
```

14.   Code for Sim Conversion Success Class(src.codes.ConversionSuccess.java)

```
 package src.codes;
import java.sql.*;
import java.io.*;
import javax.servlet.*;
```

```java
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/ConversionSuccess")
public class ConversionSuccess extends HttpServlet {

        protected void doPost(HttpServletRequest req, HttpServletResponse rs) throws
ServletException, IOException {
    rs.setContentType("text/html");
    PrintWriter pw=rs.getWriter();
    Connection con=DB.getCon();
    String fname=req.getParameter("fnm");
    String lname=req.getParameter("lnm");
    String city=req.getParameter("city");
    String zipcode=req.getParameter("zip");
    String add=req.getParameter("address");
    ServletContext sc=getServletContext();
    Object oo=(Object)sc.getAttribute("conversionNo");
    String mobno=(String)oo;
        pw.println("<!DOCTYPE html>");
                pw.println("<html>");
                pw.println("<head>");
                pw.println("<title>Mytel Sim Conversion Success</title>");
                pw.println("<link rel='stylesheet' href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
                pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
                pw.println("<link rel='stylesheet' href='https:/cdn.jsdelivr.net/npm/bootstrap-
icons@1.5.0/font/bootstrap-icons.css'>");
                pw.println("<script src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
                pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></script>");
                pw.println("<link rel='icon' href='other/images/mm.jpg'>");
                pw.println("<link rel='stylesheet' href='other/style.css'/>");
                pw.println("<script src='other/fun.js'></script>");
                pw.println(" <style> #btn1{color:white;background-image:linear-gradient(to bottom
right,rgb(47, 144, 209),rgb(198, 3, 159));} #btn1:hover{color:white;background-image:linear-
gradient(to bottom right,#12CBC4,#1289A7);} #btn2{color:white;background-image:linear-
gradient(to bottom right,#1289A7,#12CBC4);} #btn2:hover{color:white;background-image:linear-
gradient(to bottom right,rgb(47, 144, 209),rgb(198, 3, 159));}  #button1{font-
weight:bold;background-color:white;padding:8px;width:50%;border:1px solid black;border-
radius:45px;} #button1:hover{color:white;background-image:linear-gradient(to bottom
right,#00a8ff,#1d22bf);} #button2{float:right;color:white;background-image:linear-gradient(to
right,#1d22bf,#00a8ff);padding:7px;width:33%;border:1px solid #1d22bf;border-radius:45px;}
#button2:hover{color:white;padding:7px;width:33%;border:1px solid black;border-
radius:45px;background-image:linear-gradient(to bottom right,#00a8ff,#1d22bf);}@media screen and
(max-width: 600px){.cimg{width:99%;height:310px;}</style>");
                pw.println("</head>");
```

```java
                    pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);background-size:cover;'>");
                    req.getRequestDispatcher("navbar.html").include(req, rs);
                    pw.println("<br><div style='margin-left:16%;height:4px;background-image:linear-
gradient(to right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
            pw.println("<button style='float:right;margin-top:-2%;margin-right:1.9%;' class='btn btn-
outline-primary' onclick='backk()'><span class='bi bi-arrow-left-square'></span> Back</button>");
                    pw.println("<br>");
    try {
        Statement st=con.createStatement();
                        PreparedStatement ps=con.prepareStatement("select MOBNO from
SimDelivery_Address  where MOBNO=?");
                    ps.setString(1, mobno);
                    ResultSet res=ps.executeQuery();

                    if(res.next()) {
                        PreparedStatement ps2=con.prepareStatement("Update
SimDelivery_Address set
first_name='"+fname+"',last_name='"+lname+"',Address='"+add+"',city='"+city+"',zipcode='"+zipcod
e+"' where Mobno=?");
                                ps2.setString(1, mobno);
                        ps2.executeUpdate();
                    }
                    else {
                        st.executeUpdate("insert into SimDelivery_Address
values('"+fname+"','"+lname+"','"+mobno+"','"+add+"','"+city+"','"+zipcode+"')");
                    }
                    PreparedStatement ps3=con.prepareStatement("select * from
SimDelivery_Address where mobno=?");
                    ps3.setString(1, mobno);
                    ResultSet res3=ps3.executeQuery();

                        PreparedStatement ps4=con.prepareStatement("Select Mobno,Typee
from mrecharge where mobno=?");
                            ps4.setString(1, mobno);
                    ResultSet res4=ps4.executeQuery();

                    PreparedStatement ps6=con.prepareStatement("Select Mobno,Typee from
mrecharge where mobno=?");
                            ps6.setString(1, mobno);
                    ResultSet res6=ps6.executeQuery();
                    if(res6.next()) {
                     String tt=res6.getString(2);
                     sc.setAttribute("ttype", tt);
                    }

                    if(res4.next()) {
                     String type=res4.getString(2);
```

```java
                        if(type.equals("Prepaid")) {
                                st.executeUpdate("Update mrecharge set typee='Postpaid' where
Mobno='"+mobno+"' ");
                                st.executeUpdate("Delete from Pack_details where
Mobno='"+mobno+"'");
                                        st.executeUpdate("insert into Conversion_Numbers
values('"+mobno+"','Conversion Happens')");
                        }
                        else {
                        st.executeUpdate("Update mrecharge set typee='Prepaid' where
Mobno='"+mobno+"'");
                         st.executeUpdate("Delete from Pack_details where Mobno='"+mobno+"'");
                                st.executeUpdate("insert into Conversion_Numbers
values('"+mobno+"','Conversion Happens')");
                        }
                        }

                        PreparedStatement ps5=con.prepareStatement("Select Mobno,Typee from
mrecharge where mobno=?");
                                ps5.setString(1, mobno);
                        ResultSet res5=ps5.executeQuery();
                        if(res3.next()) {
                pw.println("<center><div style='margin-left:-5%;font-family: Times New Roman,
Times, serif;width:65%;'><h1 style='text-shadow:0 0 5px black;font-weight:bold'>Sim Conversion
Done!</h1><span class='bi bi-check-circle-fill' style='font-size:300%;color:rgb(3, 154, 3);border:5px
dotted green;padding:4px;border-radius:50%;'></span>");
                        if(res5.next()) {
                        pw.println("<h3 style='font-weight:bold;color:deeppink'>Congrats "+fname+"
"+lname+"!!! Your Number:"+mobno+" Conversion from "+sc.getAttribute("ttype")+" to
"+res5.getString(2)+" is Completed.Your New SIM Will be Delivered To Your Registered
Address("+res3.getString(4)+","+res3.getString(5)+", ZIP:"+res3.getString(6)+") Within 2/3 Working
Days...</h3>");
                        }
                        pw.println("<h2 style='font-weight:bold;'>Thank You!!! </h2><br><button
class='btn btn-primary' style='font-weight:bold;' onclick='backk()'>Go to Conversion
Page</button></div></center><br><br><br>");
                        }
                                } catch (SQLException e) {
                                        e.printStackTrace();}
        req.getRequestDispatcher("template2.html").include(req, rs);
        pw.println("<br><br>");
        req.getRequestDispatcher("footer.html").include(req, rs);
                pw.println("<script>function
backk(){window.location.href='Sim_Conversion';}</script>");
    pw.println("</body>");
        pw.println("</html>");
        }}
```

15.   Code for Know Balance Class(src.codes.knowBalance.java)

```
package src.codes;

import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/knowBalance")
public class knowBalance extends HttpServlet {
      protected void doGet(HttpServletRequest req, HttpServletResponse rs)
throws ServletException, IOException {
        rs.setContentType("text/html");
        PrintWriter pw=rs.getWriter();
          pw.println("<!DOCTYPE html>");
            pw.println("<html>");
            pw.println("<head>");
            pw.println("<title>Mytel Check Active Plans</title>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
            pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
            pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
            pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></scri
pt>");
            pw.println("<link rel='icon' href='other/images/mm.jpg'>");
            pw.println("<link rel='stylesheet' href='other/style.css'/>");
            pw.println("<script src='other/fun.js'></script>");
            pw.println("<style>#planBtn{color:white;border:none;border-
radius:20px;background-image: linear-gradient(to top right,rgb(3, 198,
107),rgb(47, 144, 209));box-shadow:0 0 3px black;}
#planBtn:hover{color:white;border:none;border-radius:20px;background-image:
linear-gradient(to bottom right,blue,rgb(81, 86, 236),rgb(12, 191, 250));box-
shadow:0 0 3px black;} .inp{background-image: linear-gradient(to top
right,rgb(3, 198, 107),rgb(47, 144, 209));border:2px solid
rgb(232,230,230);outline:none;background-
color:none;background:none;}::placeholder {color:lightgrey
!important;}</style> ");
            pw.println("</head>");
```

```java
        pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);'>");
            req.getRequestDispatcher("navbar.html").include(req, rs);
            pw.println("<br><div style='margin-
left:16%;height:4px;background-image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
          pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span class='bi
bi-arrow-left-square'></span> Back</button>");
            pw.println("<br>");
            req.getRequestDispatcher("knowBalanceForm.html").include(req,
rs);
            pw.println("<br><br><br><br>");
            req.getRequestDispatcher("template3.html").include(req, rs);
        pw.println("<br><br>");
    req.getRequestDispatcher("footer.html").include(req, rs);
    pw.println("<script>function
backk(){window.location.href='Mainpage.html';} function mobileVal(){var
num=document.getElementById('txt').value; if (isNaN(num)){
document.getElementById('eMsg').innerHTML='Mobile No Doesnot Contain
Letters'.italics().fontcolor('red'); }else if(num.length==10){
document.getElementById('eMsg').innerHTML='';}
else{document.getElementById('eMsg').innerHTML='Enter A Valid Mobile
Number'.italics().fontcolor('red');}}</script>");
        pw.println("</body>");
    pw.println("</html>");

    }}
```

16. Code for Active Pack Details Class(src.codes.activePlanDetailsjava)

```java
package src.codes;
import java.sql.*;
import java.text.SimpleDateFormat;
import java.util.Calendar;
import java.util.Locale;
import java.util.concurrent.TimeUnit;
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/activePlanDetails")
public class activePlanDetails extends HttpServlet {
    protected void doPost(HttpServletRequest req, HttpServletResponse rs)
throws ServletException, IOException {
        rs.setContentType("text/html");
        PrintWriter pw=rs.getWriter();
        String mobile=req.getParameter("mobnoo");
```

```java
         Connection con=DB.getCon();
        pw.println("<!DOCTYPE html>");
          pw.println("<html>");
          pw.println("<head>");
          pw.println("<title>Mytel Active Plans</title>");
          pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
          pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
          pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
          pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
          pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></s
cript>");
          pw.println("<link rel='icon' href='other/images/mm.jpg'>");
          pw.println("<link rel='stylesheet' href='other/style.css'/>");
          pw.println("<script src='other/fun.js'></script>");
          pw.println("<style>#divv{border-radius:40px;} .rech{border-
radius:20px;font-weight:bold;background-
color:rgb(5,5,188);border:none;color:white;padding:8px;}.rech:hover{font-
weight:bold;background-color:rgb(85, 85,
252);border:none;color:white;padding:8px;}</style> ");
          pw.println("</head>");
          pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);'>");
          req.getRequestDispatcher("navbar.html").include(req, rs);
          pw.println("<br><div style='margin-
left:16%;height:4px;background-image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
        pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span
class='bi bi-arrow-left-square'></span> Back</button>");
          pw.println("<br>");

          try {
                  PreparedStatement ps = con.prepareStatement("select * from
pack_details where MOBNO=? ");
                  ps.setString(1, mobile);
                  ResultSet res = ps.executeQuery();
                  PreparedStatement ps2 = con.prepareStatement("select
MOBNO,typee from mrecharge where MOBNO=? ");
                  ps2.setString(1, mobile);
                  ResultSet res2 = ps2.executeQuery();
```

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```java
                    if(res.next()) {
                            String string=res.getString(4);
                            String[] split=string.split("/");
                            String value=split[0];
                                if(res2.next()) {
                                String type=res2.getString(2);
                                if(type.equals("Postpaid")) {
                            pw.println("<div class='d-flex justify-content-
center' style='margin-left:-6%;'><div id='divv' class='shadow-lg w-50'
style='padding:3% 5%;background-color:white;'><div class='d-flex justify-
content-between'>");
                            pw.println("<div class='d-flex justify-content-
between'><h5 style='font-family: Times New Roman, Times, serif;'>Postpaid
Mobile <span style='font-
weight:bold;'>"+mobile+"</span></h5><br></div><div><button class='btn btn-
close' onclick='backk()'></button></div></div><br>");
                            pw.println("<div class='row'><div class='col-5'
style='font-family: Times New Roman, Times, serif;'><span class='bi bi-
arrow-down-up px-2 py-2' style='background-color:rgb(232, 232, 253);border-
radius:50%;color:rgb(23, 23, 202);font-size:20px;'></span><h6
style='color:grey;font-family: Times New Roman, Times,
serif;margin:4%;''>Data</h6>");
                            pw.println("<h4 style='font-
weight:bold;'>"+res.getString(4)+"</h4><span style='color:rgb(92, 91,
91);'>left of "+value+"</span><br><span style='color:grey;'>Renews till
Bill Cycle</span>");
                            pw.println("</div><div style='border-right:1.3px
solid lightgrey;' class='col-2'></div><div class='col-1'></div><div
class='col-4' style='font-family: Times New Roman, Times, serif;'><span
class='bi bi-sim px-2 py-2' style='background-color:rgb(232, 232,
253);border-radius:50%;color:rgb(23, 23, 202);font-size:20px;'></span><h6
style='color:grey;font-family: Times New Roman, Times,
serif;margin:4%;'>Plan</h6>");
                        pw.println("<h4 style='font-
weight:bold;'>&#8377;"+res.getString(2)+"</h4><span style='color:rgb(92,
91, 91);'>Till Bill Cycle</span>");
                        pw.println("</div></div><br><div style='border-
bottom:1.3px solid lightgrey;'></div><br><h6 style='color:grey;font-family:
Times New Roman, Times, serif;'>Pay using Mobikwik UPI & get up to
&#8377;50 cashback T&C applies</h6><br><div class='d-flex justify-content-
center'><button class='rech w-50 rounded-5' style='font-family: Times New
Roman, Times, serif;'
onclick='Recharge()'>Recharge</button></div></div><br></div></div><br><br>"
);
                                }
                                else {
                                        pw.println("<div class='d-flex justify-
content-center' style='margin-left:-6%;'><div id='divv' class='shadow-lg w-
```

```java
50' style='padding:3% 5%;background-color:white;'><div class='d-flex
justify-content-between'>");
                                        pw.println("<div class='d-flex justify-
content-between'><h5 style='font-family: Times New Roman, Times,
serif;'>Prepaid Mobile <span style='font-
weight:bold;'>"+mobile+"</span></h5><br></div><div><button class='btn btn-
close' onclick='backk()'></button></div></div><br>");
                                        pw.println("<div class='row'><div
class='col-5' style='font-family: Times New Roman, Times, serif;'><span
class='bi bi-arrow-down-up px-2 py-2' style='background-color:rgb(232, 232,
253);border-radius:50%;color:rgb(23, 23, 202);font-size:20px;'></span><h6
style='color:grey;font-family: Times New Roman, Times,
serif;margin:4%;''>Data</h6>");
                                        String amount=res.getString(2);

                                        String rechargeDt=res.getString(5);
                                        SimpleDateFormat sdf = new
SimpleDateFormat("dd-MMMM-yyyy", Locale.ENGLISH);
                                        java.util.Date dateBefore =
sdf.parse(rechargeDt);
                                        Calendar cal=Calendar.getInstance();
                                        SimpleDateFormat simpleformat = new
SimpleDateFormat("dd-MMMM-yyyy");
                                        String
rechargeDate=simpleformat.format(cal.getTime());
                                        java.util.Date dateAfter =
sdf.parse(rechargeDate);
                                        long timeDiff =
Math.abs(dateAfter.getTime() - dateBefore.getTime());
                                        long daysDiff =
TimeUnit.DAYS.convert(timeDiff, TimeUnit.MILLISECONDS);


                                        String time1 = "23:59:59";
                                        SimpleDateFormat sdf2 = new
SimpleDateFormat("HH:mm:ss");
                                        java.util.Date currentDate = new
java.util.Date();
                                        SimpleDateFormat formatter = new
SimpleDateFormat("kk:mm:ss");
                                        String timeIn24Hours =
formatter.format(currentDate);
                                        java.util.Date date1 = sdf2.parse(time1);
                                        java.util.Date date2 = sdf2.parse(
timeIn24Hours);
                                        long differenceInMilliSeconds =
Math.abs(date2.getTime() - date1.getTime());
```

```java
                                        long hours = (differenceInMilliSeconds /
(60 * 60 * 1000)) % 24;
                                        long minutes = (differenceInMilliSeconds /
(60 * 1000)) % 60;


                                        String str=res.getString(3);
                                           String[] sp=str.split(" ");
                                           String val=sp[0];
                                           int totalDays=Integer.parseInt(val);

                                           int validityDay=(int)(totalDays-
daysDiff);
                                           if(validityDay==0) {
                                                   PreparedStatement ps3 =
con.prepareStatement("delete from pack_details where MOBNO=? ");
                                                   ps3.setString(1, mobile);
                                                   ps3.executeUpdate();
                                           }
                                           if(amount.equals("179") |
amount.equals("184")) {
                                                   pw.println("<h4 style='font-
weight:bold;'>"+res.getString(4)+"</h4><span style='color:rgb(92, 91,
91);'>left of "+value+"</span><br><span style='color:grey;'>Renews in
"+validityDay+" days</span>");
                                                   pw.println("</div><div
style='border-right:1.3px solid lightgrey;' class='col-2'></div><div
class='col-1'></div><div class='col-4' style='font-family: Times New Roman,
Times, serif;'><span class='bi bi-sim px-2 py-2' style='background-
color:rgb(232, 232, 253);border-radius:50%;color:rgb(23, 23, 202);font-
size:20px;'></span><h6 style='color:grey;font-family: Times New Roman,
Times, serif;margin:4%;'>Plan</h6>");
                                                   pw.println("<h4 style='font-
weight:bold;'>&#8377;"+amount+"</h4><span style='color:rgb(92, 91,
91);'>"+validityDay+" days left</span>");
                                           }
                                           else {
                                                   if(hours!=0) {
                                                   pw.println("<h4 style='font-
weight:bold;'>"+res.getString(4)+"</h4><span style='color:rgb(92, 91,
91);'>left of "+value+"</span><br><span style='color:grey;'>Renews in
"+hours+" hours</span>");
                                                   }
                                                   else {
                                                           pw.println("<h4 style='font-
weight:bold;'>"+res.getString(4)+"</h4><span style='color:rgb(92, 91,
91);'>left of "+value+"</span><br><span style='color:grey;'>Renews in
"+minutes+" minutes</span>");
```

```
                                                        }
                                        pw.println("</div><div style='border-
right:1.3px solid lightgrey;' class='col-2'></div><div class='col-
1'></div><div class='col-4' style='font-family: Times New Roman, Times,
serif;'><span class='bi bi-sim px-2 py-2' style='background-color:rgb(232,
232, 253);border-radius:50%;color:rgb(23, 23, 202);font-
size:20px;'></span><h6 style='color:grey;font-family: Times New Roman,
Times, serif;margin:4%;'>Plan</h6>");
                                        pw.println("<h4 style='font-
weight:bold;'>&#8377;"+amount+"</h4><span style='color:rgb(92, 91,
91);'>"+validityDay+" days left</span>");
                                }
                                pw.println("</div></div><br><div
style='border-bottom:1.3px solid lightgrey;'></div><br><h6
style='color:grey;font-family: Times New Roman, Times, serif;'>Pay using
Mobikwik UPI & get up to &#8377;50 cashback T&C applies</h6><br><div
class='d-flex justify-content-center'><button class='rech w-50 rounded-5'
style='font-family: Times New Roman, Times, serif;'
onclick='Recharge()'>Recharge</button></div></div><br></div></div><br><br>"
);
                                }

    req.getRequestDispatcher("template4.html").include(req, rs);
                        }
                }
                else {
                        if(res2.next()) {
                                pw.println("<br><br><div><center><div
class='p-2 w-50 rounded-3' style='margin-left:-6%;font-family:Times New
Roman, Times, serif;background-color: rgb(5, 5, 188);color:white;'><h5
style='font-weight:bold;'>"+mobile+" | "+res2.getString(2)+"
VoLTE</h5><h6>There are no Plans Available for this Service Right
Now.</h6></div></center><br>");
                                pw.println("<center><div class='shadow lg p-5 w-50
rounded-3' style='margin-left:-6%;font-family:Times New Roman, Times,
serif;'><h5 style='font-weight:bold;'>You do not have any Active Plans
Right Now!</h5><h6>Buy the best plan and enjoy best
Services</h6><br><button class='rech w-50'
onclick='Recharge()'>Recharge</button><br></div></center>
</div><br><br><br><br><br>");

    req.getRequestDispatcher("template3.html").include(req, rs);
                        }
                        else {
                                pw.println("<br><div><center><div class='p-2
w-50 rounded-3' style='margin-left:-6%;font-family:Times New Roman, Times,
serif;background-color: rgb(5, 5, 188);color:white;'><h5 style='font-
weight:bold;'> <span style='color:red;'>NA</span> | <span
```

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```
    style='color:red;'>NA</span> VoLTE</h5><h6>There are no Plans Available for
    this Service Right Now.</h6></div></center><br>");
                            pw.println("<center><div class='shadow lg p-5
    w-50 rounded-3' style='margin-left:-6%;font-family:Times New Roman, Times,
    serif;'><h5 style='font-weight:bold;color:red;'>There are no such Phone
    Numbers in Your Profile</h5><br><h5 style='font-weight:bold;'>You do not
    have any Active Plans Right Now!</h5><h6>Buy the best plan and enjoy best
    Services</h6><br><button class='rech w-50'
    onclick='Recharge()'>Recharge</button><br></div></center>
    </div><br><br><br>");

        req.getRequestDispatcher("template3.html").include(req, rs);
                        }
                    }
            } catch (Exception e) {
                    e.printStackTrace();
            }
    pw.println("<br><br>");
    req.getRequestDispatcher("footer.html").include(req, rs);
    pw.println("<script>function
    backk(){window.location.href='knowBalance';}function
    Recharge(){window.location.href='mobileRecharge';}</script>");
            pw.println("</body>");
    pw.println("</html>");
    }}
```

17. Code for Profile Details Class(src.codes.profileDetails.java)

```
package src.codes;
import java.io.*;
import javax.servlet.*;
import javax.servlet.annotation.*;
import javax.servlet.http.*;
@WebServlet("/profileDetails")
public class profileDetails extends HttpServlet {
      protected void doGet(HttpServletRequest req, HttpServletResponse rs)
throws ServletException, IOException {
        rs.setContentType("text/html");
        PrintWriter pw=rs.getWriter();
        ServletContext sc=getServletContext();
          Object oo=(Object)sc.getAttribute("profileName");
            String pName=(String)oo;
            Object oo2=(Object)sc.getAttribute("profileMobileNo");
            String pMobileNo=(String)oo2;
            Object oo22=(Object)sc.getAttribute("profileMailid");
            String pMailid=(String)oo22;
            Object oo3=(Object)sc.getAttribute("profileAddress");
            String pAddress=(String)oo3;
```

```
Object oo4=(Object)sc.getAttribute("profilePicture");
String pPicturePath=(String)oo4;
pw.println("<!DOCTYPE html>");
pw.println("<html>");
pw.println("<head>");
pw.println("<title>Mytel Profile Details</title>");
pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/css/bootstrap.min.css'>");
pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/boxicons@latest/css/boxicons.min.css'>");
pw.println("<link rel='stylesheet'
href='https:/cdn.jsdelivr.net/npm/bootstrap-icons@1.5.0/font/bootstrap-
icons.css'>");
pw.println("<script
src='https://cdn.jsdelivr.net/npm/bootstrap@5.0.0-
beta1/dist/js/bootstrap.bundle.min.js'></script>");
pw.println("<script
src='https://cdnjs.cloudflare.com/ajax/libs/jquery/3.2.1/jquery.min.js'></scri
pt>");
pw.println("<link rel='icon' href='other/images/mm.jpg'>");
pw.println("<link rel='stylesheet' href='other/style.css'/>");
pw.println("<script src='other/fun.js'></script>");
pw.println("<style>.stars{margin-right:5px;font-
size:20px;border:1px solid #10ac84;padding:0 7px;color:white;background-
color:#10ac84;}.icons{font-
size:30px;color:black;}.icons:hover{color:lightgrey;}</style>");
pw.println("</head>");
pw.println("<body id='body-pd' style='background-
image:url(other/images/bg1.webp);background-size:cover;'>");
req.getRequestDispatcher("navbar.html").include(req, rs);
pw.println("<br><div style='margin-
left:16%;height:4px;background-image:linear-gradient(to
right,red,green,orange,blue,deeppink,yellow);width:61%'></div>");
pw.println("<button style='float:right;margin-top:-2%;margin-
right:1.9%;' class='btn btn-outline-primary' onclick='backk()'><span class='bi
bi-arrow-left-square'></span> Back</button>");
pw.println("<br>");
pw.println("<div style='box-shadow:0 0 10px
lightgrey;width:75%;height:65%; margin-left:9%;padding:1.5% 8%;background-
image: linear-gradient(to right,#7158e2,#18dcff);'><h4
style='color:white;text-align:center;font-family:Times New Roman, Times,
serif;font-weight: bold;'><span class='bi bi-person-circle'></span> MY MYTEL
PROFILE <span class='bi bi-person-circle'></span></h4> <br><div
style='width:100%;border-radius:6px;box-shadow: 1px 1px 1px
lightgrey;background-color: white;padding:14px;'>");
```

```
            pw.println("<div class='row'><div class='col-7'><img
src='other/ProfilePictures/"+pPicturePath+"' class='img-thumbnail'
style='height:400px;width:500%;'></div>");
            pw.println("<div class='col-5' style='font-family:Times New
Roman, Times, serif;'><br><h6>HELLO EVERYBODY, I AM</h6>");
            pw.println("<h4 style='font-weight:bold'>"+pName+"</h4>");
            pw.println("<h6 style='font-weight:bold;color:rgb(105, 105,
105);'>A SUCCESS MYTEL USER</h6><span style='color:grey;font-
size:15px;'>Hello, As far as I have used this MYTEL application is a very
user-friendly website to enjoying all services. Happy to
recommended.</span><br><br>");
            pw.println("<div class='row'><div class='col-1'></div><div
class='col-1'><span class='bi bi-telephone'
style='color:blue'></span></div><div class='col-9' style='font-
weight:bold'>+91 "+pMobileNo+"</div></div>");
        pw.println("<div class='row'><div class='col-1'></div><div class='col-
1'><span class='bi bi-envelope' style='color:blue'></span></div><div
class='col-9' style='font-weight:bold'>"+pMailid+"</div></div>");
            pw.println("<div class='row'><div class='col-1'></div><div
class='col-1'><span class='bi bi-house' style='color:blue'></span></div><div
class='col-9' style='font-weight:bold'>"+pAddress+"</div></div><br>");
        pw.println("<div class='d-flex mx-4'><div><a
href='https://www.facebook.com/mytelmyanmar'><span class='bi bi-facebook'
style='color: grey;font-size:28px;margin-right:12px;'></span></a></div><div><a
href='https://twitter.com/'><span class='bi bi-twitter'
style='color:grey;font-size:28px;margin-right:12px;'></span></a></div> <div><a
href='https://youtube.com/'><span class='bi bi-youtube'
style='color:grey;font-size:28px;margin-right:12px;'></span></a></div><div><a
href='https://www.instagram.com/mytelmyanmar'><span class='bi bi-instagram'
style='color: grey;font-size:28px;margin-
right:12px;'></span></a></div></div></div></div></div></div>");
            pw.println("<div style='box-shadow:0 0 15px
lightgrey;width:75%;height:7%;margin-left:9%;padding:1.5% 8%;background-
color:white;'></div> ");
            pw.println("<br>");
            req.getRequestDispatcher("profileTemplate.html").include(req,
rs);
        pw.println("<br><br>");
    req.getRequestDispatcher("footer.html").include(req, rs);
    pw.println("<script>function
backk(){window.location.href='Mainpage.html';}</script>");
    pw.println("</body>");
    pw.println("</html>");
    }}
```

CHAPTER-11 DATABASE DICTIONARY

Table-1: MYTEL

S.No.	Field Name	Data Type	Description
1	NAME	VARCHAR2(4000)	For Storing the name of Mytel User
2	MOBNO	NUMBER(10)	For Storing the mobile no of Mytel user for unique identification
3	MAILID	VARCHAR2(4000)	For Storing Email Address of the Mytel User
4	PASSWORD	VARCHAR2(4000)	For Storing Password of the Mytel User
5	PROFILE_PICTURE	VARCHAR2(4000)	For Storing profile picture url of Mytel User
6	ADDRESS	VARCHAR2(4000)	For Storing Address of Mytel User

Oracle Database Code for creation of MYTEL Table:

- Create table MYTEL (NAME Varchar2(4000),
          MOBNO Number(10) UNIQUE,MAILID Varchar2(4000),
          PASSWORD Varchar2(400),PROFILE_PICTURE
          Varchar2(4000),ADDRESS Varchar2(4000),
          CONSTRAINT PM_KEY PRIMARY KEY(NAME,MOBNO));

Table-2: MRECHARGE

S.No.	Field Name	Data Type	Description
1	MOBNO	NUMBER(10)	For Storing mobile numbers for making recharge
2	TYPEE	VARCHAR2(4000)	For Storing the Sim type
3	OPERATOR	VARCHAR2(4000)	For Storing mobile numbers corresponding operator

Oracle Database Code for creation of MRECHARGE Table:

- Create table MRECHARGE (MOBNO Number(10),
                TYPEE varchar2(4000), OPERATOR varchar(4000),
                CONSTRAINT PM_KEY2 PRIMARY KEY(MOBNO));

Table-3: PACK_DETAILS

S.No.	Field Name	Data Type	Description
1	MOBNO	NUMBER(10)	For Storing recharged mobile number
2	PLAN_AMOUNT	NUMBER(10)	For Storing recharged mobile numbers plan amount
3	VALIDITY	VARCHAR2(4000)	For Storing recharged mobile numbers validity
4	DATA_PERDAY	VARCHAR2(4000)	For Storing recharge mobile numbers Perday data
5	RECHARGE_DATE	VARCHAR2(4000)	For Storing the Recharge date

Oracle Database Code for creation of PACK_DETAILS Table:

- Create table PACK_DETAILS (MOBNO Number(10) NOT NULL,
    PLAN_AMOUNT NUMBER(10), VALIDITY Varchar2(4000),
    DATA_PERDAY Varchar2(4000), RECHARGE_DATE varchar2(4000),
    PRIMARY KEY(MOBNO_PLANAMOUNT));

Table-4: CONVERSION_NUMBERS

S.No.	Field Name	Data Type	Description
1	CONVERSION_NUMBERS	NUMBER(10)	For Storing the Converted Numbers
2	CONFIRMATION	VARCHAR2(4000)	For Storing the confirmation regarding the number conversion happens or not

Oracle Database Code for creation of CONVERSION_NUMBERS Table:

- Create table CONVERSION_NUMBERS (MOBNO
    Number(10),Confirmation Varchar2(4000));

Table-5: SIMDELIVERY_ADDRESS

S.No.	Field Name	Data Type	Description
1	FIRST_NAME	VARCHAR2(4000)	For Storing The first name of the delivery customer
2	LAST_NAME	VARCHAR2(4000)	For Storing The last name of the delivery customer
3	MOBNO	NUMBER(10)	For Storing The Contact No of the delivery customer
4	ADDRESS	VARCHA2(4000)	For Storing The address of the delivery customer
5	CITY	VARCHAR2(4000)	For Storing The city of the delivery customer
6	ZIPCODE	NUMBER(6)	For Storing The ZipCode of the delivery customer

Oracle Database Code for creation of SIMDELIVERY_ADDRESS Table:

- Create table SIMDELIVERY_ADDRESS(FIRST_NAME Varchar2(4000), LAST_NAME Varchar2(4000), MOBNO Number(10), ADDRESS Varchar2(4000), City varchar2(40), ZIPCODE Number(6));

Table-6: MESSAGE

S.No.	Field Name	Data Type	Description
1	NAME	VARCHAR2(4000)	For Storing The Name of the user whose has some queries
2	EMAIL	VARCHAR2(4000)	For Storing The EmailID of the user whose has some queries
3	SUBJECT	NUMBER(10)	For Storing The Subject of the query of the user
4	MSG	VARCHAR2(4000)	For Storing The Query of the user whose has some queries

Oracle Database Code for creation of MESSAGE Table:

- Create table MESSAGE(Name Varchar2(4000),Email Varchar2(4000),
                SUBJECT Varchar2(4000) ,MSG Varchar2(4000),
                Primary key(NAME,EMAIL,SUBJECT,MSG));

CHAPTER-12 FUTURE ENHANCEMENTS OF THIS PROJECT

1. We are planning to add user feedback page.
2. We'll try to make it more user friendly than it is now.
3. We will add some more categories in our app.
4. We'll try to improve its quality.
5. We will work on another feature to add attachments like audio, video, images in the app.
6. We can give more advance software or applications for this project including more facilities.
7. This project can me made more compatible so that it can be deployed in any server and can be executed in any Operation System.
8. This project can be made more responsive & interactive if we use CSS media queries along with Bootstrap properly. So that it will be best fit in any systems like Mobiles, tablets, Laptops, Desktops etc.
9. This project can be developed using Java frameworks like Spring MVC, Spring JDBC,Spring Web, SpringBoot web, & hibernate. So that it reduces the developers effort a lot. Also it will save a lot of time of developers. Through framework the developers don't need to write the common logics several times. Only they have to get focus on only the application specific logics.
10. This project can be tested through software testing tools. So that the end used won't face any issued like bug issue.
11. I have left all the options open so that if there is any other future requirement in the system by the user for the enhancement of the system by the user for the enhancement of the system then it is possible to implement them.

CHAPTER-13 CONCLUSION

This application "Mytel Application" gives to the user information about all the mobile services providers for the pre-paid & post-paid mobile users, which can be recharged frequently.

This proposed application helps the mobile recharge his/her mobile of any service provide under one roof.

Finally Here I wanna mention one thing. For a final year student it is not as much as easy to develop a complete web application on her/his own. Because in their academic career he/she only gets focus on his/her academic subjects. They are not as much aware of this development techniques. After the academic completion they learns the technologies and become eligible for the development of any project. Here I am not Feeling proud, whatever I am feeling that I mentioned here.

So finally we have developed this project after learning a lot of development techniques, Programming languages, database, frontend & backend technologies. Finally we have completed with a limited period of time.

CHAPTER-14 REFERENCES

1. **Mytel Application**
   https://mytel.com.mm/