ACTIVE LIFE

A MINI-PROJECT REPORT

Submitted by

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BONAFIDE CERTIFICATE

Certified that this project **“ACTIVE LIFE”** is the bonafide work of **“SHREENIDHI T & SONASREE P”** who carried out the project work under my supervision.

SIGNATURE

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This mini project report is submitted for the viva voce examination to be held on _____

INTERNAL EXAMINER **EXTERNAL EXAMINER**

ABSTRACT

The "Active Life" project is a user-centric health and wellness application that enables users to track personal health data, receive personalized diet/workout plans, and maintain a digital profile. The application integrates a Java Swing GUI with MySQL backend, demonstrating database management, form-based input, and dynamic content delivery. The backend ensures accurate, secure storage and retrieval of user data, promoting healthy lifestyle management through technology.

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2. SONASREE P

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION:

Active Life is a health and fitness app that helps users track personal health details and get customized diet and workout plans. It uses a simple Java interface and a MySQL database for secure data storage. The system encourages healthy living for all users

1.2 SCOPE OF THE WORK

This project helps users manage their health goals by generating diet and workout plans tailored to their specific needs. It is suitable for anyone wanting to improve or monitor fitness and overall well-being.

1.3 PROBLEM STATEMENT

Many people struggle to find reliable, personalized health advice and ways to track their progress. Active Life solves this by offering easy, personalized planning and health tracking all in one place.

1.4 AIM AND OBJECTIVES OF THE PROJECT

The aim is to support users in managing their health through personalized advice and record keeping. The system provides custom diet/workout plans, profile management, and demonstrates practical use of a database with a modern frontend.

CHAPTER 2

SYSTEM SPECIFICATIONS

2.1 HARDWARE SPECIFICATIONS

Component	Specification
Processor	Intel i3/i5 (Minimum)
Memory Size	4GB RAM (Minimum)
HDD	500GB (Minimum)

2.2 SOFTWARE SPECIFICATIONS

Component	Specification
Operating System	Windows 10 / Linux
Front-End	Java (Swing)
Back-End	MySQL
Language Used	Java, SQL
IDE	IntelliJ IDEA / Eclipse
JDBC Connector	mysql-connector-java.jar

CHAPTER 3

MODULE DESCRIPTION

This application includes two main modules—Admin and User. On startup, the application shows a login window where the user selects their role and proceeds with personalized functions.

1. Admin Login:
The Admin logs in using a secure username and password. Admins have special access to view, update, and manage all user health data in the database.

2. User Login:
Users can log in and enter their age, current health issues, and serious conditions. Based on the input, the app generates personalized diet and workout plans, helping each user easily track and improve their well-being.

CHAPTER 4

CODING

SAMPLE 1 : ***shows the main page where the user enters their health data. On clicking "Submit", a simple dialog confirms the input and would then trigger plan generation and storage.***

```
import javax.swing.*;

import java.awt.*;


public class ActiveLifeApp {

   public static void main(String[] args) {

      JFrame frame = new JFrame("Active Life");

      frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);

      frame.setSize(600, 400);


      // Labels and fields for user data

      JLabel nameLabel = new JLabel("Name:");

      JTextField nameField = new JTextField(20);

      JLabel ageLabel = new JLabel("Age:");

      JTextField ageField = new JTextField(20);

      JLabel healthLabel = new JLabel("Current Health Issues:");

      JTextField healthField = new JTextField(20);


      JButton submitBtn = new JButton("Submit");


      submitBtn.addActionListener(e -> {
```

```
 String name = nameField.getText();
        String age = ageField.getText();
        String health = healthField.getText();
        // Here you would call backend or DB code and generate plan
        JOptionPane.showMessageDialog(frame,
            "Hello, " + name + "! Your plan is ready.",
            "Plan", JOptionPane.INFORMATION_MESSAGE);
      });
  JPanel panel = new JPanel();
      panel.setLayout(new GridLayout(4, 2));
      panel.add(nameLabel); panel.add(nameField);
      panel.add(ageLabel); panel.add(ageField);
      panel.add(healthLabel); panel.add(healthField);
      panel.add(new JLabel()); panel.add(submitBtn);

      frame.add(panel);
      frame.setVisible(true);
   }
}
```

SAMPL 2 : *Demonstrates retrieving all saved user records from the database and printing names, ages, and health issues to the console for review or debugging.*

```
import java.sql.*;


public class DBUtil {
   public static void displayAllUsers() {
```

```
        try {
            Connection conn = DriverManager.getConnection(
                "jdbc:mysql://localhost:3306/active_life", "root", "yourpassword");
            String query = "SELECT * FROM users";
            Statement stmt = conn.createStatement();
            ResultSet rs = stmt.executeQuery(query);
            while(rs.next()){
                System.out.println("Name: " + rs.getString("name") +
                                   ", Age: " + rs.getInt("age") +
                                   ", Health Issues: " + rs.getString("health_issues"));
            }
            conn.close();
        } catch(Exception e) {
            e.printStackTrace();
        }
    }
}
```

CHAPTER 5

SCREENSHOTS

FIG 5.1 : LOGIN PAGE

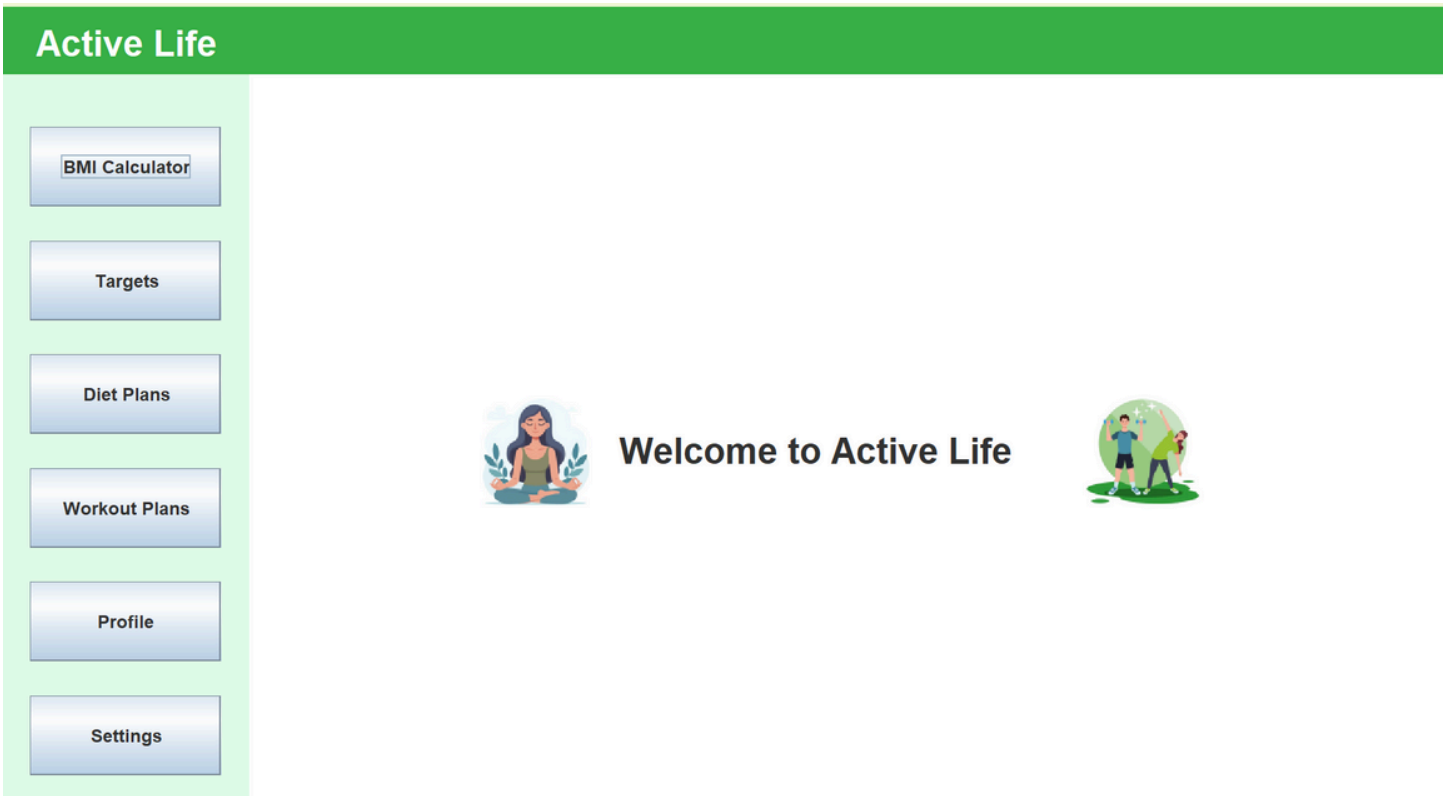


FIG 5.2 : HOME PAGE

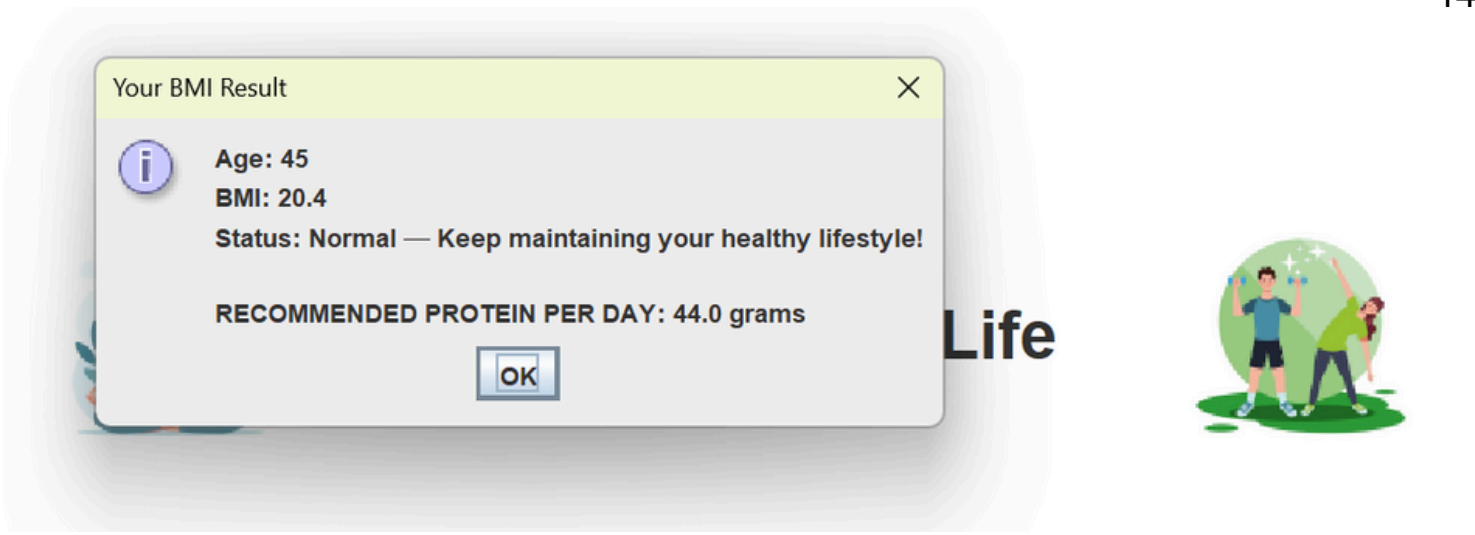
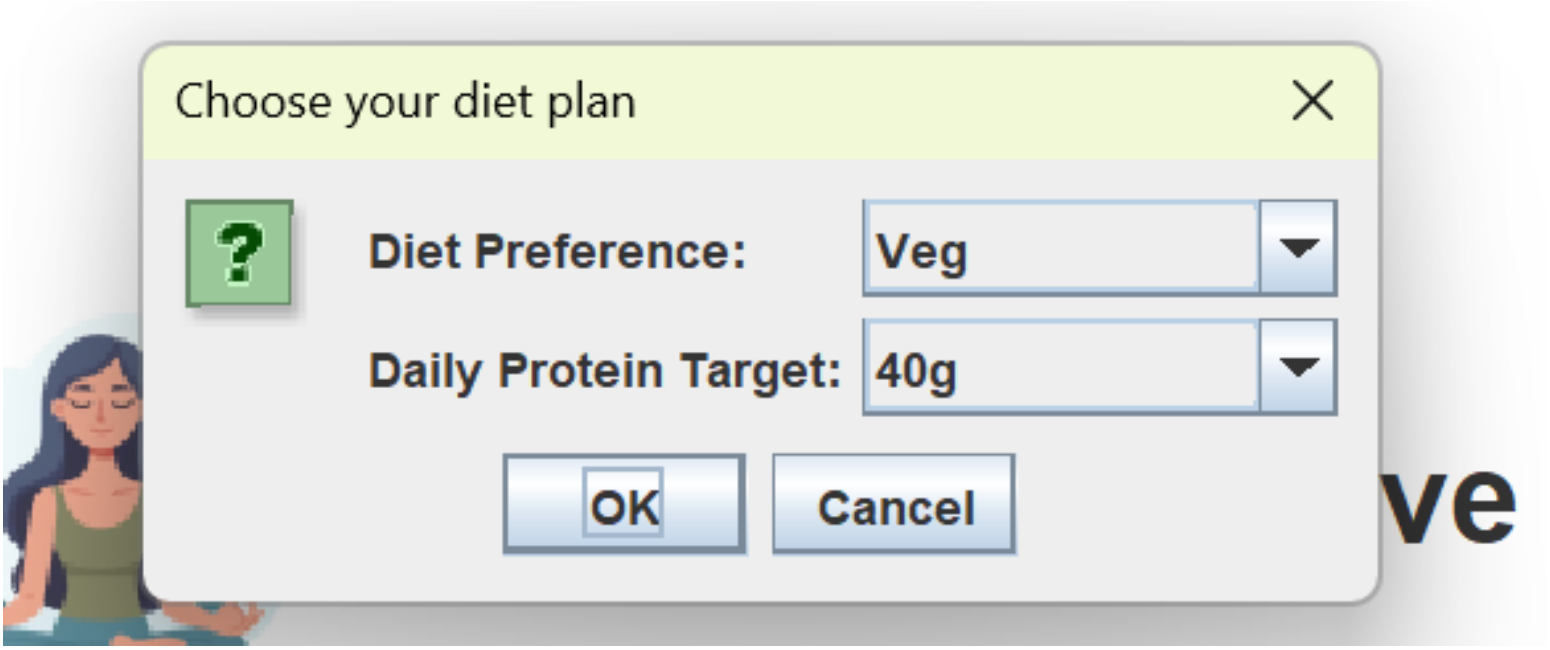


FIG 5.3 : BMI CALCULATION



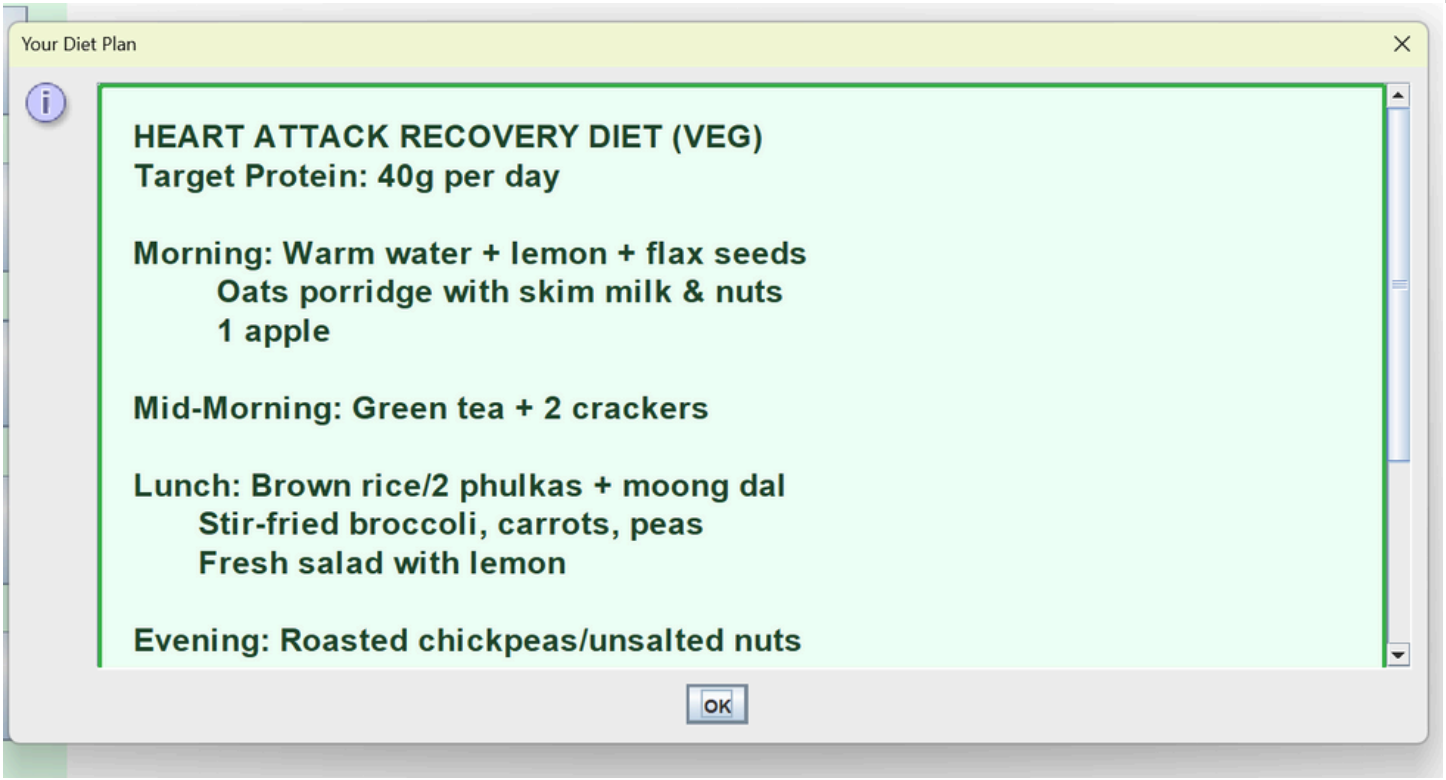


FIG 5.4 : DIET CHART

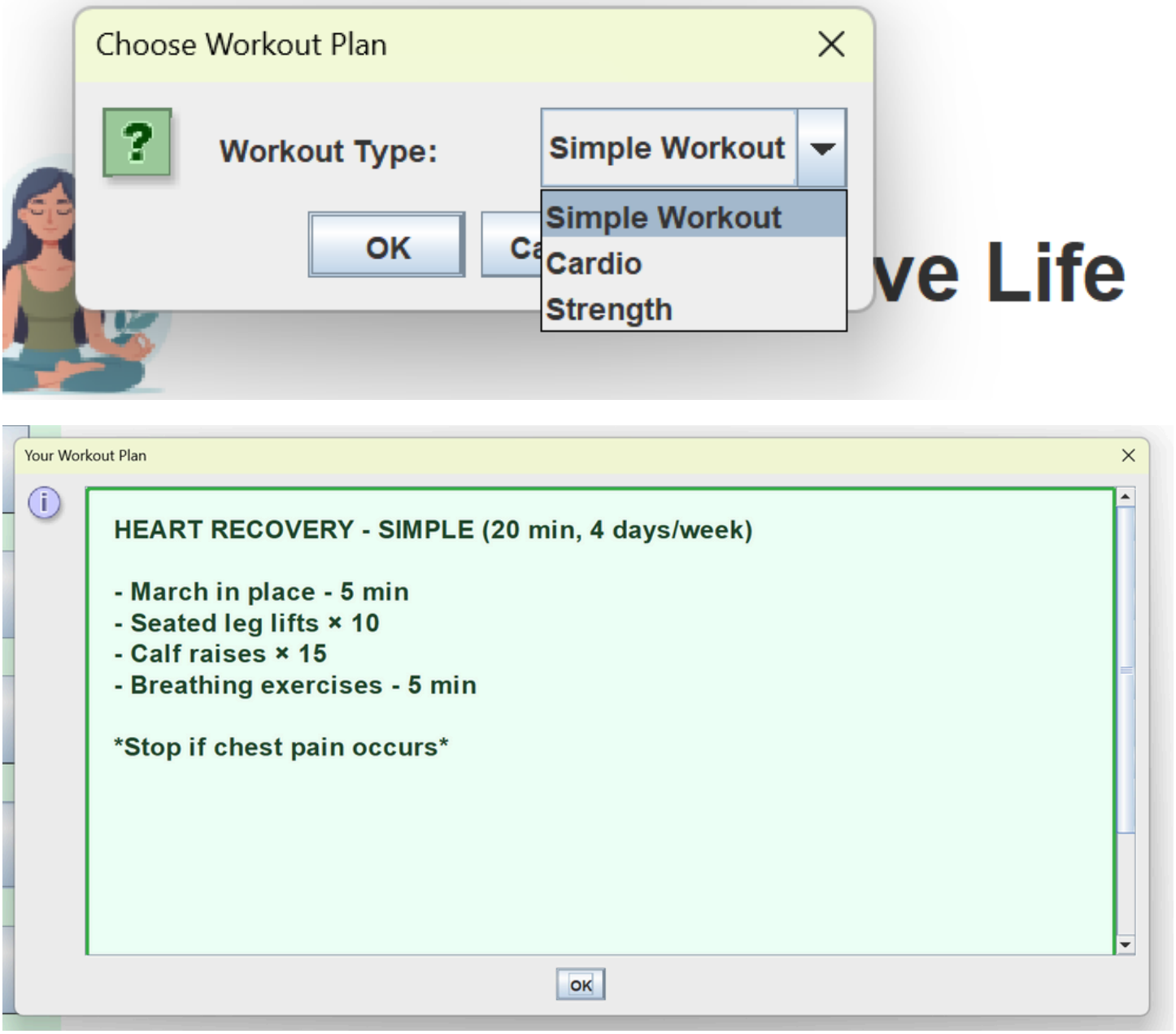


FIG 5.5 : WORKOUT PLAN

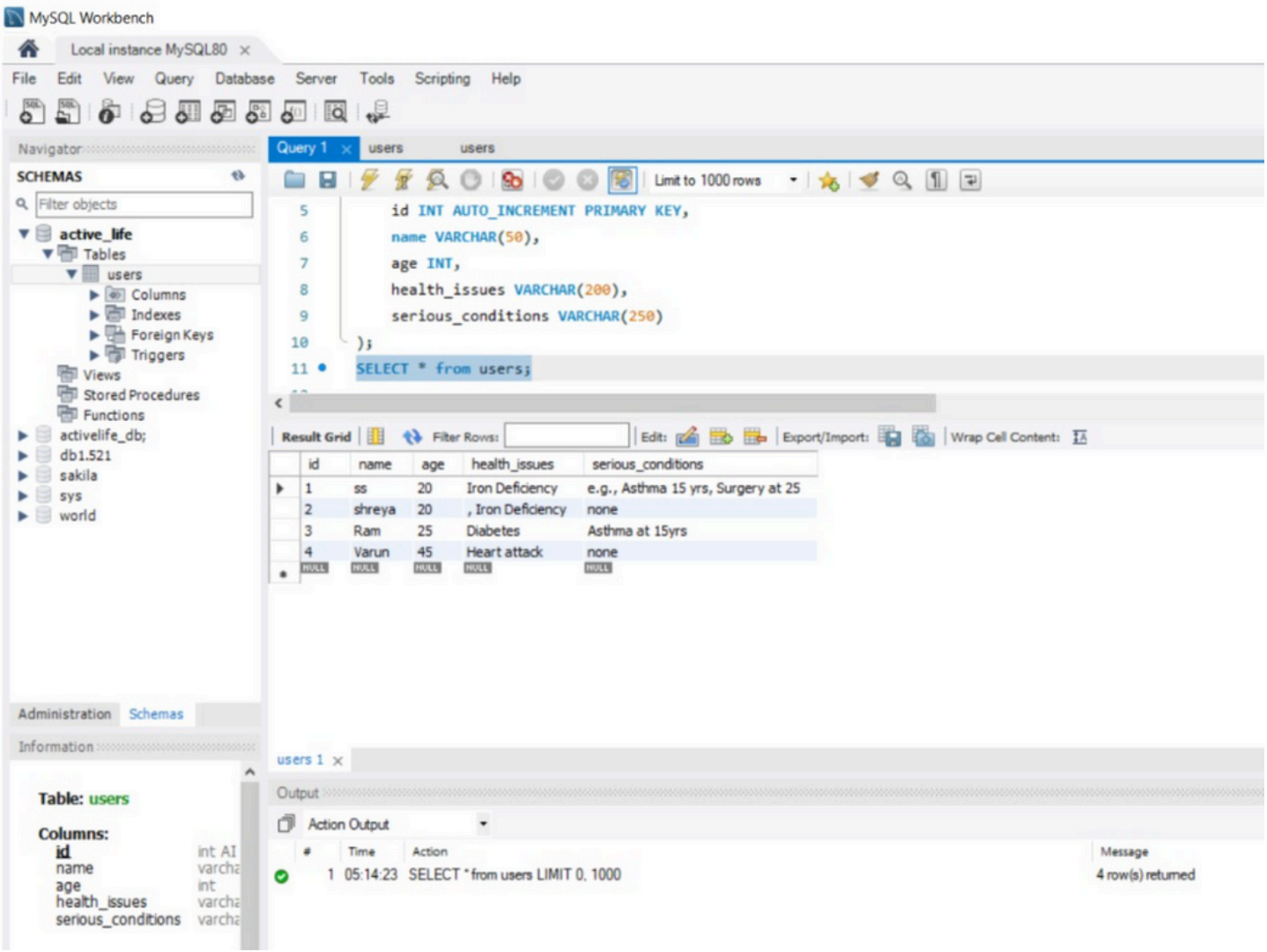


FIG 5.6 : DATABASE

CHAPTER 6

CONCLUSION AND FUTURE ENHANCEMENT

Active Life helps users manage health information and receive personalized wellness plans easily. It streamlines health tracking and makes daily healthy choices simpler for everyone.

In the future, the app can add multi-language support and allow users to securely store hospital reports, so their records are always safe and accessible.

CHAPTER 7

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