STRESS RELIEF AND ENTERTAINMENT SYSTEM

A MINI-PROJECT REPORT

Submitted by

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BONAFIDE CERTIFICATE

Certified that this project **"STRESS RELIEF AND ENTERTAINMENT SYSTEM"** is the Bonafide work of "KAYALVIZHI R, RITHIKA L" who carried out the project work under my supervision.

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

INTERNAL EXAMINER **EXTERNAL EXAMINE**

Abstract

STRESS RELIEF AND ENTERTAINMENT SYSTEM

In today's fast - paced world, stress has become a prevalent issue affecting individuals across all age groups and professions. Despite the availability of various wellness platforms and mental health services, the local community often lacks access to a streamlined, user-friendly system that addresses stress management in a holistic and personalized manner. Recognizing this gap, our team has developed a comprehensive database-driven application designed to support individuals in managing stress effectively.

The primary objective of this project is to provide users with tailored stress-relief resources based on their specific needs and preferences. The system maintains detailed records of user profiles, stress triggers, coping strategies, and progress tracking.

By organizing this data efficiently, the platform enables users to access guided meditation sessions, breathing exercises, mood tracking tools, and expert recommendations with ease.

This system empowers local wellness centers and mental health practitioners to deliver targeted support, monitor user engagement, and refine intervention strategies. By offering a structured and accessible approach to stress management, the platform not only enhances individual well-being but also contributes to building a healthier, more resilient community. Through this initiative, we aim to bridge the gap between traditional mental health services and modern digital solutions, fostering a culture of proactive self-care and emotional balance.

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2.RITHIKA.L

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CHAPTER 1

1.1 INTRODUCTION

The Stress Management System is designed to help individuals access essential information related to their mental well-being and track their stress levels effectively. The platform provides users with a personalized dashboard that displays their stress history, coping strategies, and available wellness resources. By offering a clear overview of stress-related data, the system enables users to assess their emotional state and choose appropriate interventions based on convenience and personal needs. This structured approach empowers users to take proactive steps toward managing stress and improving their overall mental health.

1.2 SCOPE OF THE WORK

The Stress Management System is designed to help individuals access personalized mental wellness support amidst the growing need for effective stress relief solutions. It offers quick and easy accessibility to a wide range of users, enabling them to monitor their emotional well-being, explore coping strategies, and engage with resources tailored to their specific needs. By streamlining access to stress management tools, the system empowers users to take control of their mental health and promotes a culture of proactive self-care within the community.

1.3 SCOPE OF THE WORK

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1.5 PROBLEM STATEMENT

Despite the rise of global wellness platforms, many local communities still lack access to effective stress management services. High demand and limited availability create barriers for individuals seeking support. This project addresses that gap by offering a simple, accessible system tailored to local needs, helping users manage stress more effectively and conveniently.

1.6 AIM AND OBJECTIVES OF THE PROJECT

The main objective of this project is to provide personalized stress management support based on individual user needs. The system helps maintain detailed records of stress levels, coping strategies, and available wellness resources. By organizing and delivering targeted interventions efficiently, the platform enables local wellness providers to offer superior service and stand out in a competitive mental health landscape.

CHAPTER 2

SYSTEM SPECIFICATIONS

2.1 HARDWARE SPECIFICATIONS

Processor	:	RMD RYZEN
Memory Size	:	8 GB DDR4 (Minimum)
HDD	:	1 TB HDD(Minimum)

2.2 SOFTWARE SPECIFICATIONS

Operating System	:	WINDOWS 11
Front – End	:	Java swing
Back – End	:	MySQL
Language	:	Java SQL

CHAPTER 3

MODULE DESCRIPTION

This application consists of two modules. When the program runs, it will ask for confirmation to the login window. The person who interacts can login as an Administrator or as a User. The description of the modules are as follows:

1. **Admin login**

   When the person who interacts tries to login as Admin then he needs to login with his username and password. The administrator only has the power to change and manipulate the data in the database.

2. **User login**

   When the person tries to login as a user then he/she will be prompted to enter

   The number of symptoms and the final result will be printed in the form of table.

CHAPTER 4

SAMPLE CODING

```
package ui;

import db.DatabaseManager;
import javax.swing.*;
import java.awt.*;

public class LoginUI extends JFrame {
    private JTextField usernameField;
    private JPasswordField passwordField;
    private DatabaseManager db = new DatabaseManager();

    public LoginUI() {
        setTitle("StressFree - Login");
        setDefaultCloseOperation(EXIT_ON_CLOSE);
        setSize(400, 300);
        setLocationRelativeTo(null);
        setLayout(new GridLayout(5, 1, 10, 10));

        add(new JLabel("Username:", SwingConstants.CENTER));
        usernameField = new JTextField();
        add(usernameField);

        add(new JLabel("Password:", SwingConstants.CENTER));
        passwordField = new JPasswordField();
        add(passwordField);

        JButton loginBtn = new JButton("Login");
        JButton signupBtn = new JButton("Signup");
        JPanel btnPanel = new JPanel();
        btnPanel.add(loginBtn);
        btnPanel.add(signupBtn);
```

```
        add(btnPanel);

        loginBtn.addActionListener(e -> {
            String user = usernameField.getText();
            String pass = new String(passwordField.getPassword());
            if (db.validateUser(user, pass)) {
                JOptionPane.showMessageDialog(this, "Welcome " + user + "!");
                new DashboardUI(user).setVisible(true);
                dispose();
            } else {
                JOptionPane.showMessageDialog(this, "Invalid credentials");
            }
        });

        signupBtn.addActionListener(e -> {
            new  SignupUI().setVisible(true);
            dispose();
        });
    }

    public static void main(String[] args) {
        SwingUtilities.invokeLater(() -> new LoginUI().setVisible(true));
    }
}
```

Sample 1

Sample-1 depicts the display code, that gets the data from the database i.e. being stored there and represented on users demand with the layout and measurements i.e. being already specified.

```
package db;


import java.sql.*;

public class DatabaseManager {

 private static final String DB_URL = "jdbc:sqlite:stressfree.db";
```

```
public DatabaseManager() {
        createTables();
}
private void createTables() {
        try (Connection conn = DriverManager.getConnection(DB_URL);
            Statement stmt = conn.createStatement()) {
            stmt.executeUpdate("""
                CREATE TABLE IF NOT EXISTS users(
                    id INTEGER PRIMARY KEY AUTOINCREMENT,
                    username TEXT UNIQUE,
                    password TEXT
                );
            """);
            stmt.executeUpdate("""
                CREATE TABLE IF NOT EXISTS moods(
                    id INTEGER PRIMARY KEY AUTOINCREMENT,
                    username TEXT,
                    mood TEXT,
```

```
timestamp DATETIME DEFAULT CURRENT_TIMESTAMP
                );
            """);
        } catch (SQLException e) {
            e.printStackTrace();
        }
    }

    public boolean registerUser(String username, String password) {
        String sql = "INSERT INTO users(username, password) VALUES (?,
?)";
        try (Connection conn = DriverManager.getConnection(DB_URL);
            PreparedStatement ps = conn.prepareStatement(sql)) {
            ps.setString(1, username);
            ps.setString(2, password);
            ps.executeUpdate();
            return true;
        } catch (SQLException e) {
```

```
            return false;
        }
    }

    public boolean validateUser(String username, String password) {
        String sql = "SELECT * FROM users WHERE username=? AND
password=?";
        try (Connection conn = DriverManager.getConnection(DB_URL);
            PreparedStatement ps = conn.prepareStatement(sql)) {
            ps.setString(1, username);
            ps.setString(2, password);
            ResultSet rs = ps.executeQuery();
            return rs.next();
        } catch (SQLException e) {
            return false;
        }}}
```

CHAPTER 5

SCREEN SHOTS

Fig 5.1 Introduction page

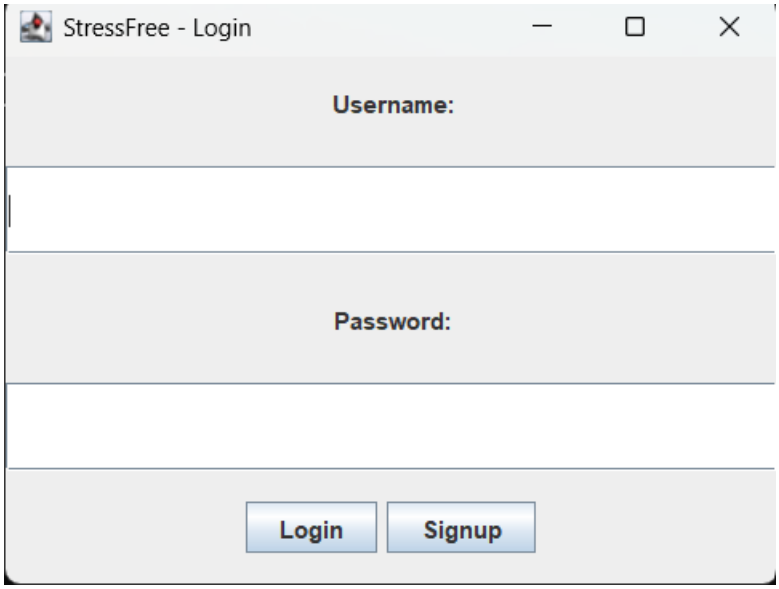

Fig 5.2 Home page

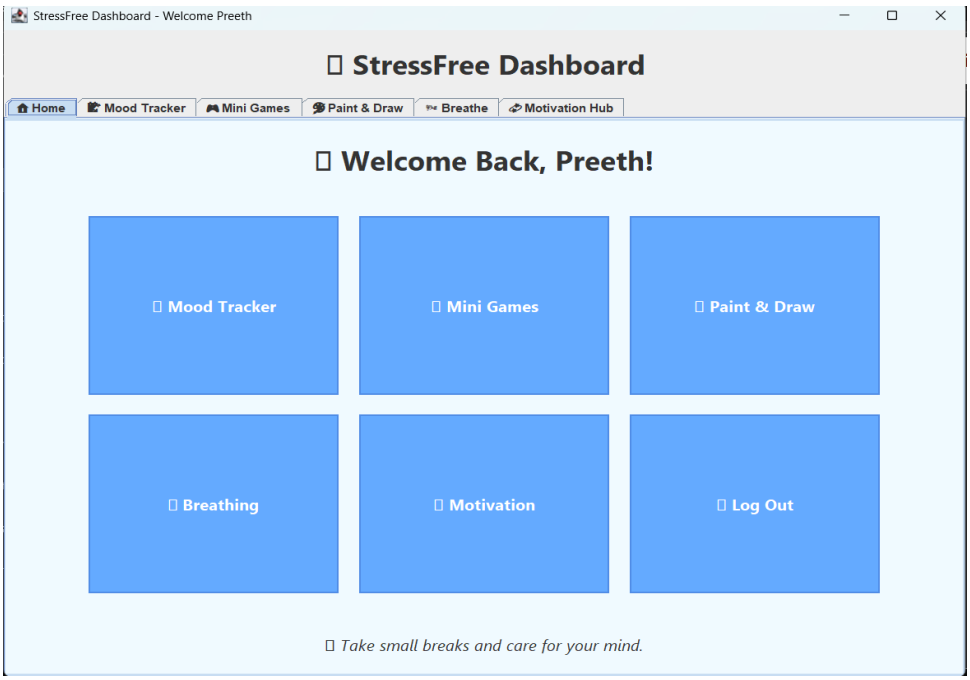

Fig 5.3 Motivation hub

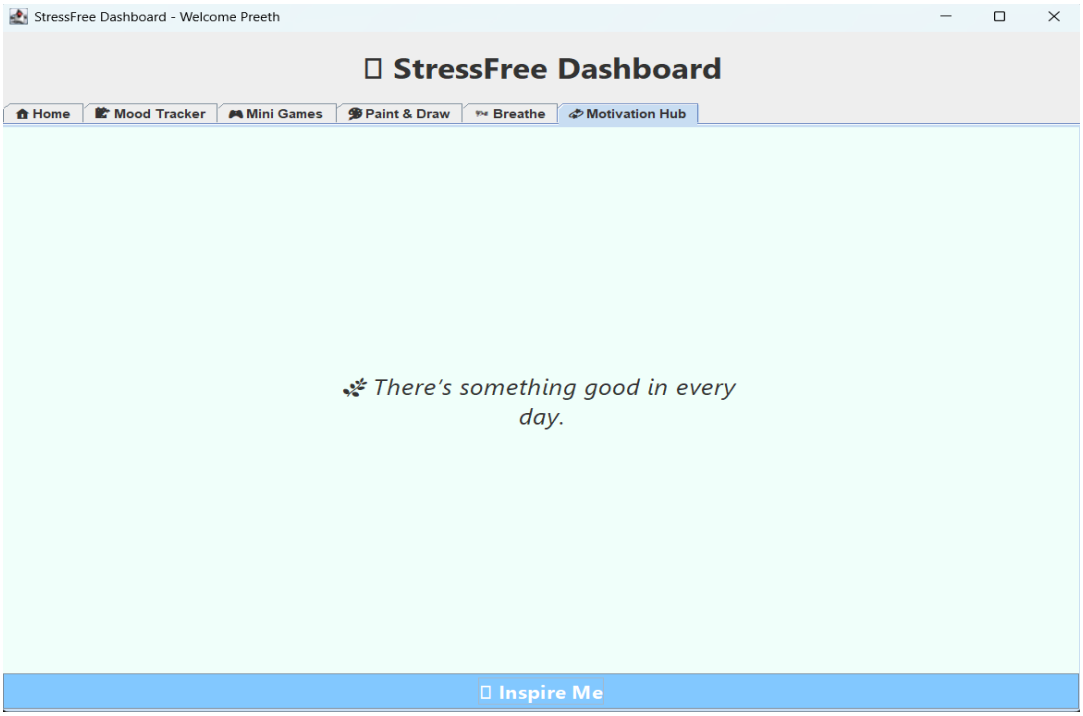

Fig 5.4 Mini games

Fig 5.5 Art space

Fig 5.6 Breathe regulating exercise

CHAPTER 6

CONCLUSION AND FUTURE ENHANCEMENT

Through the development of our Stress Management System, users are empowered to monitor their emotional well-being and access personalized resources to manage stress effectively. The system allows individuals to register, log their stress levels, and explore a curated list of coping strategies tailored to their needs. By maintaining a structured database of user interactions, stress triggers, and relief activities, the platform simplifies the management and tracking of mental wellness.

In the future, the system can be enhanced to include AI-driven recommendations, integration with wearable devices for real-time stress monitoring, and community support features to foster peer engagement. Users will be able to receive timely interventions based on their stress patterns and availability of support resources. Ultimately, this project aims to benefit users by offering a holistic, accessible, and data-driven approach to stress management, contributing to a healthier and more balanced lifestyle.

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