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# Sign Up

START Sign-Up Process

DISPLAY registration form

INPUT userID, password1, password2, email, profile, name

// Validation Checks

IF (userID is not unique in database) THEN

DISPLAY "User ID already exists. Please choose a different one."

ELSE IF (password1 != password2) THEN

DISPLAY "Passwords do not match. Please retype your password."

ELSE IF (email format is invalid) THEN

DISPLAY "Invalid email format. Please enter a valid email."

ELSE IF (profile is empty) THEN

DISPLAY "Profile field cannot be empty. Please fill in your profile."

ELSE IF (name is empty) THEN

DISPLAY "Name field cannot be empty. Please enter your name."

ELSE

// All validations passed

CONNECT to database

INSERT INTO Users (userID, password, email, profile, name)

VALUES (userID, password1, email, profile, name)

IF (database insertion is successful) THEN

DISPLAY "Registration successful! Welcome to Rolsa Technologies."

ELSE

DISPLAY "Registration failed. Please try again later."

END IF

END IF

END Sign-Up Process

# Log In

START Login Process

DISPLAY login form

INPUT username, password

attempts = 3

WHILE (attempts > 0) DO

IF (username exists in database) THEN

IF (password matches the username in database) THEN

DISPLAY "Login successful! Redirecting to the dashboard."

OPEN dashboard page

EXIT

ELSE

DISPLAY "Incorrect password. Please try again."

attempts = attempts - 1

END IF

ELSE

DISPLAY "Username not found. Please check your username."

attempts = attempts - 1

END IF

END WHILE

IF (attempts == 0) THEN

DISPLAY "Too many failed attempts. Please contact support."

END IF

END Login Process

# Homepage

START Homepage Process

DISPLAY "Welcome to Rolsa Technologies"

DISPLAY Navigation Bar with links to: Home, About Us, Services, Contact, Login/Logout

IF (user is logged in) THEN

DISPLAY "Hello, [username]. You are logged in."

DISPLAY "Logout" button

ELSE

DISPLAY "Please login or sign up to access more features."

DISPLAY "Login" button

DISPLAY "Sign Up" button

END IF

DISPLAY "Featured Products/Services"

DISPLAY List of featured items (e.g., images, descriptions, links to product pages)

DISPLAY "News/Updates Section"

DISPLAY Latest news or blog posts (e.g., headlines with links to full articles)

DISPLAY "Customer Testimonials Section"

DISPLAY Testimonials from users (e.g., quotes, ratings, and user photos)

// Footer Section

DISPLAY "© [Year] Rolsa Technologies. All rights reserved."

DISPLAY Social media links (Facebook, Twitter, Instagram)

IF "Login" button is clicked THEN

OPEN login page

ELSE IF "Sign Up" button is clicked THEN

OPEN sign-up page

ELSE IF "Logout" button is clicked THEN

LOGOUT user

DISPLAY "You have successfully logged out."

REFRESH page to show "Login/Sign Up" options

END IF

END Homepage Process

# Product Information Page

START Product Information Process

DISPLAY green energy product catalogue

DISPLAY product comparison tool

FOR EACH product IN catalogue DO

DISPLAY product details (description, pricing, customer reviews)

END FOR

END Product Information Page

# Consultation and Scheduling Page

START Consultation and Scheduling Process

DISPLAY consultation booking form

DISPLAY installation scheduling form

DISPLAY calendar integration for available time slots

INPUT user details (name, email, phone, service type)

INPUT preferred date and time

IF (date and time are available) THEN

CONNECT to database

INSERT INTO Appointments (userID, serviceType, date, time)

VALUES (userID, serviceType, date, time)

DISPLAY "Appointment booked successfully!"

ELSE

DISPLAY "Selected time is unavailable. Please choose another time."

END IF

END Consultation and Scheduling Process

# Carbon Footprint Calculator Page

START Carbon Footprint Calculator Process

DISPLAY carbon footprint calculator form

DISPLAY form for energy usage data (electricity, gas, vehicle mileage)

IF (user submits form) THEN

CALCULATE carbon footprint based on input data

DISPLAY "Your carbon footprint is [result] tons/year."

DISPLAY personalized recommendations for reducing carbon footprint

END IF

DISPLAY personalized recommendations for reducing carbon footprint

END Carbon Footprint Calculator Process

# Energy Usage Monitoring Page

START Energy Usage Monitoring Process

DISPLAY real-time energy usage data

DISPLAY historical energy usage analysis (e.g., graphs, trends)

DISPLAY energy-saving tips

IF (user is logged in) THEN

FETCH energy usage data from database

DISPLAY data in user-friendly format

ELSE

DISPLAY "Please log in to view your energy usage."

END IF

END Energy Usage Monitoring Process

# Membership Page

START Energy Usage Monitoring Process

DISPLAY real-time energy usage data

DISPLAY historical energy usage analysis (e.g., graphs, trends)

DISPLAY energy-saving tips

IF (user is logged in) THEN

FETCH energy usage data from database

DISPLAY data in user-friendly format

ELSE

DISPLAY "Please log in to view your energy usage."

END IF

END Energy Usage Monitoring Process

# User Account Page

START User Account Process

IF (user is logged in) THEN

DISPLAY account registration form (if new user)

DISPLAY user profile management options (edit personal information, view consultation history)

DISPLAY authentication and security settings (e.g., two-factor authentication, data encryption)

ELSE

DISPLAY "Please log in to access your account."

END IF

END User Account Process

# Accessibility Page

START Accessibility Settings Process

DISPLAY accessibility options (e.g., screen reader support, voice navigation, high-contrast mode)

INPUT user preferences (e.g., enable high-contrast mode, enable voice navigation)

IF (user saves preferences) THEN

UPDATE user settings in database

DISPLAY "Accessibility settings updated successfully!"

ELSE

DISPLAY "No changes were made."

END IF

END Accessibility Settings Process