



**EPOKA UNIVERSITY**

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# SCRMS

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CEN302 - Software Engineering Project Introduction

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# Project Goal

The objective of this Software Engineering project is to effectively apply our acquired knowledge as students to tackle an identified problem, and subsequently resolve this problem by developing a software solution.

The identified problem for this project was conducted by a needs analysis, which found that the current systems in Albania are inadequate in managing customer data and providing personalized communication. Companies struggle to keep track of customer interactions, track sales leads, and maintain relationships due to the limitations of their current CRM system.

The purpose of SCRMS is to provide a prototype version of a futuristic software, to improve the customer experience, streamline the sales process, and enhance the overall efficiency of customer relationship management between Albanian companies and their clients.

# User Requirements

- A Registration and Sign-In function for guests, users, and staff.
  - A display of customer interactions and purchase history.
- An overview of customer data, lead contacts, and performance metrics.
- Features to add, update, and delete their business' information and contact leads.
- Overall, it's important to ensure that the software is user-friendly and intuitive, so users can easily navigate and use all of its features.

# Application Specifications

The product scope of this web-based application includes a profile page, customer profile page, lead management, dashboard, and automated communication.

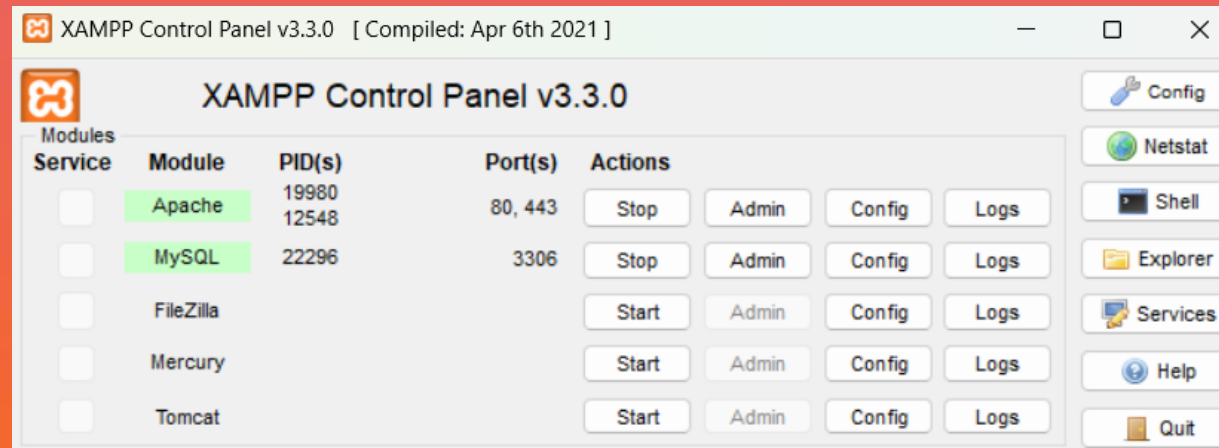
- The application will contain a Login and Signup feature. Each user and company will have their own separate sets of data, such as leads, contacts, and sales.
  - The profile page will allow the user to view and update their personal data.
- The customer profile page will contain personal data regarding to their customers' purchases, all relating to the user.
  - The dashboard page will provide the user with graphical and calculated results of their sales.
  - The lead management page will allow the user to view, search, update, and delete their contacts and contact leads. This feature has yet to be implemented and is part of the software evolution.
- The automated communication feature will allow businesses to send personalized messages, emails, and offers to customers based on their behavior and preferences. This feature has yet to be implemented and is part of the software evolution.



# Project Implementation

The programming language used for this software project is PHP, followed by features of HTML, CSS, SQL, and JavaScript.

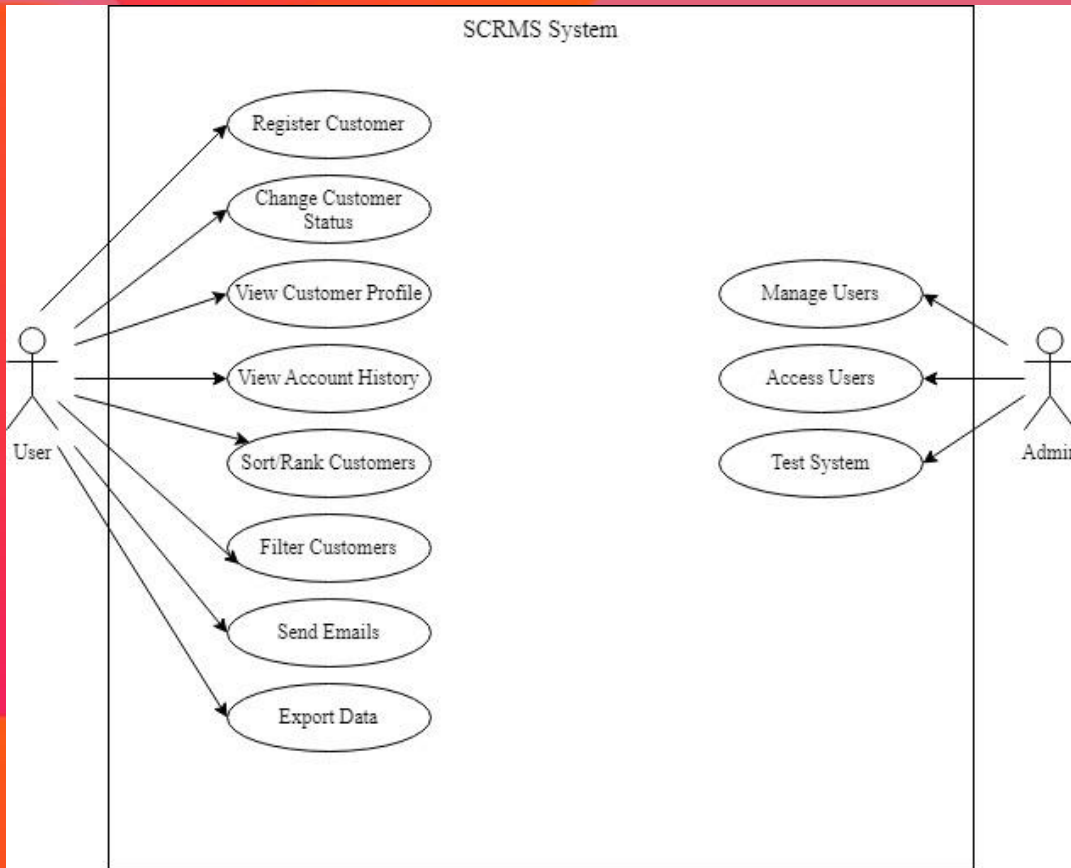
To be able to access this application and host it locally, open-source web server solution packages such as the XAMPP Control Panel should be installed and activated.



After downloading the files from the GitHub repository, the files should be placed in the correct order inside the 'xampp'->'htdocs' folder found in the PC that will run the application. The application then can run after placing the following code in any browser

URL: <http://localhost/SCRMS/index.php>

# Software Design And Modeling



## Use Case Diagram:

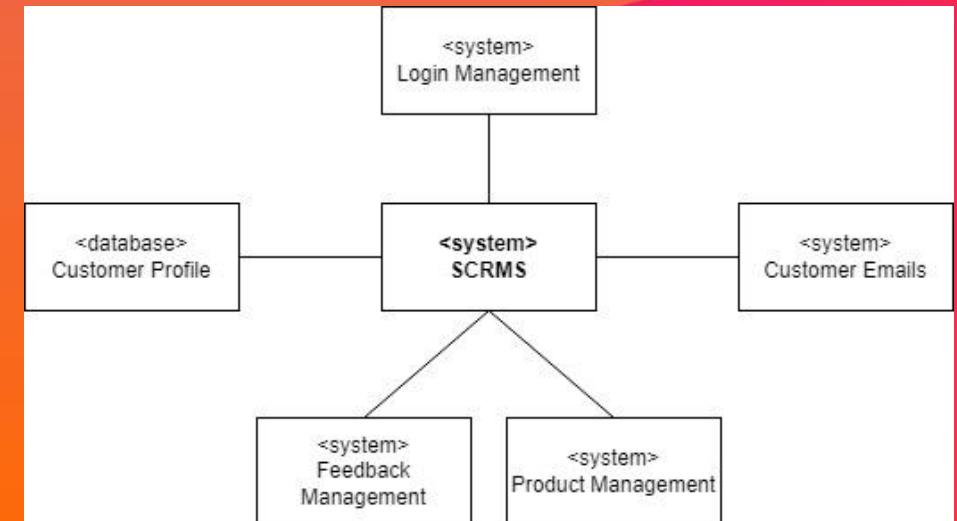
The software will consist of two main roles – users and admins.

Each user is able to view, insert, update, and delete their customers, contacts, and leads.

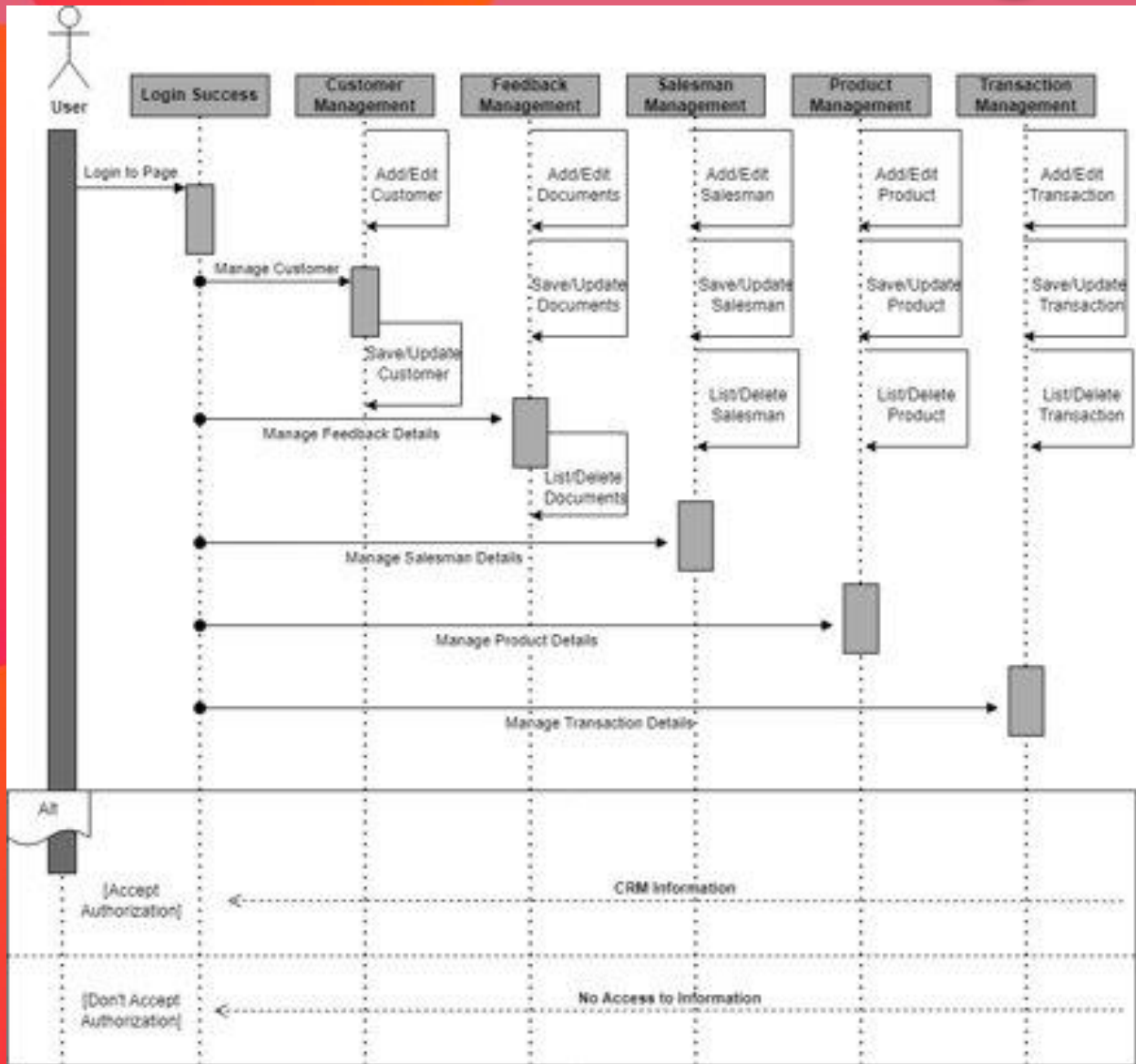
Admins are able to manage, access and assist users, and they test the system.

## Context Diagram:

This model provides a definition of how context data is structured and maintained, by using various systems and the database.



# Software Design And Modeling



## Sequence Diagram:

This model provides a description, explaining how, and in what order, a group of objects work together within the SCRMS software.

Additionally, if the users' authorization is denied, they cannot proceed with any of the demonstrated features.

Otherwise, they are provided with the information appropriate and related to their company.



# Application Visuals

## Index.php

The homepage of the application. The user is able to Sign Up or Log In, and they are unable to access any other feature of the website until they have logged in.

SCRMS - Home

localhost/SCRMS/index.php?error=none

SCRMS Lead Management Dashboard Contacts Sign Up Log In

## Welcome to SCRMS

### Sign Up

Full Name

Company

Email

Password

Repeat Password

☐ I have read and agree to the Terms of Service and Privacy Policy.

SIGN UP

### Log In

Email

Password

LOG IN

Forgot your password?

If provided with an existing user's information in the Sign Up form, the application will be redirected to <index.php?error=usertaken> and print a "user taken" error.

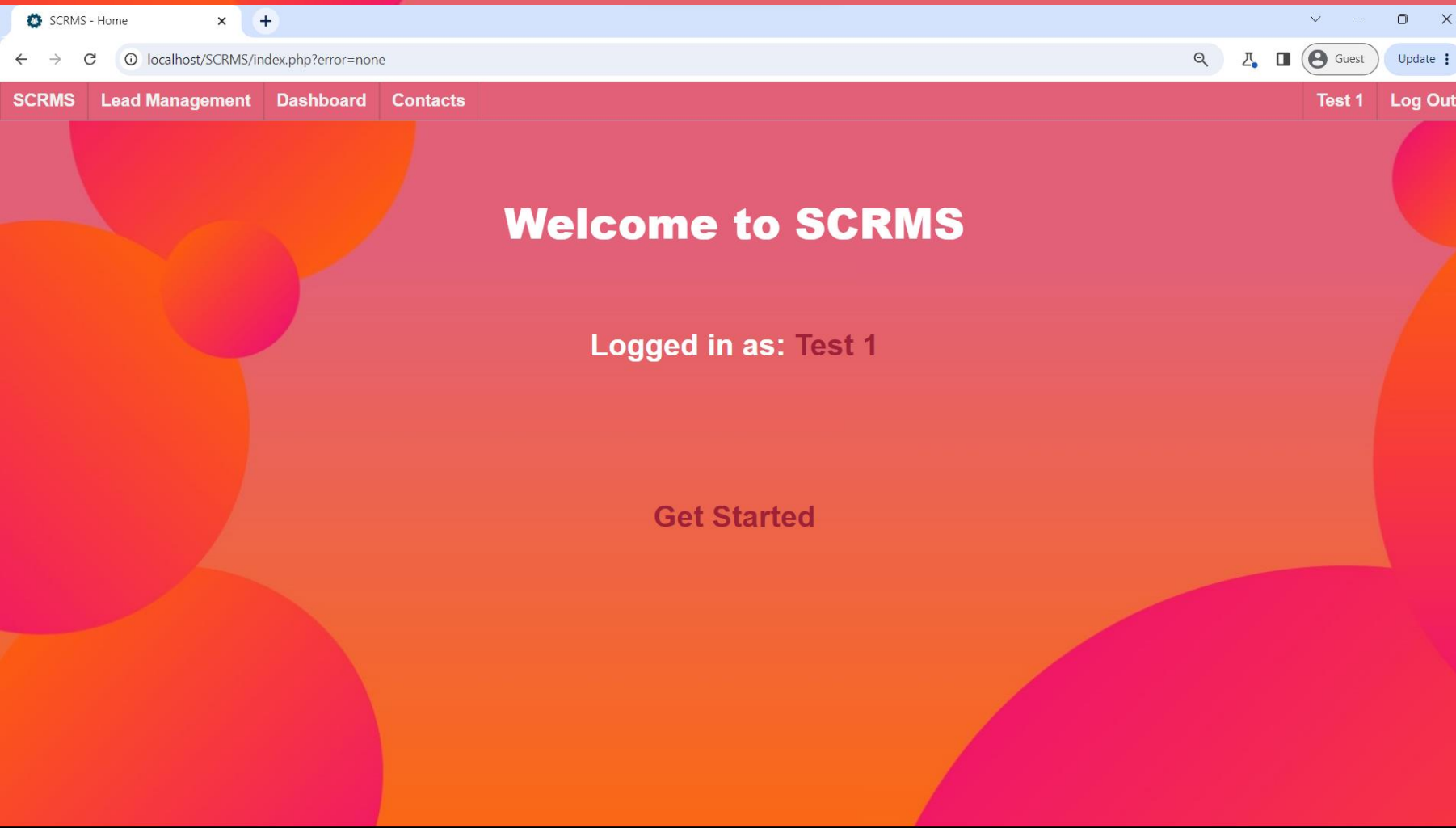
If provided with incorrect data for the Log In form, the page will be redirected to <index.php?error=usernotfound> and print an error.

If there are no additional errors, the user should be able to successfully proceed.

# Application Visuals

## Index.php?error=none

After Logging In, the index.php interface will change as seen in the image below. Now the user is able to access the software's features.



By clicking on the user's name (in this case Test 1), the user will be redirected to their profile.

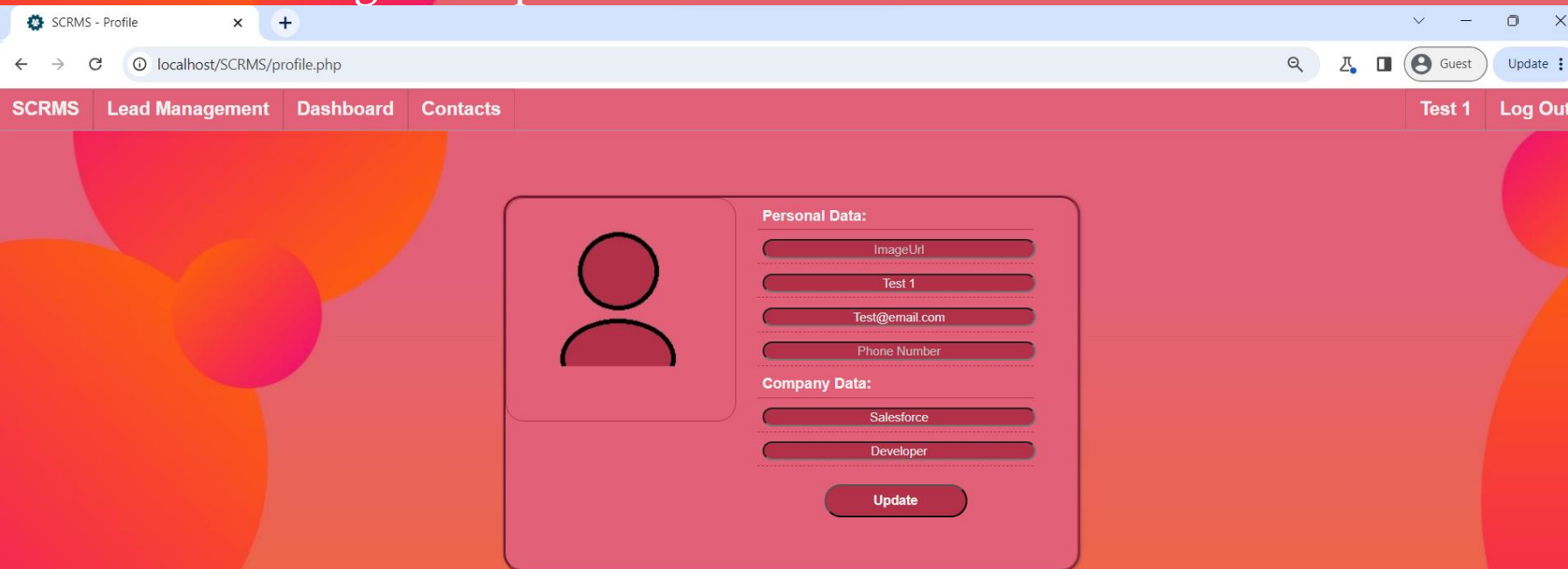
If the user clicks on Get Started, they will be redirected to their company's dashboard page.

If they select other features as seen from the top menu, they will be able to access other pages, as their names indicate.

# Application Visuals

## Profile.php

After clicking on the User's Name, the application will be redirected to the user's profile, where they are able to view and change their personal data.



The screenshot shows a web browser window with the address bar displaying 'localhost/SCRMS/profile.php'. The page has a top navigation bar with links: SCRMS, Lead Management, Dashboard, and Contacts. On the right of the navigation bar, there is a 'Test 1' button and a 'Log Out' button. The main content area features a profile card with a placeholder image on the left. To the right of the image, there are two sections: 'Personal Data' and 'Company Data'. The 'Personal Data' section contains four input fields with the following values: 'ImageUrl', 'Test 1', 'Test@email.com', and 'Phone Number'. The 'Company Data' section contains two input fields with the values 'Salesforce' and 'Developer'. Below these sections is an 'Update' button.

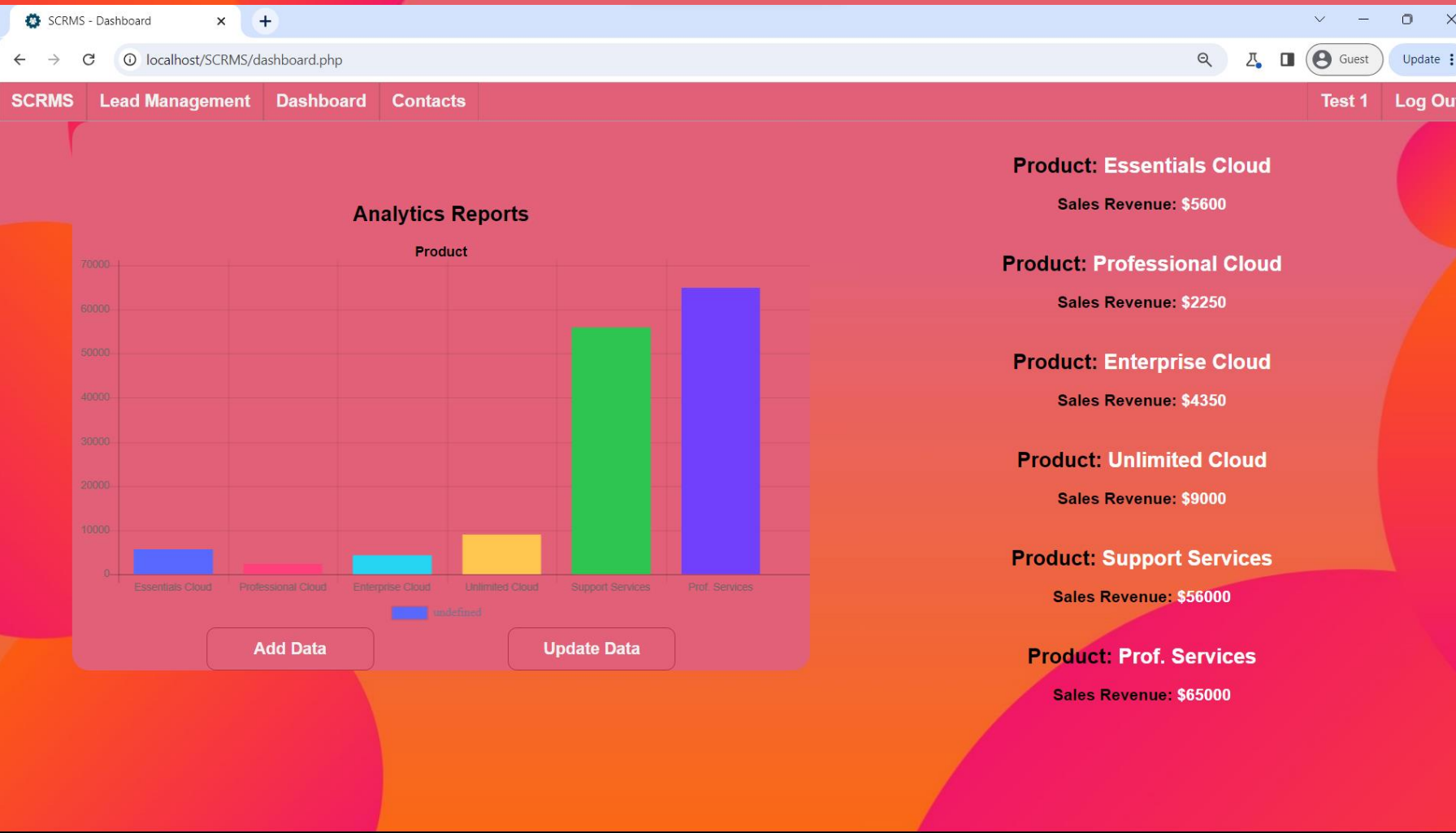
As the user changed their personal data, after clicking on 'Update', the page changes to the new saved data ([profile.php#update](#)) and the changes are stored into the "users" table of the database.

If the user selects other features from the top menu, they will be redirected to:  
SCRMS -> [index.php](#)  
Lead Management -> [yet to be developed](#)  
Dashboard -> [dashboard.php](#)  
Contacts -> [contacts.php](#)

# Application Visuals

## dashboard.php

After clicking on "Get Started", the user is redirected to this page, where they are able to view their products and their sales revenues.



Product names and sales values on the left of the page are all retrieved from the "salesdb" table of the database.

Each of the following leads the user to a separate feature: "Add Data" will redirect users to the [addData.php](#) page.

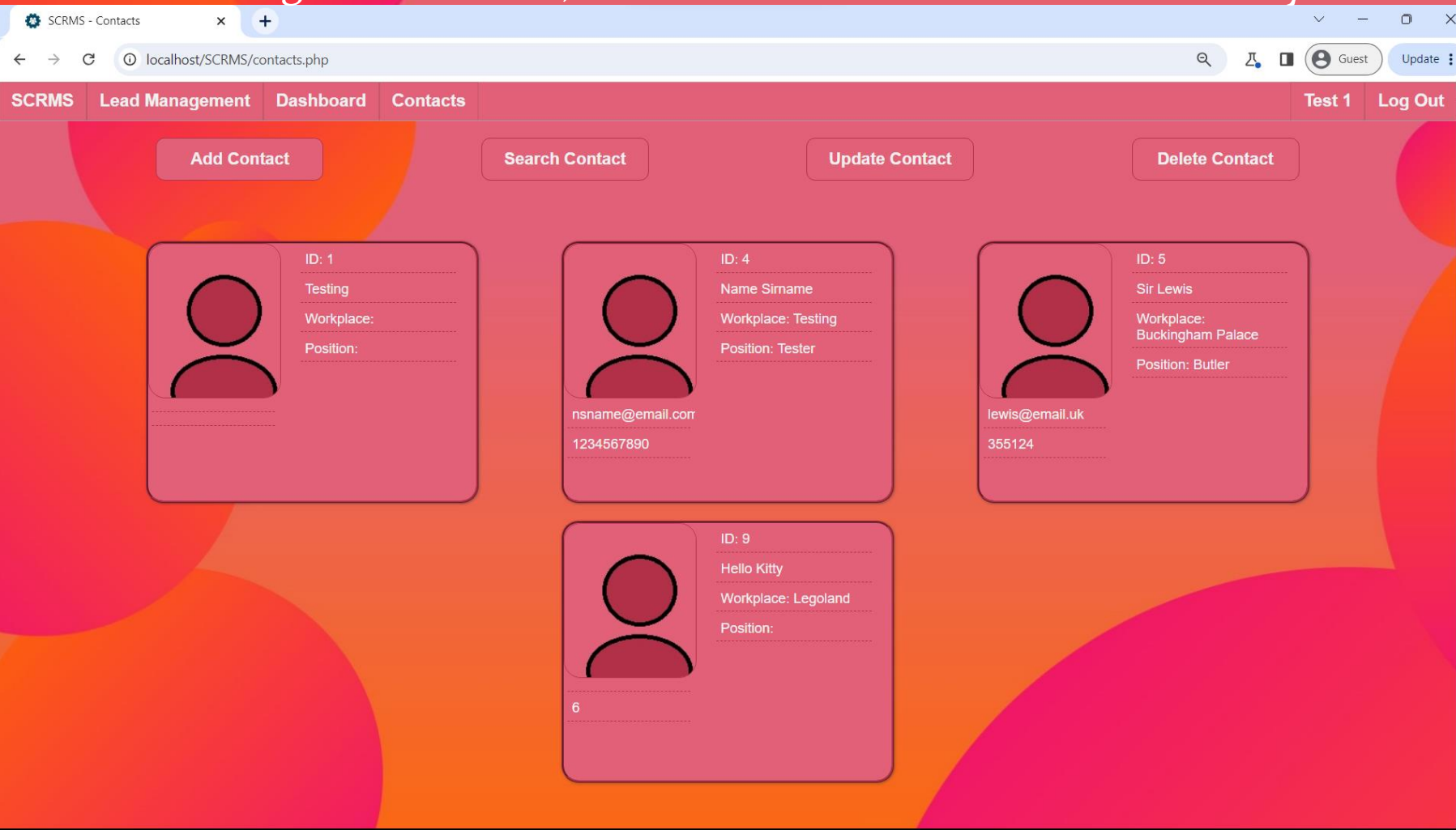
"Update Data" will redirect users to the [updateData.php](#) page.



# Application Visuals

## contacts.php

Clicking on the 'Contacts' feature from the top menu will redirect the user to this page. This page serves as the lead management feature, where the user will be able to view only their contact leads.



Each of the following leads the user to a separate feature: "Add Contact" will redirect users to the [addContact.php](#) page.

"Search Contact" will redirect users to the [searchContact.php](#) page.

"Update Contact" will redirect users to the [updateContact.php](#) page.

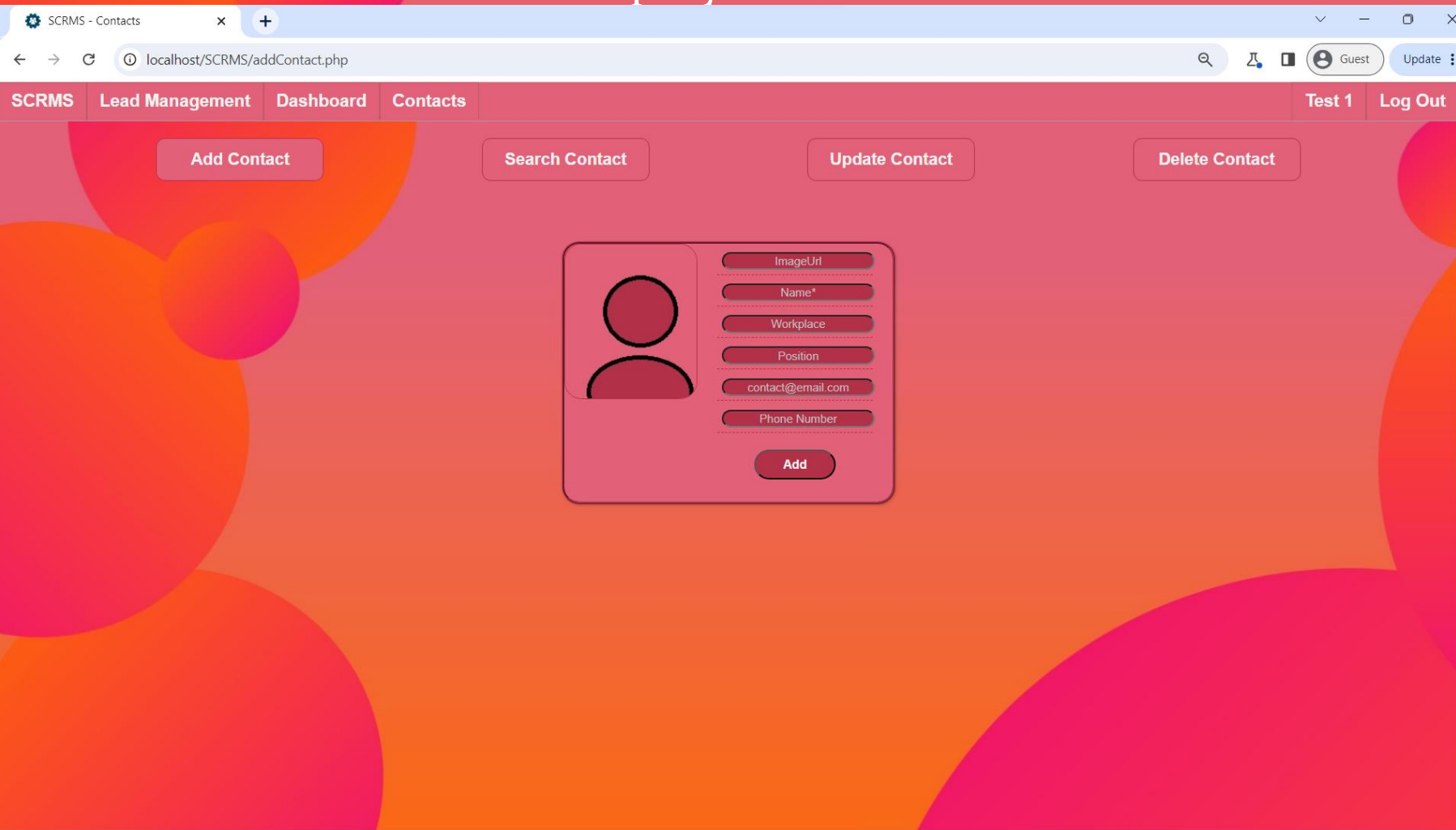
"Delete Contact" will redirect users to the [deleteContact.php](#) page.



# Application Visuals

## AddContact.php

After clicking on the "Add Contact" <a> tag, the user is redirected to this page, where they are able to add new contacts related to their company.



The screenshot displays a web browser window with the URL `localhost/SCRMS/addContact.php`. The application interface features a top navigation bar with tabs for **SCRMS**, **Lead Management**, **Dashboard**, and **Contacts**. On the right side of the navigation bar, there are links for **Test 1** and **Log Out**. Below the navigation bar, there are four buttons: **Add Contact**, **Search Contact**, **Update Contact**, and **Delete Contact**. The main content area contains a form for adding a new contact. The form includes a profile picture placeholder on the left and a series of input fields on the right: **ImageUrl**, **Name\***, **Workplace**, **Position**, **contact@email.com**, and **Phone Number**. At the bottom of the form is an **Add** button.

The data input by the user will be stored in the database table "contacts", associated with the user's lead id and the company name.

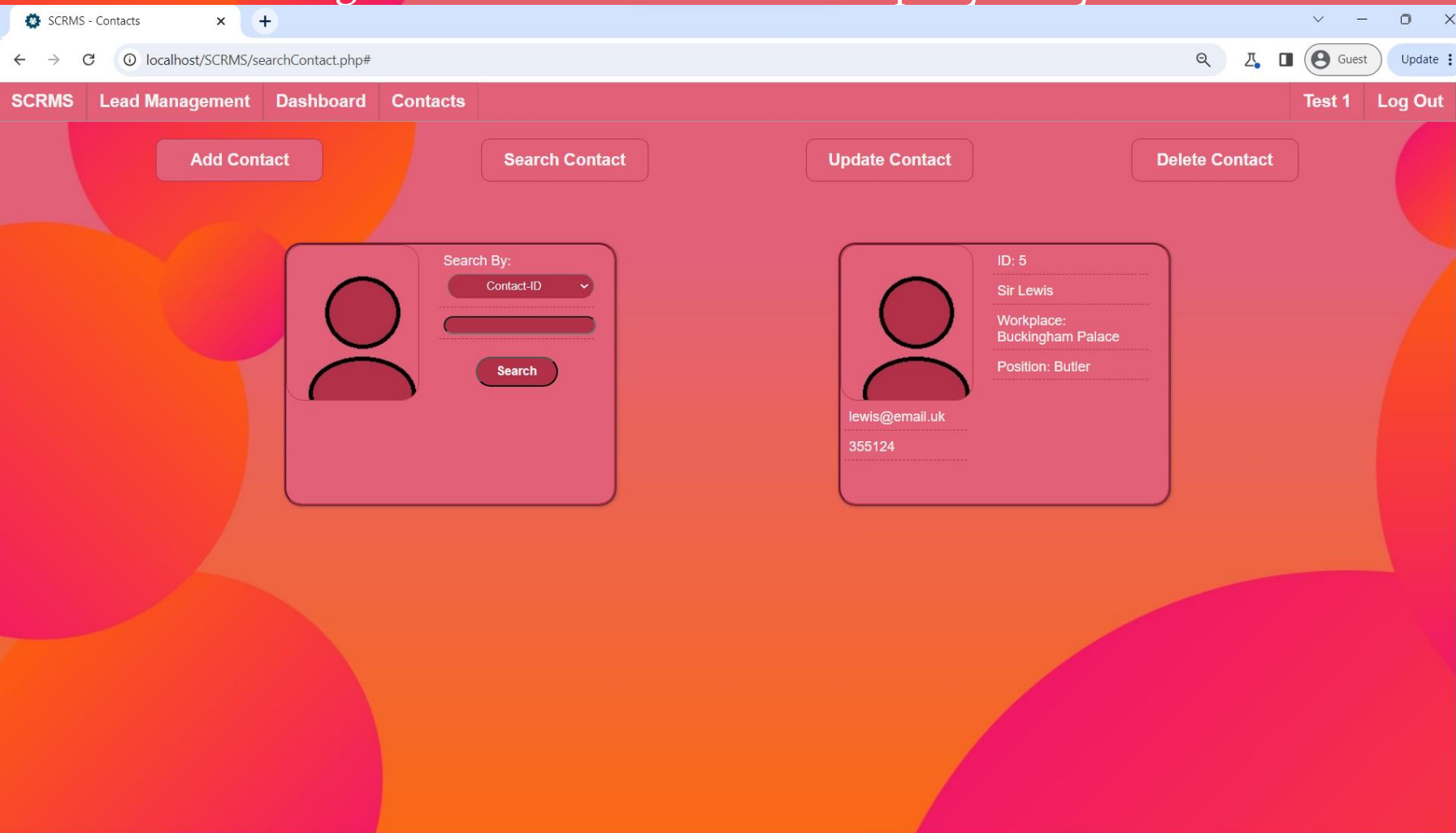
The name is the only requirement for the user to input, and the contacts' id are automatically incremented by the application.

Similar to the `contacts.php` file, the user will be redirected to another page if they click on any other feature of the user interface.

# Application Visuals

## SearchContact.php

After clicking on the "Search Contact" <a> tag, the user is redirected to this page, where they are able to search for existing contacts related to their company. They are able to search for contacts using id or name.



If the user inputs an existing contact, the second "contact card" will retrieve and print the contact with the according id/name for the user to find.

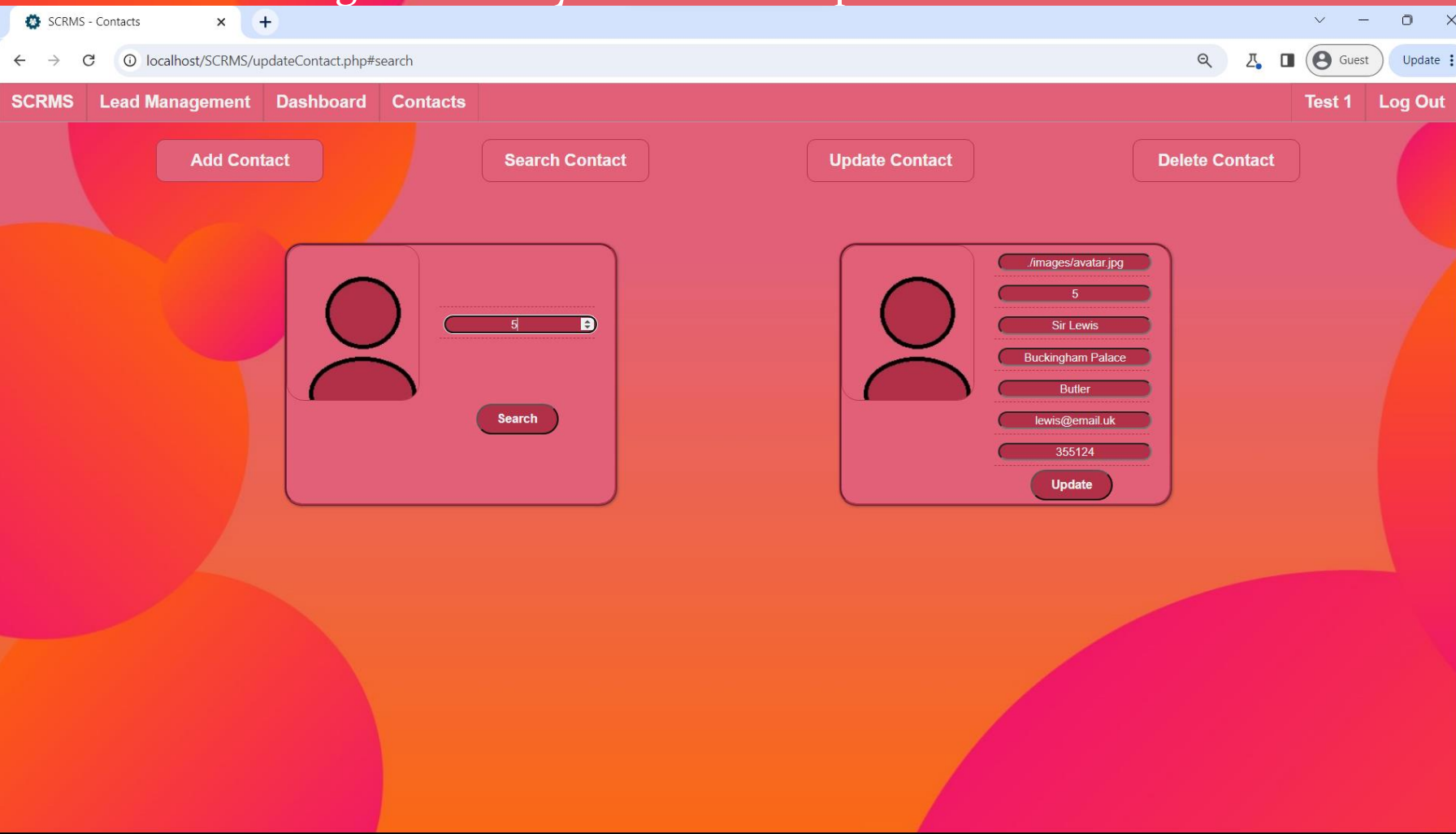
If the user inputs an id or name that is not part of their data, the second "contact card" will print "No data found".

Similar to the contacts.php file, the user will be redirected to another page if they click on any other feature of the user interface.

# Application Visuals

## UpdateContact.php

After clicking on the "Update Contact" <a> tag, the user is redirected to this page, where they are able to search for existing contacts by their id and update them.



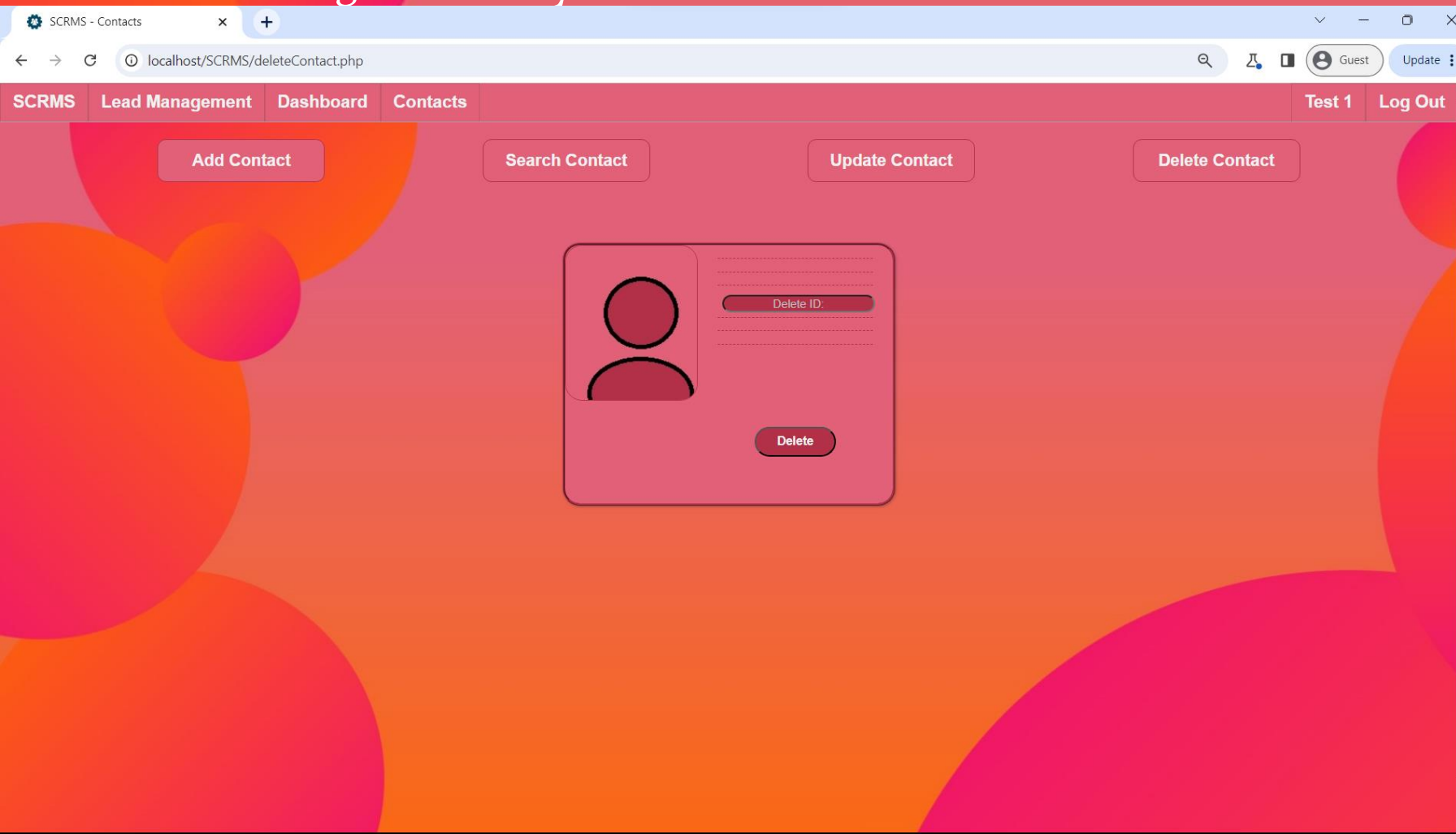
If the user inputs an existing contact, the second "contact card" will retrieve and print the contact with the according id, and the user is able to change the contact information. The changes are stored directly into the database.

If the user inputs an id that is not part of their data, the second "contact card" will print "ID: \_ not found".

# Application Visuals

## DeleteContact.php

After clicking on the "Delete Contact" <a> tag, the user is redirected to this page, where they are able to search for existing contacts by their id and delete them.



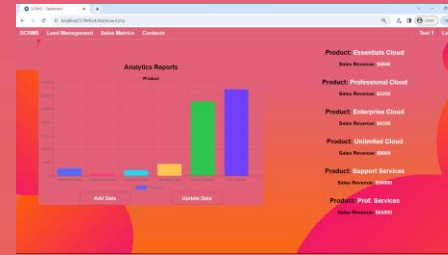
After confirming, if the user inputs an existing contact id, the contact and their information will be deleted from the database.

If the user inputs and attempts to delete an id that is not part of their data, the user will be redirected to an error [deleteContact.php?error=contactnotfound](#) which does not delete any contact.



# Application Visuals

dashboard.php



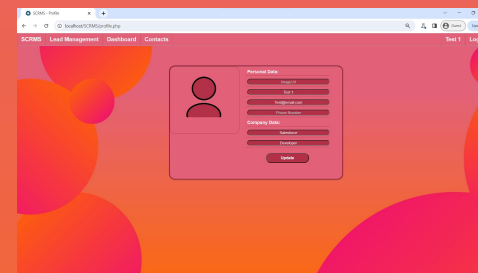
index.php



index.php?error=none



profile.php



addContact.php  
searchContact.php  
updateContact.php  
deleteContact.php

contacts.php





# Software Evolution

Due to time constraints, several features have not been fully implemented.

The dashboard sections require additional development to reach completion. This will require more time to implement the formulas into the appropriate files, and the creation of additional tables for the database.

The Lead Management has yet to be developed, and may undergo additional features and changes as the application nears its completion.

Furthermore, the automated communication feature, which enables businesses to send customized messages, emails, and offers to customers based on their behavior and preferences, is still awaiting implementation.

Due to the lack of prior knowledge, the Automated Communication was unable to be implemented, however it is a necessity for the evolution of this software application.

Finally, the Graphical User Interface may require more improvement and features in the future, such as color customization, light and dark mode, and more.

Thank You!