

INFO2180 - Project 2 (40 marks)

DUE DATE

Sunday, December 14, 2025

Overview

For this project you are tasked with creating an initial Minimum Viable Product (MVP) for a new Customer Relationship Management (CRM) System called **Dolphin CRM**. This CRM will allow users to add new contacts, view their details and add notes with information about interactions with the contact.

This project is a group project and will require you to be in groups of 3-5 persons. You must declare your groups by the latest **Sunday, November 16, 2025**

Database

You should create a database called `dolphin_crm` which contains the following database tables with the following fields:

Users Table

Column Name	Data Type
<code>id</code> (<i>auto incrementing</i>)	INTEGER
<code>firstname</code>	VARCHAR
<code>lastname</code>	VARCHAR
<code>password</code>	VARCHAR
<code>email</code>	VARCHAR

Column Name	Data Type
role	VARCHAR
created_at	DATETIME

Contacts Table

Column Name	Data Type
id <i>(auto incrementing)</i>	INTEGER
title	VARCHAR
firstname	VARCHAR
lastname	VARCHAR
email	VARCHAR
telephone	VARCHAR
company	VARCHAR
type <i>(whether Sales Lead or Support)</i>	VARCHAR
assigned_to <i>(store the appropriate user id)</i>	INTEGER
created_by <i>(store the appropriate user id)</i>	INTEGER
created_at	DATETIME
updated_at	DATETIME

Notes Table

Column Name	Data Type
id <i>(auto incrementing)</i>	INTEGER
contact_id	INTEGER
comment	TEXT
created_by <i>(store the appropriate user id)</i>	INTEGER
created_at	DATETIME

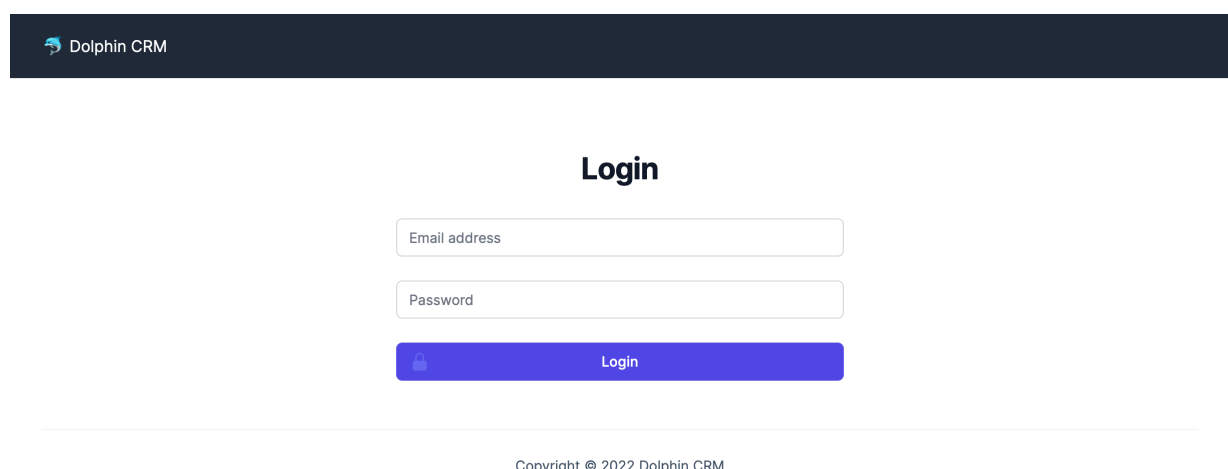
NOTE

Note: You should create a file called `schema.sql` with the relevant `CREATE TABLE` statements for the tables above and include in your submitted code. Also ensure you have an `INSERT` statement that adds a user with the email address `admin@project2.com` and the password `password123` (Of course, you need to ensure that the password is appropriately hashed before using in your `INSERT` statement).

Features

User Login

A user goes to the login page and logs in with their *Email address* and *password* (See *Figure 1*). The system keeps track of the user using PHP sessions. Once logged in they are presented with the Dashboard/Home Screen (See *Figure 4*) which initially shows a list of all the contacts that have been added to the system.



Dolphin CRM

Login

Email address

Password

Login

Copyright © 2022 Dolphin CRM

Figure 1: Dolphin CRM Login Screen

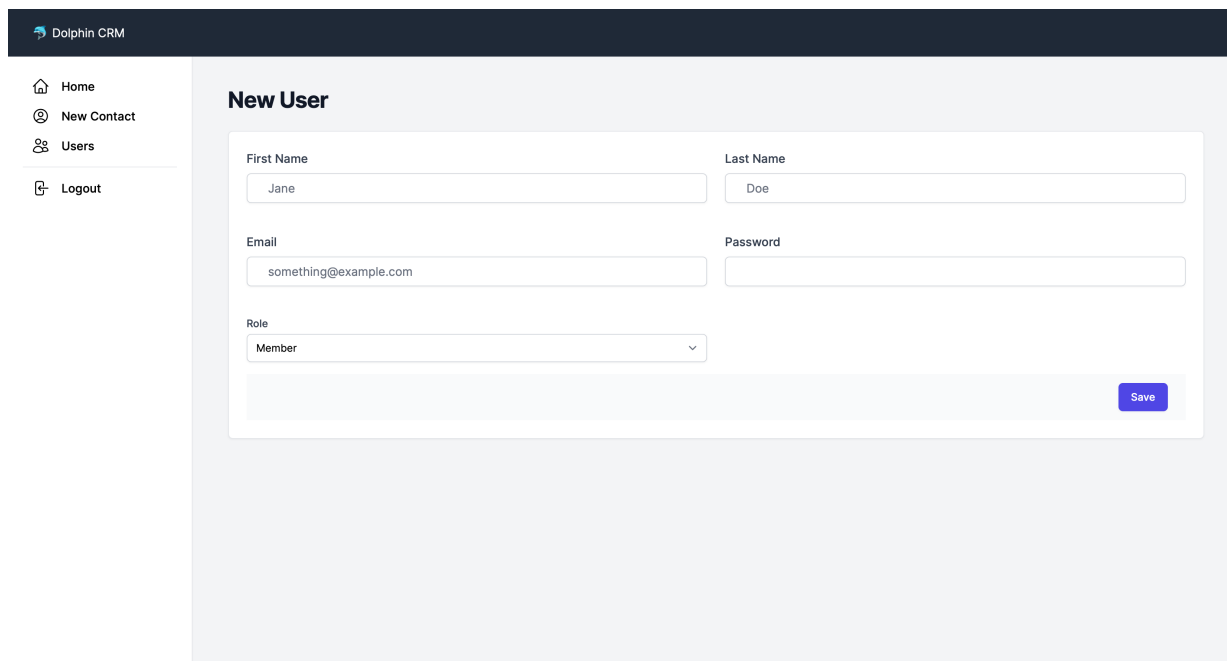
Adding a user

To simplify things for this assignment, users can only be added by an administrator, there is no feature for new users to self-sign up. An administrator logs in and completes the new user form (See *Figure 2*).

You should use regular expressions to ensure that passwords have at least one number and one letter, and one capital letter and are at least 8 characters long. The password **MUST** be hashed before being stored in the database. I suggest you use the PHP `password_hash()` [↗](#) function to hash your passwords.

Users can have a role of either *Admin* or *Member*.

Ensure that all input fields are validated and that user inputs are escaped and sanitized before being inserted into the database. Also provide the user with feedback if the new contact was added successfully or if there are any errors with their submission.



The image shows a wireframe of a 'New User' creation screen within a 'Dolphin CRM' application. The interface features a dark blue header with the 'Dolphin CRM' logo and a sidebar on the left with navigation links: 'Home', 'New Contact', 'Users', and 'Logout'. The main content area is titled 'New User' and contains a form with the following fields: 'First Name' (with the value 'Jane'), 'Last Name' (with the value 'Doe'), 'Email' (with the value 'something@example.com'), and 'Password'. Below these is a 'Role' dropdown menu currently set to 'Member'. A 'Save' button is located at the bottom right of the form.

Figure 2: Wireframe of New User creation screen

View a list of users

The system should also have a page that lists all the users of the system. It should show their full name, email, role and date created in a table (See *Figure 3*). Only an *Admin* should be able to view the list of all users.

Dolphin CRM

Home

New Contact

Users

Logout

Users

+

Add User

Name	Email	Role	Created
Ms. Jan Levinson	jan.levinson@paper.co	Member	2022-11-13 11:00
Mr. David Wallace	david.wallace@paper.co	Admin	2022-11-10 19:00
Mr. Andy Bernard	andy.bernard@paper.co	Member	2022-11-10 11:00
Mr. Darryl Philbin	darryl.philbin@paper.co	Member	2022-11-09 23:00
Ms. Erin Hannon	erin.hannon@paper.co	Member	2022-11-08 13:30

Figure 3: List of Users

User Logout

There will be a logout link/button which a user may click in order to logout of the system. When this is done, the PHP Session should be destroyed and the user redirected to the login screen.

Dashboard/Home Screen

The Dashboard/home screen allows a logged in user to see a list of all the contacts that have been added to the system. The list of contacts should display the contact's title (e.g. Mr, Mrs, Ms, Dr or Prof) and full name, Email, Company, Type of Contact (ie. Sales Lead or Support). There should also be a link that when clicked will allow the user to view the full details of the contact. (See Figure 4)

The page should also have a list of filters to display "All Contacts" no matter their type, "Sales Leads" only, "Support" only or contacts "Assigned to me" which should display only the contacts assigned to the currently logged in user.

There should be a call to action button to *Add New Contact* in the top right of the Dashboard/Home screen.

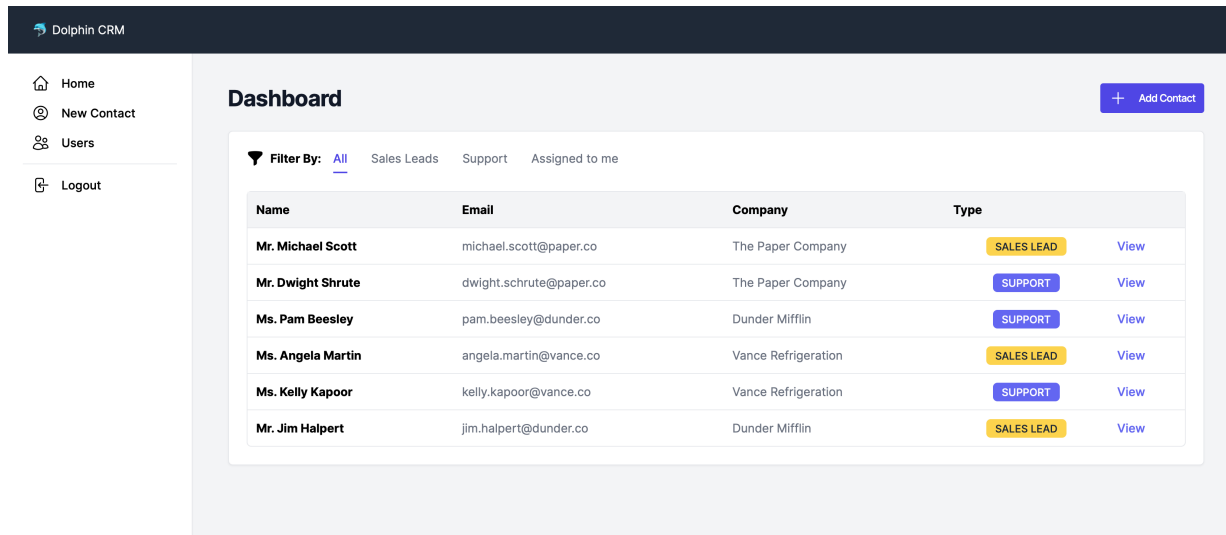


Figure 4: Dolphin CRM Dashboard

Create a New Contact

The Create a New Contact screen includes a form with the following input fields: **Title**, **First Name**, **Last Name**, **Email**, **Telephone**, **Company**, **Type** (e.g. *Sales Lead* or *Support*) and **Assigned To** (which should list the names of all the users in the system) input fields. (See Figure 5).

Whenever a new contact is created you should also store the user id of the user who created the contact and the `created_at` and `updated_at` date columns should be set to the current date and time.

Ensure that all input fields are validated and that user inputs are escaped and sanitized before being inserted into the database. Also provide the user with feedback if the new contact was added successfully or if there are any errors with their submission.

Dolphin CRM

Home
New Contact
Users
Logout

New Contact

Title
Mr

First Name
Jane

Last Name
Doe

Email
something@example.com

Telephone

Company

Type
Sales Lead

Assigned To
Andy Bernard

Save

Figure 5: Wireframe of new Contact page

Viewing Full Contact Details

When the name of a contact or the *View* link on the Dashboard/Home screen is clicked it will open and show the full details of that contact (See *Figure 6*). These details should include the *Title* and *Full Name*, *Email*, *Company*, *Telephone*, *Date Created* and *by whom*, *Date last updated*, as well as who the contact is *assigned to*.

In addition to viewing the full contact details, a user should be able to assign the Contact to themselves by selecting the "Assign to me" button. A user can also switch the type of the contact to a *Sales Lead* if it is currently of the type *Support* or switch to *Support* if it currently of the type *Sales Lead*. When either of these options are changed you should also update the `updated_at` timestamp on the contact.

A user should also see a list of notes for that particular contact (See *Figure 7*). Each note should have the name of the user who made the note, the actual comment of the note and the date the note was added. The user should also be able to add a new note for the contact.

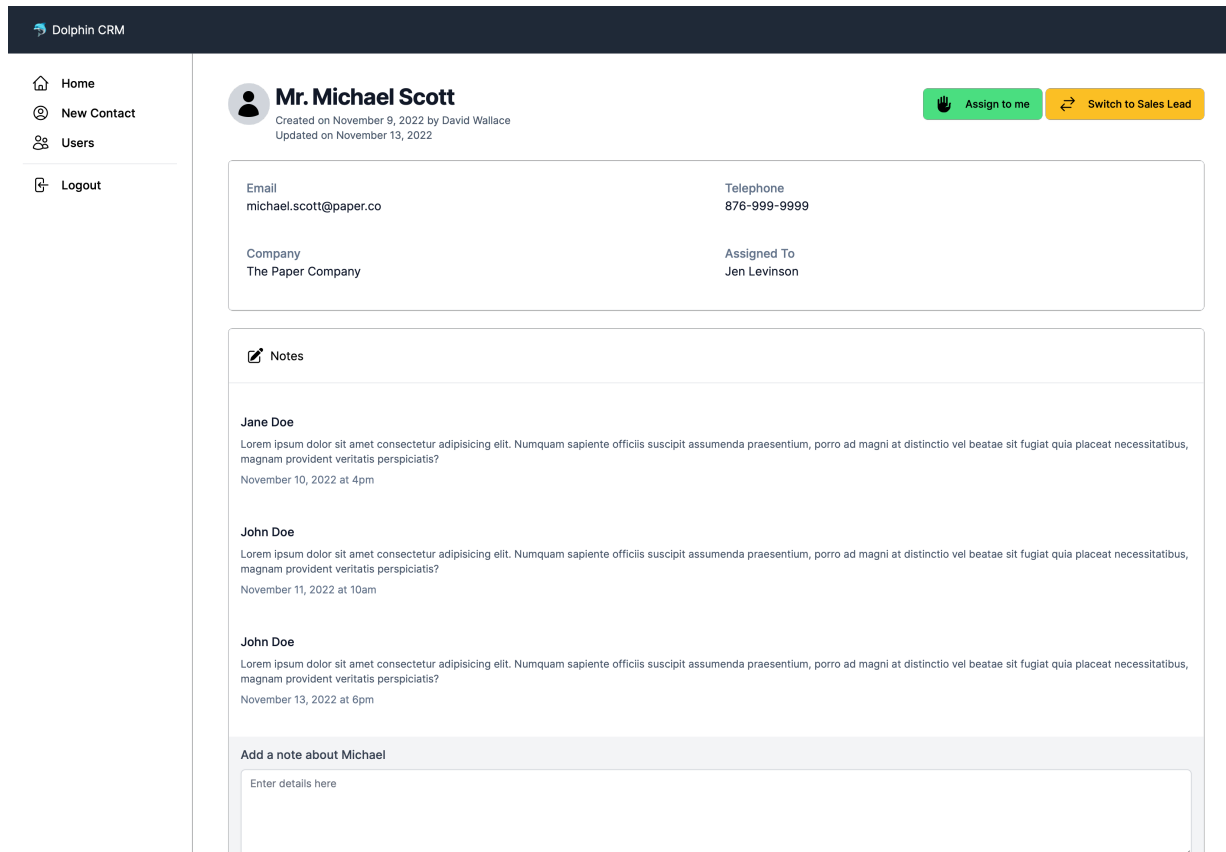



Figure 6: Wireframe of Contact details page

Adding a note to the Contact

A user should be able to add a note to a contact in order to share internal information, log phone calls, or document conversations with your contacts.

When viewing a contact, there should be a section below the contact details that shows existing notes for the contact as well as a field to enter a note about the contact and a button to save the note (See *Figure 7*). When a new note is added the `updated_at` column on the contact should also be updated.

Ensure that all input fields are validated and that user inputs are escaped and sanitized.

 Notes

Jane Doe

Lorem ipsum dolor sit amet consectetur adipisicing elit. Numquam sapiente officiis suscipit assumenda praesentium, porro ad magni at distinctio vel beatae sit fugiat quia placeat necessitatibus, magnam provident veritatis perspiciatis?

November 10, 2022 at 4pm

John Doe

Lorem ipsum dolor sit amet consectetur adipisicing elit. Numquam sapiente officiis suscipit assumenda praesentium, porro ad magni at distinctio vel beatae sit fugiat quia placeat necessitatibus, magnam provident veritatis perspiciatis?

November 11, 2022 at 10am


John Doe

Lorem ipsum dolor sit amet consectetur adipisicing elit. Numquam sapiente officiis suscipit assumenda praesentium, porro ad magni at distinctio vel beatae sit fugiat quia placeat necessitatibus, magnam provident veritatis perspiciatis?

November 13, 2022 at 6pm

Add a note about Michael

Enter details here



Add Note

Figure 7: Wireframe of Notes section on Contact Details page

No Page Refreshes by using AJAX

You will need to implement an AJAX based approach to loading new content or updating content in the browser and when doing form submissions. In other words, all pages should load the appropriate page information/data without the browser refreshing. Utilize your knowledge on the `XMLHttpRequest` object, jQuery `.ajax()` function or the Fetch API to make your AJAX requests.


Future Improvements

In the next development cycle we hope to allow Dolphin CRM to include other features such as the ability to edit and delete users and contacts, add Tasks, upload files, send emails directly to Contacts and add Cases which can help us to organize our communication – notes, emails and files together. However, for now that is not necessary for our initial MVP.

Submission

You will submit using the "Final Project Submission" link on the course platform. Since it is a group project, only one group member is required to submit the relevant project

links.

You are required to commit your code to Github and submit the link to your group project Github repository (e.g. <https://github.com/yourusername/info2180-finalproject> ).