C868 – Software Capstone Project Summary

Task 2 – Section C



Capstone Proposal Project Name: Widget Sales Unlimited, LLC -- Appointment Organizer Plus+

Student Name: Gregory Farrell

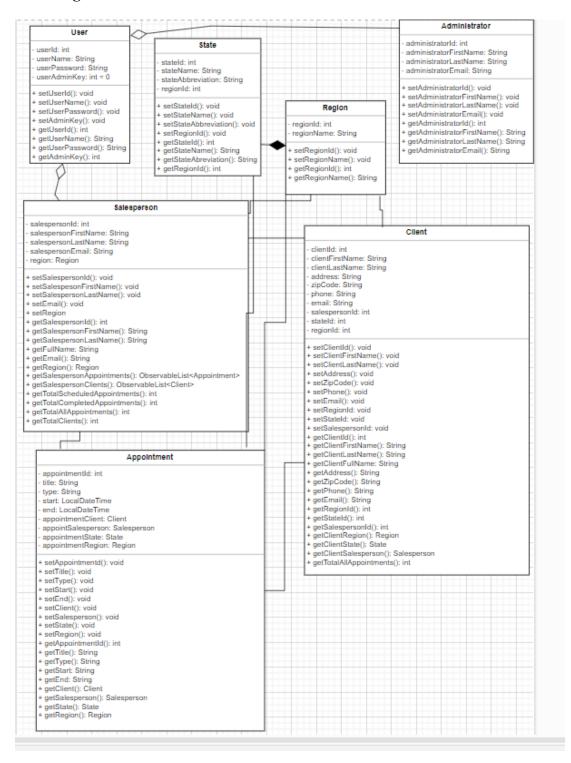
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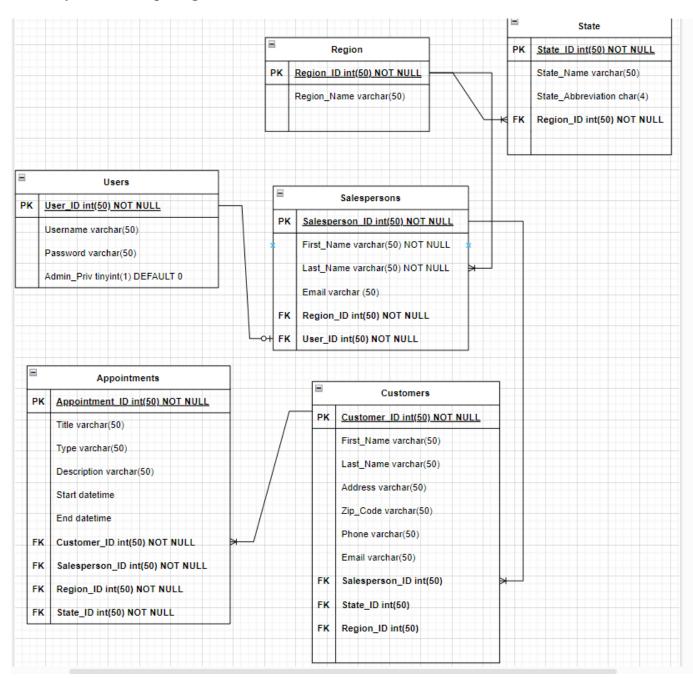
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Application Design and Testing

Java Class Design



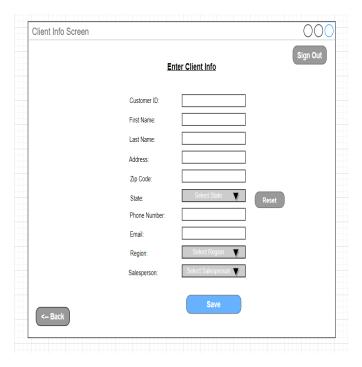
Database Entity Relationship Diagram



UI Design

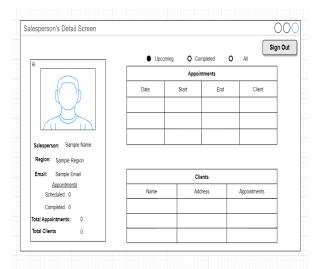
Stack of wireframes presented to the customer displaying the proposed GUI.

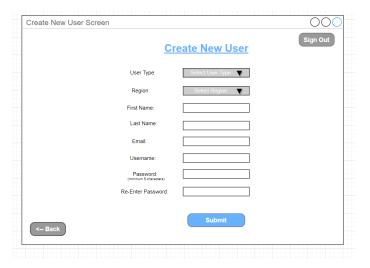


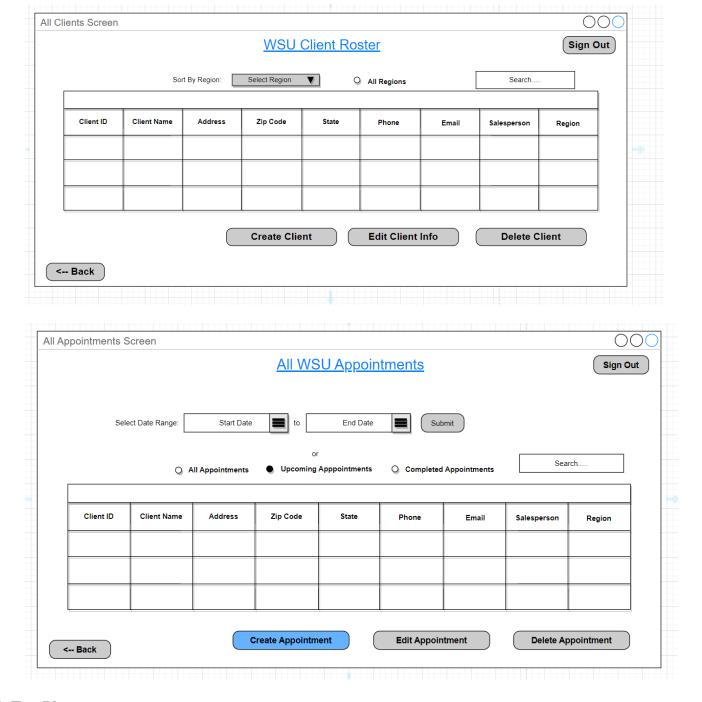












Unit Test Plan

Introduction

Purpose

Unit testing was conducted throughout development and any flaws or bugs that were detected were corrected at the time they were discovered.

Overview

As classes were implemented from the design document, the program was periodically compiled and run to ensure that all of the methods functioned as intended. Unit tests were continually conducted to confirm that all features were checked, including populating tables, running reports, filtering data, creating new clients, appointments and users. We will now conduct a use case test that will run all the way from creating a new administrative user that will create, edit and delete both client and appointment data and then create a new Salesperson user that will create, edit and delete both client and appointment data.

Test Plan

Items

Initial administrative user login credentials.

Features

Creating, editing and deleting clients and appointments, as well as creating new users.

Deliverables

The program will function as intended and screen shots will be taken.

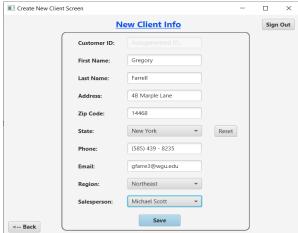
Procedures

- Username: admin1, Password: passw0rd! will login and then:
 - 1. Create a new client
 - 2. Verify that the new client appears in the salesperson table
 - 3. Create a new appointment for that client.
 - 4. Search for the appointment by client name and verify that they appear in the all appointments table
 - 5. Edit the created appointment by changing the title and the date.
 - 6. Verify that the appointment has been updated in the table.

- 7. Delete the newly created client and confirm that both the client and appointment are now removed from the database.
- 8. Create a new administrative user.
- 9. Sign out and log back in with the new admin credentials.
- 10. Create a new salesperson user.
- 11. Sign out and log back in with the new salesperson user credentials.
- 12. Create 3 new clients and confirm that all the information on the Salesperson Home Screen updates properly.
- 13. Create several appointments for the new clients and confirm that the Salesperson Home Screen updated properly.
- 14. Edit an appointment and first confirm it will not allow 2 appointments at the same time for the same salesperson/customer.
- 15. Change the date to an unused date and confirm it updated properly in the Salesperson Home Screen.
- 16. Delete an appointment and confirm everything updates properly.
- 17. Delete the client and confirm both the client and appointments are removed from the tables and the salesperson stats update properly.

Results

All of the tests were passed as evidenced below:

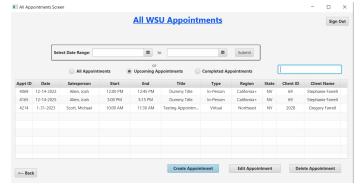


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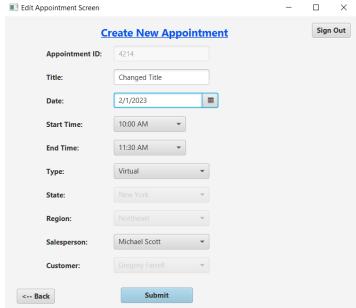


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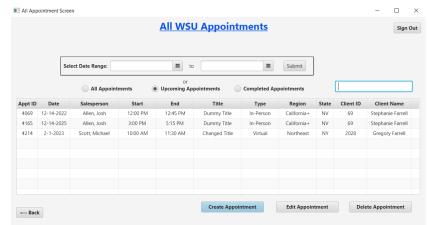
Create Appointment Screen			_	\Box \times
<u>Cı</u>	eate New Appoin	<u>itment</u>		Sign Out
Appointment ID:				
Title:	Testing Appointment			
Date:	1/31/2023			
Start Time:	10:00 AM 🔻			
End Time:	11:30 AM ▼			
Туре:	Virtual	•		
State:	New York	₹		
Region:	Northeast	•		
Salesperson:	Michael Scott	•		
Customer:	Gregory Farrell	•		
< Back	Submit			

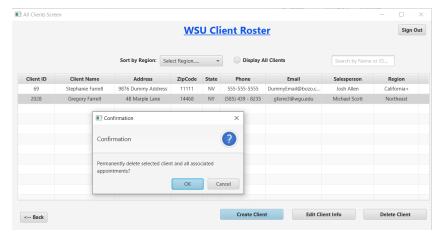


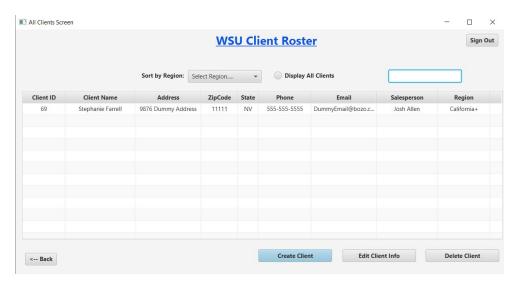
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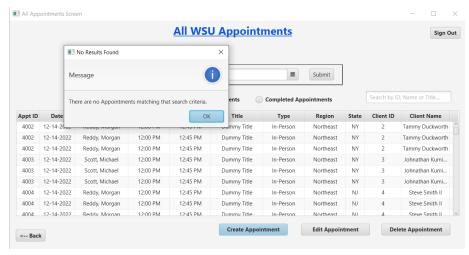


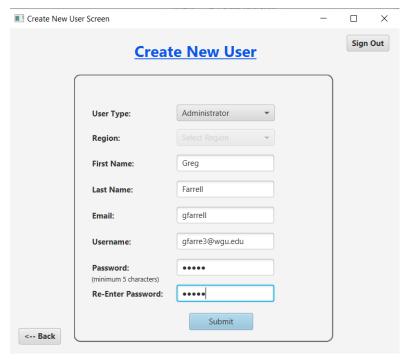
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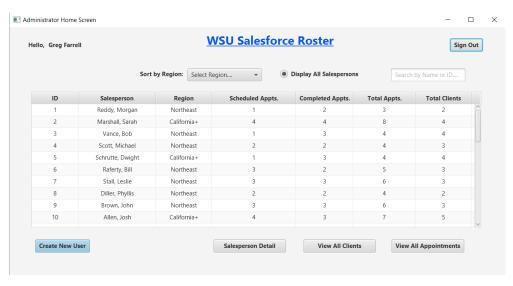


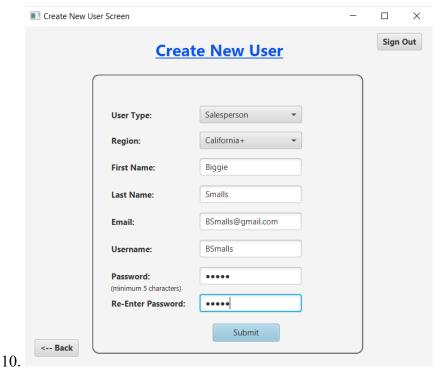






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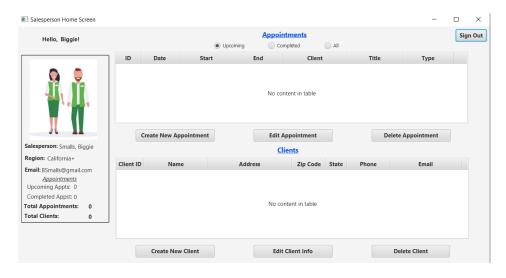


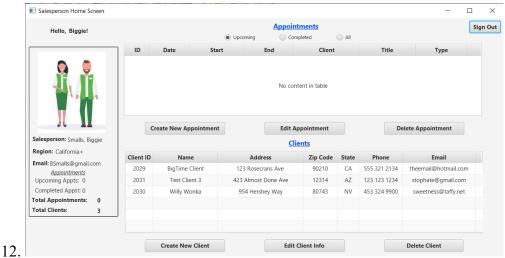
Appointment Organizer Plus+

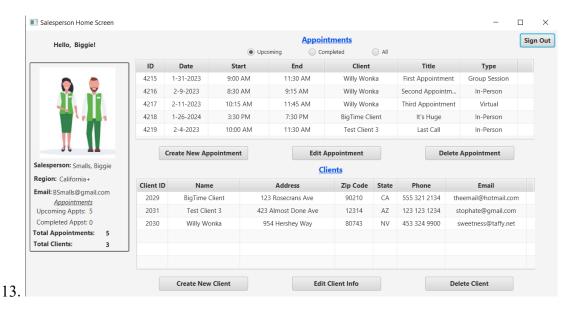
Username: BSmalls

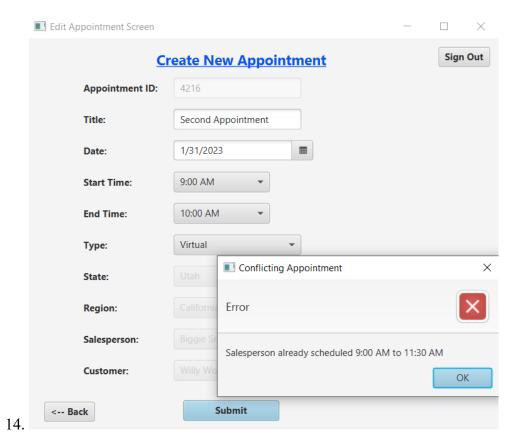
Password: Login

User Locale: America/New_York



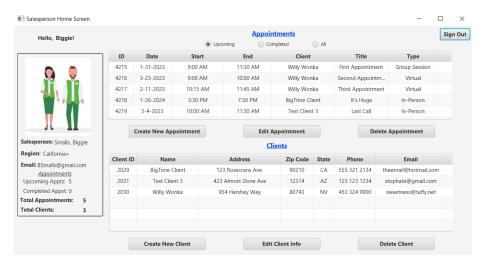


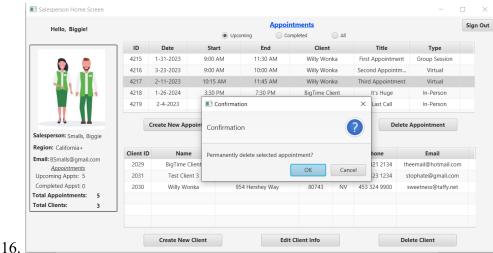


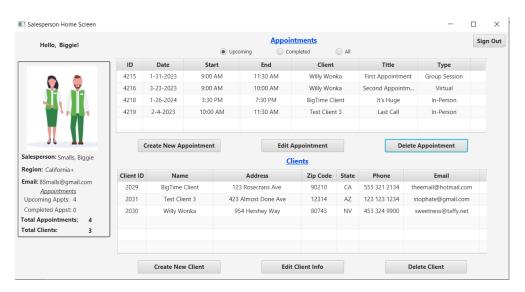


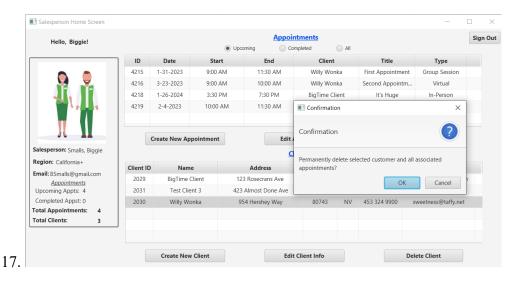
 \times Edit Appointment Screen Sign Out **Create New Appointment** 4216 Appointment ID: Second Appointment Title: 3/23/2023 ... Date: Start Time: 9:00 AM 10:00 AM **End Time:** Virtual Type: State: Region: Salesperson: Customer:

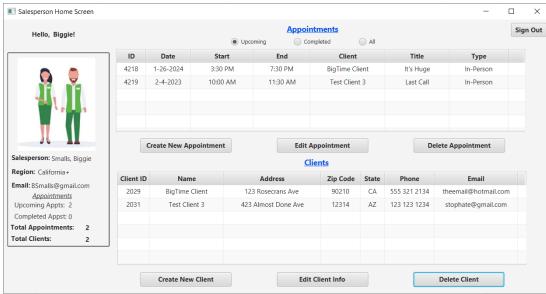
15. Submit











User Guide

Set Up and Run Application for Maintenance Purposes

There is very little that needs to be done to run for maintenance purposes.

The user must have Java installed on their machine. If they don't already have it,

it can be downloaded at: https://www.java.com/en/download/manual.jsp

Introduction

There are 2 types of users for this application, Salespersons and Administrators, and each one

will have a different GUI presented to them. This User Guide will provide instructions for logging in

and accessing the program as each one.

Administrator Login

1. Once the application is launched, the user will be presented with this login screen:

000 WSU Appointment Organizer+

2. The evaluator should initially login as an Administrator. The credentials are:

Username: admin

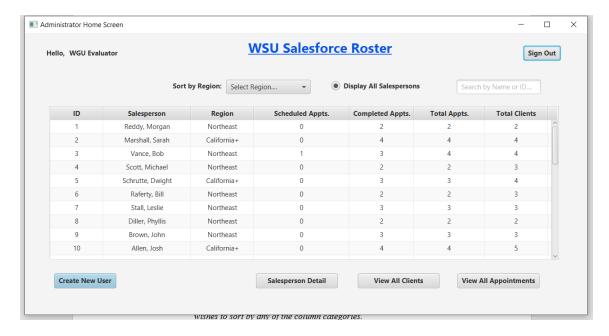
Password: Passw0rd!

Home Screen

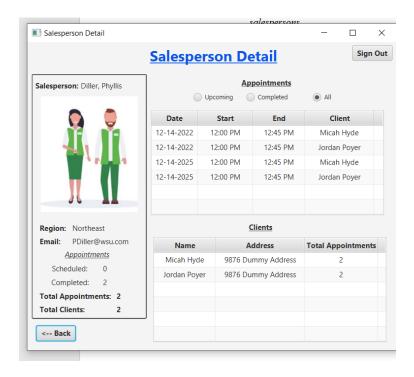
1. The Administrator Home Screen provides a table showing all the Salespersons for the

entire company and the appointment activity for each one.

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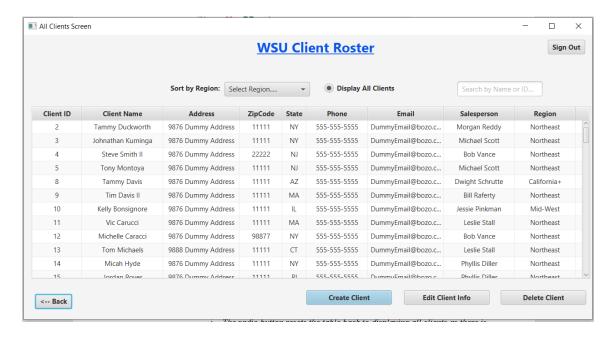


- 2. The user can filter the table in several ways:
 - a. The table columns themselves can be clicked to resort the table if the user wishes to see who has the most or least appointments, clients, etc.
 - b. The combo box provides a drop-down menu where the user can filter the table by region, thereby displaying only the salespersons belonging to each region.
 - i. The radio button resets the table back to displaying all salespersons as there is no option in the drop-down menu to accomplish this.
 - c. The search box allows the user to search for name or salesperson ID and returns all results containing any part of the ID or string that was entered.
 - i. If an empty search is entered the table will also repopulate with all salespersons.
- 3. By clicking the "Salesperson Detail" button, the user can look at a more detailed screen of the selected Salesperson's activity.
 - a. Clicking the "Back" button will return the user to the Administrator Home Screen.



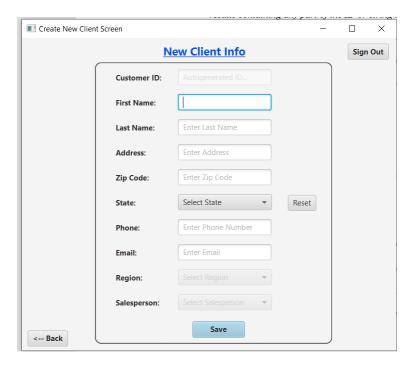
View All Clients

1. Clicking on the "View All Clients" button takes the user to All Clients Screen, which displays a table of all of the Clients across the entire company.



- 2. The user can filter the table in several ways:
 - a. The table columns themselves can be clicked to reorder the table if the user wishes to sort by any of the column categories.

- b. The combo box provides a drop-down menu where the user can filter the table by region, thereby displaying only the clients belonging to each region.
 - i. The radio button resets the table back to displaying all clients as there is no option in the drop-down menu to accomplish this.
- c. The search box allows the user to search for a client's name or ID and returns all results containing any part of the ID or string that was entered.
- d. If an empty search is entered the table will also repopulate with all salespersons
- 3. Clicking the "Delete Client" button will allow the user to delete the selected client from the database. This should be used very sparingly as deleting a client will also delete all of the appointments, both scheduled and completed, that are associated with the client. A pop-up warning will confirm that the user does in fact intend to execute this action.
- 4. Clicking the "Create Client" button will take the user to the Create New Client Screen where a new client can be entered and assigned to a salesperson.

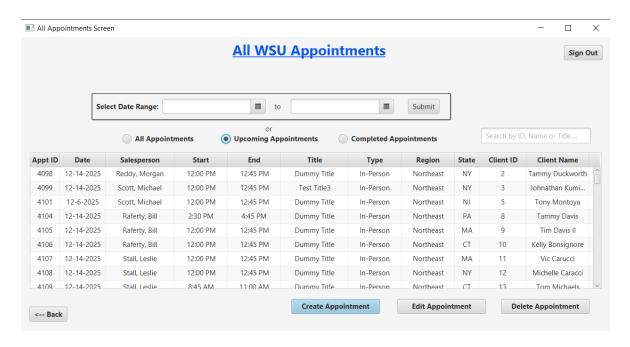


- a. To create a new client, the user needs to enter information into the text fields for the first name, last name address, zip code, email and phone number.
- b. User then selects a state. Each salesperson belongs to 1 and only 1 region, so once the user selects a state then the corresponding drop-down box for salespersons will be populated with the salespersons for that region.
 - i. States is used as the first selection because the user will not naturally know which region a state belongs to. However, once a state is chosen the corresponding region of the region drop-down box is set and the states are filtered so that only states in that region are displayed. The user can change the state drop-down box by either changing the region or by clicking the reset button to set all fields back to their original state.
- c. Once the user has entered all of the data, click save to insert the new client into the database and return the program to the All Clients Screen. There you will see the new client added.
 - i. There is also a back button if the user no longer wishes to create a new client.
- 5. The "Edit Client Info" button allows the user to edit the info for the selected client from the table.
 - a. The user will be directed to a screen similar to the Create Client Screen. See Section 5 for details.

View All Appointments

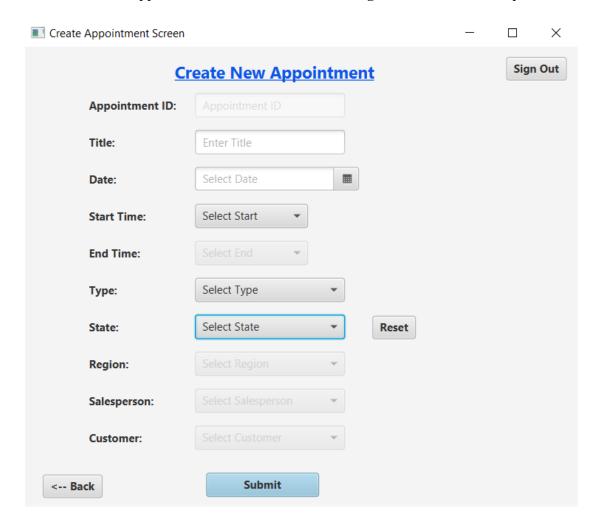
1. Clicking on the "View All Appointments" button takes the user to All Appointments

Screen, which displays a table of all of the Appointments across the entire company.



- 2. The user can filter the table in several ways:
 - a. The table columns themselves can be clicked to reorder the table if the user wishes order sort by any of the table column categories.
 - b. The radio buttons allow the user to sort by Upcoming, Completed or All appointments.
 - c. The search box allows the user to search for a client's name or ID or a salesperson's name or ID and returns all results containing any part of any of those.
 - d. If an empty search is entered the table will also repopulate with all appointments.
 - e. The custom date range allows the user to search over a specified period of time.
 - i. The end date must come after the start date.
- 3. The "Delete Appointment" button will allow the user to delete the selected appointment from the database. However, appointments that have already been completed cannot be deleted. They can only be removed by deleting a client (and thereby all associated appointments)

4. The "Create Appointment" button will take the user to the Create Appointment Screen where a new appointment can be created and assigned a client and salesperson.



- a. To create a new appointment the user needs to enter a title and then all of the other fields are implemented with drop-down boxes.
 - i. User selects a start date.
 - ii. After user selects a start time, the available end times are populated.
 - iii. User selects an appointment type.
- b. User then selects a state. Each salesperson and client belong to 1 and only 1 region, so once the user selects a state, the region is determined and the

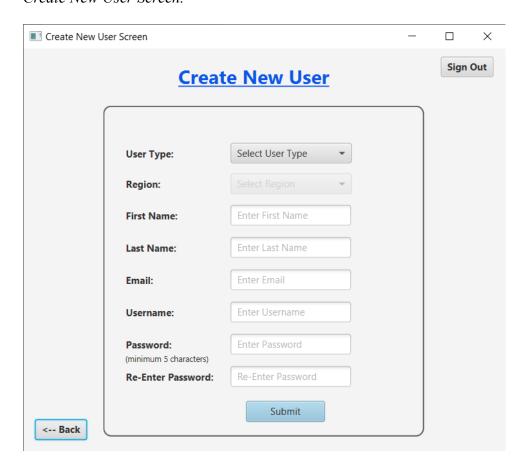
corresponding drop-down boxes for salespersons and clients will be populated for that region.

- i. State is used as the first selection because the user will not naturally know which region a state belongs to. After the state is selected, the rest of the options are determined.
- ii. The reset button will return the option back to the initial state.
- c. Once the user has selected all of the data, click submit to insert the new appointment into the database and return the program to the All Appointments Screen. There you will see the new appointment added.
 - i. There is a verification check to confirm that neither the salesperson nor the client has any other appointments scheduled during the window the user has entered (it is possible for a client to schedule appointments with different salespersons for that region. While it may be in poor taste on the salesperson's part, this requires that the client's schedule be checked as well as the salesperson).
- d. There is also a back button if the user no longer wishes to create a new appointment.
- 5. The "Edit Appointment Info" button allows the user to edit the info for the selected appointment from the table.
 - a. The user will be directed to a screen similar to the Create Appointment Screen.
 - b. The state (and therefore region) and customer cannot be changed. However, the salesperson can be changed.
 - c. Once the user has selected all of the data, click submit to update the appointment in the database and return the program to the All Appointments Screen.

- i. There is a verification check to confirm that neither the salesperson nor the client has any other appointments scheduled during the window the user has entered.
- d. There is also a back button if the user no longer wishes to create a new appointment.

Create New User

1. The Create New User button on the Administrator Home Screen takes the user to the Create New User Screen.

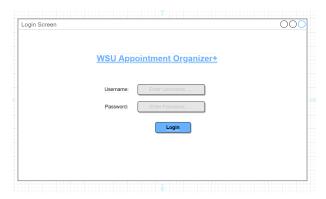


- 2. The user first selects what type of user the new user will be.
 - a. An Administrator user is able to access all of the same functions and screens that were previously covered in this guide and can themselves then create more new users.

- b. A salesperson user is the primary user of the application and is not able to create new users. They can only enter, edit and delete their own client and appointment data.
- 3. User must enter the first name, last name, email address, username and password for the new user. The password must be at least 5 characters long and must be retyped to verify that it is correct.
- 4. User then clicks submit and the new user is entered into the database and the program is redirected to the Administrator Home Screen. At this point the evaluator should click the sign out button in the upper right corner and click confirm on the prompt.
 - i. The evaluator can now login with the new credentials to verify that it works but there will be no client or appointment data with that user, so we will use a dummy user to demonstrate the Salesperson user.

Salesperson Login

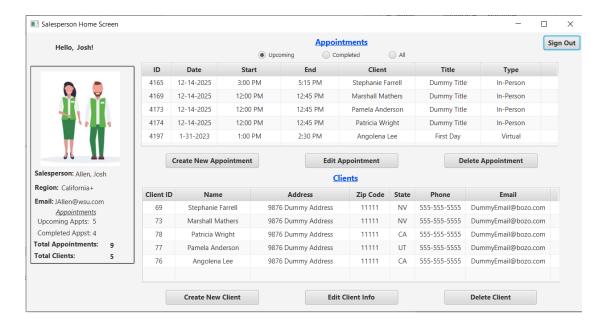
1. Once the application is launched, the user will be presented with this login screen:



2. There are a variety of dummy users entered into the database, enter: Username: user10, Password: 12345

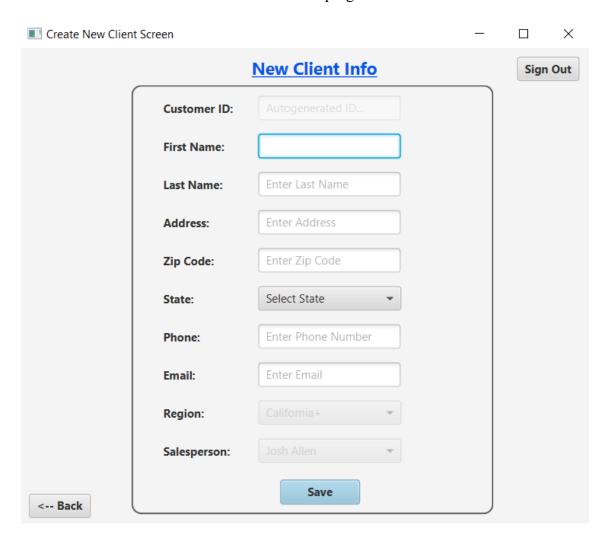
Salesperson Home Screen

1. The Salesperson home screen displays a variety of information about that salesperson appointment activity.

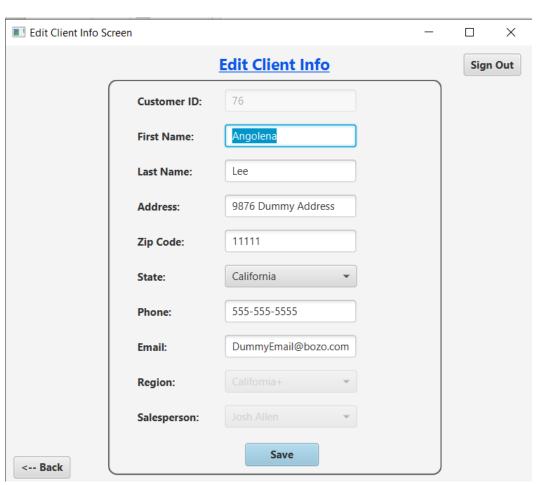


- a. The box on the left will display the total number of appointments and clients that the salesperson has, as well as the salesperson's name, region and email address.
- b. The Appointments Table is initially populated with all the upcoming appointments the salesperson has scheduled.
 - i. The 3 radio buttons above the table allow the table to be filtered with completed appointments, all appointments or back to the original upcoming appointments.
 - ii. The table can also be sorted by any of the column types by clicking on the column name.
- c. The Clients table displays all of the clients that have had an appointment scheduled with that salesperson.
 - i. Note that this may also include clients that were not originally signed by that salesperson but subsequently had an appointment. Therefore some clients may appear in tables for multiple salespersons.
- d. The "Delete Appointment" button will delete the appointment selected from the table from the database.

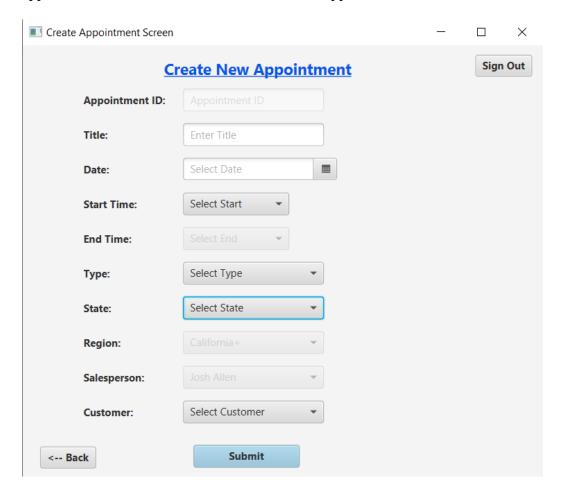
- i. Only future appointments may be deleted in this manner, completed appointments can only be deleted by deleting a client completely from the database.
- e. The "Delete Client" button will delete the client selected from the table from the database.
 - i. Deleting a client from the database will also delete all appointments associated with that client. A confirmation box will pop up to confirm that the user does in fact wish to do this.
- f. The "Create New Client" button will direct the program to the Create New Client Screen.



- i. User must enter the new client's first name, last name, address, zip code, phone and email. User must also select a state from the drop down menu, which is filtered according to the salesperson's already assigned region.
- ii. The region and salesperson drop down boxes are disabled as the user can only create new clients for themselves.
- iii. After everything is entered properly, the user clicks save and the new client is entered into the database. The user will be directed back to the Salesperson Home Screen and the new client will appear in the table, as well as the information in the box on the left being updated.
- g. Clicking the "Edit Client Info" button will direct the application to the Edit Client Info
 Screen and pass the information from the client that was selected.

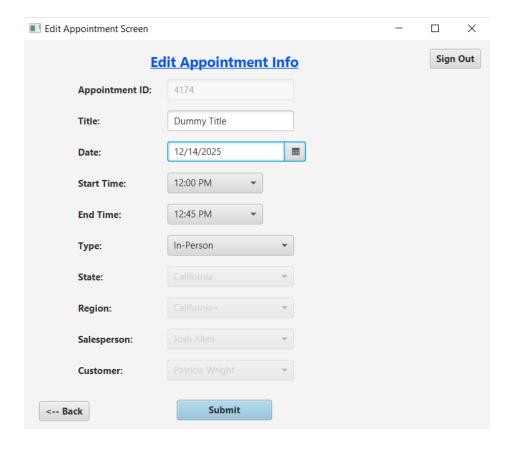


- i. The user can then alter the information they wish to change, including the state from which they can choose any state in that region.
- ii. Once the user is satisfied with the changes, click the "Save" button and the application will direct back to the Salesperson Home Screen and the client information will be updated.
- h. To create a new appointment, click the "Create New Appointment" button and the application will be directed to the Create New Appointment Screen.



- i. Enter the title, select a date and start time.
 - 1. Appointments can only be scheduled for dates occurring after the current date. This will be checked for when the "Submit" button is clicked.
- ii. Once a start time is selected, the available end times will populate the end times combo box.

- iii. Next the select the state and the customer for the appointment.
 - 1. Note that the customer combo box will only be populated with customers that are associated with this user.
- iv. If the user is satisfied with all of the data entered, click submit and the appointment will be entered into the database and the application will be directed back to the Salesperson Home Screen, where the appointment will now appear and the salesperson's stats will be updated.
- i. To edit an appointment, select an appointment from the appointments table and click the "Edit Appointment Info" button. This will direct the program to the Edit Appointment Screen and pass the data from the selected appointment.



- i. Change the information that the user wishes to update and click "Submit"
 - 1. There will be a check performed to ensure that neither the salesperson or the customer have another appointment scheduled in that window.

ii. The appointment will be updated and the application will be directed back to the Salesperson Home Screen. The updated appointment will now appear in the appointments table.