**C868 – Software Capstone Project Summary**

**Task 2 – Section C**

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| --- | --- |
| **Capstone Proposal Project Name:** | http://www.idevnews.com/views/images/uploads/general/wgu_logo.png  Global Consulting Scheduler App |
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Task 2 Part C – C868 Software Development Capstone

# Application Design and Testing

# Design Document

## Class Design

Diagram

Description automatically generatedThe figure below is an ERD diagram that shows the relationship between the five classes and two child classes. The five classes are country, city, address, Customer, and appointment. The parent class is Customer, and the child classes are client and contact. ERD diagram helps both with the class design and the table in the database.

## UI Design

Below are images of the Low-Fidelity wireframe and High-Fidelity wireframe.

Diagram

Description automatically generatedDiagram

Description automatically generatedLow Fidelity

Graphical user interface

Description automatically generatedGraphical user interface

Description automatically generatedHigh Fidelity

Graphical user interface, application, Word

Description automatically generated

Graphical user interface, text, email

Description automatically generatedGraphical user interface, text, email

Description automatically generated

Graphical user interface, text, website

Description automatically generatedGraphical user interface, text, application

Description automatically generatedTable

Description automatically generatedGraphical user interface, text, application, email

Description automatically generated

Table

Description automatically generatedA picture containing table

Description automatically generatedTable

Description automatically generated

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# Unit Test Plan

## Introduction

### Purpose

Testing was handled through manual testing via the UI and checking for changes to the database. It was broken down into different steps, treating each page as its focal point to test entirely before moving on. Testing was also done throughout development by the developer and said the developer would then correct any issues. After initial testing by the developer, the final testing will happen. During the final test, no errors were identified.

### Overview

During the completion of each requirement, the developer would complete manual testing on the application. The testing phase would include all completed requirements, not just the current requirement. Then the developer would work on any bugs found during that testing phase before continuing development.

Data was tested and verified via the database and the UI to ensure the database setup is correct. The application communicates correctly with the database and allows verification of appointment times inserted correctly, including other data integrity checks. Error messages are looked at and test and ensure they showed up when needed or appropriate. Thus, ensuring that the user could correct issues without crashing the application or thinking about action before continuing the deletion.

The developer rinding the most bugs during the application development so that the developer could address issues promptly. Thus, the final testing could go smoothly without any significant error, except for one spelling issue corrected during the final testing phase. Below will be the final testing report.

## Test Plan

### Items

Since the testing was primarily manual, a working development environment connected to the database was required. The developer is required to test the application throughout the development process manually. A user must run the test during the final stages of testing to go through the final testing process steps and identify any missed errors during the development process.

### Features

The features and functionality tested during each part of the testing process in the usability of the UI, data integrity, error handling, ensuring appropriate warnings, alters are in place to help with error handling and data integrity.

### Deliverables

The deliverable for the test plan is a table containing all test cases, steps, and results.

### Tasks

Complete testing during the development process and fix any issues found at the time.

Run through all test cases simultaneously, ensuring identification of all errors and correction of all errors. Then, repeat until no errors or issues are found.

### Needs

The development environment needs to be up and running, including Java 8 and an internet connection.

### Pass/Fail Criteria

Within the testing document, it outlines the required results. If the received results do not match the necessary results, the test case has failed. Likewise, if the obtained results and required results match, the test case has passed.

## Results

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Test Case | Description | Steps | Data | Required Results | Received Results | Status |
| 1 | Log-in in Correct user name and password | log in with password and username provided | username: test password: test | the page should change to the home page | page changed to homepage | pass |
| 2 | Log-in in incorrect user name and password | log in with password and username provided | username: wrong1 password:pas123 | log in should fail. A message saying "incorrect username and/or password." | Log-in failed | pass |
| 3 | Log-in in an incorrect user name and correct password | log in with password and username provided | username: wrong1 password: test | log in should fail. A message saying "incorrect username and/or password." | Log-in failed | pass |
| 4 | Log-in incorrect user name and incorrect password | log in with password and username provided | username: test password:pas123 | log in should fail. A message saying "incorrect username and/or password." | Log-in failed | pass |
| 5 | Log-in no password and username | log in with no password and no username | username: password: | log in should fail. A message saying "incorrect username and/or password." | Log-in failed | pass |
| 6 | Log-in no password | log in with no password and username of user's choice or provided username | username: test password: | log in should fail. A message saying "incorrect username and/or password." | Log-in failed | pass |
| 7 | Log-in no username | log in with the password of the user's choice or provided password and no username | username: password: test | log in should fail. A message saying "incorrect username and/or password." | Log-in failed | pass |
| 8 | view calendar | On Home Page, click view calendar |  | The page should change to calendar | Calendar | pass |
| 9 | view customer data | On Home Page, click view customer data |  | The page should change to List of Customer Information | List of Customer Information | pass |
| 10 | view contact data | On Home Page, click view contact data |  | The page should change to List of Contact Information | List of Contact Information | pass |
| 11 | access reports | On Home Page, click access reports |  | The page should switch to the reports screen | Report | pass |
| 12 | sign out | On Home Page, click sign out |  | The page should return to the log-in screen | Sign In | pass |
| 13 | New Customer | On List of Customer, Information click create new Customer |  | The page should go to create a new Customer | new customer details | pass |
| 14 | no select customer edit | On List of Customer, Information click create edit customer information |  | nothing should happen | nothing | pass |
| 15 | Select customer Edit | On List of Customer Information. Click on a random Customer for the list. Click edit Customer Information. Do this for each customer type |  | load edit customer information with select customers data | loaded customer information with selected customers data | pass |
| 16 | View Customer no select | On List of Customer Information click view customer details |  | nothing should happen | nothing | pass |
| 17 | View customer selected | On List of Customer Information. Click on a random Customer for the list. Click view Customer Information. Do this for each customer type |  | load view customer details with selected customer data | loaded view customer details with select customers | pass |
| 18 | Delete Customer no select | On List of Customer Information. Click on Delete Customer |  | A message may or may not appear. The customer list should not change | the warning message that appeared. Regardless of the option picked in the message, nothing changes to the customer list | pass |
| 19 | Delete Customer selected | On List of Customer Information. Click on a Customer for the list. Click on Delete Customer |  | A warning message should appear | Warming message | pass |
| 20 | Delete customer-selected Cancel | A warning message for delete customer, click cancel |  | nothing should happen | nothing happened | pass |
| 21 | Delete Customer selected OK | A warning message for delete customer, click OK. Should test on different types of Customers. |  | selected Customer should be deleted and no longer displayed in customer list or client list | customer was deleted | pass |
| 22 | Delete Customer selected Cancel check Database | A warning message for delete customer, click cancel |  | Database showing no change | Database Showes no change | pass |
| 23 | Delete customer-selected OK check Database | A warning message for delete customer, click OK. Should test on different types of Customers. |  | Database updates correctly | the tables are updated correctly, deleting the correct rows | pass |
| 24 | Delete Customer no select | On List of Contact Information. Click on Delete Customer |  | A message may or may not appear. The customer list should not change | the warning message that appeared. Regardless of the option picked in the message, nothing changes to the customer list | pass |
| 25 | Delete Customer selected | On List of Contact Information. Click on a Customer for the list. Click on Delete Customer |  | A warning message should appear | Warming message | pass |
| 26 | Delete customer-selected Cancel | A warning message for delete customer, click cancel |  | nothing should happen | nothing happened | pass |
| 27 | Delete Customer selected OK | A warning message for delete customer, click OK. Should test on different types of Customers. |  | selected Customer should be deleted and no longer displayed in customer list or client list | customer was deleted | pass |
| 28 | Delete Customer selected Cancel check Database | A warning message for delete customer, click cancel |  | Database showing no change | Database Showes no change | pass |
| 29 | Delete customer-selected OK check Database | A warning message for delete customer, click OK. Should test on different types of Customers. |  | Database updates correctly | the tables are updated correctly, deleting the correct rows | pass |
| 30 | New Customer | On List of Contact, Information click create new Customer |  | The page should go to create a new Customer | new customer details | pass |
| 31 | no select customer edit | On List of Contact, Information click create edit customer information |  | nothing should happen | nothing | pass |
| 32 | Select customer Edit | On List of Contact Information. Click on a random Customer for the list. Click edit Customer Information. Do this for each customer type |  | load edit customer information with select customers data | loaded customer information with selected customers data | pass |
| 33 | View Customer no select | On List of Contact Information click view customer details |  | nothing should happen | nothing | pass |
| 34 | View customer selected | On List of Contact Information. Click on a random Customer for the list. Click view Customer Information. Do this for each customer type |  | load view customer details with selected customer data | loaded view customer details with select customers | pass |
| 35 | Create New Customer with all null | On New Customer, Details create a client with all null |  | an error message should appear | Data Issue alert popped up | pass |
| 36 | Create New Customer with all null | On New Customer, Details create a contact with all null |  | an error message should appear | Data Issue alert popped up | pass |
| 37 | Create New Customer with all correct fields | create a new Customer client with all valid fields | Name: name Address:address City:city country: country postal code:11111 Active:0/1 Client Type:Solo Contact Method:Phone | should create a client should show in the database and on the list of Customer information | screen chanced to list of customers and Customer was added to the list | pass |
| 38 | create new Customer | create a new Customer client with an invalid active | Name: name Address:address City:city country: country postal code:11111 Active:A-Z Client Type:Solo Contact Method:Phone | an error message should appear | Data Issue alert popped up | pass |
| 39 | create new Customer | create a new Customer client with a null name | Name: null Address:address City:city country: country postal code:11111 Active:0/1 Client Type:Solo Contact Method:Phone | an error message should appear: please fill in all required customer data | Data Issue alert popped up: Please fill all required customer data | pass |
| 40 | create new Customer | create a new Customer client with invalid, null fields | Name: name Address:null City:null country: null postal code:null Active:0/1 Client Type:Solo Contact Method:Phone | an error message should appear | Data Issue alert popped up | pass |
| 41 | Edit Customer with all null | On Edit Customer Details, create a client with all null |  | an error message should appear | Data Issue alert popped up | pass |
| 42 | Create Edit Customer with all null | On Edit Customer Details, create a contact with all null |  | an error message should appear | Data Issue alert popped up | pass |
| 43 | Create Edit Customer with all correct fields | create edit Customer client with all valid fields | Name: name Address:address City:city country: country postal code:11111 Active:0/1 Client Type:Solo Contact Method:Phone | should edit client should show in the database and on the list of Customer information | screen chanced to list of customers and customer edit on the list | pass |
| 44 | create edit customer | create edit Customer client with invalid active | Name: name Address:address City:city country: country postal code:11111 Active:A-Z Client Type:Solo Contact Method:Phone | an error message should appear | Data Issue alert popped up | pass |
| 45 | create edit customer | create edit Customer client with a null name | Name: null Address:address City:city country: country postal code:11111 Active:0/1 Client Type:Solo Contact Method:Phone | an error message should appear: please fill in all required customer data | Data Issue alert popped up: Please fill all required customer data | pass |
| 46 | create edit customer | create edit Customer client with invalid, null fields | Name: name Address:null City:null country: null postal code:null Active:0/1 Client Type:Solo Contact Method:Phone | an error message should appear | Data Issue alert popped up | pass |
| 47 | create edit customer | change a customer from client to contact | Name: name Address:address City:city country: country postal code:11111 Active:0/1 Company:Company isPrimary:1/0 | should edit client should show in the database and on the list of Customer information | screen chanced to list of customers | pass |
| 48 | Create New Customer with all correct fields | create new Customer contact with all valid fields | Name: name Address:address City:city country: country postal code:11111 Active:0/1 Client Type:Solo Contact Method:Phone | should create a client should show in the database and on the list of Customer information | screen chanced to list of customers and Customer was added to the list | pass |
| 49 | create new Customer | create new Customer contact with invalid active | Name: name Address:address City:city country: country postal code:11111 Active:A-Z Client Type:Solo Contact Method:Phone | an error message should appear | Data Issue alert popped up | pass |
| 50 | create new Customer | create new Customer contact with a null name | Name: null Address:address City:city country: country postal code:11111 Active:0/1 Client Type:Solo Contact Method:Phone | an error message should appear: please fill in all required customer data | Data Issue alert popped up: Please fill all required customer data | pass |
| 51 | create new Customer | create new Customer contact with invalid, null fields | Name: name Address:null City:null country: null postal code:null Active:0/1 Client Type:Solo Contact Method:Phone | an error message should appear | Data Issue alert popped up | pass |
| 52 | Edit Customer with all null | On Edit Customer Details, create a contact with all null |  | an error message should appear | Data Issue alert popped up | pass |
| 53 | Create Edit Customer with all null | On Edit Customer Details, create a contact with all null |  | an error message should appear | Data Issue alert popped up | pass |
| 54 | Create Edit Customer with all correct fields | create edit Customer contact with all valid fields | Name: name Address:address City:city country: country postal code:11111 Active:0/1 Client Type:Solo Contact Method:Phone | should edit client should show in the database and on the list of Customer information | screen chanced to list of customers and customer edit on the list | pass |
| 55 | create edit customer | create edit Customer contact with invalid active | Name: name Address:address City:city country: country postal code:11111 Active:A-Z Client Type:Solo Contact Method:Phone | an error message should appear | Data Issue alert popped up | pass |
| 56 | create edit customer | create edit Customer contact with a null name | Name: null Address:address City:city country: country postal code:11111 Active:0/1 Client Type:Solo Contact Method:Phone | an error message should appear: please fill in all required customer data | Data Issue alert popped up: Please fill all required customer data | pass |
| 57 | create edit customer | create edit Customer contact with invalid, null fields | Name: name Address:null City:null country: null postal code:null Active:0/1 Client Type:Solo Contact Method:Phone | an error message should appear | Data Issue alert popped up | pass |
| 58 | create edit customer | change a customer from contact to a client | Name: name Address:address City:city country: country postal code:11111 Active:0/1 Company:Company isPrimary:1/0 | should edit client should show in the database and on the list of Customer information | screen chanced to list of customers | pass |
| 59 | Add Appointment | on Add Appointment, with all null |  | an error message should appear | Data Issue | pass |
| 60 | Edit Appointment | on Edit Appointment with all null but Customer | title: title desc:desc location: location contact: contact type: type URL: URL Start Date: date Start Time: time End Date: date End Time: time | an error message should appear | Data Issue | pass |
| 61 | Add Appointment | on Add Appointment, with invalid date | title: title desc:desc location: location contact: contact type: type URL: URL Start Date: date Start Time: time End Date: date End Time: time | an error message should appear | Data Issue | pass |
| 62 | Add Appointment | on Add Appointment, with invalid time | title: title desc:desc location: location contact: contact type: type URL: URL Start Date: date Start Time: time End Date: date End Time: time | an error message should appear | Data Issue | pass |
| 63 | Edit Appointment | on Edit Appointment, with invalid date | title: title desc:desc location: location contact: contact type: type URL: URL Start Date: date Start Time: time End Date: date End Time: time | an error message should appear | Data Issue | pass |
| 64 | Edit Appointment | on Edit Appointment, with invalid time | title: title desc:desc location: location contact: contact type: type URL: URL Start Date: date Start Time: time End Date: date End Time: time | an error message should appear | Data Issue | pass |
| 65 | Add Appointment | on Add Appointment, without selecting Customer |  | an error message should appear | Data Issue | pass |
| 66 | Edit Appointment | on Edit Appointment, with valid information | title: title desc:desc location: location contact: contact type: type URL: URL Start Date: date Start Time: time End Date: date End Time: time | should update calendar and database | updated calendar and database | pass |
| 67 | Add Appointment | on Add Appointment, with valid information | title: title desc:desc location: location contact: contact type: type URL: URL Start Date: date Start Time: time End Date: date End Time: time | should update calendar and database | updated calendar and database | pass |
| 68 | View appointment details | on calendar without selecting appointment click view appointment |  | nothing should happen | nothing happened | pass |
| 69 | View appointment details | on Calendar selected appointment click view appointment |  | go into view appointment | switch to view the appointment of selected appointment | pass |
| 70 | delete appointment | on calendar without selecting appointment click delete appointment |  | database and calendar should not change may or may not have a message | the database did not change | pass |
| 71 | delete appointment | on Calendar selected appointment click delete appointment click OK on a warning message |  | database and calendar should update with remove after clicking OK on an error message that should appear | database updated correctly | pass |
| 72 | delete appointment | on Calendar selected appointment click delete appointment click cancel on a warning message |  | database and calendar should not update with remove after clicking cancel on an error message that should appear | the database did not change | pass |
| 73 | run report | on Report screen run appointments by type by month |  | report should run | report ran | pass |
| 74 | run report | on Report screen run appointments for each client by month |  | report should run | report ran | pass |
| 75 | run report | on the Report screen, run the schedule for each consultant |  | report should run | report ran | pass |

# C4. Source Code

Source code can be found in HSApp.zip.

# User Guide

## Introduction

This User Guild will walk the user through installing the Scheduler App, Logging in, Creating, Editing, and Deleting Customers, Creating Editing and Deleting Appointments, and running Reports.

## Installation and Using the Application

1. Ensure the workstation has Java 8 installed.
2. The package is a download HSApp.zip.



1. User will need to up zip the package
2. Once unzipped, navigate inside the folder Text

   Description automatically generated
3. Click Dist 
4. Then double click HSApp.jar Text

   Description automatically generated
5. Optional: Right-click HSApp.jar
6. Optional: Click Send to Then Desktop: Create Shortcut.

## *Log-in*

1. *If you already have an account, log in with your username and password in the appropriate fields. If you need an account, don't hesitate to contact the admin, and they can create an account for you on the database via MSQL.*Graphical user interface, application

   Description automatically generated
2. *Once your username and password are entered, click log in. If you entered it correctly, it would take you to the homepage. If there is an issue with your password, a red error message will appear between the log-in fields and the log-in button.* 
3. *If the error message appears double-check, your username and password and try again. If the issue continues to contact, your admin*

## *Customer*

### *View Customer List / View Contact List*

1. *On the homepage, click View Customer Data / View Contact Data* Graphical user interface, text, application

   Description automatically generated
2. *The Customer List/ Contact List will load* Table

   Description automatically generatedTable

   Description automatically generated

## *Create New Customer*

1. *On Customer List / Contact List, Click on Create New Customer Button* Graphical user interface

   Description automatically generated with medium confidence
2. *On the New, Customer Page Fill in the information for the new client. Name, Address, City, Country, Postal Code, Active are required fields. Functional needs to be either 0 for inactive or 1 for active.*

Graphical user interface

Description automatically generated

1. *There are two Customer Types, and you can choose between Client or Contact. The client is for those Customers without an overarching Company or Solo person in a company. The contract is for a contact of a company. You can select the option via the radio buttons above the text fields.*

Graphical user interface

Description automatically generated with low confidence

1. *Client or Contact*
   1. *The client will add two fields called Client Type and Contact Method. Fill these fields with the data that makes sense for the new client.* Graphical user interface, text, application

      Description automatically generated
   2. *Contact will add two fields called Company and Is Primary. Company should be the company name. Is Primary needs to either be 0 for not primary or 1 for a primary contact.*

Graphical user interface, application

Description automatically generated

1. *Once you have all the information is entered in the way you like it, click Save.*



1. *You should now be back at the Customer List, and the Customer should be on the list.*

## *Edit Customer*

1. *On Customer List / Contact List, Select Customer for list.*
2. *Click on Edit Customer / Edit Contact Button*

Graphical user interface, text, application

Description automatically generatedGraphical user interface, text, application

Description automatically generated

1. *Once on the Edit Customer Screen, make changes to the Customer Using steps 2-5 of Create New Customer.*

## *Delete Customer*

1. *On Customer List / Contact List, Click on Customer from the list you would like to delete.* Table

   Description automatically generated
2. *Then click Delete Customer.*

Graphical user interface, text, application

Description automatically generated

1. *A Confirm Delete Message should pop up. Click OK.* Graphical user interface, text, application

   Description automatically generated
2. *The customer list will have been updated, and the selected Customer should now be removed.*

## *Appointments*

### *View Calendar*

1. *On the homepage, click View Calendar*



1. *The calendar will load* Graphical user interface, table

   Description automatically generated

## *Create New Appointment*

1. *On Calendar, Click on Create New Appointment Button*

Graphical user interface, Word

Description automatically generated with medium confidence

1. *On the Add Appointment Page, fill in the information for the new appointment.* Graphical user interface

   Description automatically generated
2. *Then click on the Customer that the appointment is with for the list.* Table

   Description automatically generated
3. *Then Click Select* Graphical user interface, application

   Description automatically generated
4. *Once you have all the information, enter it the way you like it. Click Save.*



1. *You will be back on the calendar, and the appointment should be on the list.*

## *Edit Appointment*

1. *On Calendar, Select Appointment for list.*
2. *Click on the Edit Appointment Button*

Graphical user interface, application

Description automatically generated

1. *Once on the Edit Appointment, Make the needed changes to the appointment Using steps 2-5 of Create New Appointment.*

## *Delete Customer*

1. *On the Calendar, Click on Appointment from the list that you would like to delete.* Table

   Description automatically generated
2. *Then click Delete Appointment.*



1. *A Confirm Delete Message should pop up. Click OK.* Graphical user interface, text, application

   Description automatically generated
2. *The calendar should now be updated, and the selected appointment should now be removed.*

## *Reports*

1. *On the homepage, click Access Reports*



1. *The Report page will load* Graphical user interface, text, application

   Description automatically generated
2. *Use the radio buttons to select what type of report you want to run.* 
3. *Once chosen, the report will run in the table.* A picture containing text, white, screenshot

   Description automatically generated