# Introduction & Executive Summary

Expanding on the previous progress report written on 11.15.2020 I have updated the database model to include the new information that National Investments has shared with me. I have made a couple of changes. The Client’s state attribute was changed to StateProvince. The Zip attribute was changed to allow up to 7 characters. My questions regarding the AUM have been answered. The only concern still remaining is the security of the database. This progress is progressing very well, I do not anticipate any delays at this time.

# Adding Data into the Database

Adding this new client via a T-SQL Insert statement was a bit challenging. Adding the remaining data, such as CS\_Representative and Investor\_Contact, was not as challenging. I was able to use the work flow I developed in the last report to make this client addition flow smoothly. That is, starting at the client level I began filling in all attributes that weren’t part of the client table relies on having already been created. If the table requires another foreign key before it can be populated I “recursively” stepped into that table and made that entry, came back to the previous table and continued my work. Adding this information helped me to contemplate the database design and validate my design choices.

# Database Model Changes

There were only two changes to the database model for this iteration of the database design. The client’s state attribute was changed to state/province. The client’s zip attribute **type** will **not** need to be changed as it already supports alphanumeric data. However, it now must accept 7 characters instead of 5 to account for a 6 digit Canadian zip with one space (7 chars in total).

# T-SQL Code:

Insertion:

USE [CSCI-1320-Proj4-2]

INSERT INTO dbo.Client (Client\_ID, Client\_Name, Account\_Type, AUM,

Investor\_Contact\_ID, Inception, Strategy\_ID, CS\_Representative\_ID, Investment\_Manager\_ID,

Credential\_ID, Management\_Fee, Address1, Address2, City, StateProvince, Zip, Email)

VALUES (

'3',

'City of Windsor Fire Pension',

'P5',

'173552.00',

'3',

'2020-05-01',

'2',

'5',

'2',

'1',

'0.0093',

'1001 Shauer Way',

' ',

'Windsor',

'ON',

'N8N 0B6',

'ChristopherDavies@ofd.ca'

)

A-D:

/\*\*

A - Create a query that shows the name of the client, the address information, investor contact, and client services contact

\*\*/

use [CSCI-1320-Proj4-2]

select Client\_Name, Address1, City, StateProvince, Zip, Investor\_Contact.Investor\_Contact\_Name, CS\_Representative.CS\_Rep\_Name

from dbo.Client

left join dbo.Investor\_Contact

on Investor\_Contact.Investor\_Contact\_ID = Client.Investor\_Contact\_ID

left join dbo.CS\_Representative

on CS\_Representative.CS\_Rep\_ID = Client.CS\_Representative\_ID

where Client\_ID like '3'

/\*\*

B - Create a query that displays the:

1. name of the client

2. "sum" total of the value of their account - (shares \* price)

\*\*/

use [CSCI-1320-Proj4-2]

select Client.Client\_Name, sum(Investment.Shares \* Investment.Price) as 'Sum Total'

from Client

left join Investment

on Investment.Client\_ID = Client.Client\_ID

where Client.Client\_ID like 3

group by Client\_Name

/\*\*

C - Create a query that shows each stock, stock company name, price, shares, total investment (shares \* price)

\*\*/

use [CSCI-1320-Proj4-2]

select Investment\_Ticker, Investment\_Name, Price, Shares, (Shares \* Price) as 'Total Investment'

from Investment

where Client\_ID like '3'

/\*\*

D - Create a query that shows the client, management fee, (mgmt fee \* investment value) as total management fee

\*\*/

use [CSCI-1320-Proj4-2]

select Client\_Name, sum(Management\_Fee \* Investment.Shares \* Investment.Price) as 'Total Management Fee'

from Client

left join Investment

on Investment.Client\_ID = Client.Client\_ID

where Client.Client\_ID like 3

group by Client\_Name

# SSMS Screen Captures:

Captures A-D and the T-SQL insert are below.

A:Graphical user interface, text, application, email

Description automatically generated

B:

Graphical user interface, text, application, email

Description automatically generated

C:Graphical user interface, text, application

Description automatically generated

D:

Graphical user interface, text, application

Description automatically generated

Insert:

Note: The text reads “(1 row affected)”

Graphical user interface, text, application

Description automatically generated

Database Design:

Diagram, schematic

Description automatically generated

# Conclusion

The database model has been updated to reflect the new information that National Investments has disclosed to me. The changes made were: The client’s zip attribute must now accept 7 characters instead of 5 to account for a 6 digit Canadian zip with one space (7 chars in total), the State attribute was renamed to StateProvince to signal support for Canadian provinces.

At this time my only questions pertain to database security and credential access. However, I am sure that these questions will be answered as the project progresses. This project is progressing well, I do not anticipate any delays at this time.