



# COMM 391 – Winter 2014 (Term 1) Microsoft Access Assignment

## Happy Harbor Financial "Green Investing the Right Way"

Due: November 3, 2014 at 11:59 pm

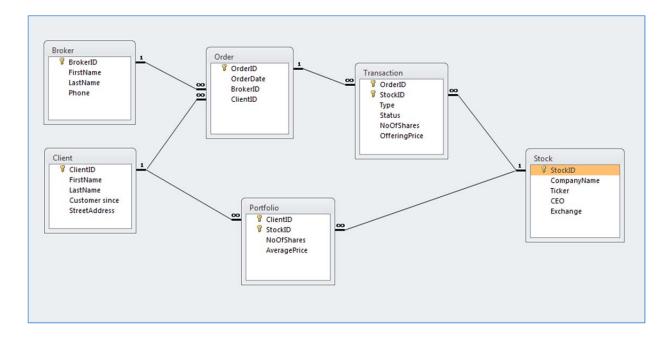
Marks: 7% of course total

# **Purpose**

The purpose of this assignment is to enable you to gain some hands-on experience in creating queries to retrieve and generate information from a database using Microsoft Access 2010.

#### Scenario

Refer to the Access database file named *HappyHarbour\_2014.accdb*. This database contains some information about the investors (clients), the orders placed by individual investors to buy or sell stocks, and their investment portfolio which is a collection of stocks held by individual clients. There are six tables in the database, viz. Client, Broker, Portfolio, Stock, Order and Transaction. Their relationships are shown below.



### Requirements

Your first task is to study the relationships among these six tables as shown above and understand what data is stored in each of these tables. Then create the queries specified below. Make sure you read the requirements carefully.

You should continue to work with your Microsoft assignment group partner.

Download and rename the database file using your group number, e.g. 101-MS99.accdb (where 99 is your group number), and submit your database file in Connect.

### Part 1 – Simple Queries

- 1. Create a query that shows a list of clients of Kenyon Osborn<sup>1</sup>, a broker at the Happy Harbour. The query should only show the last name, first name, street address of the clients. Do not display the broker name and other information. Sort the result in ascending order of first name and then last name of the clients. Save your query as "query1". (5 marks)
- 2. Create a query that shows a list of clients of <u>any broker</u> at the Happy Harbour. The broker's first name and last name will be input by the users when the query is run. The query should only show the last name, first name, street address of the clients. Do not display the broker name and other information. Sort the result in ascending order of first name and then last name of the clients. Save your query as "query2". (5 marks) (Hint: You may modify the "query1" and save it as "query2".)
- 3. Create a query that shows a list of companies listed on Toronto Stock Exchange (TSX) and using the word "international" in their company name. The query should only show the company name, the stock ticker and the name of the CEO of the company. Sort the result in ascending order of company name. Save your query as "query3". (5 marks)

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<sup>&</sup>lt;sup>1</sup> You do not know the Broker ID of any broker.

#### Part 2 - Calculated Queries

4. Create a query that shows the total cost of each stock held by a client on his portfolio. The client's name is Zeus Monroe<sup>2</sup>. The query should show the stock ticker of the companies in Mr. Monroe's portfolio and the total cost of each stock (the number of shares times the average price). The query should only show the stock ticker and the total cost. Do not display the client name, number of shares and average price. Sort the result in ascending order of stock clicker. Save your query as "query4". (5 marks)

#### Part 3 - Totals Queries

5. Create a query that shows a list of brokers and the total amount of all "Sell" transactions they have completed for their clients in August and September 2014. The query should only show the first and last name of the brokers and the total amount (i.e. number of shares times the offering price) of the "Sell" transactions that were approved. Do not display the number of shares, offering price and other information. Sort the result in descending order of the total amount. Save your query as "query5". (10 marks)

#### Part 4 - Crosstab Queries

- Create a query that shows the total number of shares each client held in his/her portfolio
  for each company. The query should have the first name and last name of the clients as
  the row and the stock ticker as the column. The grand total should be removed. Save
  your query as "query6". (10 marks)
- 7. Create a query that shows the average offering price of each company's stock in the year 2013 by transaction types. The query should only show the transactions that were approved. It should have the stock ticker as its row and the type of transaction as its column. No total column should be added and no other information should be displayed. Save your query as "query7". (10 marks)

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<sup>&</sup>lt;sup>2</sup> You do not know the Client ID of any client.