



Certificate Program in Internet Programming & Development (A.E.C. LEA.BN) Full-Time Day Training Program

(420-P14-AB) Database 1 Course Outline

A. General Information

Parameters		
Course Number	420-P14-AB	
Course Title (Long)	Database 1	
Course Title (Short)	DB1	
Course Weighting	2 hour lecture + 2 hours laboratory + 3 hours homework	
Schedule Date:	Start Date: 20-Jan-17	End Date: 6-Feb-17
Schedule Time:	8:30 am to 2:30 pm	
Classroom:	BH-213	
Number of Credits (Units)	2.33	
Number of Hours of Instruction	60	
Competencies Fully Met	DC59 – Effectively use SQL in a variety of database products to query the	
	contents of a relational database	
Competencies Partially Met	Designing Relational Database	
Prerequisite course	N/A	

Assignment 02

Deadline for submission: February 2, 2017 (as per schedule)

Late submissions will not be accepted.

Student Name	Student ID

Case Study – The following exercise allows you to design a database

In Assignment 1, you created the database design for MovinOn Inc. The database will be used to manage data about the company and its operations. John Brush, the company's president, and Simon Roberts, the company's information systems specialist, reviewed your design and worked to finalize it. The Figure 2.1 shows the database design that John and Simon approved.

Course Name: Database I

Course Number: 420-P14-AB

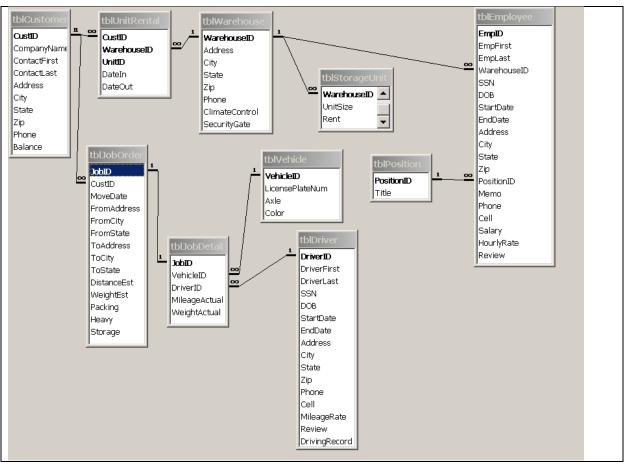


Figure 2.1: MovinOn Inc. Database Design

John and Simon are satisfied that the design in Figure 2.1 will output the data needed to manage the business. With the design approved, you can begin developing the database.

- 1. Compare the database design you developed in Assignment 1 with the one shown in Figure 2.1. If necessary, change your database and table designs to match the ones shown in the figure. If you determine that you need to add or change fields in your table designs, be certain to carefully consider and then set the properties that will support the data being stored in those fields.
- 2. Create a new database named MovinOn_YourInitials.
- 3. Use the database design shown in Figure 2.1 as a guide to help you develop the database. Be certain to specify the field names, data types, field descriptions, and field sizes as you create each table. Create validation rules as necessary to ensure that users enter consistent, complete, and accurate data in the tables. During the discovery phase (database analysis and logical design), John and Simon gave you some important



Course Name: Database I Course Number: 420-P14-AB

information that you must consider in your table designs.

4. Check your database carefully to ensure that you have created all the tables, that you have created all the fields and set their properties.

- **5.** Check all your tables for accuracy and ensure that all your relationships have been established according to the design shown in Figure 2.1.
- 6. Add few records in each table.

 In some cases, you might need to import data stored in an Excel workbook into a table. If you have not created the table in the database, you can import the data and create the table at the same time. Simon received some Excel files from Mr. Brush containing data

table at the same time. Simon received some Excel files from Mr. Brush containing data that he needs to store in the database. One of those files, Employee.xlsx (located in the Assignment 2 Data folder), contains data about the employees. Simon decides to create tblEmployee table by importing the data from the Employee.xlsx Excel file.

Darnell Colmenero is an administrative assistant responsible for many human resources tasks, and asks for your help extracting information from the MovinOn database. Darnell asks for your help in filtering data and creating queries that provide the information that he needs.

Create queries to answer the following questions:

- 7. In what states or provinces do the employees reside? Save this query as **qryEmployeeStatesProvinces**
- 8. How many employees in each city? Save this query as qryEmployeesPerCity
- 9. Who makes the highest salary? Save this query as qrySalariedEmployees
- 10. Who is paid the lowest hourly rate? Save this query as **qryEmployeeLowWage**
- 11. How many types of jobs are offered at MonivOn? Save this query as qryJobPositions
- **12.** How many people are employed in each type of job? Save this query as **qryJobsPerPosition**
- **13.** Submit the zipped folder to your instructor with using My JAC Portal (**OmniVox Services**).

