REVIEW LESSON

MTA Course: Database Administration Fundamentals
Lesson name: Database Fundamentals 1.1
Topic: Understand how data is stored in tables (One 50-minute class period)
File name: DBAdminFund_RL_1.1

Lesson Objective:

1.1: Understand how data is stored in tables. *This objective may include but is not limited to:* understanding what a table is and how it relates to the data that will be stored in the database; columns/fields, rows/records

Preparation Details

Prerequisite student experiences and knowledge

Students should know the basics of database structure.

This MTA Certification Exam review lesson is written for students who have learned about database administration. Students who do not have the prerequisite knowledge and experiences cited in the objective will find additional learning opportunities using resources such as those listed in the Microsoft® resources and Web links at the end of this review lesson.

Instructor preparation activities

None

Resources, software, and additional files needed for this lesson:

- Microsoft PowerPoint® viewer and projector.
- DBAdminFund_SA_1.1
- DBAdminFund_SA_1.1_key
- DBAdminFund_PPT_1.1

Teaching Guide

Essential Vocabulary:

field—A location in a record in which a particular type of data is stored. Data = some value; a single entry in a table.

column—A group of items that are listed up and down (that is, vertically) in a table.

row—A group of items that are listed across (that is, horizontally), left to right, in a table.

table—A data structure characterized by rows and columns, with data occupying or potentially occupying each cell formed by a row-column intersection.

record—A data structure that is a collection of fields (elements), each with its own name and type; a group of fields across one row.

variable—In a database, it refers to the label of a column.

I am not sure if providing an example of a table here will enhance clarity, for example the following table and the associated verbiage can be included to provide examples.

Customer_Identification	Customer_Last_Name	Customer_First_Name
1	Smith	Denise
2	Jones	David
3	Royant	Sabine

Each of the following is a column:

Customer_Identification, Customer_Last_Name, Customer_First_Name

Each of the following is a row of data:

1. Smith, Denise

2. Jones, David

3. Royant, Sabine

Lesson Sequence

Activating prior knowledge/lesson staging (10 minutes)

1. *Say:* Today is the start of 20 review lessons on database administration to help you pass MTA Certification Exam 98-364—Database Administration Fundamentals.

Lesson activity (30 minutes)

1. Present the PowerPoint presentation DBAdminFund_PPT_1.1, after handing out worksheet DBAdminFund_SA_1.1. The students will use the worksheet for the review work as you cover the essential vocabulary found in the PowerPoint.

Assessment/lesson reflection (10 minutes)

1. What is a database?
   A database is a collection of data. A computer system uses a database to store and manage data.
   The key is to cover the Essential Vocabulary list. One good idea is to use small whiteboards or a piece of paper and ask the students to write the definition of the essential vocabulary words, and then have the students show the whiteboards to check their understanding.

   Since the primary focus here is around the relational database, does the following definition will be more relevant?

   The question will be:

   What is a relational database?

   The definition will be:

   A relational database is a collection of data organized as a set of tables.

Microsoft resources and Web links

Faculty Connection Academic Resource Center
http://www.microsoft.com/education/facultyconnection/ARC/ResourceCenter.aspx?c1=en-us&c2=0

Additional activities (homework or enrichment):

- Homework is required if students did not complete the task from the PowerPoint assignment.