

LAST NAME:

FIRST NAME:

**Resources to be read and analyzed before you work in this homework assignment.**

- a. Lecture Notes 01 to 03
- b. Special attention must be given to the “Oracle Datamodeling” Notes Lessons 1 to 10. For your convenience the first 10 lessons of the Oracle data Modeler notes are posted with the Homework Assignment.
- c. Oracle Data Modeling Practices Lessons 1 to 10 problem statement and solutions. Also attached to this Homework Assignment.

**Procedure to work in this assignment:**

1. Install the Oracle Datamodeler software in your workstation. The instructions are in **Appendix A**.
2. Review the Oracle Datamodeler concepts we discussed in class and summarized in the attached document “**DB\_Modeling\_and\_RDB\_Design\_Lessons\_1\_to\_10.pdf**”.
3. Read and document “**DB\_Modeling\_L1\_to\_L10\_ACTIVITY\_GUIDE.pdf**”.

The practices for lessons 1 to 5 deal with the **dataflow diagram** for the scenario “Starling DVD and Games Rentals” and the practices for Lessons 6 to 10 are to build the **ER diagram** for the database.

**Your Task: Use the Oracle Datamodeler software installed in your workstation to implement the practice exercises provided to you in “DB\_Modeling\_L1\_to\_L10\_ACTIVITY\_GUIDE.pdf”.**

**Objective: Become an expert in the utilization of the Oracle Datamodeler’s software to build Data Flow Diagrams and expressing the Database Conceptual Design using EER Diagrams.**

**Deliverables:**

**The solution must be provided in a single MS Word document.**

**In all the practices you must write down the Practice description and follow it with your solution.**

**All the DFDs and ERs must be built using the Oracle Data Modeler and the resulting diagrams must be copied to the MS document (Screen pictures).**

**Please do not submit separated documents.**

**Important: Please include a LEGEND in each diagram. The legend must contain your full name**

**Practices:**

Practice 1-1: Summarize in your own words the solution that is provided and evaluate the existing rental tracking database to determine whether it would be better to start with a new model or re-engineer the database that already exists.

Practice 2-1: Build the table given and indicate if you agree with then solution and why. You may also have your own solution.

Practice 3-1: Write a detailed explanation of the suggested solution. Insert into resulting diagrams into your MS Word document.

Practice 4.1: Follow the steps in Solution 4.1 to build the DFD

Practice 5.1: Summarize the concept of decomposition presented in Lesson 10. Follow the steps in Solution 5.1 to decompose the DFD.

Practice 6-1: Write a detailed explanation of the suggested solution. Insert into resulting diagrams into your MS Word document.

Practice 6.2: Write a detailed explanation of the suggested solution. Insert into resulting diagrams into your MS Word document.

Practice 7.1: Write a detailed explanation of the suggested solution. Insert into resulting diagrams into your MS Word document.

Practice 7.2: Write a detailed explanation of the suggested solution. Insert into resulting diagrams into your MS Word document.

Practice 8.1: Write a detailed explanation of the suggested solution. Insert into resulting diagrams into your MS Word document.

Practice 8.2: Write a detailed explanation of the suggested solution. Insert into resulting diagrams into your MS Word document.

Practice 9.1: Follow the steps in Solution 9.1 to build an Entity-Relationship Diagram (ERD)

Practice 10.1: Follow the steps in Solution 10.1 to complete the required ERD

# Appendix A

## Installing the Oracle Datamodeler.

Go to: [SQL Developer Datamodeler](http://www.oracle.com/technetwork/developer-tools/datamodeler/downloads/index.html)

<http://www.oracle.com/technetwork/developer-tools/datamodeler/downloads/index.html>

The screenshot shows the Oracle SQL Developer Data Modeler Downloads page in Internet Explorer. The browser's address bar displays the URL: <http://www.oracle.com/technetwork/developer-tools/datamodeler/downloads/index.html>. The page features a sidebar on the left with a list of Oracle products, including JDeveloper, NetBeans, Application Testing Suite, SQL Developer, SQL Developer Data Modeler, Application Development Framework, Application Express, Oracle REST Data Services, Developer Tools for Visual Studio, Discoverer, Enterprise Pack for Eclipse, JHeadstart, Warehouse Builder, XML Developer's Kit, Zend Server, Forms, Oracle Help Technologies, Oracle Mobile Application Framework, WebRTC, and Oracle JET. The main content area has tabs for Overview, Downloads, Documentation, Community, and Learn More. The Downloads tab is active, showing the SQL Developer Data Modeler Downloads section. It includes a License Agreement section with a radio button for 'Accept License Agreement' and a link to the 'OTN License Agreement for SQL Developer Data Modeler'. Below this, it lists the version 'SQL Developer Data Modeler 17.4' and the release date 'Version 17.4.0.355.2121, December 22, 2017'. There are links for 'Release Notes', 'Bugs Fixed', and 'Documentation'. The download section lists three options: 'Windows 64-bit with JDK included' (257 MB), 'Windows 32-bit/64-bit' (190 MB), and 'Mac OSX' (190 MB). Each option includes a download link and a download icon.

SQL Developer Data Modeler Downloads

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SQL Developer Data Modeler 17.4

Version 17.4.0.355.2121, December 22, 2017





















[Release Notes](#), [Bugs Fixed](#), [Documentation](#)

Windows 64-bit with JDK included  
(5473f0bb9e65d9fd211215c741bd84aa)  
Installation Notes, JDK 8 or above required 257 MB Download

Windows 32-bit/64-bit  
(61590a6ceab6bfb0d03de6e9a588ee1f)  
Installation Notes, JDK 8 or above required 190 MB Download

Mac OSX  
(5f18a888c124f01206adb154d18c0a7)  
Installation Notes, JDK 8 or above required 190 MB Download

You will be prompted for your userid and password. If you do not have an Oracle userid, please create one. It is free.

name	Date modified	Type	Size
 configuration	1/30/2018 7:13 AM	File folder	
 datamodeler	1/30/2018 7:13 AM	File folder	
 dropins	1/30/2018 7:14 AM	File folder	
 dvt	1/30/2018 7:13 AM	File folder	
 equinox	1/30/2018 7:14 AM	File folder	
 external	1/30/2018 7:14 AM	File folder	
 ide	1/30/2018 7:13 AM	File folder	
 jdbc	1/30/2018 7:13 AM	File folder	
 jdev	1/30/2018 7:13 AM	File folder	
 jdk	1/30/2018 7:13 AM	File folder	
 jlib	1/30/2018 7:14 AM	File folder	
 module	1/30/2018 7:14 AM	File folder	
 modules	1/30/2018 7:14 AM	File folder	
 netbeans	1/30/2018 7:13 AM	File folder	
 rdbms	1/30/2018 7:13 AM	File folder	
 sleepycat	1/30/2018 7:13 AM	File folder	
 sqldeveloper	1/30/2018 7:13 AM	File folder	
 svnkit	1/30/2018 7:14 AM	File folder	
 datamodeler.exe	12/21/2017 9:23 PM	Application	
 icon.png	12/21/2017 9:23 PM	PNG image	

# Sign in

Username



youruserid@gwu.edu



Password



••••••••••



**Sign in**

**Create Account**

In Windows: A Zipped file will be downloaded

Unzip the file and the “datamodeler” directory will be created.

Double click on the “datamodeler.exe” to execute.

