

CPRG 200 Lab Assignment 3

In this lab you will get an opportunity to practice using data sources and dataset to access and modify data in the database. This lab is to be completed on individual basis, but of course discussion and exchanging ideas with other students, as well as asking the instructor, is encouraged.

Problem Description

Create a Windows Forms application that connects to the Northwind database using data source that includes tables: Products and Order Details.

On the form, all data from Products should be displayed in detail form, with text boxes for all columns, except for SupplierID and CategoryID, which should be bound to a combo boxes to allow user to pick supplier and category, rather than type data in text boxes. Use CategoryName and CompanyName from the related tables Categories and Suppliers for display in the combo boxes, but set value members to the IDs.

The form should have a toolbar that allows adding products, modifying data and deleting products (this toolbar is created automatically when you drag a table from the data source onto the form).

Also, display rows from Order Details table that are related to the current product record in a read-only data grid view.

Use exception handling to deal with SQL server errors and data errors. As you test the application performing data manipulation, you will likely cause errors in an attempt to delete a record that is referenced or inserting a data row with null for a non-null column. Your application needs to intercept the error with exception handling and display error message, rather than crashing.

Prepare a Word document that contains screen shots that prove that your application is running correctly in various possible cases. Identifying a comprehensive set of test cases will be a factor in marking. Put the Word document in the top-level folder of your lab (where the .sln file is).

Submit

Zip the entire folder with your application and submit to the appropriate Dropbox. Make sure that the name of the folder includes your name and *CPRG200_Lab3*, e.g. *Bob_Smith_CPRG200_Lab3*. The assignment must be submitted before the due date. Unless an important reason can be documented, late penalty deductions of 20% per day will be applied.

Marking Scheme

Marking Component	Out of
Records from the Products table are displayed in a detail form	5
Supplier and category of the current product can be selected from combo boxes	4
Form allows adding, modifying, and deleting records from the Products table	5
Exception handling deals with potential SQL server and data errors	4
Related Order Details records are displayed in a read-only data grid view	5
Code is written in good style and has comments	2
Comprehensive set of tests is documented in a Word document with screen shots	5
Total:	30