

Exercise 6 “Database configuration and dynamic web content”

Instructions and preparatory questions

Administration of Computer Systems, Fall 2008

This document is available online at:
<http://www.hh.se/te2003>

Exercise 6 – Database configuration and dynamic web contents

Practical information – Read this first!

This exercise consists of two parts:

1. Preparatory questions in this document that should be answered before coming to the exercise session (before starting the exercise session the assistant will ask you to show and explain your answers)
2. A practical exercise session where you will work with actual equipment in order to answer the remaining questions in this document.

The work on preparatory questions as well as practical exercise work is to be carried out together with your assigned partner.

Before starting the practical part show the assistant that you have finished the preparatory questions, when you are done with the practical part you must notify the assistant so that he/she can check and sign your work. No signature = no credits for the exercise.

If you get stuck on the practical part the assistant is there to assist you, however in order to learn you are of course expected to come up with solutions mainly on your own.

Information necessary to complete both the preparatory and practical part of the exercise will be given at the lectures. Lecture slides are available at the course webpage <http://www.hh.se/te2003/>

Good luck and have fun!

Introduction

In this exercise you will set up an environment to access information stored in a Microsoft Access database using ASP (Active Server Pages). The result of this exercise will be a simple web database application.

Network configuration

Before we begin, we need to do some basic system configurations, much like we did in exercise 4 and 5:

- First, start the virtual machine
 - Navigate to the directory `D:\VMW\te2003_ex5\`
 - Double-click on the VMware configuration file (`.vmx`)
 - This will start VMware Player and boot the guest operating system
 - Log in to the virtual machine as Administrator (**password: ide**)

- Configure the network connection
 - Set up the following static IP configuration:
 - Use the virtual machine IP address on the sticker at the front of your computer.

What is the IP number? _____

- The subnet mask is 255.255.255.128
 - The default gateway is 192.168.203.1
 - The DNS servers are 194.47.0.30 and 194.47.0.23
 - Save the settings and verify that you can access the internet

- Configure the computer name
 - Change the computer name to match the sticker at the front of your computer.
 - The virtual machine hostname is the one containing `virt`

What is it your host name? _____

- Restart the computer
- Create user
 - Create one user account that you will use as the iFlowers web site administrator.

What is the user name? _____

iFlowers Web Site

Before developing the web database application, you will need to download some files that you will use during the exercise.

- Go to the course web page and download the file for the exercise 6 into the virtual machine and extract the files.

What is it the extracted files' directory name? _____

Configuring the web service

- Configure the machine to act as a web server
 - In the IIS Manager, expand the local computer and select web Sites. As you see, no sites are configured at the moment
 - Create a new web site
 - Use **iFlowersWebSite** as site description
 - Use the IP-address of the server
 - Configure the server to listen on TCP port 80 (the default port for the HTTP protocol)
 - Set the site home directory to “iFlowersWebSite” directory found in the extracted files’ directory and allow “Read” and “Run script (such as ASP)” permission
 - Use the Documents tab to make `index.asp` the default web page. If you not find `index.asp`, add it.
 - In the Web Service Extentions, allow Active Server Pages (ASP)

- Test your new web server configuration
 - Start Internet Explorer and enter your IP address.

Describe what the page you see contains:

- Configure the database location
 - Navigate to the extracted files’ directory and use NOTEPAD to edit the file “global.asa” that you will find at the “iFlowersWebSite” directory.
 - You will find a directory identifying the Data Source. In our case the data source points to “C:\Temp\Exercise6\db\iFlowersDB.mdb”. You must replace the path to the file “iFlowersDB.mdb” specified in the file by the correct path according to where you extracted the files for the exercise 6.
 - Now, copy the file “global.asa” and replace the same file found in the “adm” directory

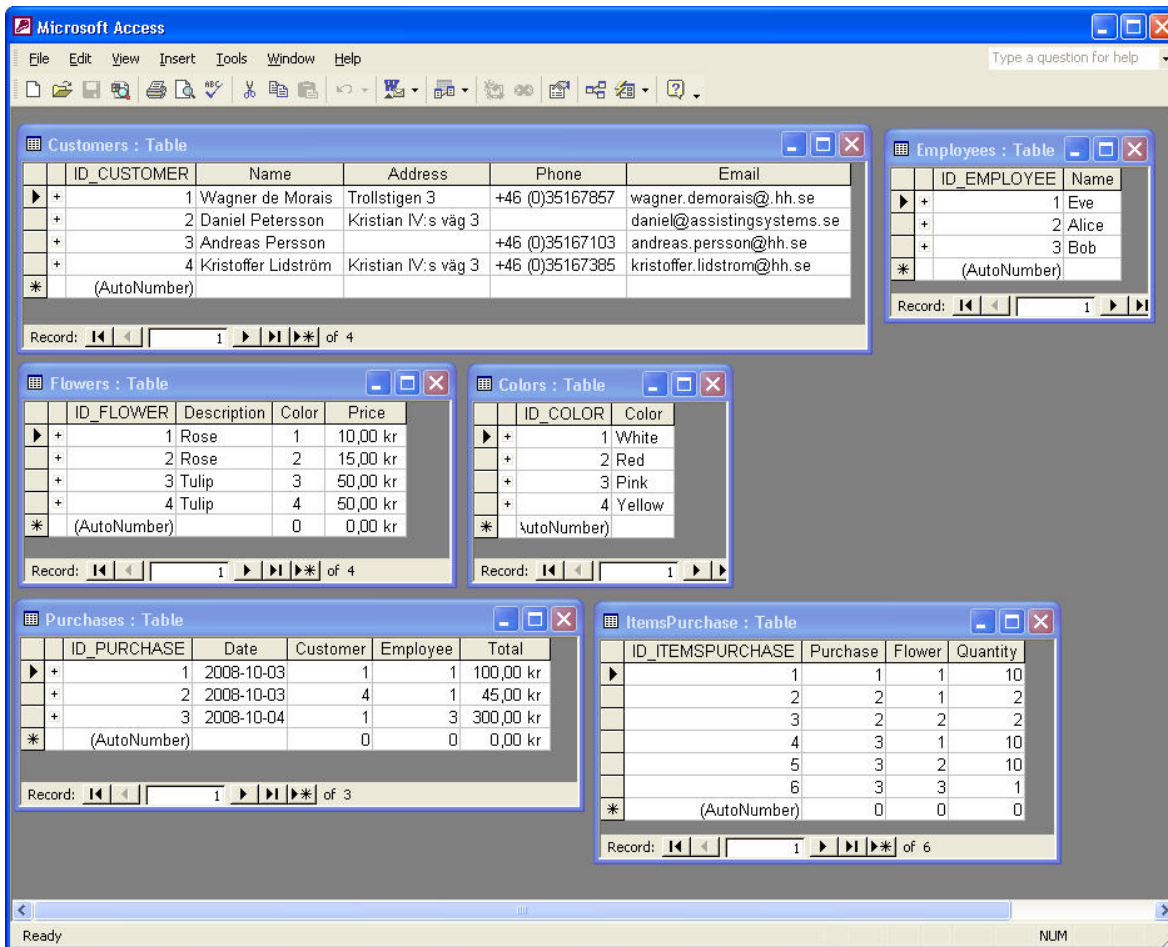
- Test the iFlowers’ web site
 - Start Internet Explorer and enter your IP address.

Describe what the page you see contains:

- Set up virtual directories
 - In the IIS Manager, expand the local computer and click on `Web Sites`
 - Right-click on the `iFlowerWebSite` web site and select `New -> Virtual Directory`
 - Create a virtual directory named **adm** pointing to the “adm” directory found in the extracted files’ directory
 - Right-click on the **adm** virtual directory and select `Permissions`
 - Click the “Advanced” button
 - Uncheck “Allow inheritable permissions...”
 - A dialog window appears, click the “Copy” button to copy permissions from the parent folder
 - Apply the changes and you will get the security and permissions window.
 - Remove Users and add the user account created at the beginning of the exercise.

- Test the iFlowers’ web site
 - Start `Internet Explorer` and enter your IP address.

Describe what the page you see contains:



Preparatory question 1

Given the database structure of the iFlowers database, suggest five interesting queries that the iFlowers staff may want to make. Specify them in plain English. Example: “See all customers that Bob has served”

iFlowers web site administration

At this point you can see the iFlowers web site. However, just an “Administration” link is available to the user.

- Administrating the iFlowers Web Site
 - Click on the “Administration” link
 - Before you access the Administration page, you should see a pop-up window prompting for a login name and a password.
 - Enter the login and password for the user account that you created before.
 - At this point, you will see the iFlowers web page for administration
- Administrating the iFlowers database
 - Click on the “iFlowers Database” link
 - Look to the existing tables and suggest at least one more column for each table

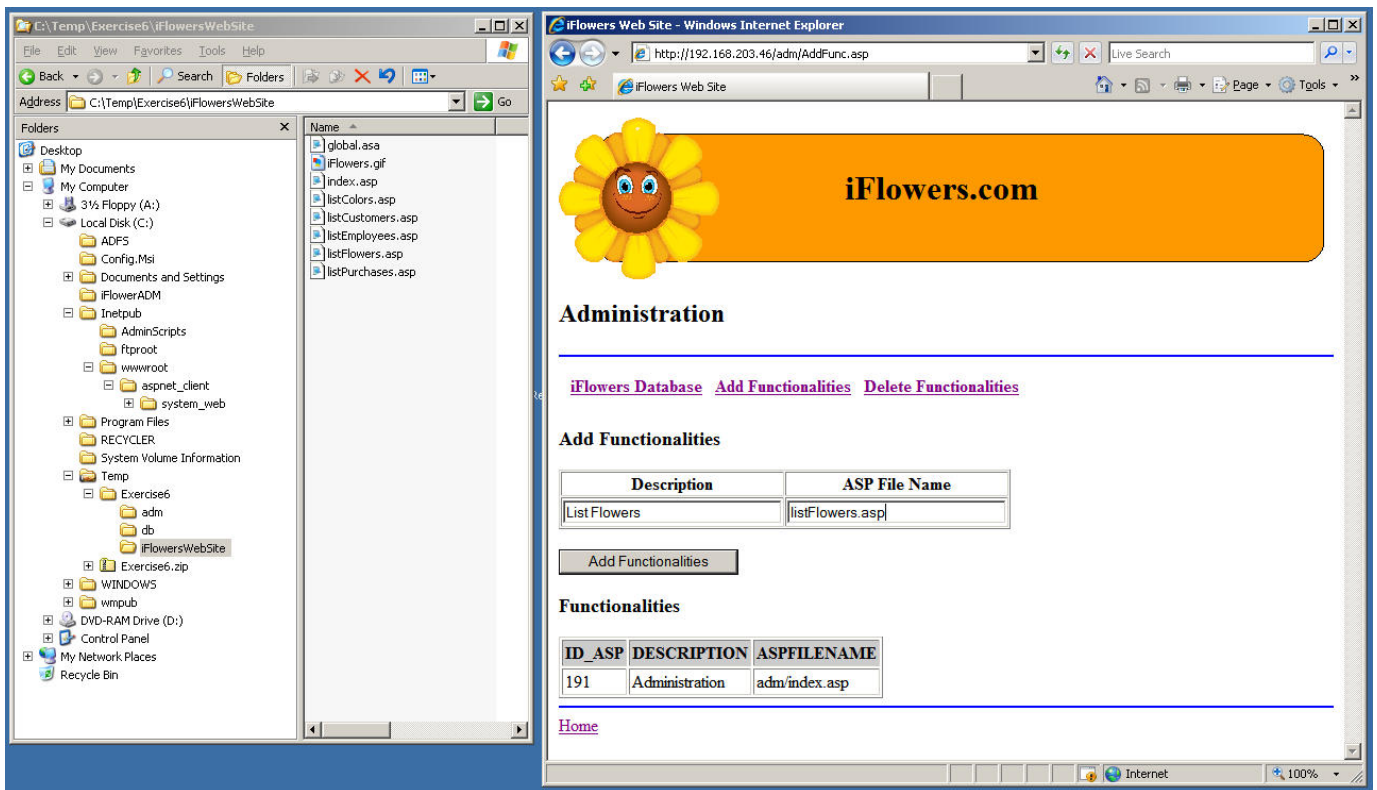


| Table Name | Column | Description |
|------------|--------|-------------------|
| EMPLOYEES | SALARY | Employee’s salary |
| | | |
| | | |
| | | |
| | | |
| | | |

- Navigate to the extracted files’ directory and write down all .ASP file names found in the “iFlowersWebSite” directory

| ASP File Name |
|---------------|
| |
| |
| |
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| |
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| |

- Adding new functionalities
 - Go back to the iFlowersWebSite.
 - Click in the Administration link and after go to “Add Functionalities”



- As you can see in the picture above, the web page shows in the first part two empty text boxes and below that a table with the existing functionalities.
- Your task here is to add new functionalities by giving a description for all .asp files found in the “iFlowersWebSite” directory.
 - Look to the picture above and take as example
 1. Description: List Flowers
 2. ASP File Name: listFlowers.asp
- As soon as you add a new functionality, you will see that the table with functionalities will show the added functionality.

- Test the iFlowers’ web site

- Start Internet Explorer and enter your IP address.
- You will see now that you have more options according to the new descriptions given for the functionalities.



