

# COMP xxxx (Fall 2006)

## MIDTERM EXAM

Instructor: **Randy Connolly**

Name: \_\_\_\_\_

Time allowed: 75 minutes.

### **Read Carefully:**

---

1. Ensure that the instructor listed above is the instructor of your registered section.
2. Ensure your name is entered on this sheet.
3. Short and Long Answer Section: answer all questions in the space provided on the exam.

### **Marks:**

---

Short Answer Section: \_\_\_\_\_ / 60 (most short answers are worth 5 marks)

**Total:** \_\_\_\_\_ / **60 Marks**

1. Describe the four basic types of web applications. Be sure to mention the constituent participants in each type.

2. What are data providers in the context of ADO.NET? What are the four key classes of each provider?

3. A single .NET application can be created using multiple .NET languages. Identify the features of .NET that enables this ability.

4. In ASP.NET, what is postback? What is the viewstate? How are they related?

5. What are the three different ways of handling exceptions in ASP.NET?

6. What are master pages? What are themes and skins? What problem do these things address?

7. What is a DataSet? What are generics?

8. What is an SQL injection attack? What can you do to protect an ASP.NET application from such an attack?

9. Describe the ASP.NET 2.0 compilation and execution process. That is, what happens behind the scenes when ASP.NET receives its first request for an ASP.NET page? Don't bother with the application or page life cycle; instead describe how ASP.NET and the .NET Framework compile and execute the page. [worth 10 marks]

10. Write the asp.net mark-up (i.e., the .aspx file) and the code-behind (i.e., the.aspx.cs file) that will display a list of three names in a drop-down list, and which will then display a message telling the user the name that the user choose from the list. [worth 10 marks].

```
<%@ Page Language="C#" AutoEventWireup="true" CodeFile="Sample.aspx.cs" Inherits="Sample" %>

<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">

<html xmlns="http://www.w3.org/1999/xhtml" >
<head><title>Sample</title></head>
<body>

</body>
</html>
```

```
using System;
using System.Web;
using System.Web.UI;
using System.Web.UI.WebControls;

public
{

}

}
```