Review

- ASP.NET project creation
- Debugging an ASP.NET page
- Adding controls to an ASP.NET page
- Adding event handlers
- Modifying the look of controls
- ASP.NET tables
- Dynamic controls (controls added via code)
- Master pages

Tracing / Profiling Pages

- Add Trace="True" to Page directive
- Causes thorough
  - Profiling of the lifecycle of the page
  - Dump of
    - ASP.NET controls
    - Session state
    - Cookies in and out
    - Headers in and out
    - Query string
### Tracing / Profiling

```plaintext
Profiling Code Example:

```
Session, Cookies and Form

ADO.Net (Review)

- You have already discussed
  - Relational databases
    - Data organized into tables
  - SQL
    - Structured Query Language
  - ODBC
    - Open Database Connectivity
  - MySQL
    - The database backend we are using

ADO.Net (Review)

- OdbcConnection
  - Connection string
    - Specifies driver, host, user, password, database
  - Open
  - Close
- OdbcCommand
  - Specifies connection, SQL, and parameters
  - Use parameterized queries
ADO.Net (Review)

- `OdbcDataReader`
- One way sequential access
- Memory efficient – one record at a time

Good Practices

```csharp
private void ModificarActa(int id, DateTime fecha, string tipo, string motivo)
{
    Acta acta = GetActa(id);
    acta.Fecha = fecha;
    acta.Tipo = tipo;
    acta.Motivo = motivo;
    UpdateActa(acta);
    GetActas();
}
```
ADO.Net Data Sets, etc.

- DataSet, along with DataTable and DataAdapter create
- In-memory
- Random access
- Optionally type-safe views onto potentially many tables
- Allows connection to be closed while the data is processed

ADO.Net Data Sets, etc.

- Code review

3rd Party Controls

- Many 3rd parties create controls for ASP.NET
- They make web sites beautiful and functional
- Try out these:
  - www.obout.com
  - www.essentialobjects.com
- Demos
  - obout Grid (source code provided)
  - essential objects tab strip and multiview
Changing Document Type

- A presentation (.aspx file) can be completely overridden to return non-HTML data
- For example:
  - XML data can be returned
    - SOAP
    - Web Services
  - Audio
  - Pictures
    - Code review