



TRAILHEAD
TECHNOLOGY PARTNERS

.NET and C# Training

Session 8

Overall Agenda

~~Session 1 – 6: Basic and Advanced C# and VS~~

~~Session 7: Classes available in .NET BCL~~

Session 8: Data Access Basics (ADO.NET)

Session 9 - 10: C# Advanced concepts

Session 11 – 12: Data Access with Entity Framework 6

Session 13 – 14: Version Control with TFVC and Git

Session 15 – 16: ASP.NET (RESTful) Web APIS

Today's Agenda

1. Review last assignment (1 hr 15 min)
2. Review useful classes in the BCL (30 min)
3. Learn ADO.NET (2 hr)
4. New assignment (15 min)

Review Last Assignment

Assignment 7

- Write a **useful** console app that gets its data from a web API
- To get you started, check out this free API listing:
<https://github.com/public-apis/public-apis>

Challenge: Cache the API results locally in the filesystem and use those local results instead of calling the API if they are fresh enough.

BCL Classes

Demo

Reflection

Demo

Graphics

SQL Server Local DB

Demo

SQL Server LocalDB and VS Data Tools

ADO.NET

Demo

Connection

Demo

Provider

Demo

Command

Demo

DataAdapter and DataTable

Demo

DataReader

Demo

Dapper - MicroORM

Assignment 8

- Create a console to-do list application that stores its items and their statuses in a SQL Server LocalDB database
- Allow the user to view their to-do list, add items, remove items, and mark items complete

Challenge 1: Create you console as a CLI instead of menu-based. (ex:

```
todo help
todo add "item 1"
todo complete "item 1"
todo list
```

etc.)

Challenge 2: Allow the user to view completed items and mark then as incomplete