



**TRAILHEAD**  
TECHNOLOGY PARTNERS

# .NET and C# Training

Session 12

# 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 assignments (1 hr 30 min)
2. EF 6 (2 hr)
3. New assignment (30 min)

Review Last Assignment

# Assignment 11

- Create (or update) your console to-do list application from assignment 8 that stores its to do item and their statuses in a SQL Server LocalDB database using EF6 instead of ADO.NET
- 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

# Entity Framework 6

# DEMO

Review EF6 Basics

# DEMO

EF Code-First and Code-First from Database



# DEMO

Code-First Migrations

# Assignment 12

- Complete Assignment 11 if you haven't already (it's that important)
- Use Entity Framework (Model-First or Code-First) to create a record store inventory management system
  - Allow searching by song title, album title, album year, artist, etc
  - Allow the user to add, edit, and delete songs, artists, and albums in the database
  - Ensure duplicates records aren't created
  - Make sure new albums are associated with an existing artist if they already exist, otherwise create a new artist