

MY ENTITY FRAMEWORK CHEAT SHEET

This is a list of tools I use to get generated code and get work done quickly with Entity Framework.

Generate Classes for Entity Framework Code-First from Database

1. Prerequisite: An existing database
2. Do one time: [Download Entity Framework 6 Tools for Visual Studio 2012 & 2013.](#)
3. Right click a project
4. **Add new item...**
5. Search for ADO, select **ADO.NET Entity DataModel**.
6. Name it.
7. Select **Code First from database**.
8. Select / Create Database connection.
9. Select tables you want to include.
10. Finish
11. Now you have models and a DbContext to work with.

Generate SQL/Database from a DbContext

1. For the entities, create a models directory and create classes in it.
 1. If your primary key does not follow convention name, use the `[Key]` attribute.
 2. Create navigation properties for many to one relationships; create a property for the ID and the object.
 3. If your nav prop ID does not follow convention, use the `[ForeignKey]` attribute on the object.
 4. Other attributes to use: *Required*, *MaxLength*, *Index*, *InverseProperty*, *Column* (if you want your db column to have a different name), `[Table("TableName", Schema = "SchemaName")]`
2. VIEW > Other > **Package Manager Console**.
3. Make sure the console is showing the correct project. You also may need to set that project as the startup project in VS so it can find the correct config file with the DB connection string.
4. If you are trying to recreate your database, make sure to drop the DB or change the connection string. Also remove the Migrations folder.
5. Make sure you have a DbContext file with:
 1. A good database connection string.
 2. Sub-classing DbContext
 3. `public DbSet<Entity> Entities {get;set;}`
6. Type: **Enable-Migrations**
7. **Add-Migration MigrationName**
8. **Update-Database -Script**. Save off the SQL if you want it.
9. **Update-Database**. Now your database tables are created.