Command Line Interface Commands for Migrations

Use .NET Core Command List Interface to execute entity framework core commands. To use .NET CLI, add `<DotNetCliToolReference` `Include="Microsoft.EntityFrameworkCore.Tools.DotNet"` `Version="2.0.0"` `/>` under `<ItemGroup>` node by editing your .NET Core project's `.csproj` file.

Open command prompt and navigate to your project's root folder and enter `dotnet ef --help` to list EF Core commands, as shown below.

```
C:> dotnet ef --help
Entity Framework Core .NET Command Line Tools 2.0.0-rtm-26452

Usage: dotnet ef [options] [command]

Options:
  --version        Show version information
  -h|--help        Show help information
  -v|--verbose     Show verbose output.
  --no-color       Don't colorize output.
  --prefix-output  Prefix output with level.

Commands:
  database    Commands to manage the database.
  dbcontext   Commands to manage DbContext types.
  migrations  Commands to manage migrations.

Use "dotnet ef [command] --help" for more information about a command.
```

As you can see above, there are three main EF commands available: database, dbcontext and migrations. The following table lists all EF commands and sub commands.

Command	Sub Commands	Usage
Database	drop	Drops the database.
	update	Updates the database to a specified migration.
DbContext	info	Gets information about a DbContext type.
	list	Lists available DbContext types.
	scaffold	Scaffolds a DbContext and entity types for a database.
Migration	add	Adds a new migration.
	list	Lists available migrations.
	remove	Removes the last migration.
	script:	Generates a SQL script from migrations.

Let's see available options for each command.

Database Drop

> **dotnet ef database drop**

```
Usage: dotnet ef database drop [options]

Options:
  -f|--force                          Don't confirm.
  --dry-run                           Show which database would be dropped, but don't drop it.
  -c|--context <DBCONTEXT>            The DbContext to use.
  -p|--project <PROJECT>             The project to use.
  -s|--startup-project <PROJECT>     The startup project to use.
  --framework <FRAMEWORK>            The target framework.
  --configuration <CONFIGURATION>    The configuration to use.
  --runtime <RUNTIME_IDENTIFIER>     The runtime to use.
  --msbuildprojectextensionspath <PATH>  The MSBuild project extensions path. Defaults to "obj".
  --no-build                          Don't build the project. Only use this when
                                      the build is up-to-date.
```

Database Update

> **dotnet ef database update**

```
Usage: dotnet ef database update [arguments] [options]

Arguments:
  <MIGRATION>  The target migration. If '0', all migrations will be reverted. De
faults to the last migration.

Options:
  -c|--context <DBCONTEXT>            The DbContext to use.
  -p|--project <PROJECT>             The project to use.
  -s|--startup-project <PROJECT>     The startup project to use.
  --framework <FRAMEWORK>            The target framework.
  --configuration <CONFIGURATION>    The configuration to use.
  --runtime <RUNTIME_IDENTIFIER>     The runtime to use.
  --msbuildprojectextensionspath <PATH>  The MSBuild project extensions path. Defaults to "obj".
  --no-build                          Don't build the project. Only use this when
                                      the build is up-to-date.
```

DbContext Info

> **dotnet ef dbcontext info**

```
Usage: dotnet ef dbcontext info [options]

Options:
  --json                                 Show JSON output.
  -c|--context <DBCONTEXT>               The DbContext to use.
  -p|--project <PROJECT>                 The project to use.
  -s|--startup-project <PROJECT>         The startup project to use.
  --framework <FRAMEWORK>                The target framework.
  --configuration <CONFIGURATION>        The configuration to use.
  --runtime <RUNTIME_IDENTIFIER>         The runtime to use.
  --msbuildprojectextensionspath <PATH>  The MSBuild project extensions path. Defaults to "obj".
  --no-build                             Don't build the project. Only use this
                                         when the build is up-to-date.
```

DbContext List

```
> dotnet ef dbcontext list
```

```
Usage: dotnet ef dbcontext list [options]

Options:
  --json                                 Show JSON output.
  -p|--project <PROJECT>                 The project to use.
  -s|--startup-project <PROJECT>         The startup project to use.
  --framework <FRAMEWORK>                The target framework.
  --configuration <CONFIGURATION>        The configuration to use.
  --runtime <RUNTIME_IDENTIFIER>         The runtime to use.
  --msbuildprojectextensionspath <PATH>  The MSBuild project extensions path. Defaults to "obj".
  --no-build                             Don't build the project. Only use this
                                         when the build is up-to-date.
```

DbContext Scaffold

```
> dotnet ef dbcontext scaffold
```

```
Usage: dotnet ef dbcontext scaffold [arguments] [options]

Arguments:
  <CONNECTION>  The connection string to the database.
  <PROVIDER>    The provider to use. (E.g. Microsoft.EntityFrameworkCore.SqlServ
er)

Options:
  -d|--data-annotations               Use attributes to configure the model (
where possible). If omitted, only the fluent API is used.
  -c|--context <NAME>                 The name of the DbContext.
  -f|--force                          Overwrite existing files.
  -o|--output-dir <PATH>              The directory to put files in. Paths ar
e relative to the project directory.
  --schema <SCHEMA_NAME>...           The schemas of tables to generate entit
y types for.
  -t|--table >TABLE_NAME<...          The tables to generate entity types for.
  --use-database-names                Use table and column names directly from the database.
  --json                              Show JSON output.
  -p|--project <PROJECT>              The project to use.
  -s|--startup-project <PROJECT>      The startup project to use.
  --framework <FRAMEWORK>             The target framework.
  --configuration <CONFIGURATION>     The configuration to use.
  --runtime <RUNTIME_IDENTIFIER>      The runtime to use.
  --msbuildprojectextensionspath <PATH>  The MSBuild project extensions path. Defaults to "obj".
  --no-build                          Don't build the project. Only use this
                                      when the build is up-to-date.
```

Add

```
> dotnet ef migrations add
```

```
Usage: dotnet ef migrations add [arguments] [options]

Arguments:
  <NAME>  The name of the migration.

Options:
  -o|--output-dir <PATH>              The directory (and sub-namespace) to us
e. Paths are relative to the project directory. Defaults to "Migrations".
  --json                              Show JSON output.
  -c|--context <DBCONTEXT>            The DbContext to use.
  -p|--project <PROJECT>              The project to use.
  -s|--startup-project <PROJECT>      The startup project to use.
  --framework <FRAMEWORK>             The target framework.
  --configuration <CONFIGURATION>     The configuration to use.
  --runtime <RUNTIME_IDENTIFIER>      The runtime to use.
  --msbuildprojectextensionspath <PATH>  The MSBuild project extensions path. Defaults to "obj".
  --no-build                          Don't build the project. Only use this
                                      when the build is up-to-date.
```

List

```
> dotnet ef migrations list
```

```
Usage: dotnet ef migrations list [options]

Options:
  --json                               Show JSON output.
  -c|--context <DBCONTEXT>             The DbContext to use.
  -p|--project <PROJECT>               The project to use.
  -s|--startup-project <PROJECT>       The startup project to use.
  --framework <FRAMEWORK>              The target framework.
  --configuration <CONFIGURATION>      The configuration to use.
  --runtime <RUNTIME_IDENTIFIER>       The runtime to use.
  --msbuildprojectextensionspath <PATH> The MSBuild project extensions path. Defaults to "obj".
  --no-build                           Don't build the project. Only use this
                                       when the build is up-to-date.
```

Remove

> **dotnet ef migrations remove**

```
Usage: dotnet ef migrations remove [options]

Options:
  -f|--force                           Don't check to see if the migration has
 been applied to the database.
  --json                               Show JSON output.
  -c|--context <DBCONTEXT>             The DbContext to use.
  -p|--project <PROJECT>               The project to use.
  -s|--startup-project <PROJECT>       The startup project to use.
  --framework <FRAMEWORK>              The target framework.
  --configuration <CONFIGURATION>      The configuration to use.
  --runtime <RUNTIME_IDENTIFIER>       The runtime to use.
  --msbuildprojectextensionspath <PATH> The MSBuild project extensions path. Defaults to "obj".
  --no-build                           Don't build the project. Only use this
                                       when the build is up-to-date.
```

Script

> **dotnet ef migrations script**

```
Usage: dotnet ef migrations script [arguments] [options]

Arguments:
  <FROM>  The starting migration. Defaults to '0' (the initial database).
  <TO>    The ending migration. Defaults to the last migration.

Options:
  -o|--output <FILE>                   The file to write the result to.
  -i|--idempotent                      Generate a script that can be used on a
 database at any migration.
  -c|--context <DBCONTEXT>             The DbContext to use.
  -p|--project <PROJECT>               The project to use.
  -s|--startup-project <PROJECT>       The startup project to use.
  --framework <FRAMEWORK>              The target framework.
  --configuration <CONFIGURATION>      The configuration to use.
  --runtime <RUNTIME_IDENTIFIER>       The runtime to use.
  --msbuildprojectextensionspath <PATH> The MSBuild project extensions path. Defaults to "obj".
  --no-build                           Don't build the project. Only use this
                                       when the build is up-to-date.
```