

Add-Migration

References

Code First - <http://www.entityframeworktutorial.net/efcore/entity-framework-core-console-application.aspx>

Migrations Commands

Add-Migration

Creates a migration script analysing changes since the previous model. No modification is done to database.

After generation you can edit the UP and Down from the Migration object.

Install the Package Manager Console tools by running the following command in Package Manager Console:

PowerShell

```
Install-Package Microsoft.EntityFrameworkCore.Tools
```

Update the tools by running the following command in Package Manager Console.

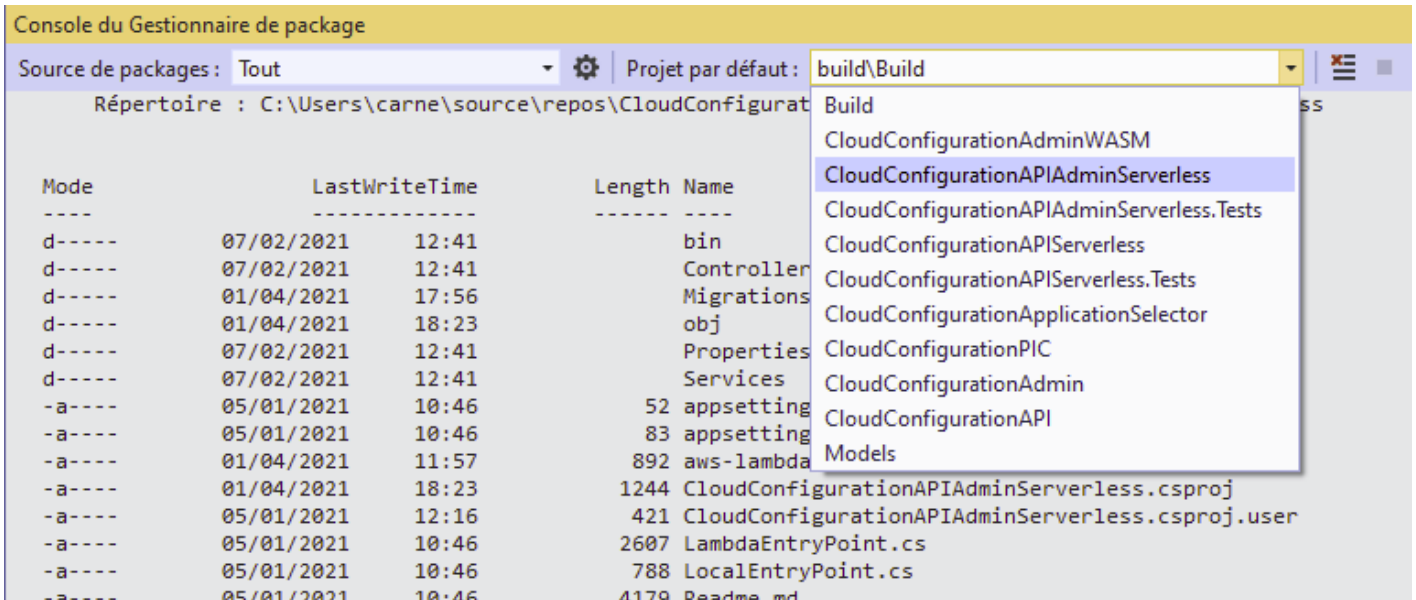
PowerShell

```
Update-Package Microsoft.EntityFrameworkCore.Tools
```

Create Database Schema

In Visual Studio, open NuGet Package Manager Console from Tools -> NuGet Package Manager -> Package Manager Console

Check if you are on the correct project :



and enter the following command:

```
PM> add-migration CreateSchoolDB
```

After creating a migration, we still need to create the database using the update-database command in the Package Manager Console, as below.

```
PM> update-database -verbose
```

DbContext

DbContext Methods

Method	Usage
Add	Adds a new entity to <code>DbContext</code> with Added state and starts tracking it. This new entity data will be inserted into the database when <code>SaveChanges()</code> is called.
AddAsync	Asynchronous method for adding a new entity to <code>DbContext</code> with Added state and starts tracking it. This new entity data will be inserted into the database when <code>SaveChangesAsync()</code> is called.
AddRange	Adds a collection of new entities to <code>DbContext</code> with Added state and starts tracking it. This new entity data will be inserted into the database when <code>SaveChanges()</code> is called.

AddRangeAsync	Asynchronous method for adding a collection of new entities which will be saved on SaveChangesAsync().
Attach	Attaches a new or existing entity to <code>DbContext</code> with Unchanged state and starts tracking it.
AttachRange	Attaches a collection of new or existing entities to <code>DbContext</code> with Unchanged state and starts tracking it.
Entry	Gets an <code>EntityEntry</code> for the given entity. The entry provides access to change tracking information and operations for the entity.
Find	Finds an entity with the given primary key values.
FindAsync	Asynchronous method for finding an entity with the given primary key values.
Remove	Sets Deleted state to the specified entity which will delete the data when SaveChanges() is called.
RemoveRange	Sets Deleted state to a collection of entities which will delete the data in a single DB round trip when SaveChanges() is called.
SaveChanges	Execute INSERT, UPDATE or DELETE command to the database for the entities with Added, Modified or Deleted state.
SaveChangesAsync	Asynchronous method of SaveChanges()
Set	Creates a <code>DbSet<TEntity></code> that can be used to query and save instances of TEntity.
Update	Attaches disconnected entity with Modified state and start tracking it. The data will be saved when SaveChagnes() is called.
UpdateRange	Attaches a collection of disconnected entities with Modified state and start tracking it. The data will be saved when SaveChagnes() is called.

OnConfiguring	Override this method to configure the database (and other options) to be used for this context. This method is called for each instance of the context that is created.
OnModelCreating	Override this method to further configure the model that was discovered by convention from the entity types exposed in <code>DbSet<TEntity></code> properties on your derived context.

DbContext Properties

Method	Usage
ChangeTracker	Provides access to information and operations for entity instances this context is tracking.
Database	Provides access to database related information and operations for this context.
Model	Returns the metadata about the shape of entities, the relationships between them, and how they map to the database.

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