

# Introduction to .NET – lab no. 5

Way of working: 2 persons.

Summary:

Keywords: DbContext, EF Core, Repository pattern, Migrations, Loading patterns

---

## *Prerequisites*

---

1. Check the extra info's.

---

## *Requirements*

---

1. Create a new .NET Core class library
  - a. Make the design of a new class Author and expose the following properties:
    - Id
    - FirstName mandatory, min 50 and max 100
    - LastName mandatory max 150
  - b. Make the design of new class Book and expose the following properties:
    - Id
    - Title mandatory, min 50 and max 100
  - c. Create a ApplicationContext class derived from DbContext (add the required libraries)
    - i. Add Author class
    - ii. Add Book class
  - d. Create 1-to-Many relation between City and Poi
  - e. Check Unit Of Work pattern
  - f. Combining UoW pattern with Repository pattern expose and test the following behaviour
    - i. CreateAuthor
    - ii. RemoveRemoveAuthor by its id
    - iii. AddBook
    - iv. RemoveBook by its id

### Extra info's

### Hints

```
protected override void OnConfiguring(DbContextOptionsBuilder optionsBuilder)
{
    if (!optionsBuilder.IsConfigured)
    {
```

```
optionsBuilder.UseSqlServer(@"Server=(localdb)\mssqllocaldb;Database=YourDatabaseName;Trusted_Connection=True;");
}
```

---

*Note:*

---

1. All exercises are mandatory.
2. Encapsulation is mandatory.
3. Use Fully Defined Relationship and explain the consequences
4. Your samples should expose all the loading patterns for EF.
5. You will receive your points at the end of the lab.
6. Working time: 70 minutes.