

Skipping to DB connectivity:

1. Database-First

2. code first



DbContext => A bridge between your application and DB.

DbContext <T> => represents a collection of entities.

1) DbContext class is also made in the Models folder. The name of the class will be the name of the DB.

2) Constructor in the DbContext class:

```
public class Name (DbContext options option):  
    base (option) {  
    }
```

/* DbSet will be made for every Model. */

3) public.

```
DbSet < ModelName > Variable { get; set; }
```

/* DbSet should always be made public

Always make a primary key in the Model class before running migration, otherwise it won't create a migration.

④ Connection String:

→ connection string will be made in appsettings.json

```
ConnectionStrings: {  
  "constr": "Server=.; database=DB; trusted_connection=  
TrustServerCertificate=true;"  
}
```

⑤ Configure Program.cs

```
/* before var = builder.Build();
```

(DbContext class name)

```
builder.Services.AddDbContext<DbContext class name>
```

```
(item => item.UseSqlServer(builder.Configuration.
```

```
GetConnectionString("constr")));
```

(what ever name was assigned
while making the conn. str.)

⑥ Adding Migration (to add DB via C#) make

In PM console => add-migration Name

Update-Database.

* (if you want to do any changes in the DB (column name or data type, etc), you do the changes in the Model class & run the migration again.

CRUD in DB:

To Display Data:

→ Making a controller. Just make a controller class in the controller folder.
(You can use HomeController as well).

→ Whatever approach you might take, making a controller or using the HomeController you will need to set context.

→ Setting context means adding an object of the DbContext class in the controller because it contains DbSet which represents the table of the database.

public readonly Name of the DbContext class
object;

/* Make a constructor.

```
public ControllerClass (
```

```
    this.object = object; };
```

→ Then make an action method.

If you want to display data in the form of list, make a list in the action method.

La class = 'btn btn-dark text-white' asp-action
to create a button.

25:00
(39)

```
public ActionResult Index() {
```

```
    var students = object.stud Dbset Name: PoliCF()  
    return View(students); }
```

Then generate Razor view of this by
right clicking and generating non-empty
Razor view.

To create Data:

→ create an action method to create
in the controller

```
public ActionResult Create(object std) {
```

```
    if (ModelState.IsValid) {
```

```
        context.students object. Add(std);
```

```
        context.SaveChanges();
```

```
        return RedirectToAction("View Name");
```

```
    }
```

```
    return View(std std); }
```

Create the Details, Edit, & Delete
methods similarly.