

CTIS 479

C# Programming in the .NET Framework

Name:	
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Section:	

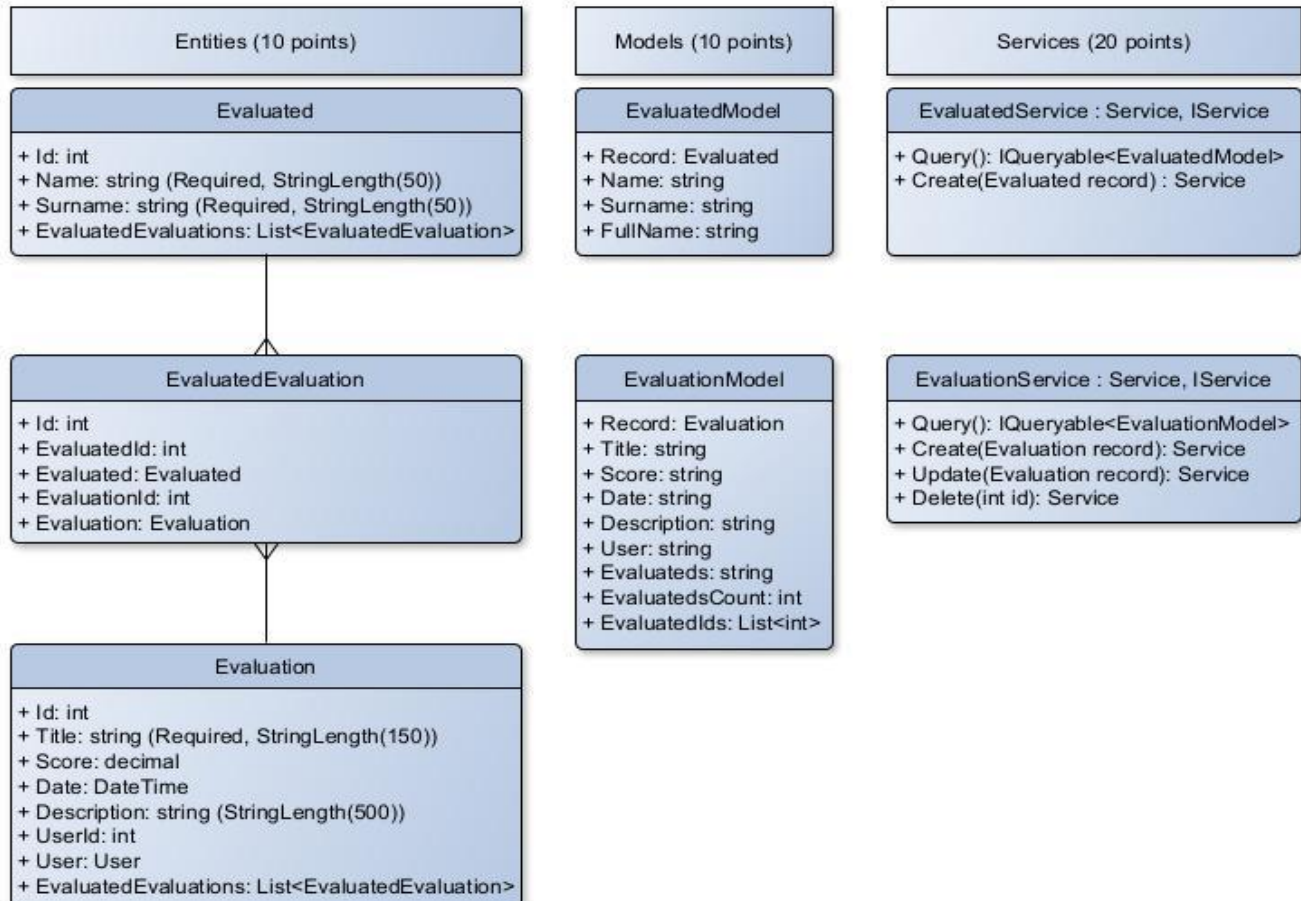
FALL 2024 – 2025 FINAL 180 minutes Total points: 100 07.01.2025

Web applications which contain compile errors will not be graded!

1. **(3 points)** Clone the **EZEvaluation** repository from the GitHub link below:
<https://github.com/cagilalsac/EZEvaluation>
2. **(2 points)** Create the **EZEvaluationDB** by running the “update-database” command in the **Package Manager Console**. Don’t forget to choose the **BLL** project as **Default project**.

Note: You must run your project and click the “Seed Database” menu link to insert the initial data to your database.

3. **(40 points)** Create the entity, model and service classes in you **BLL** project according to the class diagram below (Do not forget to add **DbSets** of type **Evaluated**, **EvaluatedEvaluation** and **Evaluation** in the **Db** class):



4. **(10 points)** In the **MVC Layer**:
 - a. **(8 points)** In the **Program.cs** file:
 - i. Add inversion of control of the **Service Classes** you created in the **IoC Container**.
 - ii. Write necessary codes to read configuration data from the **appsettings.json** file:
In the **appsettings.json** file, there must be a section called **AppSettings** which must contain the following property:
"Title" property that has a value **"EZ-Evaluation"**.
You must also create an **AppSettings.cs** file in the **Models** folder under your **BLL project** which has a class containing the static string property above (**Title**).
 - iii. Write necessary codes to add **Authentication** with a cookie to your web application. The cookie options must be configured as below:
LoginPath must be assigned as **"/Users/Login"**,
AccessDeniedPath must be assigned as **"/Users/Login"**,
ExpireTimeSpan must be assigned as **60 minutes**,
SlidingExpiration must be assigned as **true**.
After adding **Authentication** in the **Program.cs** file, don't forget to use it with the **app** variable.
 - b. **(2 points)** In the **_Layout.cshtml** file:
 - i. Use the **Title** property value of the **AppSettings** class for displaying **"EZ-Evaluation"** in the link HTML tag with the CSS class **navbar-brand** within the body HTML tag.
Hint: You can replace **"MVC"** with the **Title** property value of the **AppSettings** class.
 - ii. **Evaluations** link redirecting to the **Index** action of the **Evaluations** controller must be shown to all web application users, no authentication control needed.
 - iii. For authenticated users with role **Admin**, **Evaluateds** link redirecting to the **Index** action of the **Evaluateds** controller must be shown.
5. **(10 points)** Scaffold the **EvaluationsController** with Index, Details, Create, Edit and Delete actions with views.
6. **(5 points)** Scaffold the **EvaluatedsController** with only the Index and Create actions with views.

Note: You must change the **RedirectToAction** method parameter from **Details** to **Index** in the post Create action.
7. **(10 points)** In the **UsersContoller** class, implement the actions below for authentication:
(9 points) Login post action,
(1 points) Logout get action.

For a user with **Admin** role, you can use "admin" as the **user name** and "admin" as the **password**.
 For a user with **User** Role, you can use "user" as the **user name** and "user" as the **password**.

8. **(10 points) Authorization** in the **EvaluationsController** must be provided as follows:
- i. Index action can be called by all users (authenticated and non-authenticated),
 - ii. Details, Create and Edit actions can be called by only authenticated users,
 - iii. Delete action can be called by only authenticated users with role **Admin**.
9. **(5 points)** In the Index view of the **EvaluationsController**, Create, Details and Edit links must be shown only to the authenticated users. Delete link must be shown only to the authenticated users with role **Admin**.
10. **(5 points) Authorization** in the **EvaluatedsController** must be provided as follows:
- i. Index and Create actions can only be called by authenticated users with role **Admin**.