**ASP.NET MVC Tutorial Cheat Sheet**

**Part 1 - General MVC**

**0. Understanding project structure**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/getting-started/introduction/getting-started>

**1. Creating Controllers & Views**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/getting-started/introduction/adding-a-controller>

**2. Create your first model**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/getting-started/introduction/adding-a-model>

**3. Create DBContext**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/getting-started/getting-started-with-ef-using-mvc/creating-an-entity-framework-data-model-for-an-asp-net-mvc-application>

**4. Install EntityFramework 4.6 from NugetPackageManager**

Extra scaffolding:

4.1 <https://www.completecsharptutorial.com/asp-net-mvc5/scaffolding-example-in-asp-net-mvc-5-step-by-step.php>

4.2 <https://www.c-sharpcorner.com/UploadFile/26b237/scaffolding-in-mvc5/>

**5. Edit the Model - Migrations - Code First**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/getting-started/getting-started-with-ef-using-mvc/migrations-and-deployment-with-the-entity-framework-in-an-asp-net-mvc-application>  
  
Tools -> *NuGet Package Manager -> Package Manager Console:*

***enable-migrations (само първия път)***

***add-migration InitialMigration***

***update-database***

**6. More complex data model**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/getting-started/getting-started-with-ef-using-mvc/creating-a-more-complex-data-model-for-an-asp-net-mvc-application>

**7. Validation & Data Notations**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/older-versions/mvc-music-store/mvc-music-store-part-6>

<https://www.c-sharpcorner.com/article/model-validation-using-data-annotations-in-asp-net-mvc/>

**8. Filters & Pagination**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/getting-started/getting-started-with-ef-using-mvc/sorting-filtering-and-paging-with-the-entity-framework-in-an-asp-net-mvc-application>

<https://www.c-sharpcorner.com/UploadFile/4b0136/perform-paging-searching-sorting-in-Asp-Net-mvc-5/>

**9. Authentication (Login/Registration)**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/security/>

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/security/create-an-aspnet-mvc-5-web-app-with-email-confirmation-and-password-reset>

<https://code.msdn.microsoft.com/ASPNET-MVC-5-Security-And-44cbdb97>

<https://www.c-sharpcorner.com/UploadFile/asmabegam/Asp-Net-mvc-5-security-and-creating-user-role/>

<http://openlightgroup.com/Blog/TabId/58/PostId/189/UserRolesAdministration.aspx>

<https://www.dotnetcurry.com/aspnet-mvc/1102/aspnet-mvc-role-based-security>

**10. REST API Specifics**

HttpClient - <https://zetcode.com/csharp/httpclient/>

Sync & Asynchronous requests - <https://developer.mozilla.org/en-US/docs/Web/API/XMLHttpRequest/Synchronous_and_Asynchronous_Requests>

<https://docs.microsoft.com/en-us/aspnet/web-api/overview/getting-started-with-aspnet-web-api/action-results>

From A to Z - <https://www.dotnettricks.com/learn/webapi>

**11. Securing your API / Token Authorization**

<https://www.luisquintanilla.me/posts/client-credentials-authentication-csharp.html>

<https://stackoverflow.com/questions/38494279/how-do-i-get-an-oauth-2-0-authentication-token-in-c-sharp>

JWT

<https://www.c-sharpcorner.com/article/jwt-json-web-token-authentication-in-asp-net-core/>

<https://codeburst.io/jwt-auth-in-asp-net-core-148fb72bed03>

<https://devblogs.microsoft.com/aspnet/jwt-validation-and-authorization-in-asp-net-core/>

**Part 2 - Separation into Layers**

**12. Understanding WCF**

<https://docs.microsoft.com/en-us/dotnet/framework/wcf/getting-started-tutorial>

Create WCF Service Library. Add WCF Service class

**13. More about DTOs**

Info: <https://www.codeproject.com/Articles/1050468/Data-Transfer-Object-Design-Pattern-in-Csharp>

DTO Basics: <https://www.telerik.com/blogs/dotnet-basics-dto-data-transfer-object>

MS: <https://docs.microsoft.com/en-us/aspnet/web-api/overview/data/using-web-api-with-entity-framework/part-5>

<https://docs.microsoft.com/en-us/archive/msdn-magazine/2009/august/pros-and-cons-of-data-transfer-objects>

**14. Repository Pattern & Unit of Work**

FAQ: <https://www.c-sharpcorner.com/UploadFile/b1df45/unit-of-work-in-repository-pattern/>

**Implement Generic Repository**

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/older-versions/getting-started-with-ef-5-using-mvc-4/implementing-the-repository-and-unit-of-work-patterns-in-an-asp-net-mvc-application#implement-a-generic-repository-and-a-unit-of-work-class>

SampleCode#GenericRepository <https://docs.microsoft.com/en-us/aspnet/mvc/overview/older-versions/getting-started-with-ef-5-using-mvc-4/implementing-the-repository-and-unit-of-work-patterns-in-an-asp-net-mvc-application#implement-a-generic-repository-and-a-unit-of-work-class>

SampleCode#UnitOfWork

<https://docs.microsoft.com/en-us/aspnet/mvc/overview/older-versions/getting-started-with-ef-5-using-mvc-4/implementing-the-repository-and-unit-of-work-patterns-in-an-asp-net-mvc-application#creating-the-unit-of-work-class>

15. WebAPI

* <https://www.tutorialsteacher.com/webapi>
* <https://www.dotnettricks.com/learn/webapi>