MVC — MVVM (Model-View-ViewModel)

~~Startup.cs~~

Razor pages — for simple pages to receive & display data.

Startup.cs

Startup
- Configuration
- Configure (app, env)
  - to development
  - Https redirect
  - use static files
  - use Routing
  - use Authorization
  - use Endpoints

@Html

@page
<
< @ ... >

filename.cshtml

@page
@using namespace_name
@model modelname
<>
< >
Model - .
</>

filename.cshtml.cs

namespace namespace_name {
public class modelname : PageModel
}

Framework provided Services

→ IHost Appl^n Lifetime — logging
→ IHost Lifetime
→ IHostEnvironment — appname, envt name, content root path

Host Configuration

Configure HostConfiguration on IHostBuilder

ASPNETCORE_ENVIRONMENT ⇒ environment

ConfigureHostConfiguration (config Host ⇒)
→ SetBasePath
→ addJsonFile (HostSetting)
→ AddEnvtVariable
→ addCommandLine

App Config

AppName — key, type, default (entry point) // Envt variable —.
ContentRoot — key, type, set val, Default - app directory
Envt Name — key, type default: production, Envt var

WebApps

CaptureStartupErrors
UseStartup <Startup>.()

Program

→ Host.CreateDefaultBuilder(args).
.ConfigureWebHostDefaults(webBuilder =>

→ CreateDefaultBuilder
→ ChainedConfigurationProvider – source to app config.
[appconfig] - custom prop & behaviour of app.
~~→ appsettings.json~~ → configuration value
→ Content root – gets current directory
→ env. variable & cli arguments
→ loads app config from appsettings.json. ...
→ logging provider
→ console
→ debug
→ event source
→ event log

ConfigureWebHostDefaults
→ host config
→ kestrel
→ adds middleware
→ IIS Integration

· cshtml – html markup & C# code with Razor Syntax

· cshtml.cs – C# code for page events

wwwroot – contains assets like HTML, JS, & CSS files

appsettings.json – config data & connection strings

Program.cs – entry point for the System

Startup.cs – code for configure app behaviour.

→ appsettings.json

→ Program.cs

→ Startup.cs

---

appsettings.json

→ logging,

↳ log level

↳ default – ~~micro soft~~ Information

↳ microsoft – warning

↳ .

– AllowedHosts

– ConnectionStrings:-{

—— context: ——

}

Program.cs (AspNetCore, .Hosting, Extensions)

↳ CreateHostBuilder(args).

→ IHostBuilder

~~HostBu~~ ~~Host.CreateDefault~~

Host.CreateDefaultBuilder(args)

.ConfigureWebHostDefaults(webBuilder =>

{

webBuilder.UseStartup<Startup>();

});

}

Startup.cs

{ AspNetCore, .Build, .Hosting, .Extension, .configuration

Dependency Injection, Hosting, Entity framework core,

→ Configuration

→ ConfigureServices

→ AddDbContext

→ Configure (AppBuilder app, IWebHostEnv)

Softwares

- **Net Framework** – Support websites, Services, desktop apps & more on windows (fast buildy)

- **.Net Core** – cross platform, websites, services & desktop apps
  (modular, light weight & flexible)
  → able to use in different computers.

- **.Net** – free, cross platform opensource for web, mobile, desktop games etc

- **ASP.Net** – framework for web apps with .Net & C#
  web apps, APIs, Realtime, Microservices
  → developer platform made up of tools, prog. lang. & libs to build web apps
  – fast & scalable
  – secure (XSS) – cross site scripting
    (CSRF) – cross site req. forgery

- **ASP.Net MVC** – decouple UI, (view) data (model) & Appl. logic (controllers)

- **ASP.Net WebAPI** – HTTP services with easy way that returns only data.

Software development framework

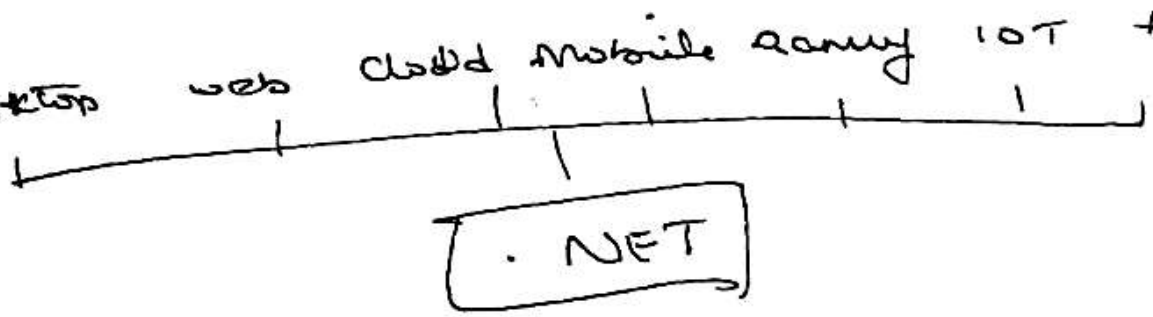
→ foundation for developers to build software applications
→ It includes libraries, packages, compiler etc
→ It improves efficiency of working on the important details of app instead of working on the fundamental parts.

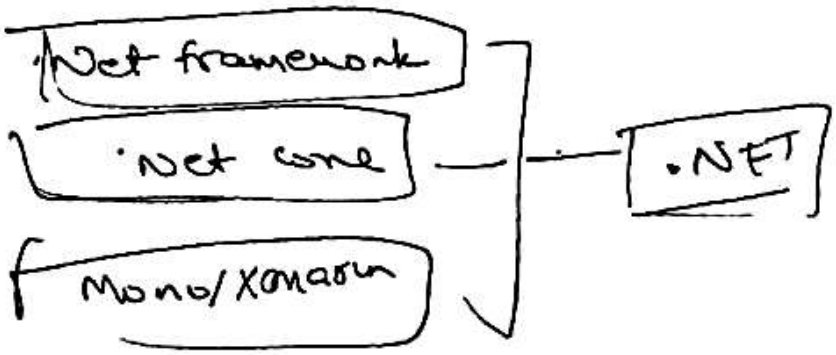
.Net

→ is a software framework that runs primarily on Microsoft windows
→ has a large library that supports interoperability (ability to cooperate)
→ across several languages., platform to build.

→ Build

.Net → the ecosystem – collection of diff software projects
CLR → JVM
C#, F#, VB → languages
Nuget → npm etc
dotnet cli → entry pt, sdk, javac etc
&
Desktop web cloud Mobile gaming IOT AI





EcoSystem — Languages - C#, F#, VB
runtime - CLR
Libraries - Base Class libraries

.dll - dynamic link library
.exe - executable

.Net 5.0 — follow up .Net Core 3.1 & added functionality
— removed core part

TFM - Target framework Moniker

C# — 9.0

---

dotnet - package manager

.Net framework → windows apps.
→ WPF, WF, .Net fwk,
.Net Core → cross platform software framework
→ Modular,

.Net 5.0 - unified framework

URLs

UseUrls( )

WebRoot

.UseWebRoot("public")

(Web API)

- UseDeveloperExceptionPage
- UseSwagger
- addSwaggerGen — Author, Licence, Comments
- UseHttpsRedirection
- UseRouting
- UseAuthorization
- UseEndpoints

ASP.Net ~~Web API~~ MVC

- ASP.Net ~~Web API~~ (dotnet)

→ Start up.cs — startup & enable core configuration
↳ requests & responses

→ myWebApp/Pages — contains web pages for app

→ myWebApp.csproj — libraries referenced to

~~dotnet~~ dotnet new webapp -o myWebApp —no-https
~~dotnet~~ dotnet watch run

Razor pages