1/29/2024

Topics Discussed:

* Doubts about C# topics.
* Recap of what we learnt.
* Roadmap of .Net Development
* General Development Skills:
  + Git, Design patterns, Clean code(resharper) and Refactoring, Design principles, DSA, Software architecture (Microservices, Layered), Architecture patterns (MVC, MVP)
* Importance of Code review (peer review and lead review) – By using code review tools.
* N-tire architecture will have N layers
* .Net is using MVC architecture.
* Windows is using MVP architecture.
* Learn ASP.Net Core (Framework Class Libraries)
  + MVC, APIs, Web APIs, Minimal APIs, Middleware, Filters & Attributes, Authentication and Authorization.
* Client-side .Net:
  + Razor, Blazor, .NET MAUI
* Databases
  + Database design, SQL syntax, stored procedures, Relational DB(Postgres SQL, MySQL, SQL server), NoSQL(MongoDB, RavenDB, CosmosDB used in Azure)
* ORM (Object Relational Mapping)
* Caching (memory cache, application level, distributed caching(redis) used for production applications)
* Logging ->crucial for finding errors, fix issues and bugs and make apps more reliable and secure.
* Microsoft.Extensions.Logging -> used for logging (exclusively for .Net development)
* NLog and Serilog -> popular logging tools
* Real-time communication ->SignalR Core, Web sockets (used for live-chat, notifications, real-time updates)
* Native Background Service, HangFire, Quartz ->Background tasks
* Object Mapping -> AutoMapper, Mapster
* Testing -> xUint, Nunit
* Automation testing: Selenium
* JMeter used for performance testing
* Monitoring and Telemetry
* Messaging -> Kafka (used in Epam), RabbitMQ(used in .Net development)
* Containerization -> Docker, Kubernetes
* Cloud : AWS, Azure
* CI/CD

To-do:

* DataTypes