The .NET Framework, introduced by Microsoft in 2002, evolved into the open-source cross-platform .NET Core in 2016. In 2020, it consolidated into the unified .NET 5.0, merging Core and Framework. C#, its primary language, advanced with features like async/await, LINQ, and pattern matching. .NET 6.0, released in 2021, continued the unification, emphasizing performance and versatility. With consistent updates, the ecosystem promotes modern development practices, fostering cross-platform compatibility and cloud-native solutions, positioning .NET and C# as integral components in contemporary software development.