

# ASP.NET Core

Tmpst is built as an ASP.NET Core application. ASP.NET Core is a cross platform development framework used mainly to create cloud-based applications. ASP.NET Core can run on Windows, Linux and macOS. By using ASP.NET Core, tmpst is able to take advantage of features such as user secrets.

## What is ASP.NET Core

As mentioned earlier, ASP.NET Core is a cross-platform development framework which is also open source. Core was released as a re-designed version of the ASP.NET Framework which only runs on Windows machines.

## Advantages

Below is a list of the advantages of using ASP.NET Core:

- Performance - When compiling ASP.NET Core code, the application's code will automatically be optimised by the compiler. Also, according to [TechEmpower](#), ASP.NET Core ranked 7th out of 297 frameworks when it comes to processing plaintext. .NET Core had a 99.7% performance score out of 100.
- Cross Platform - As mentioned earlier, ASP.NET Core applications can run on Windows, Linux and macOS
- Writing Less Code - ASP.NET Core offers tools such as LINQ which removes the need for lots of for and foreach loops. With LINQ, a query to find the first of instance of an item in a collection (List, Array, etc.) can be written as `NAME_OF_LIST.FirstOrDefault()`; This line of code would have to be written as a multi-line for or foreach loop without LINQ

## References

Hopefully, this tutorial has helped you understand ASP.NET Core better, however, below is a list of useful resources:

## Useful Resources

- What is .NET Core? - <https://cynicaldeveloper.com/blog/what-is-net-core/>
- Create First .NET Core app - <https://dotnet.microsoft.com/learn/dotnet/hello-world-tutorial/intro>
- TechEmpower Results - <https://www.techempower.com/benchmarks/#section=data-r17&hw=ph&test=plaintext>
- Why migrate to .NET Core? - <https://dzone.com/articles/4-benefits-of-migrating-to-aspnet-core-20>
- Advantages of .NET Core - <https://www.fortech.ro/top-advantages-net-core/>