The .Net Framework

The .Net framework was created by Microsoft to build applications on the Windows platform. Desktop applications can be built using WinForms, web applications can be built using ASP.NET and web services can be built. Web services can also be built using the .Net framework

The .Net Framework architecture is made up of three components. These are Languages, Libraries and the Common language runtime.

Languages:

A developer can use a variety of programming languages such as C#, VB.Net and F#, there is a separate compiler for each programming language i.e.: on for C# and one for VB.Net. The .Net framework comprises of the following categories WinForms, ASP.NET and ADO.NET.

WinForms is used to create Form based applications, which would run on an end user machine like Microsoft Office. ASP.Net is used for developing web based applications which are made to run on any browser such as Internet Explorer, Google Chrome and Firefox.

The application would run on a server, when a user makes a request, the server serves up a page to the user, which is viewed on the user’s client machine. ADO.Net is technology used to develop application to interact with Databases such as Oracle or Microsoft SQL Server.

Libraries:

The .Net Framework consists of standard class libraries. It is a collection of methods and functions used for a specific purpose. For example, reading and writing from a file

The Common Language Run time:

The CLR is the platform which .Net programs are executed. It provides Exception handling , which occur when the application is executed, for example if a connection is not valid to a database an exception could be thrown stating that the connection to the database could not be established.

The CLR also provides garbage collection, this is the process of removing unwanted resources when they are no longer required. For example if a database connection is no longer required.

Once a piece is compiled by its respective compiler then compiler will the send the program to the CLR/CLI layer to run.

References

<https://www.guru99.com/net-framework.html>