## Expectation:

This bootstrap course is required to be completed before the actual training starts. Participants should be completely aware of the following topics of C#

## Mode of Course:

Online

## Content:

**Module-1: Introduction to .NET Framework**

* Introduction to .NET Framework
* History of versions - 1.0, 1.1, 2.0, 3.0, 3.5, 4.0, 4.5, 4.6, 4.7, 4.6, 4.7 and 4.8
* .NET Framework Application Execution Cycle, CLS and CTS
* Assembly Brief Idea, Components of Assembly
* Advantages of ,NET Framework

**Module-2: Visual Studio:**

* Introduction to Visual Studio
* How to create a simple C# application using Visual Studio 2012/2013/2015/2017/ 2019
* Using different windows: a. Solution Explorer, b. Server Explorer, c. Properties Window
* Using "Find all references", refactoring, generating method stubs, alignment of code, organize usings etc.,
* Debugging Features in VS, Using debugging windows: a. Autos window, b. Locals window, c. Watch and Quickwatch windows, d. Immediate and Command Window
* Designing class using class diagram, Testing feature in VS, Compiling and Running application in VS

**Module-3: Introduction to C#**

* Introduction to C#, Features of C# language
* Data Types in C#, Control flow statements in C#, Operators in C#
* Writing methods in C#
* Writing a basic C# application, featuring all the previously discussed topics and compiling and running the same, debugging the previous application
* Namespaces, Boxing and Unboxing, using checked and unchecked

**Module-4: Arrays in C#:**

* Arrays in C#
* Declaring one and multi-dimensional arrays
* creating Jagged arrays (array of arrays)
* using "params" keyword - Param array

## Recommended Online Courses for the above mentioned bootstrap course:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Course Name | Link | Source | Duration | Comments |
| C# Tutorial for Beginners - Learn C# Basics in 1 Hour | <https://www.youtube.com/watch?v=gfkTfcpWqAY> | YouTube | 1 hour | NA |
| C# Basics for Beginners: Learn C# Fundamentals by Coding | <https://www.udemy.com/course/csharp-tutorial-for-beginners/> | Udemy | 5 Hours and 24 Minutes | Learners should skip the section **Lists** from the module named: **Arrays and Lists**  Also, learners should skip the section named: **Working with Files** |