# CHAPTER 4: IMPLEMENTATION

Implementation is the third phase of software development lifecycle. It is the part where programmers program code for the project. It’s the part where real working system are built and their responding functions. **Code and UI are in appendix.**

## **4.1 programming language**

Programming language is set of instructions that provides various output. It is instruction for computer that generates or performs special actions. Thousands of programming language have been created and are being created every year. Most popular programming languages are c, C++, java, C#, etc.

For my project I have used C# dot net programming language with MVC framework. I have used .NET MVC with controller and views and razor pages for building web UI more easily. Razor pages covers more features. C# is one of the powerful object-oriented language developed by Microsoft. It can be used to create various application like web, desktop and other types of application using visual studio. MVC stands for Model, View and Controller. Model is used to retrieve and store objects in database. View is a user interface. Controller is request handler.

## **4.2 Development Environment**

Development environment is a collection of tools for the development of programs. It includes testing and debugging as well. It is also called IDE (Integrated development environment) in programming terms. Basically, development environment refers entire environment which includes development and staging and IDE is used to code in local application. Various types of IDE are Microsoft Visual studio, phpstorm, php, mysql etc.

For my project, I have used Microsoft Visual studio for development environment. Visual studio community is the most common used and is free of cost, featured for students and programmers. It supports 16 different programming languages. Many websites, web apps, Mobile apps can be created through this IDE. I have developed a website through the help of this IDE.