# Chapter 4

# Implementation

After design phase, implementation is another step of development lifecycle. This phase is all about developing executable system software. Implementation is the process of realising the design as a program. The main aim of this phase is firstly installing system in production environment and bringing it into operation.

And secondly to ensure the system satisfies:

* Functional Requirements
* Business needs
* Obeys to all physical limits and all orders
* Operates as defined in User and Operator manuals

# 4.1 Programming language(s)

* **PHP**

For the development of this project I have used PHP as programming platform. This language helps in making our website more dynamic and interactive and extends the understanding of how the server works. It is HTML scripted language written in C Programming by Rasmus Lerdorf in1994 for monitoring his online resume and personal data. Server-Side scripting and Command line scripting are traditional and main target field for PHP. It also supports various of the OS and supports web servers like Apache, IIS etc.

* **CodeIgniter**

Framework that has been used for this project is CodeIgniter .CI is an open-source PHP framework with a very small footprint created by Rick Ellis in 2006. MVC design pattern is followed in this framework. This framework is just like tool which helps in fast and better development of websites. The main goal of CI is to develop project much faster so that we can write code from scratch. I have used this framework as it has exceptional performance, doesn’t require any command line and requires nearly zero configuration.

* **MySQL**

Backend of Booking application is handle in database called MySQL. It is the most popular open source database which is popular of its performance, reliability and ease of use. This has been a leading database for web –based application used by high profile properties like Facebook, Twitter, Yahoo etc. This sequential query language offers wide broad of features in it. It is client/server system and a relational database system which communicates with the server, save queries loads data. Replication, Transaction, Triggers etc. are other include features of MySQL.

# 4.2 Development environment

**• IDEs(Sublime)**

Sublime IDE is used for write a series of code for this project. It is a text editor for code, mark-up and prose. They work together with colours to provide syntax highlighting. Sublime defines scope that divides the text in a buffer into named regions. Plugin API, Split Editing, Cross Platform etc. are some of the major features of Sublime. It also makes use of fine-grained contextual information.

**• Development Platform**

This project has been built under the Microsoft Windows 8.1 OS with essential hardware configuration. Management of project is done under GitHub. Internet platform was also better as ‘Worldlink’ named ISP is fast and reliable.

# 4.3 Deployment strategy

This is all about installing the web based system into client or server system and getting access through the application. It ensures mainly two migration techniques:

* System Migration

It is all about transferring programs from one’s computer to another

Or one server to another. This may involve both physical system migration (i.e. Change of old hardware devices) and data based migration (data and files transferred into new OS).

* Data Migration

This migration is used to describe the process to translate data from one format to another which is called translating data and moving data from one storage device to another which is called moving data.

# 4.4 User training

Online Hotel Booking is one of the web application developed for Hotel Venus made under real scenario. This booking system includes all essential and flexible booking procedures that is needed for guest. A series of rooms with its type and prices are listed for guest. As they can book any of them as per their need and facilities and services included in rooms. This system depends on the Internet so that its availability for the guest is 24/7.

This application uses appropriate user interfaces so it will also make novice users flexible to use the site. Web pages has been entrenched with different design techniques which makes helps in making the better use of the system.

# 4.5 Conclusion

Finally, we are at the closure of this phase. Blocks of coding with appropriate API and UI has been prepared to make guest requirement more essential. Programming platforms, frameworks, appropriate design pattern is used for this website application. For this phase, some tutorials were viewed and tutorial classes were conducted in order to develop the project in zero problem way.