

## **Chapter 3**

### **Technology adapted**

#### **3.1. Introduction**

In previous chapter I have done a literature survey on examination systems. During my literature survey I have studied Idea of an examination system, its nature, phrases of examination system, limitations of manual examination system and available computerized examination systems.

For solving the problem faced by NIBM examination unit, I have introduced a web based Examination management system which can be used to prepare exam schedule, register exam schedule, view result, select awardees, online transcript request and analyze exam results. Here I focus on study of technologies available to develop the proposed Examination Management System.

#### **3.2. Adopted Technologies**

My solution is mainly web based which facilitate users to interact with examination management system through client computers connected to the internet. So I have identified some technologies to develop the proposed Examination Management System. I have explained each technology in details below.

## **3.2.1. User Interface Design Technology**

### **3.2.1.1. HTML**

My solution is web based system. Because of that I have selected HTML as user interface design technology. HTML is short for Hypertext Markup Language.

Hypertext is simply a piece of text that works as a link. Markup Language is a way of writing layout information within documents. Basically an HTML document is a plain text file that contains text and nothing else.

When a browser opens an HTML file, the browser will look for HTML codes in the text and use them to change the layout, insert images, or create links to other pages. Since HTML documents are just text files they can be written in even the simplest text editor. A more popular choice is to use a special HTML editor - maybe even one that puts focus on the visual result rather than the codes - a so-called WYSIWYG editor ("What You See Is What You Get"). Some of the most popular HTML editors, such as FrontPage or Dreamweaver will let you create pages more or less as you write documents in Word or whatever text editor you're using.

It is possible to create WebPages without knowing anything about the HTML source behind the page.

The most important benefits are:

- Can use tags the editor does not support.
- Can read the code of other people's pages, and "borrow" the cool effects.
- You can do the work yourself, when the editor simply refuses to create the effects you want.

### **3.2.1.2. CSS**

CSS is a style language that defines layout of HTML documents. For example, CSS covers fonts, colors, margins, lines, height, width, background images, advanced positions and many other things

### **3.2.2. Programming Technology**

#### **3.2.2.1. PHP**

PHP (recursive acronym for *PHP: Hypertext Preprocessor*) is a widely-used open source general-purpose scripting language that is especially suited for web development and can be embedded into HTML.

### **3.2.3. Database Management Technology**

#### **3.2.3.1. MYSQL**

Database management technology should be compatible with the PHP programming tool. PHP coding should be capable of making connection with database. Because of this reason I select MYSQL as database management technology of the proposed solution.

### **3.2.4. Communication Technology**

#### **3.2.4.1. SMS**

I use SMS technology a way of viewing results from anywhere with mobile phone.

#### **3.2.4.2. E-mail**

E-mail is used to send an alert to the examination system users through internet connectivity.

### **3.3. Summery**

In this chapter indicates the identified the technologies which are used to develop proposed Examination Management System. Mainly four types of technologies have been used to address the solution. There are programming technologies, database management technology, communication technology and interface design technology. Such that PHP use as the programming technology, MYSQL use as database management technology, SMS, E-mail as communication technologies and HTML, CSS as interface design technology.