# **CHAPTER 2**

# SYSTEM AND SOFTWARE REQUIREMENTS AND SPECIFICATIONS

The program works on Desktop PC and is executed using a PHP 5 interface which interacts with a MySQL database running on localhost.

#### 2.1 FUNCTIONAL REQUIREMENTS

A description of the facility or feature required. Functional requirements deal with what the system should do or provide for users. They include description of the required functions, outlines of associated reports or online queries, and details of data to be held in the system.

# 2.1.1 Interface Requirements:

- The system shall provide an option to add/delete quizzes with questions.
- The system shall provide an option to see and attend the quizzes.
- The system should give option for login for staffs and students.
- The system shall provide option to see scores.

# 2.2 NON-FUNCTIONAL REQUIREMENTS:

Non-functional requirements define the overall qualities or attributes of the resulting system.

#### **2.2.1** Usability

Usability is the ease with which a user can learn to operate the online examination system and get results.

# **2.2.2** Security

Security requirements are included in a system to ensure:

- All questions and users are well secured
- SQL injection is prevented

4

#### 2.2.3 Reliability

Reliability is the ability of a system to perform its required functions under stated conditions for a specific period of time. Constraints on the run-time behavior of the system can be considered under two separate headings:

- Availability: is the system available for service when requested by end-users.
- Failure rate: how often does the system fail to deliver the service as expected by endusers.

# 2.3 SOFTWARE REQUIREMENTS

Programming language : PHP, MYSQL

Operating system : ANY OS (Recommended: Windows8,

Windows Vista, Windows XP)

Application required : Standalone desktop application & Xampp

Coding language : PHP,HTML,CSS,Javascript

# 2.4 HARDWARE REQUIREMENTS

CPU : Pentium IV 2.4 GHz or above

Memory (Primary) : 512 MB, 1 GB or above

Hard Disk : 40 GB, 80GB, 160GB or above

Monitor : 15 VGA color