Software Requirements Specification

for

Quiz System

Version 1.0 approved.

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# Introduction

## Purpose

This web application provides facility to conduct online examination in a college. It saves time as it allows large number of students to attend the exam at the same time and display the result just after the exam is finished. The teacher in this system has the privilege to create, modify and delete the test papers and its questions.

## Document Conventions

The following are the list of conventions and acronyms used in this document:

**Administrator** – A loin id representing a user with user administration privileges to the software.

**User** – A general login id assigned to the user.

**Client** – Intended user for the software.

**Examiner** – Checks the test n given result.

## Intended Audience and Reading Suggestions

This document has Introduction, Overall Description, External Interface Requirement, System Feature, Functional and non-functional requirements and other requirements. Developers can have an overall outline view of Online Quiz System in this document. It helps the students to learn more about the online quiz system development. This document can also be used for teaching purposes. This document is designed in a proper sequence so that the reader can go to understand the system.

## Product Scope

This can be used in a lot of educational institutions. It can be used by many students to attend their exams any time as it is a web-based application. It also improves the standard of education through online.

## References

* IEEE Std 830-1998(Revision of IEEE Std 830-1993)
* IEEE Std 828-1998, IEEE Standard for Software Configuration Management Plans.
* IEEE Std 610.12-1990, IEEE Standard Glossary of Software Engineering Terminology.
* R. Pressman 5E, reference book

# Overall Description

TOPICS

QUIZ/TEST

HOME

STAFF

LOGIN

LOGOUT

## Product Perspective

The proposed Language Skill Exam System is an on-line Exam System. The online test created for taking online test has following stages.

* + - Login
    - Test
    - Result

## Login:

There is a quality login window because this is more secure than other login forms as in a normal login window there are multiple logins available so that more than one person can access to test with their individual login. But in this project, there is only one login id i.e., administrator id and password by which a person enter the site. Hence it is more secure and reliable than previously used on-line test simulators.

## Test:

Test page is the most creative and important page in this project. It consists of 2 modules namely.

* + Subject selection
  + Utilities

## Subject Selection:

From the given choices the candidate can select his field (like C, C++ and JAVA etc.) for taking on with the test.

## Utilities:

It includes:

Skip and come back to the question afterwards if needed.

Gives the list of attempted and unattempt questions and can go to any question directly and can either attempt or change the answer of the already attempted question.

## Product Functions

The product includes many functionalities of the organization. These functionalities are:

* New student registration by admin.
* User database management.
* Score evaluation.
* To maintain records of student scores.
* To conduct online quizzes.

## User Classes and Characteristics

Many users such as the Administrator, Teacher and Students, can use system. Only administrator of the system should be able to enter user information or modify any kind of information in the system, but every user, whether a teacher or a student, with a valid login ID and password, should be able to view their details such as their personal information, marks in previous tests etc.

## Operating Environment

The product will be operating in windows environment. Also, it will be compatible with the IE 6.0. Most of the features will be compatible with the Google Chrome,

Mozilla Firefox & Opera 7.0 or higher version. The only requirement to use this online product would be the internet connection.

## Design and Implementation Constraints

The implementation of this product is done with two modules.

1. Module I:

This first module tracks the path of Administrator. In this module it shows how the admin can log into the system with a valid password and can add new valid user to the database. His name and exam are saved in the database. Also, he can manipulate the database and add new question in the database from the webpage itself. It also shows how many questions are in database.

1. Module II:

This second module tracks the path for the examinee. The examinee can log into the system with a valid ID issued by the admin. After successful login into the system the examinee moves to the instruction web page where he will get instruction about the examination process. Then after clicking the start button the exam starts and timer also starts .In this manner examinee can take up the test and clicking the submit button , he will get the result of that section immediately. At the end, system displays the initial web page.

* + - Front end is fully developed using HTML and CSS in Visual studio.
    - Xampp server is used to carry out the quiz. It stores the questions and answers in its database. PHP is used for accessing the database.

## User Documentation

The product will include user manual. The user manual will include the information about the product overview, complete configuration of the used software, technical details and contact information which will include email address.

## Assumptions and Dependencies

We assume all users have basic computer knowledge and our quiz system provides good user interface and help the user at any moment during their visit to the website.

# External Interface Requirements

## User Interfaces

It incorporates with effective GUI concepts and focuses on user-friendly systems. It has good, appealing, attractive, and aesthetic web pages with optimum hyperlink to select the required process.

## Hardware Interfaces

**Server Side:**

* + - Operating System: Windows 9x/xp ,Windows ME
    - Processor: Pentium 3.0 GHz or higher
    - RAM: 256 Mb or more
    - Hard Drive: 10 GB or more

## Client side:

* + - Operating System: Windows 9x or above, MAC or UNIX.
    - Processor: Pentium III or 2.0 GHz or higher.
    - RAM: 256 Mb or more

## Software Interfaces

Interfacing with several modules to perform various operations, it requires Database connectivity which is provided by MYSQL and Server interfacing which is provided by APACHE.

## Communications Interfaces

The Customer must connect to the Internet to access the Website:

* + - Dialup Modem of 52 kbps
    - Broadband Internet
    - Dialup or Broadband Connection with an Internet Provider

# 

# 4. System Features

## System Features 1:

**4.1.1 Description and Priority**

Proposed Database is intended to store, retrieve, update, and manipulate information related to university which include.

* + - Profile of both users
    - Student details
    - My account
    - Test results

**4.1.2 Stimulus/Response Sequences**

**Responses for Administrator:**

The administrator can Login and Logout. When the Administrator Logs into the Online Exam system. The system will check for validity of login .If the Login and password are valid, the response to this action is the administrator will be able to modify, view, add, deleting and all other functions that can be performed on the database.

**Examination:**

First, the user/examinee gets a valid identification number (same as the roll for a normal examination).The user can log on with this identification no. and can take up the examination. After logging in the user can see various options and can choose the option from the menu

**4.2 System Features 2**

This section gives the list of Functional and nonfunctional requirements which are applicable to the Online Quiz System. Functional requirements are nothing, but the services provided by the system to its end users. There are three sub modules in this phase.

* Candidate module.
* Examiner module.
* Administrator module.

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# 5.Other Nonfunctional Requirements

## Performance Requirements

Requirements include our total no of tasks such as login, new user registration will take certain time periods for both normal and peak workload conditions. Here we measure each task would be processed in less than 1 sec. It means 100% task performed in less than 1 sec.

## Safety Requirements

The system has been designed in a way to protect the users from malwares. It also allows only the valid uses to access the system.

## Security Requirements

* The login page asks for use rid and password.
* The use rid and password has certain conditions for security needs.
* The username must be in small letters and should include a number.
* The password must have a capital letter, a small letter and a special character.

## Software Quality Attributes

* **Reliability:**

This system is highly reliable so that it gets updated every time when it is updated.

## Availability:

This system is available around the time so that the users can take up the test any time and can also attend a scheduled test.

## Maintainability:

The maintenance instructions will be given in the user manual so that the user can use the website properly.

## Business Rules

This product has certain business rules like a user can login with one account in only one window.