INTERNATIONAL INSTITUTE OF PROFESSIONAL
STUDIES, DAVV

Subject: System Analysis And Design

Project report-

Software Requirement Specifications [SRS]

Topic: Online Examination Software

Submitted by-   Submitted to-

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1. INTRODUCTION

1.1   PURPOSE

The main purpose of creating an online examination system is to automate the existing manual processes and provide the ease of attempting a test for students while sitting at their home from their devices simultaneously helping the evaluators to use computerised system to automatically check objective based questions and other subjective questions with less effort and paperwork.

The aim is to build a secure system for student registration, test evaluation and monitoring time that is effective and saves manual effort and time.

1.2   INTENDED AUDIENCE

This document is primarily intended for the people contributing to the designing or development of the online examination software and its implementations in any significant amount.
This document may also be referenced for information about requirements for software assurance methods, and the rationale for selection of various development tools and techniques.

1.3   SCOPE

The scope of this online examination conducting system is comparatively wider compared to manual system. With some manipulations it can find its application in the corporate sector. Physical presence of any candidate or the examiner is not required. They can access the system from any compatible device. Their location is not a determinant. It is also free from time limitations.

A student can attempt the test for a fixed amount of time at any instant within the time frame.

1.4   <u>OVERVIEW</u>

We aim at developing an online examination system that is reliable, secure, error free and comprehensive for various fractions of users. Appearing for an exam in manual system i.e., physically in a university is very time-consuming process. Now the purpose of this system is to overcome the shortfall faced in the previous systems already working in the area. The website will be secure, and properly working on WAN. It will be speedy with good interface. The university may conduct examination in various countries and in different languages. It would support multiple platforms at least those used by people commonly.

2. <u>**USER REQUIREMENTS**</u>

The primary users of this system are the students and their evaluators. The students are required to firstly register themselves online and use those login credential to sign into the system and appear for their respective test. They also requires a report of their results, if possible, immediately in case of objective questions.

The evaluators on the other hand need proper details of all the students who have attempted the test, their answers, their scores etc. A particular test has a limited time period in which the student can attempt a test.

3. <u>**ASSUMPTIONS**</u>

To develop this application, we've taken into account some assumptions. They are:

- University will provide each student a unique student Id during enrolment time. The purpose of this is so that no one can register on behalf of any other student and only the student himself/herself can register for the examination using this id.

- Student login name will be generated automatically by combining student's first Name and Enrolment No. in a particular format. For example : Narendra Modi has student id - NM7.

    So, Narendra's student login here will be Narendra_NM7

- Expert login name will be generated same as student login name but with small modification.
    Expert Login = (Expert First name + Course Name)

    For example : Rahul Gandhi is a java expert

    So, Rahul's expert login here will be Rahul_Java.

4. SOFTWARE REQUIREMENTS SPECIFICATION

For development, softwares used are:

Operating System :   Windows-XP Professional Version 2002, service pack-2, Microsoft IIS 5.0/6.0

Platform :   .Net

Technology :   Asp.net

Language :   C#(C sharp)

Backend :   SQL server 2007

Editor :   Microsoft word processor 2000

For Development :   Visual studio .Net setup tools

For Design :   HTML, Visual studio designer

For deployment, softwares used are :

Operating system :   Windows-XP professional Version 2002, service pack-2

Framework :   .Net 2005

IIS :   Configured

Backend :   SQL server 2000

5. <u>HARDWARE REQUIREMENTS SPECIFICATION</u>

<u>For Development, Hardware's used are:</u>

1. Pentium IV(dual core processor operating at 3.6 GHz)

2. 40GB hard disk

3. 1GB RAM

<u>For Deployment, Hardware's used are :</u>
(Minimum)

1. Pentium III or better processor

2. 10 GB hard disk

3. 256MB RAM

4. 10-100 MBPS of Network card

<u>Recommended</u>

1. Pentium IV

2. 20GB hard disk

3. 1GB RAM

4. 100-512 MBPS of network card

6. <u>FUNCTIONAL REQUIREMENTS</u>

<u>Functional requirements of student:</u>
The student has to login to the system and appear the test. He can check the previous test results. He can set up his profile. He can also receive his result immediately after test in case of an objective exam.

<u>Functional requirements of the evaluator/examiner:</u>
 The examiner has access to the entire database related to the details of students in the university appearing for online exams. They receive the student's test scores and update the results accordingly. They also need to design the question paper and upload it on system.

<u>Some other functional requirements:</u>

- Enable candidates' online answering on multiple platforms, such as computer and mobile phones
- To enable students to take exams anytime and anywhere.
- Support high concurrency
- Adding test questions and test paper online
- Support test questions management, test paper management, easy to classify management
- Add candidates online and manage candidate information
- Realize automatic judgment and reduce manual output
- Achieve online query results

7. <u>NON-FUNCTIONAL REQUIREMENTS</u>

The online exam system designed for educational institutes must

- ✓ store and manage all operations
- ✓ generate appropriate reports
- ✓ support multiple choices questions
- ✓ Allow the student to choose the answer and to see his mark and be able to review it anytime during the test.
- ✓ The system must be consistent and secure

Developing a robust, safe, secure and reliable system is a key element is case of online examination system. The software must also support access by multiple users at the same time without errors.

8. <u>INTERFACE REQUIREMENTS</u>

The user interface should be simple to use, with minimal graphics, no disguised icons, and no error messages that aren't relevant.
In a nutshell, we're supposed to create a web-based application that houses all of an organization's online examination-related features.

BIBLIOGRAPHY

The information and details used in this document are mostly my original work referenced from some books and articles. I used google for problem solving, William S. Davis and David C. Yen's The Information System Consultant's Handbook and Analysis and Design of Information Systems by V. Rajaraman (PHI Publications).

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