# Software Requirements Specification

## for

# Online Examination System

**Version 1.0 approved**

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# Revision History

| Name | Date | Reason For Changes | Version |
|------|------|--------------------|---------|
|      |      |                    |         |
|      |      |                    |         |

# 1. Introduction

## 1.1 Purpose

*The purpose of Online Examination System Software is to make it easier for the Teachers to construct the examinations in more efficient manner. All the data regarding each subject, Teachers, Students and their scores in the tests can be stored and managed through a single portal. Moreover, it also helps environments by reducing the use of paper.*

## 1.2 Product Scope

*The Online Examination System Software can be used to conduct different of exams, specifically the ones including Multiple Correct Answers. All kinds of Competitive and Entrance Exams can be conducted with the use of this software. This process can effectively reduce the time taken in evaluation of the answer scripts and thus include the whole selection process for Entrance Exams faster.*

## 1.3 References

*1. Screen Shot for User Interface of Examination Page - http://aimnachieve.com/updates/four-key-points-to-know-for-railway-exam-2016/*
*2. Screen Shot for User Interface of Log-In Page - http://www.freebiezz.com/login-page-design*
*3. Screen Shot for User Interface of Registration Page - http://www.android-examples.com/php-create-user-signup-registration-page-with-login-script/*

# 2. Overall Description

## 2.1 Product Functions

*There are 2 kinds of Actors present:*
*1. Administrator (Teacher)     2.Student*

*Their functionalities include:*

- *Administrator*
    1. *Log-In*
    2. *Create / Select a subject*
    3. *CREATE, MODIFY or DELETE questions.*
    4. *Log-Out*
    5. *View Statistics of all the students who gave the test.*
    6. *Delete all the previous Data.*

- *Student*
    1. *Log-In*
    2. *Select a subject*
    3. *Take the Test (Time Starts)*
    4. *Answer the Questions – Save / Submit*
    5. *Log Out*

## 2.2 Operating Environment

*1. A Computer System with working Keyboard and Mouse.*
*2. Fast and reliable Internet Connectivity.*
*3. Java*
*4. A Web Browser (preferably Mozilla Firefox)*

## 2.3 Design and Implementation Constraints

1. All users MUST register themselves into the system.
2. Same set of questions should appear to all students.
3. Log-In information contains only Email Address and Password.
4. After clicking on SUBMIT, selected answers cannot be changed.
5. After clicking on SAVE, selected answers can be changed.

## 2.4 Assumptions and Dependencies

*1. The Email-Address provided by the users is valid.*
*2. The Web Browser is Compatible to display Java based Applications.*
*3. The operating System is GUI based.*

# 3.    External Interface Requirements
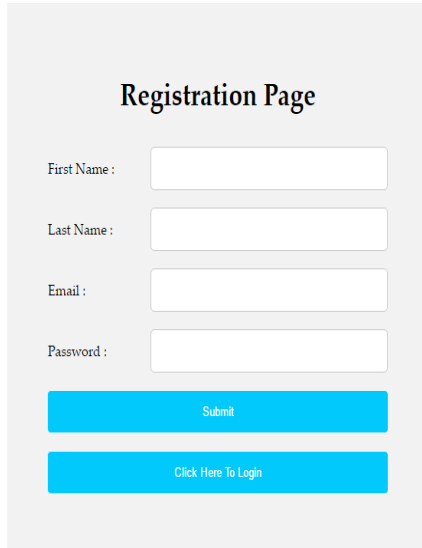
## 3.1    User Interfaces



The user Interface for **Examination Page** would include (as in the sample screen shot) -
1. Name of Subject
2. Question
3. Options
4. Answer Check Blocks
5. Clear any response
7. Time Left
9. Key for Different Symbols
10. All Questions Block
11. Save Option
12. Submit Option

**Login Page** -

**Registration Page** -



## 3.2     Hardware Interfaces

*NOT APPLICABLE*

## 3.3     Software Interfaces

*1. Storage of all the data in Databases(MySQL)*
*2. Extraction of Data from the databases.*
*3. Proper Placement of data at the Web Page*
*4. For Log-In, secured gateways should be there to ensure no stealing of data is done.*

## 3.4     Communications Interfaces

*Communication to user through Email-Id. Sending Test Scores, Updates or important messages to users can be done.*

# 4. System Features

## 4.1 Inputs

*1. **User Information** – The user will be asked to enter all his information at the time of Registration. Some of these details can be modified at any later time. The required information would be different for different kind of users. They Include -*
- *Students –*
  *Name (Compulsory, Can be changed Later)*
  *Roll No (Compulsory, Can be changed Later)*
  *Email Address (Compulsory, Can NOT be changed Later)*
  *Contact Number (Optional, Can NOT be changed Later)*
  *Password (Compulsory, Can be changed Later)*
- *Administrator -*
  *Name (Optional, Can be changed Later)*
  *Email Address (Compulsory, Can NOT be changed Later)*
  *Password (Compulsory, Can be changed Later)*

*2. **Subject Information** – Each subject should be given a unique code, so that all subjects can be identified uniquely through them. The Administrator would be able to Add a new subject, access the data of all students who gave the test and make changes to the test.*

*3. **Question-Answer Set** – A set of Questions for each Subject and The Correct answers for them. The Answers could be Multiple Correct Type. All this information would be stored in databases.*

## 4.2 Processing

1. **Registration** – Whenever a person registers, it is made sure that he fills all the compulsory details. Also, a user with a registered Email-Id is not allowed to register again with the same Email-Id. While looking up for same Emal-Ids it has to be made sure that we lookup in the databases of both Students and Administrators.

2. **Log-In** – When the user enters his Email-Id and password, we have to match them, and then return the logged in session of the user. The password Entered by the user should not be visible on the screen.

3. **Session –** The functions would be different for Administrator and Student.
- Administrator -
  View all subjects
  Create new Questions, Modify or Delete Questions.
  View statistics of all the students who gave the Test
  Reset all the test Data.
  View / Modify His Profile
- Student -
  View / Modify His Profile
  View all subjects
  Give Test of a particular Subject (Time-Starts)
  Answer Questions – Save (The question can be visited later again), Submit(The answer cannot be modified again)
  A Timer is visible showing the time left.
  Submit the Test and View Score
  Log-Out

4. **Statistics Management** – Save the score of all the students and maintain a database containing the Student list in Descending Order of Marks.

## 4.3    Outputs

1. **Profile View –** Display the profile of the user with all his data.
2. **Result View –** For each subject, display the result in DESCENDING order according to obtained marks with Roll Number.

# 5.    Other Nonfunctional Requirements

## 5.1    Performance Requirements

*1. Internet Connectivity is required throughout the test.*
*2. If Internet Connection stops, answers won't be submitted or saved.*
*3. High Speed Internet is required otherwise time taken in submission would be deducted from Test Time.*
*4. Screen Resolution of atleast 800\*600 is required.*

## 5.2    Software Quality Attributes

*NOT APPLICABLE*

# 6.    Other Requirements

*1. Regular Updates of Java Version*
*2. Regular Updates of Web Browsers*