# SECURE ONLINE EXAMINATION SYSTEM

# PROJECT SYNOPSIS

OF MINOR PROJECT

## **BACHELOR OF TECHNOLOGY**

Computer Science and Engineering

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#### Introduction:

Presently, if the teachers conduct any examination, they have to check the answer sheets manually which is time consuming and the generation of results manually might result in errors. Online Examination System for introduction to management is an application that is designed and developed for students and lecturers. The system helps students to take examinations. It also helps lecturers to upload the questions and answers in the database and they can see the students who fail or pass the exam.

Online examination system is a web-based examination system where examinations are given online either through the internet or intranet using a computer system.

Online examination helps students of schools/ College/ Institutes to offer a quick and easy way to appear for the exam. It also provides the results immediately after the exam. The students have to enter valid userid and password to attend the exam. This examination project provides a time limit to finish the exam. The user can see their results after completing the exam.

#### **Problem Statement:**

The problem with the current system is that students take their exam manually. This outdated system will take long time utilisation; the manual procedure used for conducting exams is a time consuming process. More time is being used for lecturers to bring the questions papers and answer sheets and also more time is needed for students in order to write their exam. Students are not satisfied with the current system of taking the multiple choice examination. The no accuracy with current system when students did not use a 2b pencil student are losing their mark. Using the manual procedure of conducting examinations we are not saving the environment by using more paper, we are in a world where we really need to take care of the environment.

#### **Objective:**

This project is aimed at developing an online examination system for introduction to management for students and lecturers. The purpose of the system is to completely automate the old manual procedure of conducting exams to a computerised System. We will provide a more efficient examination system.

- It can be used anywhere any time as it is a web based application.
- It reduces the time of taking examinations of the students manually.
- This system will provide better security and transparency in the examination.

# Project relevancy, feasibility

# 1. Technical Feasibility:

Building this system is technically feasible. The hardware and software needed are all available, it is not difficult to get them. Brief I can say the necessary resources needed for the development and maintenance of the system are available. I am going to use java programming languages and databases.

## 2. Operationally Feasibility:

The project I am developing is operationally feasible as there is no need for users to have good knowledge in computers before using it. The user can learn and use the system with ease; he just needs to read the manual or tutorial from the developers.

## 3. Economic Feasibility:

Besides being technically feasible, developing this system is economically feasible as well. The development of the system does not require the developers to spend a lot of money. The tools I will be using to develop the system are not expensive and the software's are open source. All I need is time. Even the maintenance of the system will not be expensive. The system is indeed economically feasible.

## **Literature Survey:**

Many different researches have focused on the subject of an online examination system. These works can be represented as follows:

SIETTE: Guzman and Conejo (2005) proposed an online examination system called System of Intelligent Evaluation Using Tests for Tele-education (SIETTE). SIETTE is a web-based environment to generate and construct adaptive tests. It can be used for instructional objectives, via combining adaptive student self-assessment test questions with hints and feedback. SIETTE supports secure login and portability features. On the other hand, the other features:resumption capability, multi-instructor,random question selection, random questions distribution and random choices distribution are missing.

**EMS**: Rashad Et. Al. (2010) proposed a web-based online examination system called Exam Management System (EMS). EMS manages the examination and auto-grading for students' exams and supports conducting exams, collects the answers, auto marks the submissions, and produces the reports for the test. EMS supports secure login, multi-instructor, and portability features. However, the other features: resumption capability, random question selection, random questions distribution, and random choices distribution are missing.

**ArvindSingh,NirajShirke,KiranShette 2011**:The project evaluates the examiners by using the online examination system concept. The exams will be totally customizable. This system will check results automatically based on students' answers.

**CBTS**: Fagbola et. al. (2013) developed a Computer BasedTest System (CBTS). CBTS is a web-based online examination system developed to address issues such as lack of timing flexibility for automation candidates log-off upon expiration of allowed time, result integrity, guaranty, stand-alone deployment, need for flexibility, robustness, designed to support the examination processes and overcome challenges framing the conduct of examination, automarking, auto-submission, and generation report of examination result.

Understudy Verification System for Online Assessments: Bolstering Quality and Integrity of Distance Learning. The Effectiveness and Potential of E- Learning in War Zones: An Empirical Comparison of Face-To-Face and Online Education in Saudi Arabia.

#### **EXISTING SYSTEM:**

Existing framework is a manual one where clients are keeping up books to store the data like Student Details, Instructor Details, Schedule Details and inputs about understudies who endeavoured to test according to plan. It is extremely hard to keep up authentic information.

#### Methodology/Planning of work:

## 1. Research Methodology:

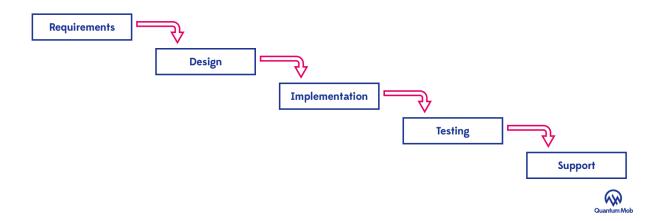
Main methodology activities held during the research are acquiring information and knowledge about the online examination system through reading books, and researches that were previously done in related areas. All the research materials were obtained over the internet, Wikipedia and other websites.Next step taken is reading, comprehending and analysing literature review and matching information obtained. This research emphasises online examination systems, which include usability, user-friendly interface, reliability, costing and meeting needs of target users.

#### 2 Project Activities:

The methodology chosen to develop this system is the waterfall model approach. I opted for this method because I found that it is the best for my project where the stages involved can assist my level of progress. Many developers prefer the waterfall model and widely use it as a development strategy.

Waterfall model approach is chosen because the approach allows the development of the system to be revised after the stages are finished. Once the stages are not satisfied, then going back to the previous stages can be considered necessary to add or modify any features. The different stages for this model:

- Project Planning
- Requirements Design
- Design
- Development
- Integration and Testing
- Installation and Acceptance



## Facilities required for proposed work:

## **Hardware requirements:**

• Processor: Intel dual core or above

• Processor Speed:1.0GHZ or above

• RAM: 1 GB RAM or above

• Hard Disk: 20 GB hard disk or above

• Operating system: Windows XP or above

# **Software requirements:**

Server: Apache serverDatabase: MySQL server

• IDE: VS Code, Eclipse

## **Languages Used:**

• Front end: Html, CSS, Javascript

• Back end: Java, JSP, MySQL

#### References:

#### Reference Books:

- 1. The Complete Reference -----PatrikNaughton, Herbert Schildt
- 2. JAVA 2 Ivor Horton
- 3. Java Server Pages-----O'Reilly

## Websites:

- 1. 1.www.java2s.com
- 2. www.javatpoint.com
- 3. www.tutorialspoint.com/java/
- 4. www.roseindia.net