GOVERNMENT POLYTECHNIC JAMNAGAR

COMPUTER DEPARTMENT

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Software Requirement Specification (SRS)

For

FACULTY AND STUDENT MANAGEMENT APP

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1. **Introduction**

**Purpose**:

This document is meant to delineate the features of Student Teacher management system, to serve as a guide to the developers on one hand and a software validation document for the prospective client on the other. The Student Teacher management system for electronics item shop web application is intended to provide complete solutions for Teachers and students through a single get way using the internet. It will enable teachers to setup online tests,assignments, attendance & students to generate practice test papers online without having to visit the college physically. The Faculty module will enable a system administrator to approve and reject requests for new account creation and maintain various lists of subject’s categories.

**Scope**:

This system can be used in particular department in college. It is a two user system(teacher & student). It is also controlled by power user for backend task.

**Definitions**:

SRS- Software Requirement Specification

GUI- Graphical User Interface

**References**:

**Overview**:

This system provides an easy solution for teachers & student for day to day functionalities of department. This proposed system can be used by any naïve users, and it does not require any educational level, experience, or technical expertise in computer field, but it will be of good use if teacher has the good knowledge of how to operate an accedemic app.

1. **Overall Description:**

**Product Prespective:** To give easy access Of .( This product aimed toward a person(faculty/student) who don’t want to visit the college physically.)

**Product Functions:** Product Showcase, Product Description, Product Feedback, product details update, easy access of database indirectly through UI.(se case)

**User Characteristics:** Should have general knowledge about websites, user should have a device with internet connection. User should be familiar with the terms like login,register,order system etc.

**Principle Actors:** Teacher, Student,(Hidden user).

**General Constraints:** A full internet connection is required for both users, and they should know the general workings of an educational website.

1. **Supplementary Specification Document**

**Objective:**

The purpose of this document is to define the requirements of the Student/Faculty management system, This document lists the requirements that are not readily captured in the use-cases of the use-case model. The supplementary specification and use-case model together capture a complete set of requirements of the system.

**Scope:**

This supplementary specification defines the non-functional requirements of the system such as reliability, performance, supportability, and security as well as functional requirements that are common across a number of use-cases.

**Common Functionalities:**

Multiple users must be able to log on to the website and perform their work concurrently , the users must be notified if any changes frrm any side are made.

**Usability:**

The desktop user interface shall be compliant to any device that supports the common browsers.

**Reliability:**

The system shall be 24 hours a day, 7 days a week and not more than 10% down time.

**Performance:**

The system shall support up to 5000 simultaneous users against the central database of any given data . The system must be able to complete 80% of all transactions within 5 minutes

# Specific Requirements:

## Functional Requirements:

## This section provides requirement overview of the system. Various functional modules that can be implemented by the system will be –

**Description:**

# **Login:** Customer logins to the system by entering valid user id and password given by respective faculty (pre generated user id & password. )

# **Logout:** After the usage of product is complete user is logged out manually.

# **Report Generation :** After giving the test or taking attendance, the system will display it to either one of th user and make changes in the system data base.

## Non-Functional Requirements:

Following Non-Functional Requirements will be there in the insurance to the internet:

(i) Secure access to consumer’s confidential data.

(ii) 24X7 availability.

(iii) Better component design to get better performance at peak time.

(iv) Flexible service-based architecture will be highly desirable for future extension.

Non-Functional Requirements define system properties and constraints. Various other Non-Functional Requirements are:

** Security**

** Reliability**

** Maintainability**

** Portability**

** Extensibility**

** Reusability**

** Compatibility**

** Resource Utilization**

# Performance Requirements:

In order to maintain an acceptable speed at maximum number of uploads allowed from a particular customer as any number of users can access to the system at any time. Also, the connections to the servers will be based on the attributes of the user like his location and server will be working 24X7 times.

# Technical Issues:

This system will work on client-server architecture. It will require an internet server, and which will be able to run PHP application. The system should support some commonly used browser such as IE, mozzila firefox,chrome etc.

# Constraints

The main constraint here would be the avoiding misuse of product by student user, which is not always possible. There can be security risks involved.

* **Interface Requirement**:

Various interfaces for the product could be:

1). Login Page

2). Homepage

3). There will be a screen displaying information about product that the shop having.

4). If the customers select the practice test button, then another screen displaying question paper should be opened.

5). After giving the attendance ,the system will display report to the Faculty.

* 1. **Software Interface**:

1.Operating System: Windows7,8,10 which supports networking

2.Internet Browser

During our system development, we have to design both static and dynamic website interfaces, create website functions and a database system, edit photos and pictures, and print out reports, so it has a set of software requirements. The following are needed requirements. Web browser - Microsoft Internet PHP XAMPP application MySQL Database server

* 1. **Hardware Interface**:

Any Type of Device with Internet Connectivity and Browsers. Since the application must run over the internet, all the hardware shall require connecting internet will be hardware interface for the system. As for e.g., Modem, WAN – LAN, Ethernet Cross-Cable.

* 1. **Communication Interfaces**:

The two parties should be connected by LAN or WAN for the communication purpose.

The system shall use the HTTP protocol for communication over the internet.

* 1. **User Interface**:

The user interface shall be web-based, allowing users to remotely access the system via several applications. Users will be able to use the software through applications such as Microsoft Internet Explorer, Mozilla, et al. Each part of the user interface intends to be as user friendly as possible. The fonts and buttons used will be intended to be very fast and easy to load on web pages. The pages will be kept light in space so that it won't take a long time for the page to load. The starting page will be a home page.

* **Vision Document**

A vision document describes the higher-level requirements of the system specifying the scope of the system. The vision document for this system might be:

• The system can run on popular web-browser platforms like Windows Explorer, Netscape navigator etc. The system is easy to extend with new functionality

• The system recommends a facility to accept the requests 24\*7 .

• Application is available in the Smartphone & PC both, so it is easily accessible and always available.