

## Student Teacher Interactive Platform

Arjun Ramachandran<sup>1</sup>, Baiju A B<sup>2</sup>, Hilma T Raj<sup>3</sup>, Shabana T S<sup>4</sup>, Vibin K V<sup>5</sup>, Saneesh Mohammed N<sup>6</sup>  
<sup>1,2,3,4,5</sup>B Tech Students, Department of computer Science and Engineering, Ammini College of Engineering, Palakkad, Kerala, INDIA

<sup>6</sup>Assistant Professor, Department of computer Science and Engineering, Ammini College of Engineering, Palakkad, Kerala, INDIA

### ABSTRACT

We have developed student teacher interactive platform to provide an easy and quick manner for interaction among students and teachers. We are implementing this particular system as an web application. By using this technology we can make fast feedback about the teachers by the students regarding their suggestions for how the teacher can improve the classes and queries if any. There are other helpful features like online assessment, viewing timetable, attendance and marks. We have added the feature of sending and uploading image and text files.

**Keywords**— Interactive platform, Web application, Online assessment, Fast feedback, separated by commas

### I. INTRODUCTION

STUDENT TEACHER INTERACTIVE PLATFORM is a web application, which is useful for the students as well as teachers to interact each other. Main aim of this application is to exchange information in different services of formats such as pdf, image formats also it will create a good exchange of information in a secure manner. In this platform teachers can assign assignments, assessments with a time period. And also they can upload the student's attendance, marks, and required notes. Students can view their attendance, marks, and as well as attend the assessments and assignments with in the time period. Admin have the whole control over the application.

This application works like, initially we want to create a data base which includes the details about the students like student id number, register number, department, semester etc. And the teachers like staff id, department etc. Teachers and students can register using their id and only they can access their account.

The main purpose of the project is to provide the student an easy and efficient way to interact with teachers.

Here a student can send the queries and suggestions to teachers and the teacher can view the message from the student and the corresponding faculty can give the reply to the student.

Using this application, students can clarify their doubts and ask queries to the teacher without fear.

### II. LITERATURE SURVEY

#### 1. Online Descriptive Examination and Assessment System

The descriptive exam system consists of checking of answer sheets and attending theory exam online. The system consists of candidate login and admin login. The whole system will be controlled by the admin. After registration candidate gets exam information related to his interest. In this system, the candidate can apply for the exam, he receives his exam card through E-mail and he attends the exam and when the result should have to be declared, this decides by the administrator. The administrator arranges the exam schedule and result declaration. He also arranges the exam question papers and answer papers. The system checks paper manually also, if the exam paper checker gives wrong marks to candidate the system gives alert to him. The demo exam is also provided; the sample question and answers are also provided for the help of the candidate.

#### 2. Secured File Management over Internet

Today's economy is increasingly based on information flow. Getting the right information to the right person at the right time is the key strategy for secured file transfer. It is critical that the execution of this strategy ensures that the storage and transfer of information is reliable and secure. File transfer must provide end-to-end visibility, security and compliance management. A secure and managed file transfer approach can help the user to meet the challenge of safely and reliably exchanging electronic information. The purpose of this project is to

present an online platform to manage and share files. Different categories of users use various medium to manage and transfer files over internet. The project presents a solution so that users can communicate and exchange the important files in a secured way. The abstract presents Secured File Management and Sharing System over the internet developed using the J2EE technologies.

### **3. Student and Teacher Response System**

This paper is focusing IT-supported real-time formative feedback in a classroom context. The development of a Student and Teacher Response System (STRS) is described. Since there are a number of obstacles for effective interaction in large classes IT can be used to support the teachers aim to find out if students understand the lecture and accordingly adjust the content and design of the lecture. The system can be used for formative assessment before, during, and after a lecture. It is also possible for students to initiate interaction during lectures by posing questions anonymously. The main contributions of the paper are a) the description of the interactive real-time system and b) the development process behind it.

### **4. Feedback Management System for Evaluating and Generating Monthly Report**

In the existing system students can give feedback about the lecturers by doing manually. By this process student can give feedback in online system without wasting his time in writing. After giving feedback by every student papers are collected by the faculty and calculated the overall grade for each subject and each lecturer. The existing system carries more time to do a piece of work for this reason the online system feedback is implemented. Feedback represents information communicated to the learner that is intended to modify the learners thinking for purpose of improving learning. Student feedback on courses is an essential element in quality assurance.

## **III. SYSTEM ANALYSIS**

### **3.1 Feasibility Study**

A feasibility study is an evaluation of a proposal designed to determine the difficulty in carrying out a designated task. Generally, a feasibility study precedes technical development and project implementation. In other words, a feasibility study is an evaluation or analysis of the potential impact of a proposed project. Feasibility Study is performed to choose the system that meets the performance requirements at least cost. The most essential tasks performed by a Feasibility Study are the identification and description of candidate systems, the evaluation of the candidate systems and the selection of the best of the candidate systems. The best system means the system that meet performance requirements at the least cost. The most difficult part of a Feasibility Study is the identification of the candidate systems and the evaluation

of their performances and costs. The new system has no additional expense to implement the system.

The new system has advantages such as we can easily access files from any client in the Network, accurate output for accurate input and this application is more user friendly. We can use this application not only in this organization but also in other firms. So it is worth solving the problem.

In STUDENT TEACHER INTERACTIVE PLATFORM there is no additional expenses when new features are added. In this system we can provide more accurate information. From analysis the system can meet the performance requirements at least cost.

#### **3.1.1 Technical Feasibility**

Technical Feasibility study is performed to check whether the proposed system is technically feasible or not. Technical feasibility centers on the existing computer system (hardware, software, etc.) and to what extent it can support the proposed addition. This involves financial consideration to accommodate technical enhancement. This system is technically feasible. All the data are stored in files. The input can be done through dialog boxes which are both interactive and user friendly. Hard copies can be obtained for future use, by diverting the documents to a printer. Windows serves as the platform for the new system.

The system is technically feasible because there is no use of hardware part and easily accessible from anywhere in the world. Here all the data are stored in files.

#### **3.1.2 Economical Feasibility**

Economic Feasibility Study is the most frequently used method for evaluating the effectiveness of a candidate system. More commonly known as cost/benefit analysis, the procedure is to determine the benefits and savings that are expected from a candidate system and compare them with cost. This analysis phase determines how much cost is needed to produce the proposed system. As the organization has required machines and supporting programs for the application to execute itself. Our system requires only least cost for designing it. There will be no additional cost for new features. So this is economically feasible.

#### **3.1.3 Operational Feasibility**

Operational feasibility is a measure of how well a proposed system solves the problems, and takes advantage of the opportunities identified during scope definition and how it satisfies the requirements identified in the requirements analysis phase of system development. The operational feasibility assessment focuses on the degree to which the proposed development projects fits in with the existing business environment and objectives with regard to development schedule, delivery date, corporate culture, and existing business processes. To ensure success, desired operational outcomes must be imparted during design and development. These include such design-dependent parameters such as reliability, maintainability,

supportability, usability, reducibility, disposability, sustainability, affordability and others. These parameters are required to be considered at the early stages of design if desired operational behaviors are to be realized. A system design and development requires appropriate and timely application of engineering and management efforts to meet the previously mentioned parameters. A system may serve its intended purpose most effectively when its technical and operating characteristics are engineered into the design. Therefore, operational feasibility is a critical aspect of systems engineering that needs to be an integral part of the early design phases.

In our project the system is operationally feasible. Since the usage of command buttons throughout. The application programs enhance operational feasibility. So maintenance and modification is found to be easier.

#### 3.1.4 Legal Feasibility

Determines whether the proposed system conflicts with legal requirements or not. e.g.: A data processing system must comply with the local Data Protection Acts. Our system complies with the local Data Protection Acts. There are no conflicts with legal requirements. So this is legally feasible.

#### 3.1.5 Schedule Feasibility

A project will fail if it takes too long to be completed before it is useful. Typically this means estimating how long the system will take to develop, and if it can be completed in a given time period using some methods like payback period. Schedule feasibility is a measure of how reasonable the project timetable is. Given our technical expertise, are the project deadlines reasonable? Some projects are initiated with specific deadlines. It is necessary to determine whether the deadlines are mandatory or desirable.

#### 3.1.6 Resource Feasibility

This involves questions such as how much time is available to build the new system, when it can be built, whether it interferes with normal business operations, type and amount of resources required, dependencies, etc.

### 3.2 Existing System

The system, which is followed at present, is a manual system. Modern day's students are very busy and it is difficult for them to meet the teachers directly to assess their academic information and give the feedback. And it is also time consuming. There is no actually any platform independent system for this purpose.

#### 3.2.1 Limitations of Existing System

- Hard to maintain
- Bad interface
- Installation is difficult
- No multilingual support
- Unstructured coding
- Less browser capability

### 3.3 Proposed System

Student Teacher Interactive Platform is a web application, which is useful for the students as well as teachers to interact each other. Main aim of this application is to exchange information in different services of formats such as pdf, image formats also it will create a good exchange of information in a secure manner. In this platform teachers can assign assignments, assessments with a time period. And also they can upload the student's attendance, marks, and required notes. Students can view their attendance, marks, and as well as attend the assessments and assignments with in the time period. Admin have the whole control over the application.

#### 3.3.1 Advantages of Proposed System

- PHP CodeIgniter architecture
- Responsive interface
- Web installer
- Reusability
- Multilingual

## IV. SYSTEM SPECIFICATION

### 4.1 Hardware Requirements

- Processor: Pentium IV and above
- Memory: 2 GB RAM or above
- Hard Disk 320 GB OR Above
- Hub

### 4.2 Software Specifications

- PHP(Language)
- Wamp server
- Dream weaver(IDE)
- MySQL
- HTML

#### 4.2.1 PHP

PHP is scripting language commonly used on web servers. PHP Stands for hypertext preprocessor. It uses dynamic generation of web-page content. PHP is embedded with in html pages within the tags: `<? php...?>`. The short version of these tags can also be used: `<? ?>`. Each line of PHP is terminated, like MySQL, with a semi-colon. It supports file handling and text processing. Data base interaction network interaction.

#### 4.2.2 WAMP Server

Wamp server refers to a software stack for the Microsoft Windows operating system consisting of the Apache web server, MySQL database and PHP programming language. The acronym WAMP refers to a set of free (open source) applications, combined with Microsoft Windows, which are commonly used in web server environments. The WAMP stack provides developers with the four key elements of a web server: an operating system, database, web server and web scripting software. The combined usage of these programs is called

a server stack. In this stack, Microsoft Windows is the operating system (OS), Apache is the web server, and MySQL handles the database components, while PHP, Python, or PERL represents the dynamic scripting language.

**4.2.3 IDE-Dream Weaver**

An integrated development environment (IDE) also known as integrated design environment or integrated debugging environment is a software application that provides comprehensive facilities to computer programmers for software development. An IDE consist of:

- A source code editor
- A compiler and/or an interpreter
- Build automation tools

Adobe Dreamweaver is a proprietary web development tool developed by adobe systems. Adobe Dreamweaver is available for OS X and for Windows.

**4.2.4 MySQL**

MySQL is a database management system. SQL stands for Structured Query Language. It defines hoe to insert, retrieve, modify and delete data. A MySQL server can store several databases.

Databases are stored as directories.

**4.2.5 Features of Html**

HTML or Hypertext Mark-up Language is the main mark-up language for creating web pages and other information that can be displayed in a web browser. HTML is written in the form of HTML elements consisting of tags enclosed in angle brackets (like <html>), within the web page content. HTML tags most commonly come in pairs like <h1> and</h1>, although some tags represent empty elements and so are unpaired, for example <img>. The first tag in a pair is the start tag, and the second tag is the end tag (they are also called as opening and closing tags). In between these tags web designers can add text, further tags, comments and other types of text-based contents. The purpose of the web browser is to read HTML document and compose them into visible or audible web pages. The browser does not display the HTML tags, but uses the tags to interpret the content of the page. HTML elements form the building blocks of all web sites. HTML allows images and objects to be embedded and can be used to create interactive forms. It provides a means to create structured documents by denoting structural semantics for text such as headings, paragraphs, lists, links, quotes and other items. It can embed scripts written in languages such as JavaScript which affect the behaviour of HTML web pages.

**V. SYSTEM DESIGN**

**5.3 Module Description**

Student Teacher Interactive Platform consists of 3 modules:-

**5.3.1. Admin module**

This module consists of a web app developed in PHP to be managed by the administrator. The system is designed in such a way that the administrator has the responsibility to register Faculties and students for the app. The admin also has the responsibility to provide institution profile, course details, important events in institution to be notified to faculties which in turn will be broadcasted to corresponding Students and faculties. Registration is done by the admin through the web app. There is separate registration of each of the users of the app such as student and faculty. Username and password will be provided to each user by the admin.

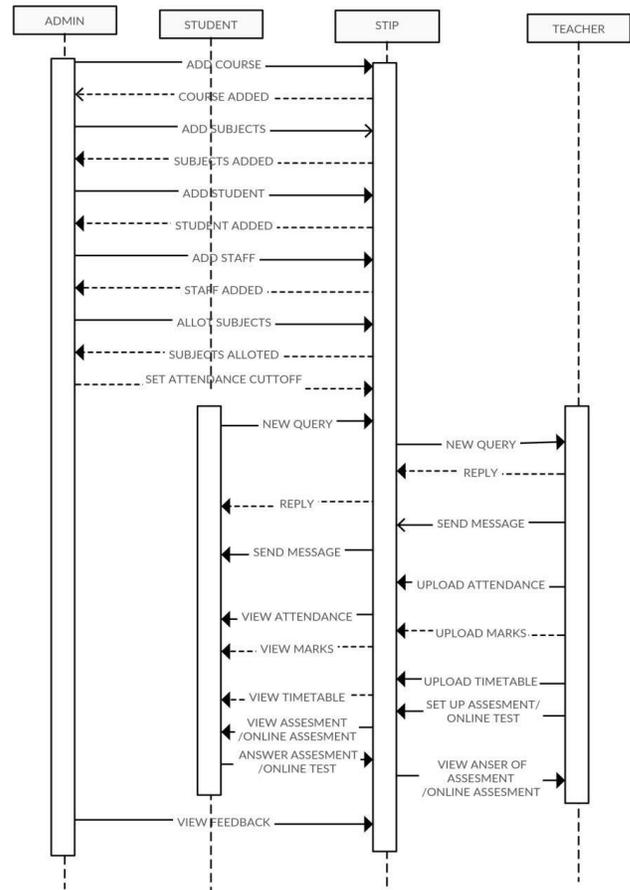
**5.3.2. Student module**

A student’s tasks are implemented in student module. The main tasks to be done are post a query, view query, send feedback, answer online assessment, view attendance, marks and timetable.

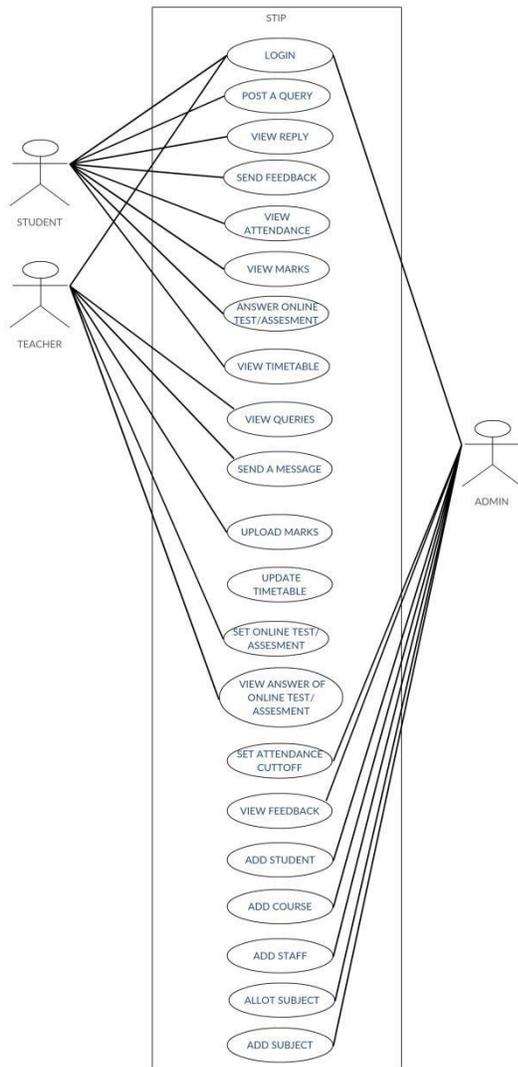
**5.3.3. Teacher module**

A teacher’s tasks are implemented in teacher module. The main tasks to be done are post a query, view query, setup online assessment, upload attendance, notes and marks

**5.1 Sequence Diagram**



### 5.2 Use Case Diagram



## VI. CONCLUSION

The project is completed in good manner. Thus the implementation of STUDENT TEACHER INTERACTIVE PLATFORM gets completed based on the design and the remaining implementation will be continued as part of academics. It can be easily implemented in any institution without much modification. Some of the user requirements are user friendliness, data security and data maintainability. All these requirements are included in this project. The maintenance is done only by authorized persons.

## REFERENCES

- [1] International Journal of Advanced Research in Computer and Communication Engineering Vol. 3, Issue 1, January 2014
- [2] International Journal of Emerging Technology and Advanced Engineering Website: www.ijetae.com (ISSN 2250-2459, ISO 9001:2008 Certified Journal, Volume 4, Issue 3, March 2014)
- [3] R. L. Bangert-Drowns, C. C. Kulik, J. A. Kulik, and M. T. Morgan, "The Instructional Effects of Feedback in Test-like Events". Review of Educational Research, 61(2), pp. 213-238.
- [4] J. Biggs, Teaching for Quality Learning at University. (2nd Ed.) Buckingham: Society for Research into Higher Education and Open University Press, 2003.