# A Software Design Document :Course Feedback System

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# **Course Feedback System**

# **Design Document**

### **Revision History**

Version	Date	Author(s)	Description
v1.0	01/11/15	Ashish Arya, Amanshu Raikwar, Purushottam Shukla	
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## 1 Introduction

The Course Feedback System is based Web interface for all users, including students, faculty and administrator. Students can first signup for their account and then allowed to give feedback for their respective courses. The feedback given by a student then stored in the database and thus faculty can further see the statistics(mean and standard deviation) of feedback given by students, and can also compare the statistics with last years.

## 1.1 Design Overview

The Course Feedback System is based on the LAMP platform. It has an easy-to-use Web interface for all users, including students, faculty and administrator.

#### 1.2 Intended Audience

This document is intended for software managers, coders and testers.

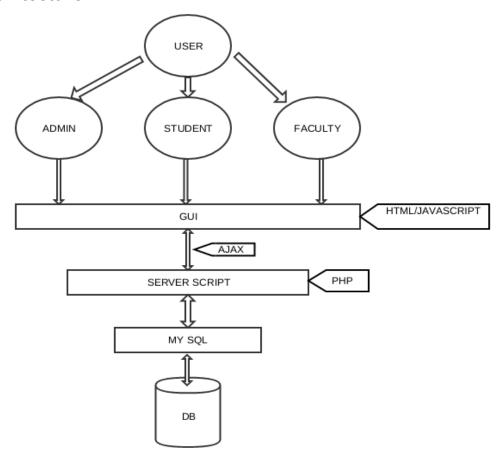
#### 1.3 References

- [1] <a href="http://www.w3schools.com/js/js">http://www.w3schools.com/js/js</a> intro.asp (For Javascript references).
- [2] <a href="http://www.w3schools.com/ajax/default.asp">http://www.w3schools.com/ajax/default.asp</a> (For AJAX references).
- [3] <a href="http://www.tutorialspoint.com/php/">http://www.tutorialspoint.com/php/</a> (For php references).
- [4] <a href="http://www.w3schools.com/php/">http://www.w3schools.com/php/</a> (for php references).
- [5] <a href="http://stackoverflow.com/">http://stackoverflow.com/</a> (For other clarifications).

## 2 Detailed Design

For rapid implementation and future expansion, the LAMP is used as the platform for Course Feedback System.

#### 2.1 Architecture



The basic architecture of course feedback system is displayed in the diagram. It uses html and CSS for user interface, Javascript for front end input handling, AJAX for asynchronous database handling, php for server side tasks and mysql for database.

#### **Components**

The database used and the tables under the database in the course feedback system is dynamically generated and created using php.

**All the GUIs** are written in html. Extensive data validation is done by javascript to minimize mistakes made by novice user.

**The various categories of users** access course feedback through a browser. Authentication is done by username and password for each user i.e. students, administrator and faculty.

#### Interfaces

The interface between the brower and all GUIs is HTML.

## 2.2 Algorithms and Data Structures.

There are no significant algorithms developed for this product. The only important data structure is sql tables to hold all the informations about students and feedback data.

#### 2.3 External Data

#### **Databases**

Course feedback system uses mysql database. It uses various tables to store different types of data. Initial database schema is shown below :-

#### **Database Schema:**

Database Name :- CourseFeedback

#### **Database Tables:**

1. adminAccount

```
columns: userName(varchar(20)), password(varchar(20))
```

2. studentAccount

```
columns : <u>rollNo</u>(varchar(10)) , password(varchar(20))
```

3. facultyAccount

```
columns: <a href="mailto:userName"><u>userName</u></a>(varchar(20)), password(varchar(20))
```

4. courseStudents

```
columns: courseId(varchar(10)), rollNo(varchar(10)), feedback(boolean)
```

*5.* < *courseId* > Feedback

```
columns: sno(int(auto_increment)), q1(int), q2(int), q3(int)...... qn(int)
```

6. student

```
columns: rollNo(varchar(10)), name(varchar(30)), sem(int)
```

```
7. course
```

```
columns : <a href="mailto:courseId">courseId</a>(varchar(10)) , name(varchar(50)) , faculty(varchar(30)) , l(int) , t(int) , p(int) , c(int)

8. backupLog
```

columns : <a href="mailto:sno(int(auto\_increment">sno(int(auto\_increment</a>)) , fileName(varchar(20)) adminUName(varchar(20)) , date(date)

9. questions

```
columns: <u>sno(int)</u>, question(varchar(1000)), relevance(varchar(10)(l,t,p,c))
```

10. excelFile

```
columns : sno(int(auto_increment)) , excelFileName(varchar(30)) ,
Semester(varchar(20)) , Year(int)
```

11. backup<year><semester>

```
columns : courseId(varchar(10)) , mean(int) , sd(int)
```

You can even visit this link for viewing the database schema:

https://docs.google.com/spreadsheets/d/16lCFmvUFZ3RX50LsgXQxEMDTCatvJMh-5wxuBJyvSqg/edit?usp=sharing

#### **Files**

Course feedback system uses a excel file(in .xls format) which has to be uploaded by the admin. The file should contain three sheets(1st sheet should contain information about each courses, 2<sup>nd</sup> sheed contain Student's information and 3<sup>rd</sup> sheet contain course list for each student). It creates an additional file that stores the sql user name and sql password(this file is used for providing sql user name and passoword each time whenever it is required in php file). The course feedback system also uses external css and javascript files for best functioning .

The format of input excel file is give below:

```
sheet 1 : courseId,courseName,facultyName,l,t,p,c
```

sheet 2: student roll no, student name, semester

sheet 3: student roll no, enrolled course 1, enrolled course 2, ...

#### 2.4 Performance

The project can be accessed from any pc and any student that exist in database table can give feedback using server's IP. The feedback data is automatically stored in the database. The feedback is completely anonymous .