Software Requirements Specification

for

Faculty Feedback Management System

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1. Introduction

1.1 Purpose

The feedback system will be used for semester-wise assessment of the college facilities, using the question answer forms provided to the students. These facilities include the teaching mechanism, lab assistance and services, cultural and sports activities conducted and library maintenance etc. The feedback system which was used earlier required lots of manual tasks such as creation mapping of teacher with students and teacher with subjects. In order to avoid the drawbacks of the previous system and to add other better features, this new system will enhance the previous system. PICT feedback system will help make the feedback assessment much easier than previous along with providing an interactive interface for both client and server side.

1.2 Document Conventions

The document features some terminology which readers may be unfamiliar with. There are no conventions used in this document.

1.3 Intended Audience and Reading Suggestions

The Software Requirement Specification (SRS) document is intended for all individuals participating in and/or supervising the Faculty Feedback Management System project and also for the individuals who are going to use it.

- Readers interested in a brief overview of the product should focus on the rest of Part 1 (Introduction) as well as Part 2 of the document (Overall Description).
- Point 3 (External Interface Requirements) offers further technical details, including information on the user interface as well as the hardware and software platforms. The Point 3 is primarily for the developers and describes in technical terms the details of the project's functionalities.
- The Overall Description section, of the document gives a brief summary of the each aspect of the project as a whole, along with its functionalities Readers who wish to explore the features of Management System in more detail should read on the Point 4 (System Features), which expands upon the information laid out in the main overview.
- All the three points(Point 2, Point 3, Point 4) of the document describe the same software product in its entirety, but are intended for different audiences and thus use different language.
- Software Requirements Specification for Faculty Feedback Management System Page 10 on which the web-based software will run.

- ➢ Readers interested in the non-technical aspects of the project should read Point 5 (Other Nonfunctional Requirements), which covers performance, safety, security and various other attributes that will be important to users.
- ➢ Readers who have not found the information, they should check Point 6 (Other Requirements), which includes any additional information which does not fit logically into other sections.

1.4 Product Scope

The scope of the project is clear to give a simple application and to simplify the previous application through which we will be able to save feedback for all teachers, students, subjects and questions per in the department or whole college. In this we can store feedback from students easily. The system will be secured as a random password will be generated every time. We are also able to generate the feedback report in the PDF format. Various data visualization techniques like charts and tables, for better visualization of data will be used. The feedback will be hosted at a time for the whole college. The functionality of Individual teacher or department wise feedback is not addressed in the system and not included in the scope of it.

1.5 References

- ➢ Previous Feedback system which is being used.
- ➢ https://www.researchgate.net/publication/323243527_FACULTY_FEEDBACK_MANAGEMENT_SYSTEM

2. Overall Description

2.1 Product Perspective

Problem Statement:

Creating a feedback management system developed for PICT.This feedback system will be used for semester assessment of teachers provided to the students. These facilities include the teaching mechanism, lab assistance and services, cultural and sports activities conducted and library maintenance etc. The feedback system which was used earlier required lots of manual tasks such as creation mapping of teacher with students and teacher with subjects. In order to avoid the drawbacks of the previous system and to add other better features, this new system is developed instead of enhang the previous system. PICT feedback system will help make the feedback assessment much easier than previous along with providing an interactive interface for both client and server side.

Existing System:

The existing system describes the features of the previous working model and their drawback.The current feedback system in use is an obsolete and labor intensive system. Existing system does all the process manually. Admin registers the information of all the teachers in the college along with data entry from scratch every time they wish to collect feedback. If any modifications or updates are required in the system requires complete deletion and then inserting again, it has to be done manually. As it is done manually, there are chances of error.This is tedious and time consuming, takes more man power, this process is so difficult.

Proposed System:

The aim of the proposed system is to develop a system with improved facilities. The proposed system can overcome all the limitation of the existing system, such as previous feedback information is maintained in the database, it gives more flexibility, ensures reduced redundant data entry, reduces admin work and save time, it makes information flow efficient and paves way for easy report generation, reducing the space proposed by the system is cost effective. It is easy for the administrators and coordinators to handle the feedback system efficiently without ambiguity. The students also get to view the ease with intuitive layout of the student side helping faster and efficient response collection.

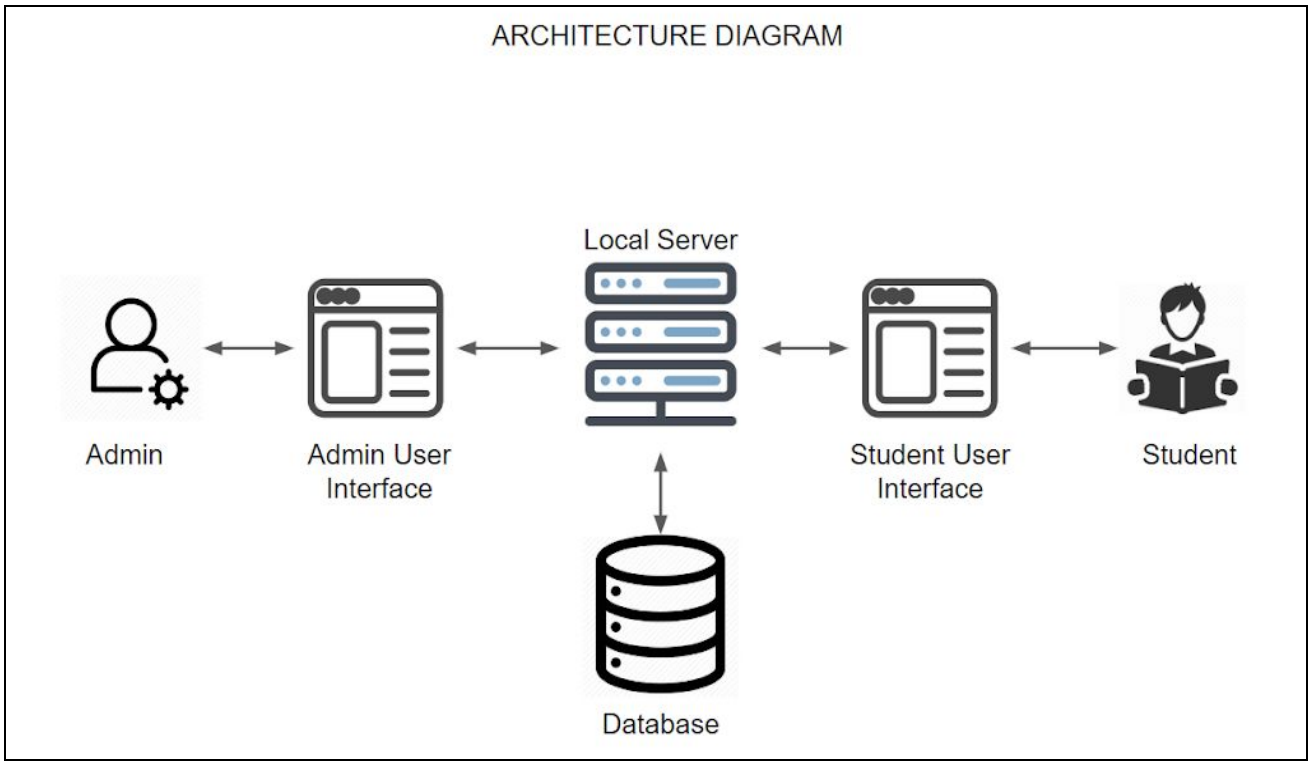
In the project there are two modules which are admin/coordinator of the feedback and students.

1. Admin module

In this module, Admin can log in using their given credentials. And selecting a particular semesters feedback he/she wishes to create.On selection the admin starts inserting details such as teachers,classes and questions which will then be mapped to respective students using mapping screens.The admin creates/imports data into the system accordingly ,after which he/she can generate passwords for each student automatically.

2. Student module

In this module, students log in for the first time using their roll number and a unique password generated by the admin which will be distributed to each class. After that student will be displayed only those teachers which teach that particular student/class.On registering the feedback into the system it will generate a report of the teachers based on the students response and feedback collected.



2.2 Product Functions

1. Completely web-based software solution.

2. Front-end can be accessed throughout the campus.

3. Completely Menu Driven and User friendly design.

4. Students will be able to give feedback more intuitively and surf through on their dashboard.

5. At the time of data entry in the admin side, efficient and fast flow through to setup the system for feedback collection

6. Feedback report is generated which takes into account the number of students who have given that specific teacher.

7. Admin can be edited/deleted as and when required very easily.

8. Admin can also view the previous feedback recorded and generate reports of a teacher in those feedbacks.

9. For more efficient setup entry through excel files is available which directly takes in the teachers and subject that are to be inserted into the system.

10. BE students elective can be separately mapped to specific teachers and their subjects.

11. Question template feature for customizable question assignment to different teachers.

12. Batch creation for lab provided for teacher allotment to various batches.

13. Feedback reports: The Feedback Reports will be made available on screen with export facility in PDF format.This facility is available only to admin to download.

2.3 User Classes and Characteristics

The Feedback Management system consists of complete web-based software to automate the whole process. It will reduce the time taken by the process manually. The process of collecting information, uploading information will be easier due to this. The whole process will be centralized hence, reducing the efforts and ambiguity occurrences. It will minimize the mistakes that occur due to more human involvement and make the marking system easier to handle.

The project will use the following list of activities:

2.3.1 Admin and auditors

2.3.1.1 Data Entry/ Insert Information:

The admin will be able to enter the college, teacher, subject and other semester data into the system and can also upload it via excel sheets.

2.3.1.2 Update Information:

The system data is editable and the filled data can be replaced with new data.

2.3.1.3 View Information:

The admin will be able to view the semester data before launching the feedback. The admin will be able to view the statistics of the process. The coordinator will be able to view the generated feedback.

2.3.1.4 View and Download reports:

The admin can visualize the reports from the received feedback of students.

2.3.2 Student

2.3.2.1 Submit Feedback:

The student will be able to submit the feedback to only those teachers whose classes are attended by the student. Multiple forms will be given to the student.

2.4 Operating Environment

The information regarding technical specifications at user-end especially is as follows:

- Min. Hardware required at the data entry level - PC with Pentium Processor, 2 GB RAM, 50 GB HDD, 15" Display.
- Min. Software requirement at data entry level : Operating System - Windows XP,
- Browser : Internet Explorer 9.0 / Google Chrome / Mozilla Firefox

There should be Local network Connectivity to launch the student side feedback screen.

2.5 Design and Implementation Constraints

The web-based software will require local network connectivity which will be an important issue. For the efficient functioning of the system, stable network connectivity will be required at ground level. The feedback reports will be made available to the admin and coordinator after the feedback is taken from students and will be available in the MS-Excel Format or PDF Format with export facility. For accessing the Feedback reports, MS-Excel or PDF Viewer will be required. The system data can also be entered using MS-Excel sheets or directly via user interface. Intra-net or local network is the crucial constraint for the system.

2.6 User Documentation

A help menu will be provided in the system to guide the users and help them to find things quickly. Also the menu will have details of each and every option present on the dashboard of the user. It will help users to understand the appropriate use of each functionality. Along with this FAQs will be available in the same menu. If the FAQs can’t solve the user's doubts then in that case contact details of the admin coordinators will be provided for the user to clear their doubts.

2.7 Assumptions and Dependencies

It is assumed that users of this software will have local network connectivity. Web browser versions to be used to access this software will be of latest release and should support HTML 5. For accessing the software through smart phones, it can be accessible through android and non-android smartphones also, but to access the software, the phone's browser should be used.

The data entry and mapping will be done already and excel functionality for data-entry will be provided. The data entry is assumed to be correct.

3. External Interface Requirements

3.1 User Interfaces

- The system is a web based project.
- Any Latest browser must be installed on the device.
- Can be used on any browser over Mobile phone, Tablet pc, laptop and Desktop.

3.2 Hardware Interfaces

- Processor: Intel Dual Core and above.
- RAM : 4GB and above.

3.3 Software Interfaces

- Browser: Google Chrome, Mozilla Firefox.
- Database: MySQL
- Server: Apache preferred.

3.4 Communications Interfaces

- Existing Data Lines, Data Card, Mobile network.

4. System Features

4.1. Data Entry

- **Information Filling**
  - Admin can fill the data and of various entities such as class, teachers, subjects, students etc for setting up the feedback.
- **Entity Mapping**
  - Admin can map the filled data and mappings between various entities such as class, teachers, subjects, students etc for setting up the feedback is also done.
- **Easy data entry**
  - Admins can create entities and mappings entries after directly using the excel sheets.

4.2 Host Feedback

- **Random Password Generation**
  - Students will get randomly generated passwords to login into their dashboard.
- **Host the feedback for students**
  - Admin will host feedback after which students will be able to give the feedback according to the mapping done by the administrator.

4.3 View Report and feedback

- **Analytics**
  - Admin gets Analytics about the feedbacks of various students, type of feedback provided by students, number of teachers received feedback and much more with tables and charts.
- **View completed system**
  - Admins and coordinators can view various entities and mappings at any point. Whole system can be viewed including all of the data from all of the screens that are made available on the UI screen.

4.4 Give Feedback

- **Student give feedback**
  - Students will login into their dashboard where they will see their respective domains and teachers to whom they will cast their feedback. Students will be provided with certain forms designed by the administrator. Once the feedback is given students will log out from the system.get randomly generated passwords to

4.5 Other features

- **Field level validation**
  - Depending on the screen and constraints of the system, proper validation of each and every field is done.
- **System specific features**
  - Clean separation of various components and revision of the data.
  - Editable components to facilitate easy modification and
  - Easy generation of report and all the data is maintained in a separate database to facilitate easy modification.
  - Quick and easy saving and loading of database files.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- The user must get responses within seconds i.e. the response time of a particular function should be minimum.
- The system should provide required feedback when necessary.

5.2 Safety Requirements

- The system should provide functionalities that will keep the data safe in any case of emergency.
- Any transaction will be rolled back if any problem occurs during the transaction.

5.3 Security Requirements

- Backend database will be MySQL and will be protected with a strong password. Only Admin will have rights to access that database.
- Front end will be password protected and only authorized user with proper level-dependent credentials can access the software.
- The user data (Student data) will not be shared or compromised in any means.
- The data that will be provided by the user will be kept safe and the files that will be uploaded by the user will be viewable to concerned individuals only.

5.4 Software Quality Attributes

- Usability
    - The user interface should be self guiding, which will help user to perform necessary actions.
    - Necessary alerts will be given wherever needed to acknowledge user with actions allowed and disallowed.
- Maintainability
    - The cost for the maintenance of the system will be minimum and cost efficient.
    - Any chance of additional maintenance will not occur in the future.

6. Other Requirements

- The system should be very user-friendly to use and the user should be able to complete his/her task very efficiently
- The system should also satisfy requirements like
    1. Portability
    2. Reusability
    3. Testability
    4. Flexibility
    5. Efficiency
- All the functionalities should run smoothly without any errors.
- User will require a stable internet connection to access and use the system as it is web-based.