Birla Vishwakarma Mahavidyalaya

(An Autonomous Institution)
Vallabh Vidyanagar

A Project Report

Prepared as a part of the requirements for the subject of

Design Engineering

(Electronics and Communication)

Submitted By:

Ankit Jha	15ET006	150080112003
Alok Kumar	15ET009	150080112002
Vrund Shah	15ET011	150080112036

Guided By:

Dr.BhargavGoradiya
(HOD EC Dept.)

Academic Year: 2017-2018

Acknowledgement:

The success and final outcome of this project required a lot of guidance and assistance from many people and I am extremely privileged to have got this all along the completion of my project. All that I have done is only due to such supervision and assistance and I would not forget to thank them.

I respect and thank **Dr. Bhargav Goradiya** for providing me an opportunity to do the project work on Design engineering and giving us all support and guidance which made me complete the project duly. I am extremely thankful to him for providing such a nice support and guidance, although he had busy schedule managing the corporate affairs.

I am thankful to and fortunate enough to get constant encouragement, support and guidance from all Teaching staffs of Electronics and Communication Department which helped us in successfully completing our project work. Also, I would like to extend our sincere esteems to all staff in laboratory for their timely support.

BIRLA VISHVAKARMA MAHAVIDYALAYA

Engineering College, Vallabh Vidyanagar

(A CVM Institute)

(An Autonomous Institution)

Electronics and Communication Department

Certificate

This is to certify that the project entitled, “Online Feedback Form" submitted by **Ankit Jha(15ET006), Alok Mishra(15ET009), Vrund Shah(15ET011)** in partial fulfilment of the requirements for the B. Tech Degree in "**Electronics and Communication**" at the "**Birla Vishwakarma Mahavidyalaya**" is an authentic work carried out by them under my supervision and guidance.

Date:

Dr. Bhargav Goradiya
HOD(EC Departments)
Birla Vishwakarma Mahavidyalaya
(*An Autonomous institution*)

Contents

The aim of this project is to harness the creativity and technical expertise and think out of the box and come up with innovative and disruptive tech solutions for some of the daunting problems faced by our nation.

The issues include geo-fencing of airports, online toll collection, smart/intelligent traffic management, cyber-attacks, real-time monitoring of teachers' attendance and of cyber-attacks, smart drones to make airspace safer and title recognition system for marine animals.

As many as 29 ministries have submitted their problem statements to the human resource development ministry.

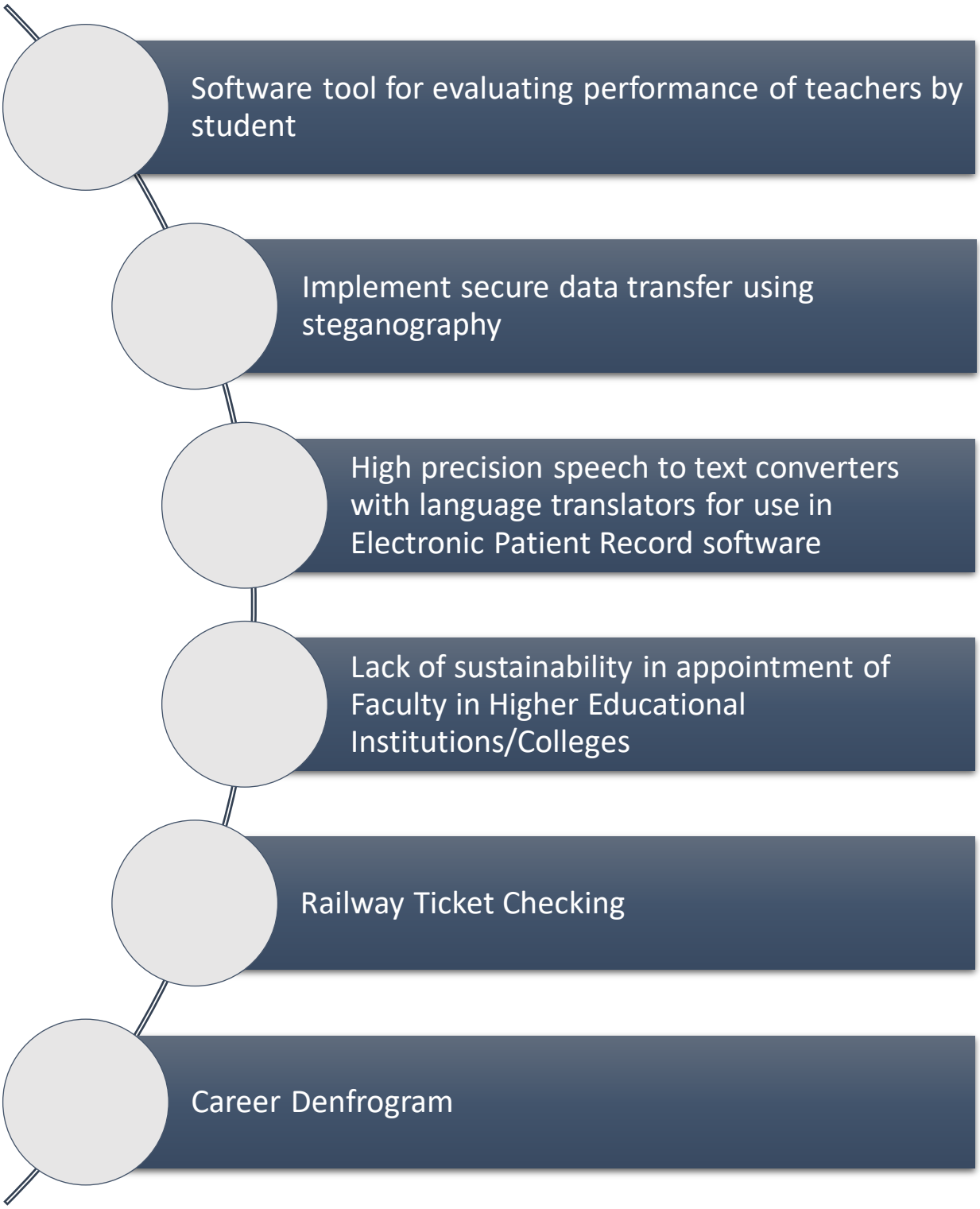
Problems Source:

The listed problems are from the different *Union Ministries* of *Central Government of India* which were indexed under the contest named "Smart India Hackathon'17".

Criteria for Evaluating a Creative Solution

The problems discussed should be solved using the skills those are available with us or can be acquired within a short span of time.

List Of Problems:



Problem Selection Process:

Based on Capabilities:

Analyzing each problem, our group was capable of doing only 3 of them. In which, we were able to contribute with our recent knowledge and area of interests. 2 problems were there, in which we tried to learn the subjects for developing it but due to some or the other reasons we were not able to complete. Out of the 6, we continued with 1 which was the most suitable as per our knowledge that is *Online Feedback System.*

Based on Challenges:

There were various challenges on each problem. Every problem leaded to some new challenge. Some of them were resolved but many of them were from those areas where none of us had any kind of experience and to attain that level of accuracy it was nearly impossible. Some common kind of challenges were cracking out the algorithms for the given set of problem.

Based on Ethics:

Ethical is the most important part of any project if a project doesn't not support any ethic or value system then it is almost same as not making the project. If the project is without value system then in some or the other that this will face the problems due to these things. Ethical also includes the environment. Some of the projects were not that environment efficient so, even those problems were also neglected

Based on Surveys:

We did many surveys on the listed projects. Many surveys were not viable as there were some limitations with the data or the locations of survey etc. Surveys are always the first and most needed step to initialize the probable solution. In our case we had gone through many surveys many of them were very useful to make our project a success, as the surveys provided us with broader aspect of everything which we thought of as an individual.

Problem Selected:

The aim of this project is to harness the creativity and technical expertise and think out of the box and come up with innovative and disruptive tech solutions for some of the daunting problems faced by our nation. *The Online Student Feedback System* is a management information system for education establishments to manage student data. Student Feedback Systems provide capabilities for selecting particular subject for feedback and generate the report automatically, build student details, student-related data needs in a college. *An Online Student Feedback System* is an automatic feedback generation system that provides the proper feedback to the teachers as per the categories like always, poor, usually, very often, sometimes. 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. After that those all grade report is viewed by the HOD which is given by the faculty. Hence estimating the performance of lecturers and giving feedback to college staff. So, the existing system carries more time to do a piece of work for this reason the online system feedback is implemented. This is the main disadvantage of the existing system for giving feedback about the lecturers and viewing report of lecturers manually. Student feedback on courses is an essential element in quality assurance. Questionnaires are of primary importance in the dialogue with students, since they are the best tool we currently have for collecting objective, detailed and reasonably systematic information on a wide range of questions, which Informs the teacher about student's perceptions of the course's strengths and weaknesses. Responses are collated on behalf of departments by the system, and will be used only for the purposes of quality enhancement. The aim of this is to save time for staff in academic departments and to allow a minimum level of statistical analysis of the data across the College. This recognizes that whilst the information remains the property of the College. Formulating learning and teaching practices and the views of students are to be considered as the primary factor on which the quality of teaching and learning is evaluated. The idea of feedback is to make corrective actions based on the desired and the actual value that can be implemented in many different ways.

Problem Selected:

Student feedback on subjects in their curriculum is an essential element in quality assurance. Questions in the standard form are very important in relating with students, since they are the best tool for collecting objectives, detailed and reasonably systematic information, which in forms the faculties about students' perceptions of the course's as well as their strengths and weaknesses that can prompt changes in delivery methods, course content, and guidance for the course. In online feedback system student gives feedback for teacher of particular subject for particular period of time may be at month end. Feedback is send to HOD of particular department as well as all departments' feedback to principal. HOD has rights to whether feedback shows to respected teacher or not. After analysing report HOD or principle conducts the meetings for staff by send mail to them. These meetings are conducted not only to discuss the feedbacks, but they are conducted to improve the areas which are suggested or seems to be neglected through the feedback. Even through online system the transparency is maintained with the management board and students as all the feedbacks are directly given to the management directly no mid-channels are required in this system so a much more safe and secured and transparent communication channel has been generated by applying this type of projects.

Problem Source:

The listed problem is from the Union *Ministries* of *Central Government of India* which were indexed under the contest named "Smart India Hackathon'17", and It was indexed under AICTE (All India Council for Technical Education)

The **All India Council for Technical Education** (**AICTE**) is the statutory body and a national-level council for technical education, under Department of Higher Education, Ministry of Human Resource Development. Established in November 1945 first as an advisory body and later on in 1987 given statutory status by an Act of Parliament, AICTE is responsible for proper planning and coordinated development of the technical education and management education system in India. The AICTE accredits postgraduate and graduate programs under specific categories at Indian institutions as per its charter.

Technical education in India contributes a major share to the overall education system and plays a vital role in the social and economic development of our nation. In India, technical education is imparted at various levels such as: craftsmanship, diploma, degree, post-graduate and research in specialized fields, catering to various aspects of technological development and economic progress.

The beginning of formal Technical Education in India can be dated back to the mid 19th Century. The major policy initiatives in the pre-independence period included appointment of the Indian Universities Commission in 1902, issue of the Indian Education policy resolution in 1904 and the Governor General's policy statement of 1913 stressing the importance of Technical Education, the establishment of IISc in Bangalore, Institute for Sugar, Textile and Leather Technology in Kanpur, N.C.E. in Bengal in 1905 and Industrial schools in several provinces. Significant developments include:

- Constitution of the Technical Education Committee of the Central Advisory Board of Education (CABE) of 1943;
- Preparation of the Sergeant Report of 1944; and
- Formation of the All India Council for Technical Education (AICTE) in 1945 by the Government of India.

All India Council for Technical Education (AICTE) was set-up in November 1945 as a national level Apex Advisory Body to conduct survey on the facilities on technical education and to promote development in the country in a coordinated and integrated manner. And to ensure the same, as stipulated in, the National Policy of Education (1986), AICTE be vested with statutory authority for planning, formulation and maintenance of norms and standards, quality assurance through accreditation, funding in priority areas, monitoring and evaluation, maintaining parity of certification and awards and ensuring coordinated and integrated development and management of technical education in the country.

Objectives:

1) Decision making power is provided by this system.
2) Accurate result can be obtained.
3) This system makes Selection process more effective.
4) To increase efficiency proposed system is depend on classification method.
5) Proposed system is used to reduce confusion at the time of processing feedback average.
6) To provide the platform to the students in identifying a greater role in the teaching -learning process.
7) To develop a sense of responsibility and belonging to the institution among the students.
8) To develop the skill of critical evaluation.
9) To modify and rearrange the course contents based on students' constructive suggestions.
10) To help the teachers modify and improve their teaching methodologies.
11) To open a transparent communication channel between the students and the teacher.
12) To maintain the functioning of teaching-learning process in the best possible way.

Literature Survey:

The first step in conducting the study was to identify areas within the literature to review. It was important to understand what makes a term evaluation system effective. Second, it was important to understand what, if anything, might be inherently different in collecting term feedback using an online system as opposed to a traditional paper-pencil system. It also seemed valuable to review the literature on future trends in collecting online midterm student feedback. The results from the literature on these topics are reviewed below. Term evaluations, by the nature of their purpose and timing, are almost always formative (Scriven, 1967). Instructors typically use the results from formative, Term student feedback solely for instructional improvement and rarely for inclusion in personnel documents (Overall and Marsh, 1979). Student feedback has the potential to benefit the students who provide it (Kulik, 2001). Consequently, term results are most useful when received and interpreted in a timely manner. In addition, midterm evaluations include more open-ended questions than closed, or forced-choice, questions (Angelo and Cross, 1994). One inherent element of paper-pencil feedback is that students' comments are handwritten. This can affect quantity and quality of student responses as well as the way the results are summarized and used. Compared with the paper system, the online system for semester feedback encourages students to write more and be more honest in their responses. Using an online system, students can type their responses rather than handwrite them. Because they are typing their comments, they are likely to include more information in response to each item than if they were handwriting their responses (Ballantyne, 2000). Furthermore, with the online system, students who lack understanding of a course concept can make this known to an instructor without revealing their identity through their handwriting (Sheehan, 2001). In addition, the timeliness of online systems allows instructors to receive midterm feedback quickly and respond to it in class the next day.

A) Mobile Virtual Online Feedback System: We take the inference from this paper to create feedback system that collect the feedback from the student and provides the automatic generation of feedback by student. This system has security limitation. It is only works on intranet. In addition to that we also provide the rating system due to which the student will rate the teacher based on his/her teaching, we also provide the interactive user interface for student and teacher.

B) Feedback Management System for Evaluating and Generating Monthly Report: We take the inference from this paper to create feedback system that collect the feedback from the student and provides the automatic generation of feedback by student. This system is not time bound. In case of user interface this system is not user friendly. In addition to this we also provide the portal system due to which student will give the monthly feedback. We are planning to develop the system for not only the college but also for organization area to develop the user interface

Learning Need Matrix:

Purpose/product concept:

The *Online Student Feedback System* is a management information system for education establishments to manage student data. Student Feedback Systems provide capabilities for selecting particular subject for feedback and generate the report automatically, build student details, student-related data needs in a college. *An Online Student Feedback System* is an automatic feedback generation system that provides the proper feedback to the teachers as per the categories like always, poor, usually, very often, sometimes. In the existing system students can give feedback about the lecturers by doing manually.

- **Website:** www.innovate.mygov.in/sih2017

- **List of problems:**

Software tool for evaluating performance of teachers by student	Implement secure data transfer using steganography
High precision speech to text converters with language translators for use in Electronic Patient Record software	Lack of sustainability in appointment of Faculty in Higher Educational Institutions/Colleges
Railway ticket checking system	Career Dendrogram

- **Ministries:**

AICTE	India Space Research Organisation
Ministry of Railways	Ministry of HRD
Indian Council of Medical Research	

- **Components used;**

Computer Systems	Routers	Internet
Intranet	Severs	Switch

Learning Need Matrix:

- **Languages Used;**

MySQL	Php	CSS
JavaScript	Bootstrap	HTML5

- **Software Simulation:**

XAMPP	Web Browsers	WAMP
Dreamweaver	Bootstrap	HTML5

- **Objectives:**

Decision making	Accuracy
Time Efficient	Better Classification Methods
Sense of belonging Increases	Critical Evaluation
Rearrangements as per the feeds.	Transparency
Identify greater role in teaching learning process	

Observation(AEIOU):

Activities:

Poor Hygienic places	Non-Cooperative Staffs	Opinions mismatch
Appraisal	Information Sourcing	

Environment:

Schools	Colleges	Government policies
Hospitals	Industries	Government offices
Restaurants	Companies	Tourist locations
Hotels	Banks	Malls

Interactions:

Students	Guides	Principal
Faculties	Tourists	Hod
Customers	Cashiers	Doctors
Managers	Shopkeepers	Patients
Employees	Hr executive	labours

Objects:

Internet	Computer Systems	Html5	XAMPP
Intranet	Servers	Php	Notepad++
Feedback collector system	MySQL	CSS	JavaScript

Users:

Students	Tourists	Patients
Customers	Labours	Employees

Ideation:

People:

Students	Guides	Principal
Faculties	Tourists	HOD
Customers	Cashiers	Doctors
Managers	Shopkeepers	Patients
Employees	Hr executive	labours

Activities:

Poor hygiene of tourist places
Technology adaptability in tourist places
Technology upgradability in hospitals
Business alliance

Situation/context/location:

Notations of behaviours of faculties in colleges	Technological feedback in hospital
Improvement on the tourist locations	Product feedback of the company
Public relation feedback for the doctor	Service feedback of the restaurant

Props/possible solution:

Hard Copy feedback	Verbal interactions	Online feedback
Telephonic feedback	Feedback through letters	Another Channel Feedback

Product Development:

Purpose:

Feasibility	Easily data handling
Data is easily managed	Data security

People:

Students	Guides	Principal
Faculties	Tourists	Hod
Customers	Cashiers	Doctors
Managers	Shopkeepers	Patients
Employees	Hr executive	labours

Product experience:

Good	Economical	Transportable
Flexible	Safety	dynamics

Product function:

Easy to use	Excellent service
Informative	Lesser complexity
Reliable	Authentic

Product Development:

Product features:

Digitalized	Data security
Easy to analyze data	Economical
High adaptability	Cloud computing

Components:

Internet	Computer System	Html5	XAMPP
Intranet	Servers	Php	Notepad++
Feedback collector system	MySQL	CSS	JavaScript

Customer revalidation:

User interface	Personal data security
Better questions	Bandwidth

Reject/Redesign/Retain:

Better User Interface	Dynamic Pages
More Secured data	Bandwidth of data increased

User:

Students	employees	Patients
Labours	Tourists	customers

Stakeholders:

MHRD	colleges	Malls
AICTE	Companies	hospitals

Activities:

Poor hygiene of tourist places
Technology adaptability in tourist places
Hospitality feedback in restaurant and hotel
Technology upgradability in hospitals
Public relation feedback of doctors
Service feedback for the restaurants
Notations of behaviours of faculties in colleges
Hospitality evaluation of hotels and restaurants
Appraisal of the services received
Product feedback of the company

Happy Story:

Rajita plans for a party in her house. She thought of some entertainment plans. After executing her plans in the party, she was not that pleased as many of her guests did not contributed much in the plans. So, she thought of an alternative idea to make this entertainment programme good. Therefore, she shared the link of online feedback system which was designed for better entertainment programme to all her guests. She got many brilliant ideas for next time and she was quite happy with it.

Sad Story:

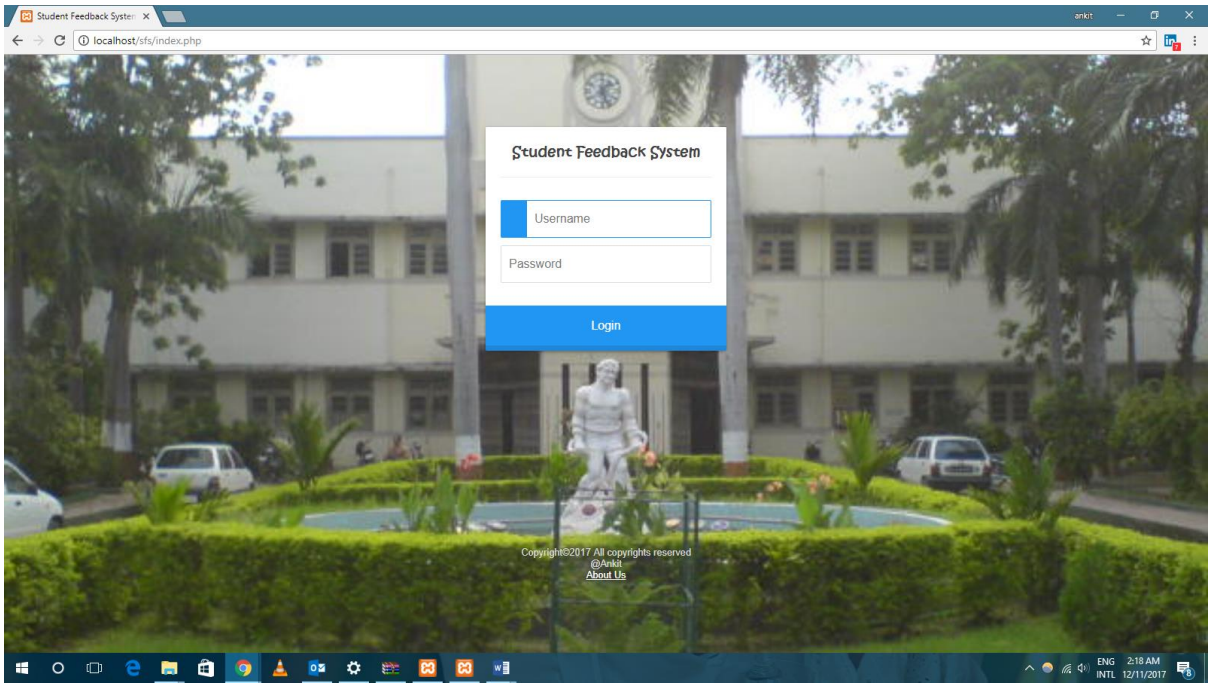
Thera was a restaurant in Ajmer, which was famous for its foods. But all of a sudden there was a very high crisis of customers in those restaurants. The owners were very worried about the things going on. They were under many loans and with the time passes they started to come under fiscal deficit. One of the owner started to analyse what was the real problem behind such an adverse change. He started to search for methods for analysing, one of his friend suggested for online feedback system. After getting the feedbacks from the regular customers he concluded that, even though their food was good they failed in many other areas like hospitality, ambience. So, If they had chosen this feedback system earlier then they might not face this situation today.

Happy Story:

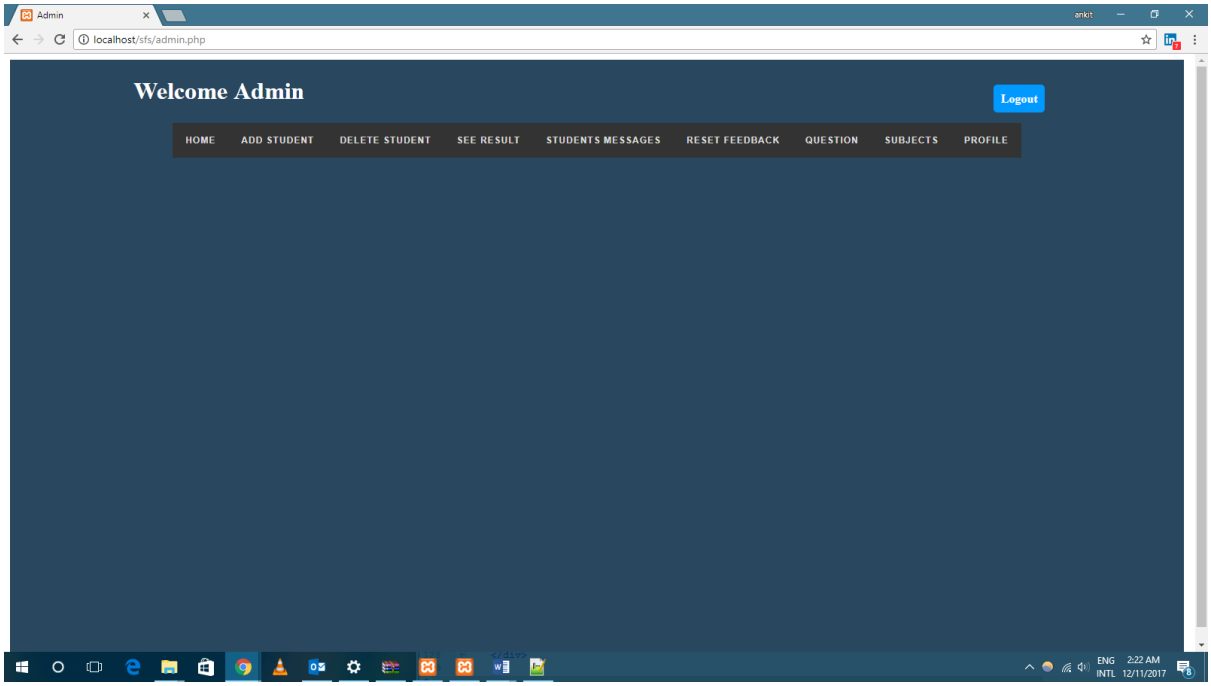
In UK University, students were filling feedback forms. Managing these feedback forms was a tedious task and none of the management members nor any other member were ready to take the responsibility. Analysing those forms was also a very pathetic work. After getting the online feedback system, this analysing and management tasks were assorted. As there was nothing to manage or sort, All the answers were directly available with the website and none of the members need to manage anything

Prototype:

Screenshots of Various pages of online feedback system:



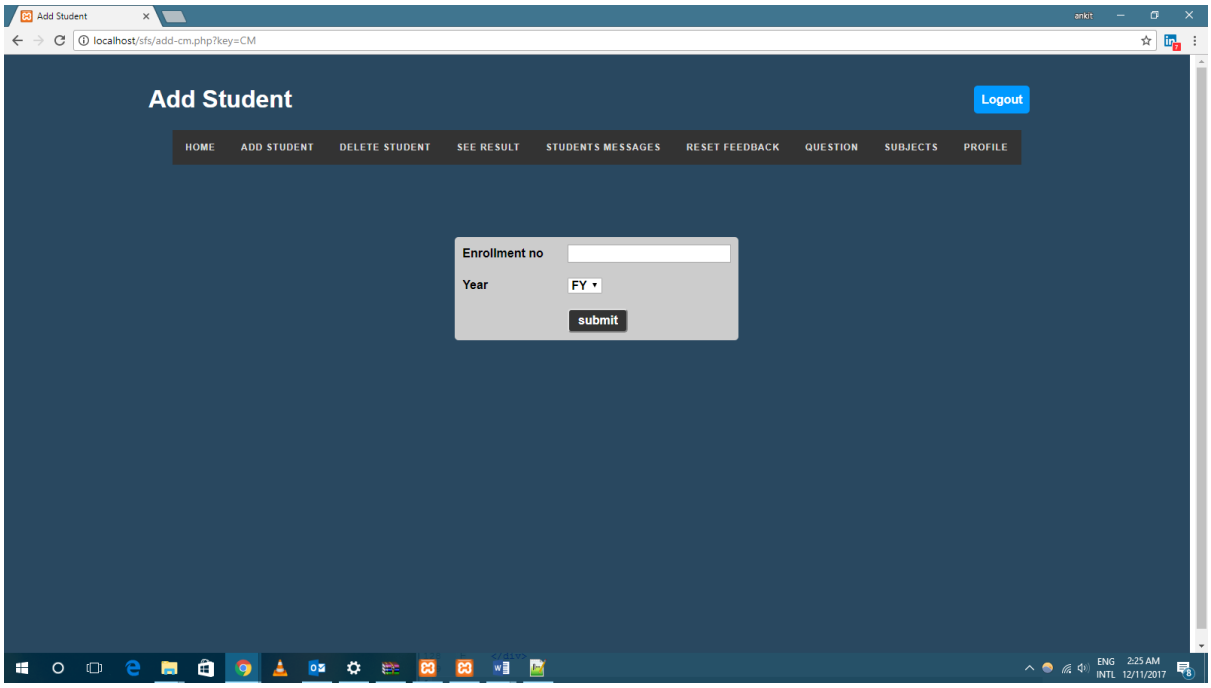
Login page



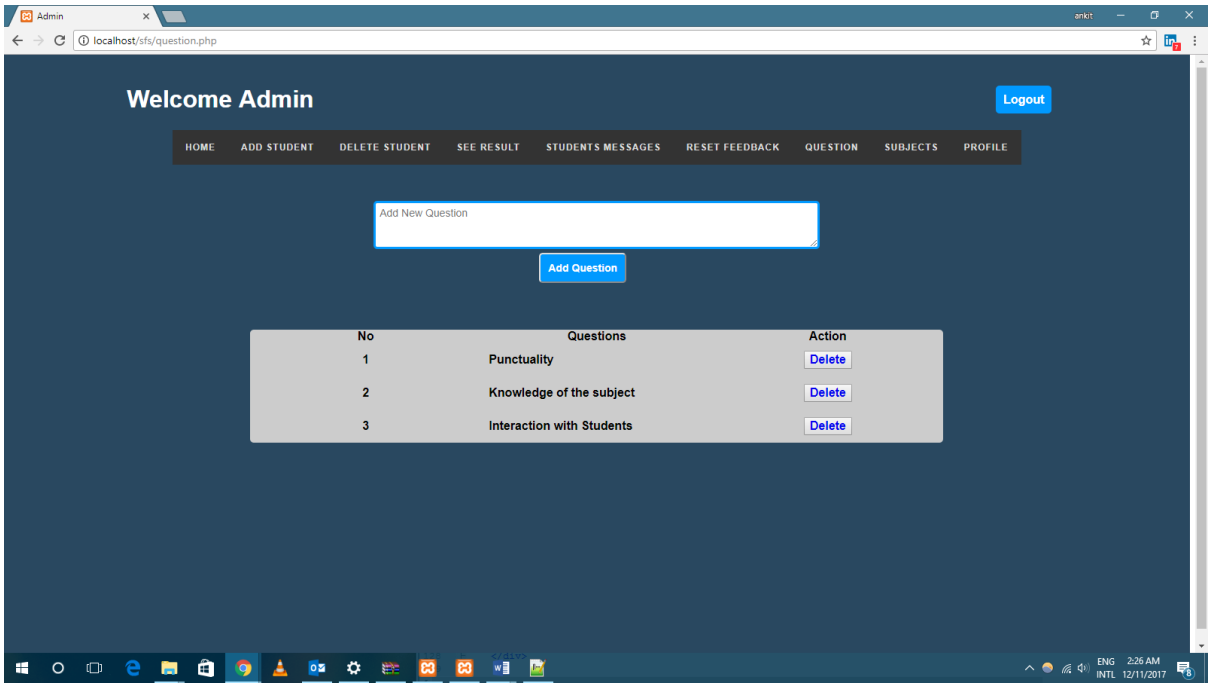
Admin's Home Page

Prototype:

Screenshots of Various pages of online feedback system:



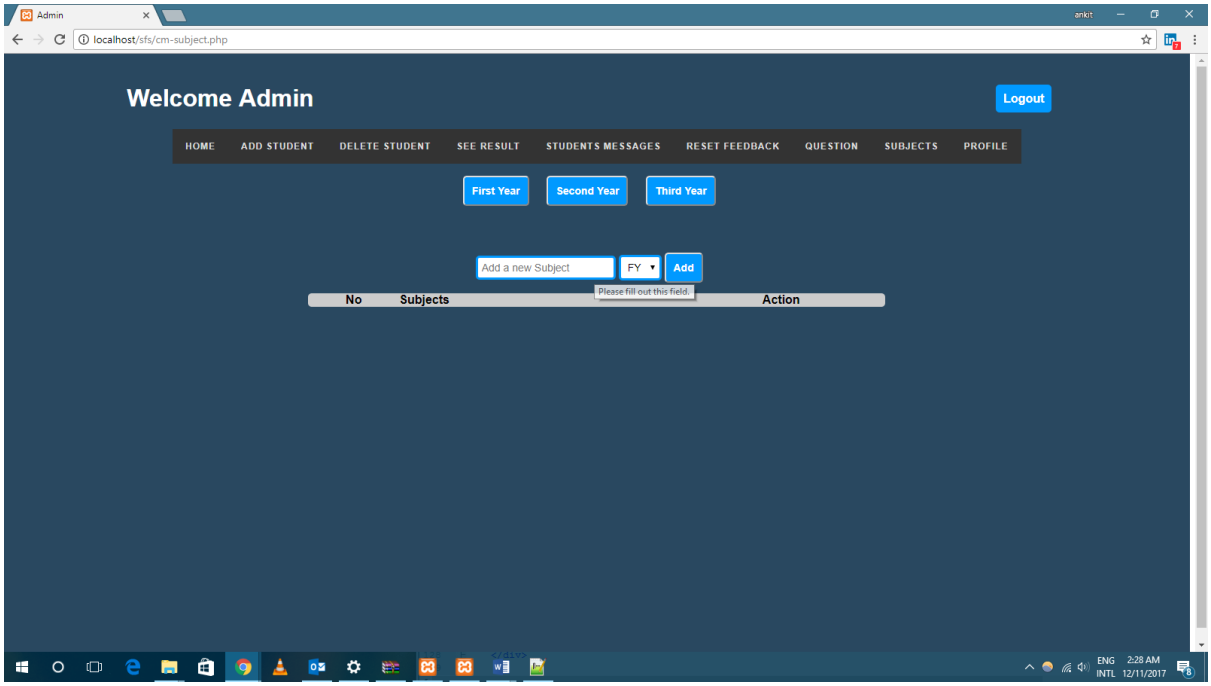
Adding New Student



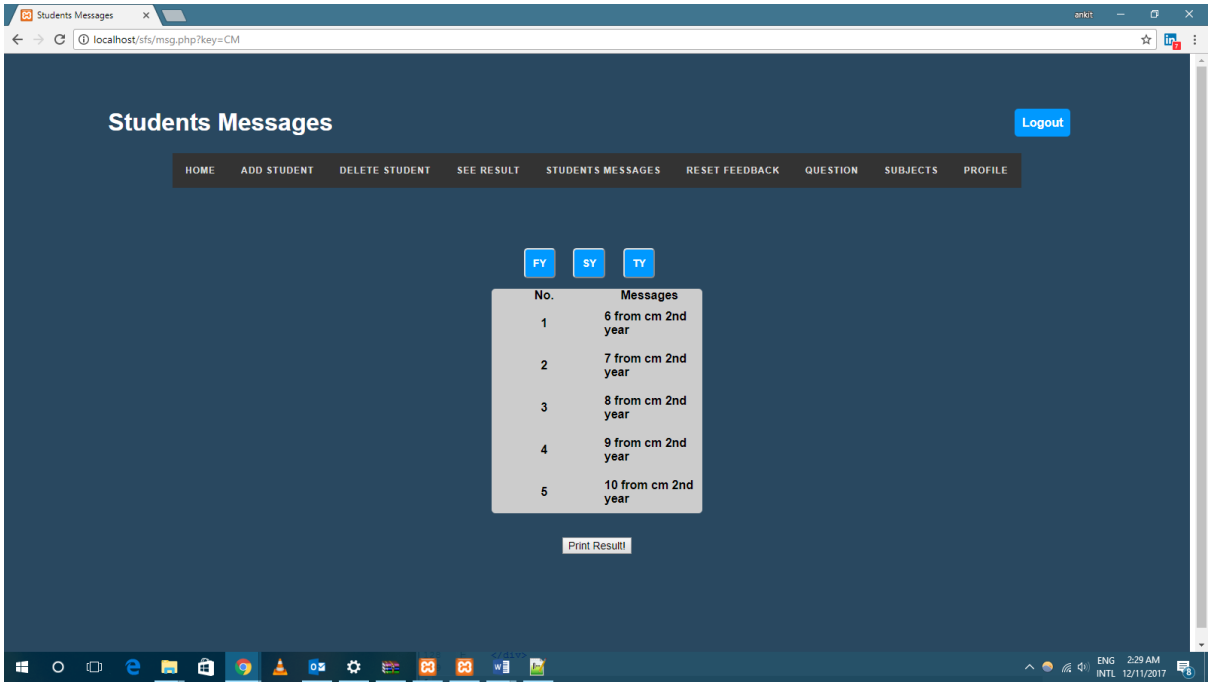
Adding questions

Prototype:

Screenshots of Various pages of online feedback system:



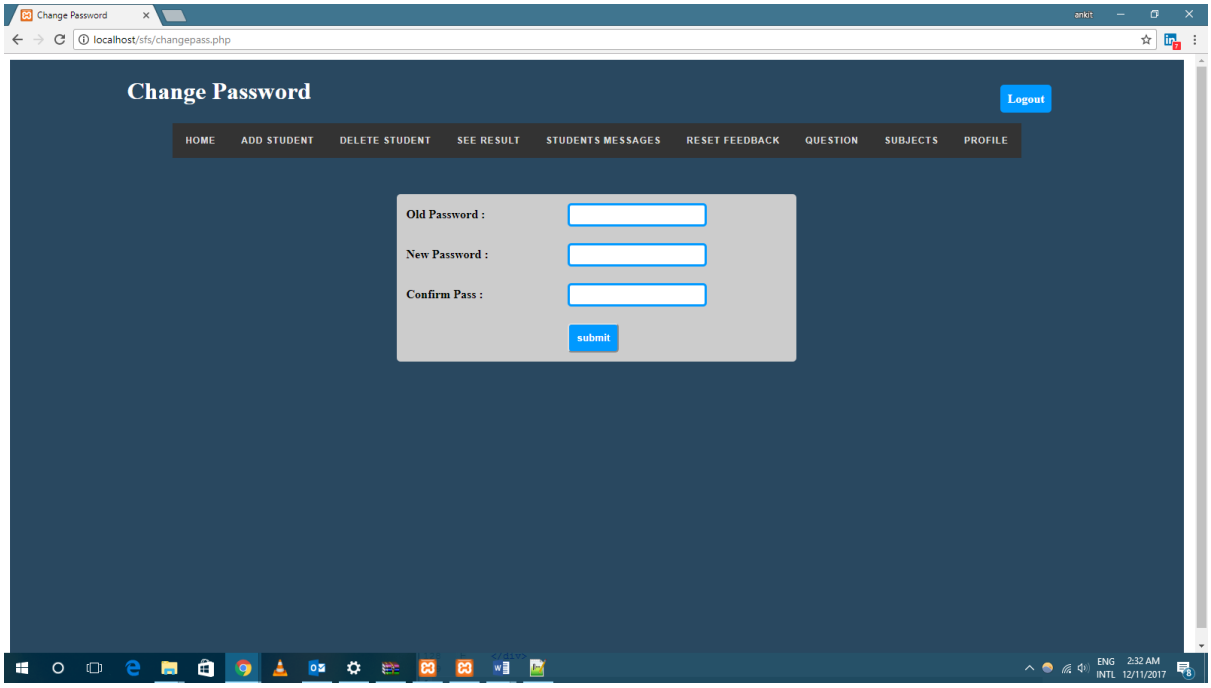
Subject Addition



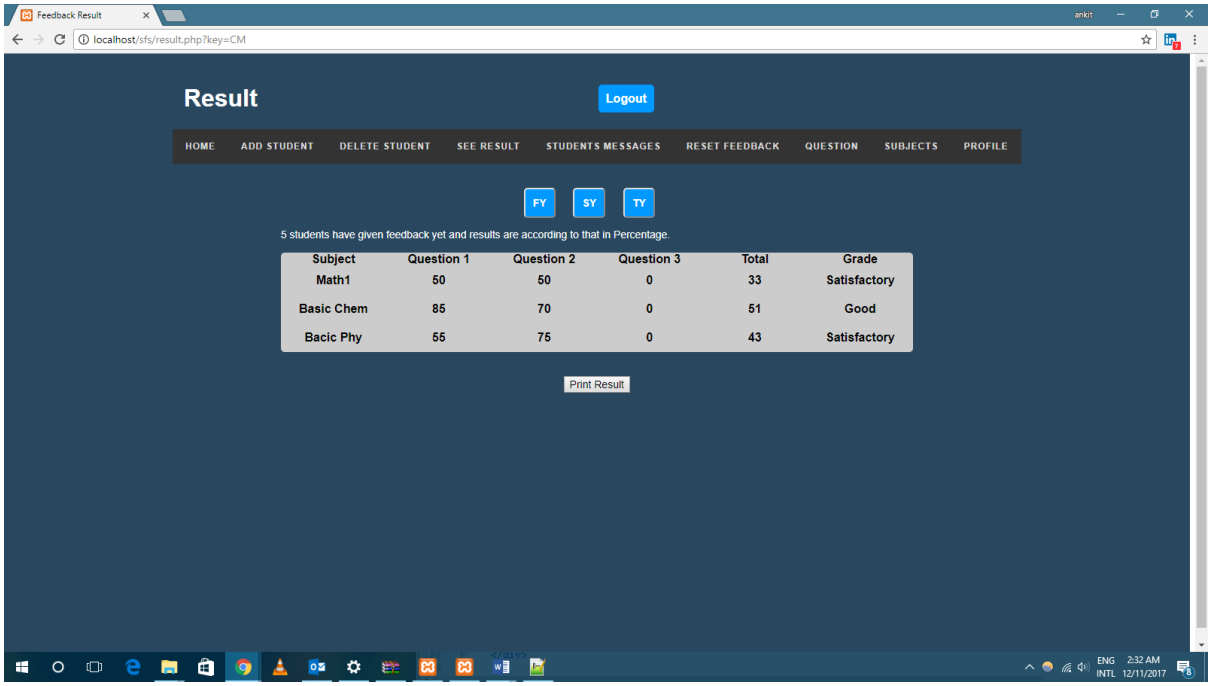
Student's Message view

Prototype:

Screenshots of Various pages of online feedback system:



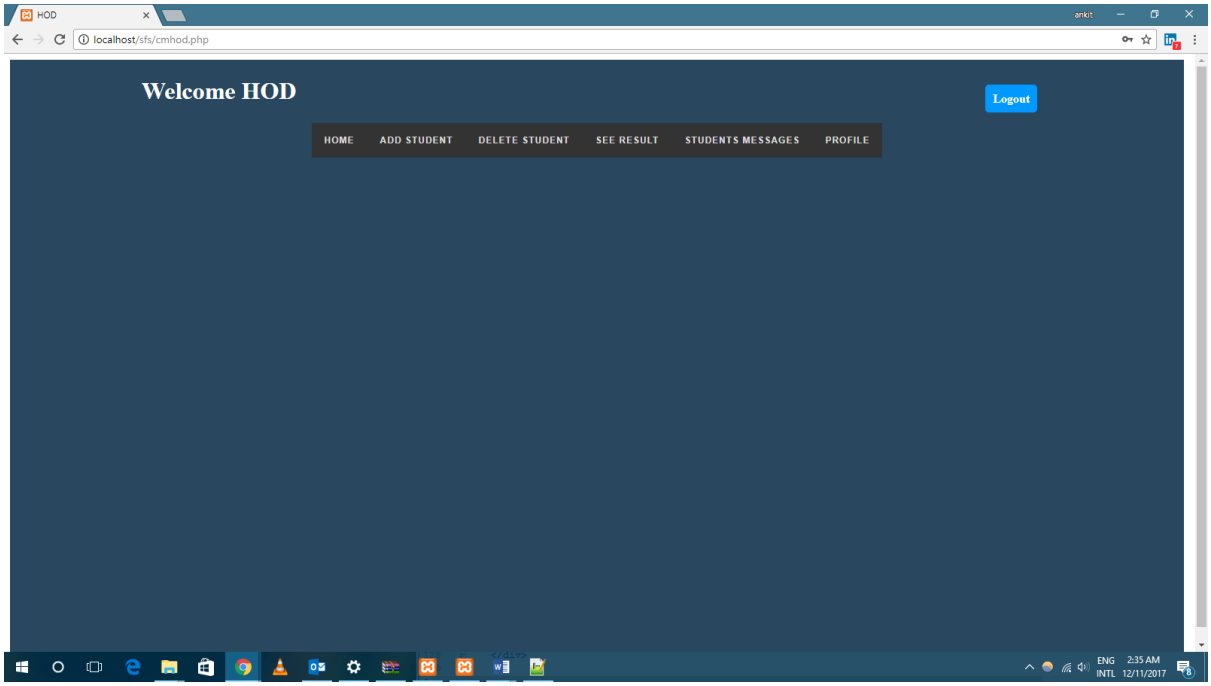
Change Password Page



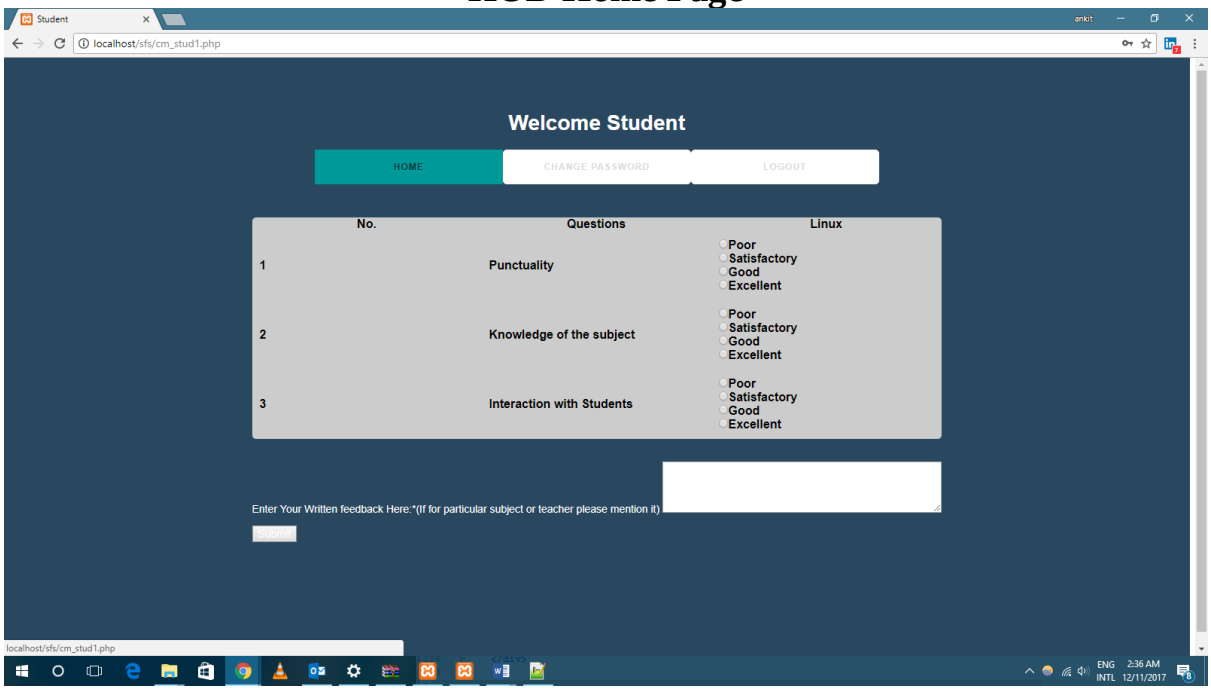
Result page

Prototype:

Screenshots of Various pages of online feedback system:



HOD Home Page



Student's Home Page

Research Paper Summary:

Topic1: Online Feedback System

Abstract:

Online feedback system is web based system which provides a way for colleges to allow students to gives feedback for staff online to improve their teaching. Students are requiring to gives feedback using one standard feedback form. In our project, the security is also maintaining by result of feedback is only visible to authentic user. This project also includes time portal. This system helps teachers to improve the performance by analysing the feedback given by students.

Introduction

The Online Feedback System is used to manages feedback provided by students. Online Feedback System allows students to select particular subject and respective teacher to give feedback about teacher and subject. An Online Feedback System is a feedback generation system which gives proper feedback to teacher provides the proper feedback to the teachers about their teaching quality on basis of rating very poor, poor, average, good, very good. In the existing system students requires giving feedback manually. In existing system report generation by analysing all feedback form is very time consuming. By online feedback system report generation is consumes very less time. In online feedback system student gives feedback for teacher of particular subject for particular period of time may be at month end. Feedback is send to HOD of particular department as well as all departments' feedback to principal. HOD has rights to whether feedback shows to respected teacher or not. After analysing report HOD or principle conducts the meetings for staff by send mail to them.

Literature Survey

A. Mobile Virtual Online Feedback System

We take the inference from this paper to create feedback system that collect the feedback from the student and provides the automatic generation of feedback by student. This system has security limitation. It is only works on intranet. In addition to that we also provide the rating system due to which the student will rate the teacher based on his/her teaching, we also provide the interactive user interface for student and teacher.

B. Feedback Management System for Evaluating and Generating Monthly Report

We take the inference from this paper to create feedback system that collect the feedback from the student and provides the automatic generation of feedback by student. This system is not time bound. In case of user interface this system is not user friendly. In addition to this we also provide the portal system due to which student will give the monthly feedback. We are planning to develop the system for not only the college but also for organization area to develop the user interface.

Existing System

In Existing System, the feedback is done by the manual process. In the Existing System students can give the feedback about the lecturers by using paper and pen. After giving feedback by every student papers are collected by HOD's and calculates the overall grade for each subject and each lecturer. After that those all grade report is viewed by the principal which is given by HOD's. Hence estimating the performance of lecturers and giving counselling can be done by the principal.

Proposed System

Here we aimed to design the online web application for giving the feedback about the lecturers, particular subject, etc. by students toteachersThis Feedback System consist of four kinds of users Student, Staff, HOD's of all department and principal. But this feedback are only given by Students other three users only view the feedbacks. This feedback which are issued by the student are first given to HOD's and principal and HOD's will decides whether feedback is visible to staff for that subject or not. System will generate the report based on rating in terms of very poor, poor, average, good, very good. Based on report HOD's or principal conducts meeting by simply sending mail to teachers.

Methodology

Systems design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. Systems design could be seen as the application of systems theory to product development. In this system process commence with registration of student, while registration student has to specify its academic year, the student will have authorized to provide feedback for their respective year college teachers. After submitting the feedback form only HOD is authorized to go through the feedback, it will send opinion about feedback to respective teacher. Then HOD will give report to principal and then principal will take the corresponding action.

Conclusion

This project is design for the purpose to reduce the lecturer's time and to reduce the burden of maintaining huge amount of records of students. At the time of feedback generation, it applies formulae for generate a feedback of particular subject. After that it will displayed the whole record sheet to the staff, when the staff will login in the system. As the comparison with manual feedback or existing feedback system the new system is easier way to manage whole things in a particular manner. As per the existing system it is very easy process to save each and every record of individual student by the use of database.

Research Paper Summary:

Topic2: Blue Brain Project

Abstract

Human brain is the most valuable creation of God. The man is intelligent because of the brain. "Blue brain" is the name of the world's first virtual brain. That means a machine can function as human brain. Today scientists are in research to create an artificial brain that can think, response, take decision, and keep anything in memory. The main aim is to upload human brain into machine. So that man can think, take decision without any effort. After the death of the body, the virtual brain will act as the man. So, even after the death of a person we will not lose the knowledge, intelligence, personalities, feelings and memories of that man that can be used for the development of the human society.

What is Blue brain?

BLUE BRAIN is a virtual brain, which is not the actual natural brain, but it acts as the brain. It can think like brain, take decisions based on past experiences, and respond as the natural brain does. The human brain is the most complex thing in the world. So, is it possible to create a virtual version of it and store it? Yes. It is possible by using a super computer, with a huge amount of storage capacity, processing power and an interface between the human brain and this artificial one. Through this interface the data stored in the human brain can be uploaded into the computer. So, anyone's knowledge can be kept and used even after the death of that person. The IBM is now developing a virtual brain known as the Blue Gene Supercomputers. It would be the world's first virtual brain. Within 30 years, we will be able to scan ourselves into the computers

Working of Human brain

The brain essentially serves as the body's information processing centre. It receives signals from sensory neurons in the central and peripheral nervous systems, and in response it generates and sends new signals that instruct the corresponding parts of the body to move or react in some way. It also integrates signals received from the body with signals from adjacent

areas of the brain, giving rise to perception and consciousness. The brain weighs around 1,300-1,400 g i.e. about 3 pounds and constitutes about 2 percent of total body weight. The human ability to feel, interpret and even see is controlled in computer like calculations, by our nervous system. The nervous system is quite magical because we can't see it, but its working through electric impulses throughout our body. One of the world's most "intricately organized" electron mechanisms is the nervous system. Not even engineers have come close to making circuit boards and computers as precise as the nervous system. To understand this system, one has to know the three simple functions that it puts into action; sensory input, integration & motor output.

Working of Blue Brain

Structural data that is to be gathered includes data on the genome, the transcriptome, proteins, metabolites, organelles, neurons and glia cells, synapses, extracellular space, microcircuits, mesocircuits, macrocircuits, the vasculature, blood, the blood brain barrier, ventricles, cerebrospinal fluid, and large-scale organization of the whole brain. Required functional information includes data on gene transcription, protein translation, cell biology processes, signalling, receptor functions, biochemical, biophysical and electrochemical processes and properties, neuronal and synaptic information processing, information processing at the micro- meso- and macro-circuit level and at the level of the whole brain, metabolism, development, adaptation, learning, perception, cognition, and behaviour. One of the project's key strategies is to exploit interdependencies in the experimental data to build comprehensive digital reconstructions of the brain, including features that have yet to be characterized experimentally. The BBP has applied this strategy in several different areas (prediction of the spatial distribution of ion channels in 3D model neurons, prediction of neuronal firing properties from expression data for a selected set of ion channels, prediction of synaptic connectivity from neuronal morphology).

Uploading Human Brain

The uploading is possible by the use of small robots known as the Nanobots. These robots are small enough to travel throughout our circulatory system. Traveling into the spine and brain, they will be able to monitor the activity and structure of our central nervous system. They will be able to provide an interface with computers that is as close as our mind can be while we still reside in our biological form. Nanobots could also carefully scan the structure of our brain, providing a complete readout of the connections. This information, when entered into a

computer, could then continue to function as us. Thus, the data stored in the entire brain will be uploaded into the computer.

How will this project Serve?

1. A detailed and accurate data about the Brain and its working will be better understood with the help of a model and allow fine control of any of the elements and allow a systematic investigation of their contribution to the emerging behaviour.
2. Detailed and accurate data for analyzing the brain and how information is transmitted within the neural networks have not yet been learnt.
3. Using BLUE BRAIN technology will enable us to learn how a new born neuron is connected to the neural network and whether it carries a pattern.
4. Understanding complexity: At present, detailed, accurate brain simulations is the only approach that can allow us to explain why the brain needs to use many different ion channels, neurons and synapses, aspect rum of receptors, and complex dendritic and axon arborizations, rather than the simplified, uniform types found in many models.
5. Tracking the emergence of intelligence: This approach offers the possibility to re-trace the steps taken by a network of neurons in the emergence of electrical states used to embody representations of the organism and its world.
6. Simulating disease and developing treatments: Such simulations could be used to test hypotheses for the pathogenesis of neurological and psychiatric diseases, and to develop and test new treatment strategies.
7. Exploring the role of dendrites.
8. Revealing functional diversity.
9. Providing a circuit design platform: Detailed models could reveal powerful circuit designs that could be implemented into silicone chips for use as intelligence devices in industry.
10. Cracking the Neural Code, The Neural Code refers to how the brain builds objects using electrical patterns. In the same way that the neuron is the elementary cell for computing in the brain, the NCC is the elementary network for computing in the Neocortex. Creating an accurate replica of the NCC which faithfully reproduces the emergent electrical dynamics of the real microcircuit, is an absolute requirement to revealing how the Neocortex processes, stores and retrieves information.
11. A Novel Tool for Drug Discovery for Brain Disorders Understanding the functions of different elements and pathway s of the NCC will provide a concrete foundation to

explore the cellular and synaptic bases of a wide spectrum of neurological and psychiatric diseases. The impact of receptor, ion channel, cellular and synaptic deficits could be tested in simulations and the optimal experimental tests can be determined.

12. A Global Facility: Software replica of a NCC will allow researchers to explore hypotheses of brain function and dysfunction accelerating research. Simulation runs could determine which parameters should be used and measured in the experiments. An advanced 2D, 3D and 3D immersive visualization system will allow "imaging" of many aspects of neural dynamics during processing, storage and retrieval of information. Such imaging experiments may be impossible in reality or may be prohibitively expensive to perform.
13. A Foundation for Molecular Modelling of Brain Function: An accurate cellular replica of the neocortical column will provide the first and essential step to a gradual increase in model complexity moving towards a molecular level description of the neocortex with biochemical pathways being simulated.

Limitations

We become dependent upon the computer systems. Others may use their technical knowledge against us. Computer viruses will pose an increasingly critical threat.

Conclusions

In conclusion, we will be able to transfer ourselves into computers at some point. Most arguments against this outcome are seemingly easy to circumvent. They are either simple minded, or simply require further time for technology to increase. The only serious threats raised are also overcome as we note the combination of biological and digital technologies. While the road ahead is long, already researches have been gaining great insights from their model. Using the Blue Gene supercomputers, up to 100 cortical columns, 1 million neurons, and 1 billion synapses can be simulated at once. Despite the sheer complexity of such an endeavour, it is predicted that the project will be capable of this by the year 2023.

Bibliography:

AICTE. (2016). Retrieved from My Gov Innovation: https://innovate.mygov.in/challenges?s=&challenge-category=all-india-council-for-technical-education-aicte

Bullock, C. D. (2007, December 23). *Online Collection of Midterm Student.* Retrieved from semanticscholar: https://pdfs.semanticscholar.org/7c9e/2c50ffe0bab8b8fb4cd2a448be57cecd0002.pdf

COMMITTEE, P. V. (2016, february 16). *Student Feedback .* Retrieved from UNIVERSITY OF MALTA: https://www.um.edu.mt/__data/assets/pdf_file/0007/64933/student_feedback.pdf

Divyansh Shrivastava; Shubham Kesarwani; Amol K. Kadam; Aarushi Chhibber; Naveenkumar. (2017). *Online Student Feedback* Analysis System. *International Journal of Innovative Research in Science,*, 8445-8451.

Indian Council of Medical Research(ICMR). (2017). Retrieved from My Gov Innovation: https://innovate.mygov.in/challenges?s=&challenge-category=indian-council-of-medical-research-icmr

Indian Space Research Organisation(ISRO). (2017). Retrieved from My Gov Innovate: https://innovate.mygov.in/challenges?s=&challenge-category=indian-space-research-organisation-isro

Ministry of HRD. (2017). Retrieved from My Gov Innovation: https://innovate.mygov.in/challenges?s=&challenge-category=ministry-of-hrd-ncertugccbsenios

Ministry of Railways. (2017). Retrieved from My Gov Innovation: https://innovate.mygov.in/challenges?s=&challenge-category=ministry-of-railways

Ministry of Road Transport and Highway. (2017). Retrieved from My Gov Innovation: https://innovate.mygov.in/challenges?s=&challenge-category=ministry-of-road-transport-and-highways

Rahman, M. S., Raut, M. A., Ahmed, M. A., & Junghare, M. S. (2016). *ONLINE STUDENT FEEDBACK* SYSTEM. *International Journal of Research In Science & Engineering*, 224-230.

Sivasankari.S; Srimathi.P.S; Ramya.S; Dr.G.Fathima. (2016). Online Feedback System for Educational. *International Journal of Innovative Research in Science, Engineering and Technology*, 275-279.

The student feedback system. (2012, September 22). Retrieved from University of Kuopio: https://www2.uef.fi/documents/13384/1401124/feedbacksystem_english.pdf/f5a6fadc-6e47-43e4-b40d-0c1ab71ed494

Conclusion

We hereby conclude that, the above project was a result of many hours of hard work and contribution of many people. In Todays, upcoming world there is an utmost need to make everything digitalised so that is easier to access anything from anywhere. Our project was just one step to it.

This project finds many applications throughout the globe out of which some of them are already listed. This project not only focusses on digitalization rather this also focuses on keeping the data secured so that no other can get the benefits from others data.

While completing this project there were many challenges some of them were like, getting suitable questions, sometime server crashes, some codes error which is difficult to identify for web programming. But facing those issues led us to many great experiences and learned a lot through it.