ONLINE CSE-NITK WEBSITE AND MANAGEMENT SOFTWARE

Under the Guidance
of
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Submitted By

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ABSTRACT

A web site enables content such as texts, images, and videos to be displayed on the internet. A Website is a collection of web pages and related content that is identified by a common domain name . College Website is a web application that handles various academic as well non-academic activites of a college.This system can be access by the student as well teacher and admin for there various purpose.

This project is based on Online mangement of a college website.It manages the college website as well contains the details about the college as well contains the details about the students teacher and various department which our in NIT K college.It also keep tracks about the students which are placed in differnt various organizations.It also keep track for the workshop as well event which are happening the college wheather it is Techincal or Cultural. The entire system is designed and devoloped with the help of html,css,js,php and mysql technology and entire devolopment process involves steps of the Waterfall model.

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1 INTRODUCTION

1.1 Purpose of project

The project aims to incorporate state-of-the-art technique for creating the NIT K CSE department website with the goal of achieving high accuracy with a real-time performance.This project tries to create the NIT K CSE department website so that it is useful for many visitors to know what we are and what our student are doing.

1.2 System Analysis

System analysis is a important factor which is use for gathering the new data and making use of that data in a production,it also help in recreating or changing the already exisiting one and modify it the already exit data.Two of the steps are:

- Identification of need
- Preliminary investigation

1.3 Identification of need

1.3.1 Performance of the system:

Performance of the system depends upon:

- System design
- Tools
- Coding

The system should be FAST, ACCURATE and RELIABLE.

1.4 The information being supplied and its form:

- The information should be very precise, correct.
- Information about project should be gathered from reliable source.

1.5 Primary investigation

- Evaluation of project request is major purpose of preliminary investigation.
- It is the collecting information that helps committee members to evaluate merits of the project request and make judgment about the feasibility of the proposed projects.

Preliminary investigation has three parts:

- Request clarification
- Feasibility study
- Request approval

1.5.1 Request clarification

A system is intended to meet needs of an organization. Thus, the first step is in this phase is to specify these needs and requirements.

- The next step is to determine the requirements met by the system. Many requests from stakeholders in the organizations are not clearly defined. Therefore, it become necessary that project request must be examined and clarified properly before considering system investigation.
- Information related to different needs of the System can be obtained by different users of the system. This can be done by reviewing different organization's documents such as current method of passing message, complaint data etc. By observing the onsite activities, the analyst can get close information related to real system.

1.5.2 Feasibility study

Feasibility study is the measure of how beneficial or practical the development of an information system will be to an organization.

1.5.3 Feasibility test:

Technical feasibility: Technical feasibility of this application is concerned with specifying equipment and software that will successfully satisfy the user requirements.

- The facility to produce outputs in a given time.
- Losing of data will be reduced.

In technical feasibility, the configuration of the system is a given more importance than the actual make of the hardware. The configuration should give the complete picture about the system requirements:

- How the units are interconnect and how they communicate with each other?
- What would be the speed of data transmission ? Specfic products and hardware need to done be keeping in mind with the logical structure of the model.

1.5.4 Operational feasibility:

It basically compromise of two major thing first is performances of the model and second it acceptances of the model in the organization.The points which we need to consider in every aspect are as follows

- What changes will be brought with the system?
- What organizational are considered?
- What new skills are required? Operational feasibility determines how the proposed the system will fit in with the current operation and what needs to implements the system

1.5.5 Economic feasibility:

Economic feasibility or cost analysis is the most effective study for saving and spending the cost on the model.It is a procedure to determine the benefits and savings those are expected from the proposed system and compare them with cost.If the cost is execed then a particular decison is taken for desizn and implement the model.

1.6 Request approval

Not every request of the customer can be implement by the orgranization and and every request is not fesiable and every request it not granted and not every request is implemented. However, those projects that are both feasible and desirable should be taken up seriously. Many business organizations develop information systems plan as carefully as they plan for new products, new manufacturing programs or plant expansion.

2 VISION

We have a vision for making the NIT K website very beautiful and user interactive and very easy to use by everyone and reduced as much time as possible in fetching details.

3 LITERATURE SURVEY

The website can give the details of the cousers offered by the NIT K for undergraduates and postgraduates,and gives the details about the faculty's of the NIT K and placement stats of the students.

4 TECHNOLOGIES USED

- **HTML** Hypertext Markup Language (HTML) is the standard markup language for documents designed to be displayed in a web browser. It can be used by other technologies such as CSS and javascript basically it is used to make a skelton of a webpage and then work further.
- **CSS** Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language such as HTML. CSS is used to make a desize and coloring and making effect in the HTML page and make it beautiful for the user to interact with HTML page.
- **PHP** PHP is a general-purpose scripting language especially suited to web development. PHP is used for scripting purpose basiclly we used this so that with the help of database we can access and implement and make chances in the database as well in the website.
- **MySql** Mysql is a popular choice as embedded database software for local/client storage in application software such as web browsers. It is used for storing the contents of the webpage in the database.
- **Javascript** javascript is a scripting language which is used for creating the dynamically pages and which is used for creating 2D/3D things in our webpage and which helps to create webpage dynamically and not static.

5 SOFTWARE DEVELOPMENT LIFECYCLE

- SDLC is the acronym of software development life cycle it is also known as software development process.The software development life cycle(SDLC) is a framework defining tasks performed at each step in the software development process.
- SDLC is a process follwed for software project,within a software organization.It consists of a detailed plan descibing how to develop,maintain,replace and alter or enhance specific software.The life cycle defines a methodology for improving the quality of software and the overall development process.

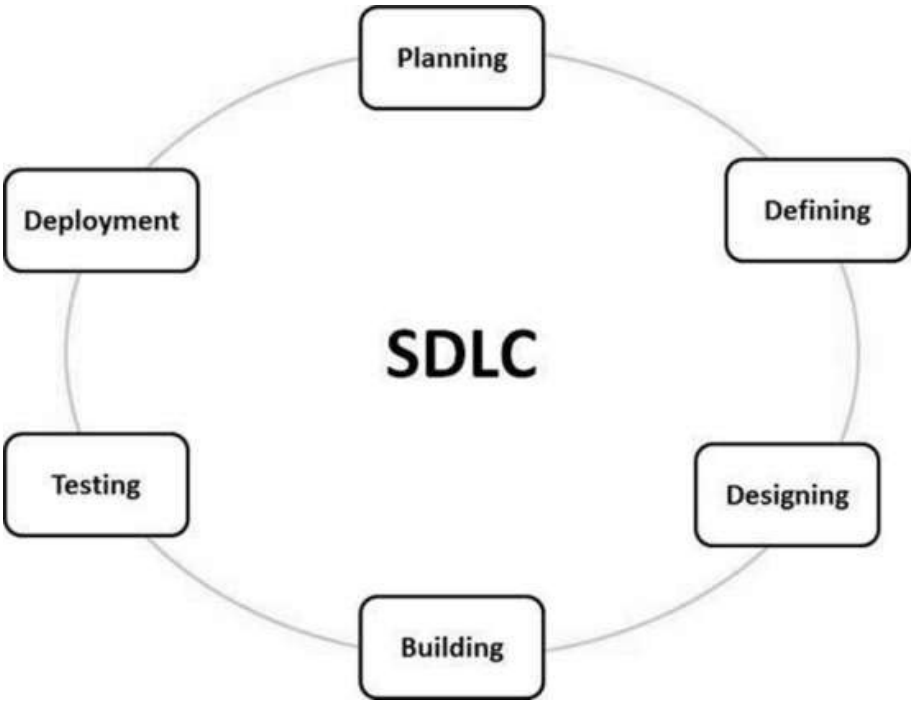


Figure 1: Software Development Lifecycle

6 WATERFALL MODEL

- It is one of the simplest model.
- This model works sequentially from Requirement Analysis phase to Maintenance Phase.
- The task of designing a simple complete web site for CSE NITK SURATHKAL is realtively easy that can be easily modeled and developed using Water flow Model.

6.1 Requirement Analysis

- To develope a simple and managable CSE NITK WebSite.
- Site should be easily updatable.
- proper authentication to update something on site is required.
- Students and General public can only view the public data available on site.

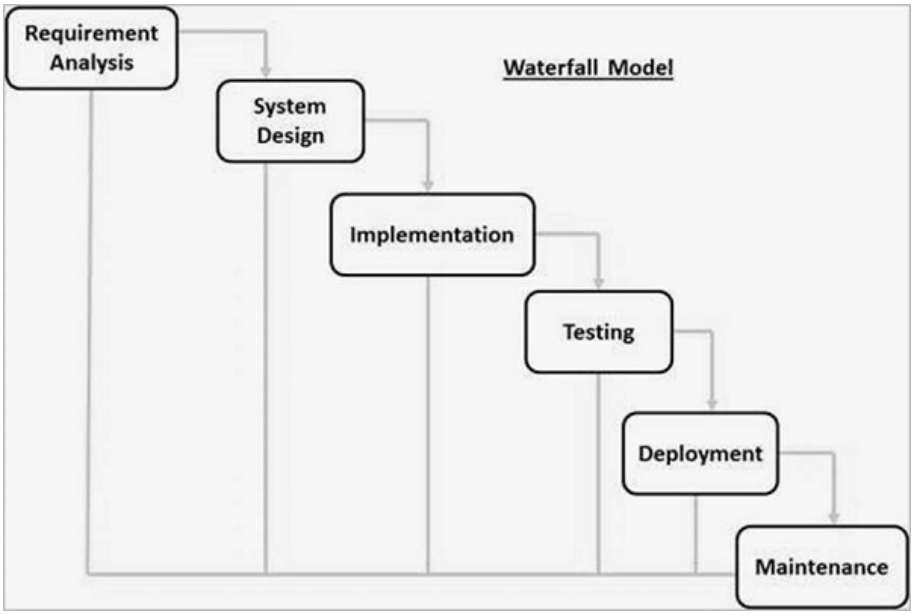


Figure 2: Waterfall model

6.2 System Design

UML Diagrams are made.

- Flowchart

- ER diagram
- UseCase diagram

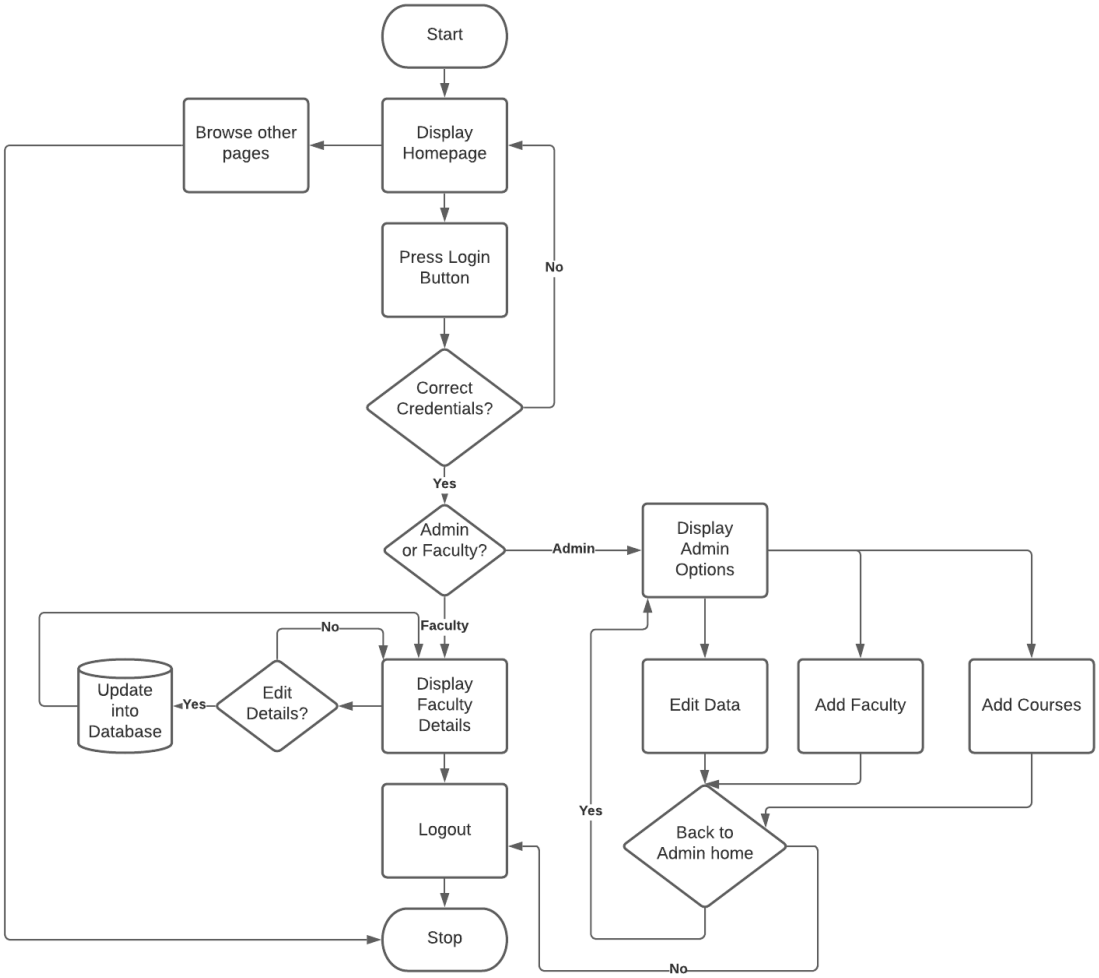


Figure 3: Flowchart diagram

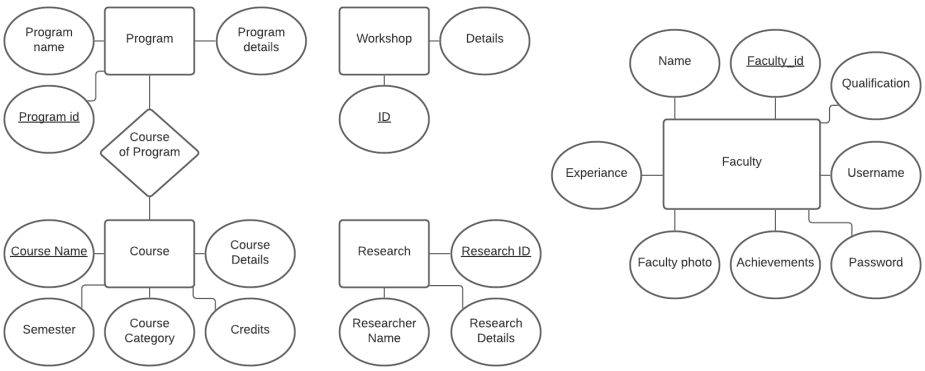


Figure 4: Er diagram(1)

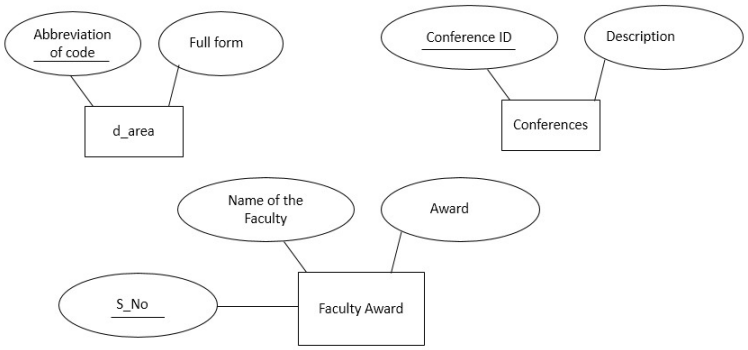


Figure 5: Er diagram(2)

- Dependencies and their flow are identified.
- Components of the site are divide into modules for independent and reliable development.

6.3 Implementation

- Platform for Developement—UBUNTU 20.04
- Front end Development
  - HTML 5 (creating components on page)
  - CSS (for Styling)
  - Javascript (for some effects required)
- Back end Development
  - PHP
  - Database used-Mysql database.

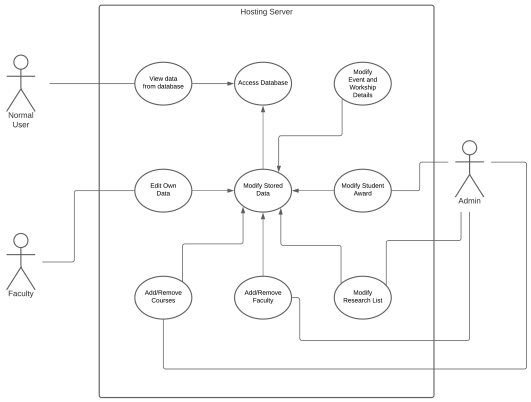


Figure 6: UseCase diagram

  - Server -Apache server.

- (Xampp Software which provides tools like mysql database , apache server and many other functionality is used).

6.4 Integration and Testing

- Different modules and components developed by different team members after implementation phase are then merge in one single main module having all the requirements as desired.
- Main module is checked for its correct working after the integration.
- Checked on 4 different systems for correct functioning.

6.5 Deployment

- Not yet deployed as the site developed for learning purpose.

6.6 Maintenance

- After we have a working site , it required a lot of changes to be made.
- Some changes made are
  - More Tabs are added for easy navigation.
  - Theme of the entire site is changed for making it more nice and user friendly.
  - Expanded the site and database to include some additional needs.
  - Authentication is made more reliable in terms of who can do what.

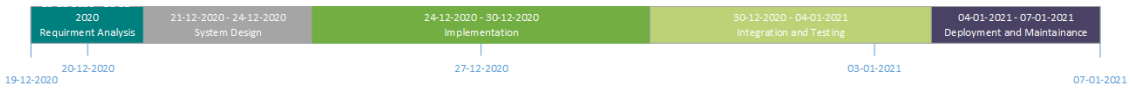


Figure 7: Planning Diagram

7 TESTING

7.1 System Testing

- System Testing is a very important issue in a system development.During system testing we have make sure that our system do not fail as well pass system according to its specification

7.1.1 White Box Testing

In this time of testing we acutally know what will be the output while giving the input so after passing this testing it as make sure that our system is running peacefully.

7.1.2 Black Box Testing

In this section we have tested our system in the hand of other user who have not made this as well as they dont know how this system works as well as how the data the flows we have tried to eliminate the errors as much as possible as well as bugs are also fixed.

7.1.3 Validation Testing

In this section we validate that the thing which are already exits in the original website are also having in our system.

8 INTERFACE

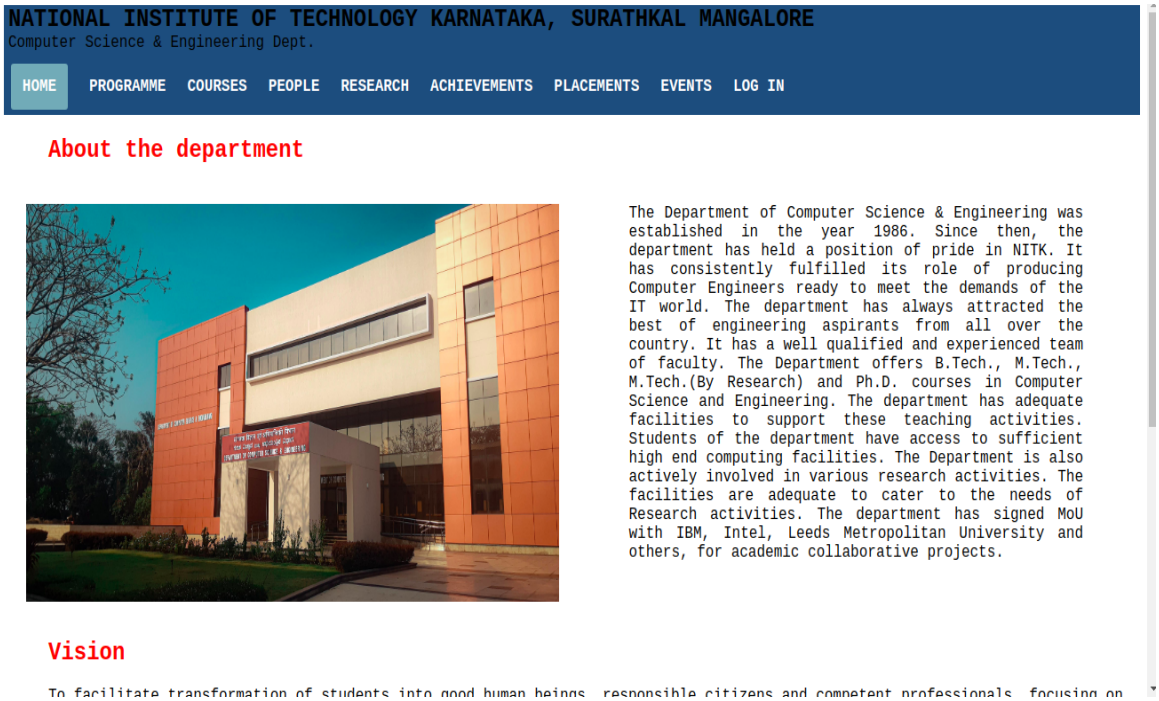


Figure 8: FrontPage

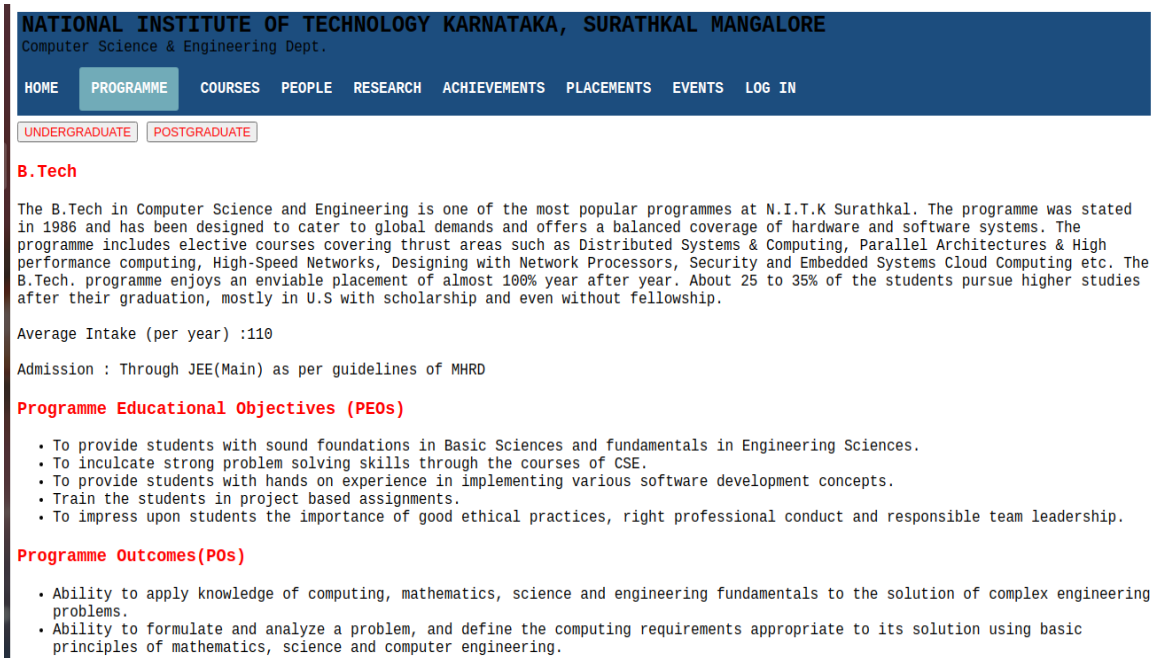


Figure 9: Programme Tab

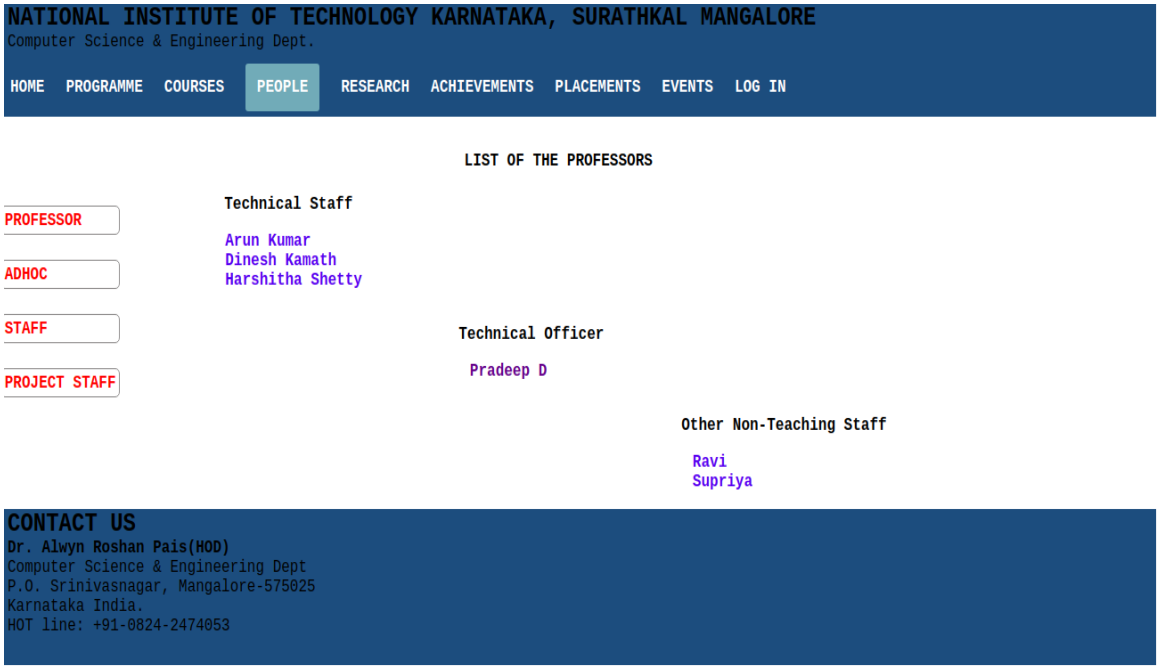


Figure 10: PeopleTab

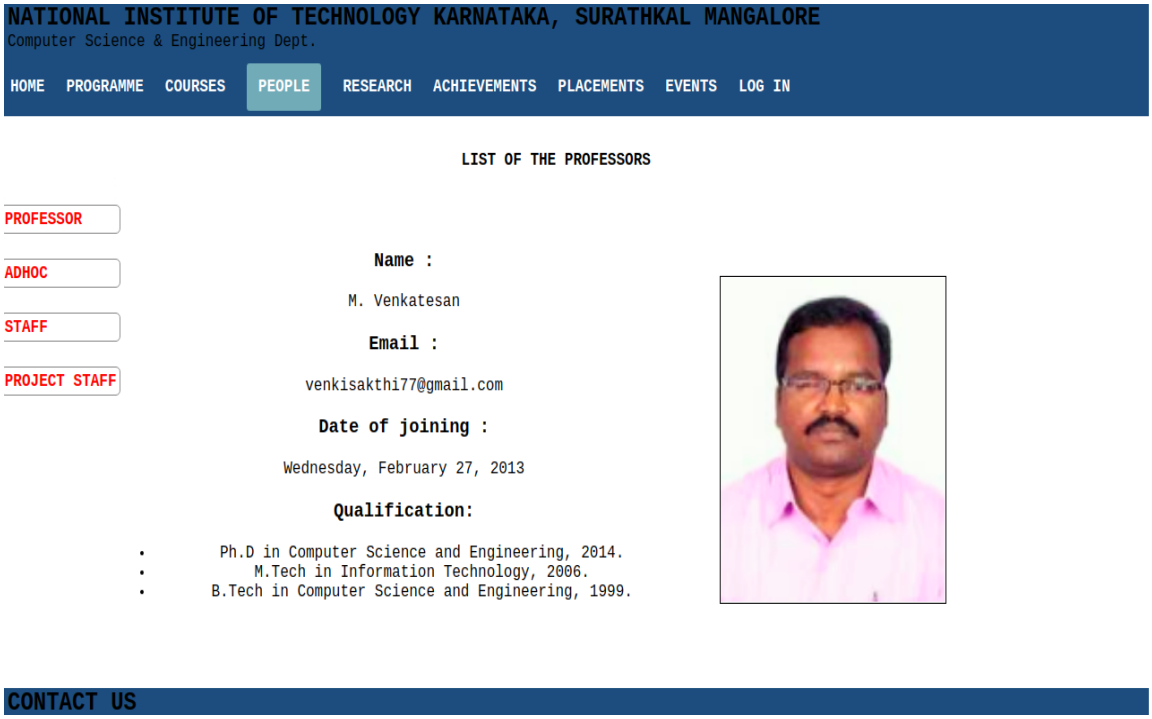
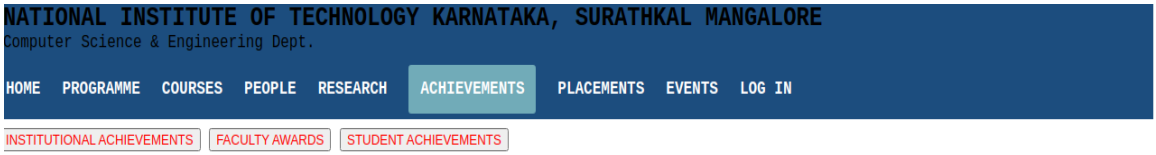


Figure 11: FacultyDetails

DEPARTMENT WISE PUBLICATIONS

Area	Number of Publication
90	3455
Computer Engineering	82
Electric and Electronics Engineering	71
Electronics and Communication Engineering	72
Informational Technology	46
Mathematical and computational Science	56
Mechanical Engineering	146
Metallurgical And Materials Engineering	95
Mining Engineering	33
Physics	49
School of Management	51

Figure 12: ResearchTab



FACULTY AWARDS

S.NO.	NAME	AWARD
1	Dr. K. Chandrasekaran	Best Paper award for the paper “Load Balancing of virtual Machine Resources in Cloud Using Genetic Algorithm,” in 7th Int. Conf. on Communication Networks, August 9-11, 2013, Bengaluru.
2	Dr. P. Santhi Thilagam	S Ramanujan Lecture Presenter Award, 30th National convention of Computer Engineers, The Institution of Engineers (India),18-19 February 2015
3	Dr. P. Santhi Thilagam	Best paper award for the paper “A Simplified Graph Approach for Mining Biological Network”, International Conference on Bioinformatics and Diabetes Mellitus, ICBDM'06, 25-27th March 2006.
4	Dr. Annappa	Best paper award for the paper “Enhancing response time for distributed computing applications by harnessing recommender systems and social networks”, ICC 2014. Elsevier.
5	Dr. Alwyn Roshan Pais	Best paper award for the paper “Detecting & Defeating Split Personality Malware", in an International Conference SECURWARE 2011, France
6	Mrs. Saumya Hegde	Best Paper award for the paper “Securing the Network Topology in a Source Routing Multi Domain SDN”, ICACEA 2014.
7	Dr. Shashidhar G. Koolagudi	Best Paper award for the paper “Age Approximation from Speech using Gaussian Mixture Models”, 2nd International Conference ADCONS’13, December 15-17, 2013, NITK-Surathkal.
8	Dr. B.R.Chandavarkar	Best Paper Award at COMSNET 2020. 02-Feb-2020 to Dr. B.R.Chandavarkar, Mr. Ajay Jangid & Mr. Priyansh Dubey.

Figure 13: AchievementsTab

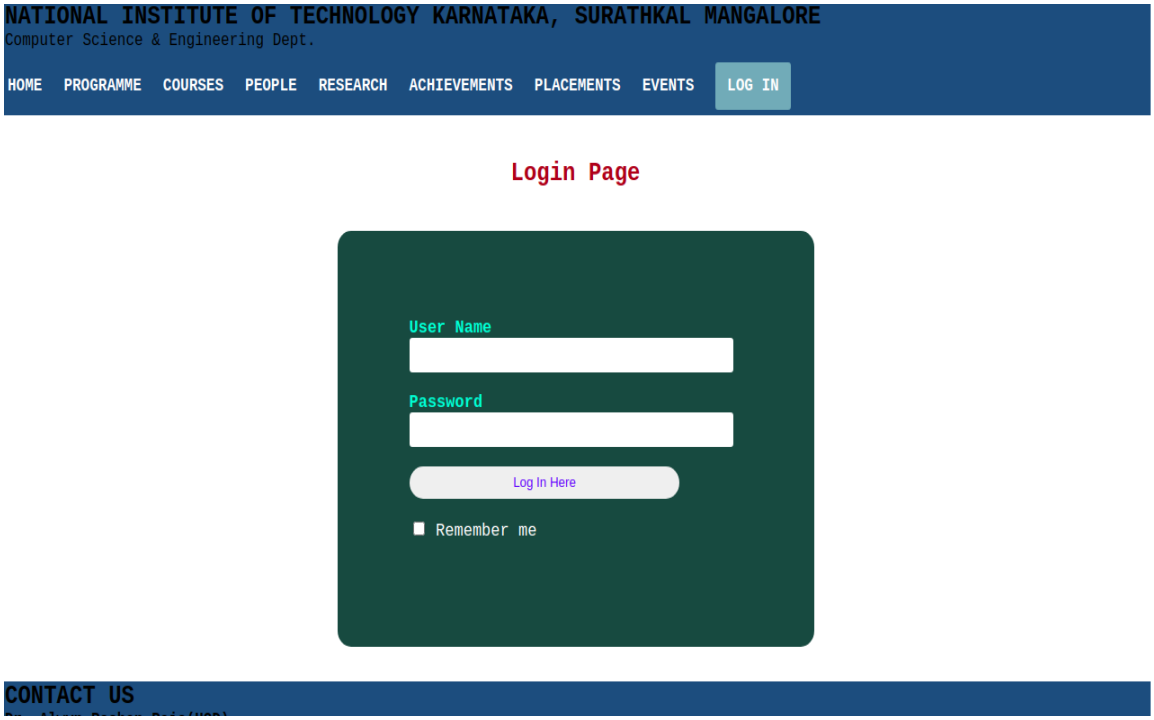


Figure 14: LogIn Tab

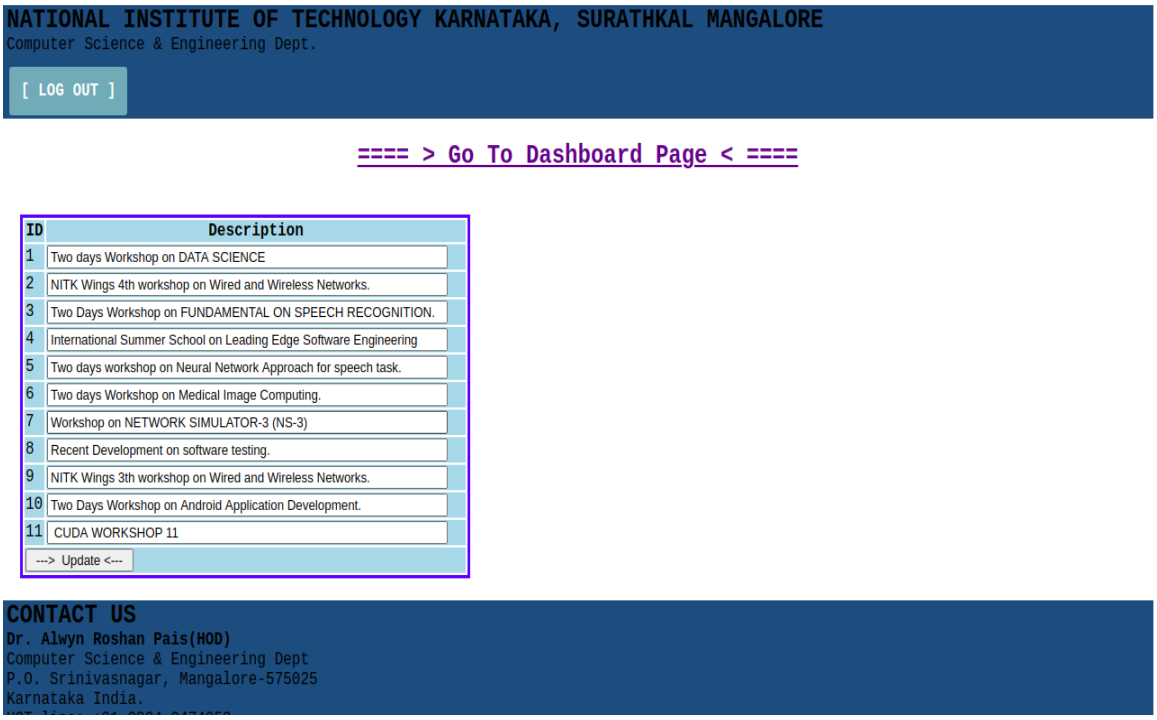


Figure 15: Inside Login

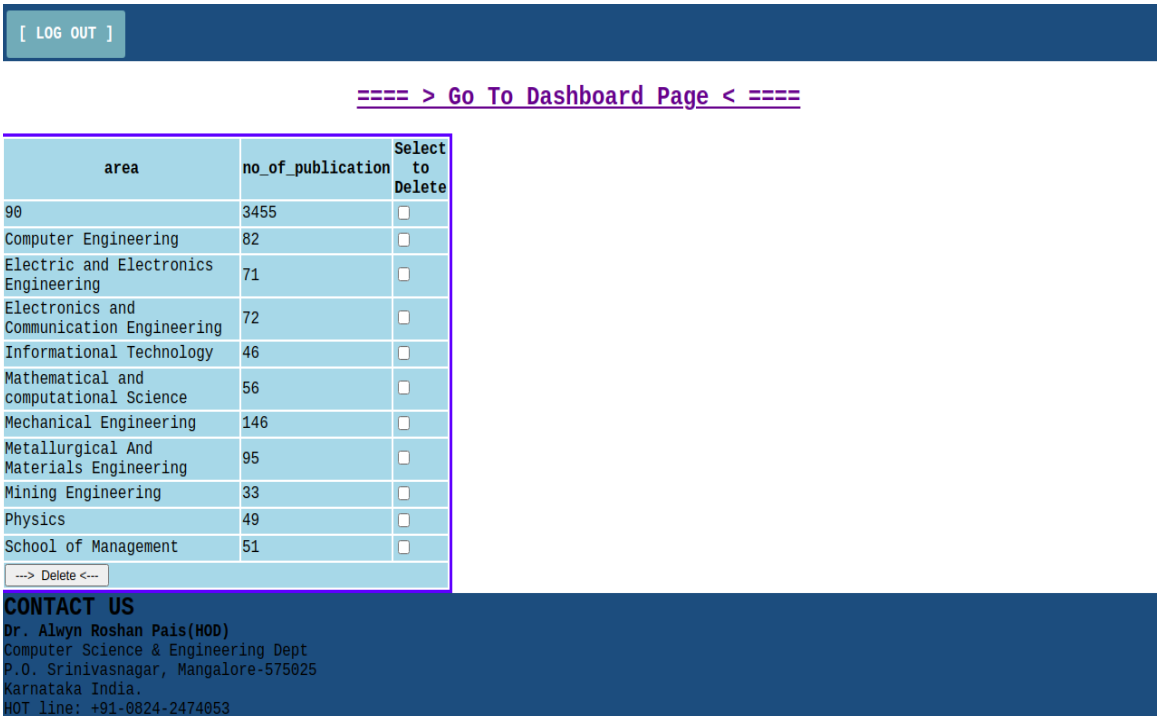


Figure 16: Inside Login

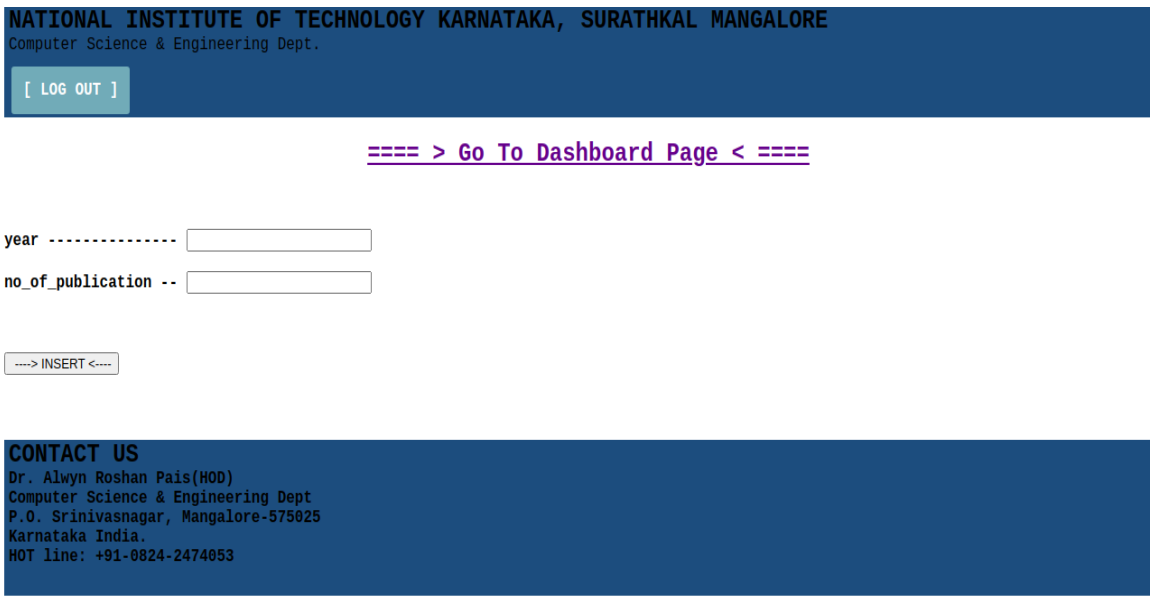


Figure 17: Inside Login

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