

# Report

## Problem Statement:

Online CSE-NITK website and management software.

## 1. Feasibility Study:

In this project, our main purpose is creating a sophisticated and fully functioning CSE-NITK website within 3 weeks. Here we are not aiming to implement all the attributes of the original website but a subset of it, in such a manner that it should seem complete to the viewer.

This project will involve front-end working of the web application as well as database and back-end working. There are many softwares including few paid and freely available to execute our task. Some paid softwares are also offering templates to create the web application, but it is not feasible in terms of financial and does not fit in the eligibility criteria.

We are using freeware editor Visual Studio Code for developing our front end. We have used HTML, CSS, Bootstrap, and JScript for the purpose. With the help of HTML we can create the basic structure of our web page, and CSS, Bootstrap, and JScript will add excellent styling and functionality to it. The reason to choose Visual Studio Code is freely available and is much easier to handle as it has very less complexity compared to the other editors.

So, in the end we can say we have chosen the most feasible option available to us. We

have created a full functioning CSE-NITK website in a sophisticated manner.

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## **2. Software Development Life Cycle:**

Waterfall Model

### **2.1 Communication:**

#### **a) Requirement Gathering:**

Our website has visitors from different groups, like current students, newly admitted students and their guardians, professors and staff of NITK as well as other academic institutes, etc. Irrespective of the type of the visitor, every visitor must be able to navigate easily through our website without having any difficulties to reach the information he/she wants. All of the components of the website must be clear and should meet and define their purpose. In other words, our website must be easy to navigate along with the excellent UI suitable to any academic institute.

#### **b) Analysis:**

After requirement gathering we analysed, understood the need of visitors and finalized the components of the site accordingly.

### **2.2 Planning:**

We executed our project in the following steps and time frame.

1.	Requirement Gathering and Understanding Problem Statement	28Dec 2020- 29 Dec 2020
2.	Planning	30 Dec 2020
3.	Design of Software	31Dec -02 Dec 2020
4.	Implementation	04 Dec - 05 Jan 2021
5.	Basic Testing , Verification and Final Updates	8 Jan - 9 Jan 2021

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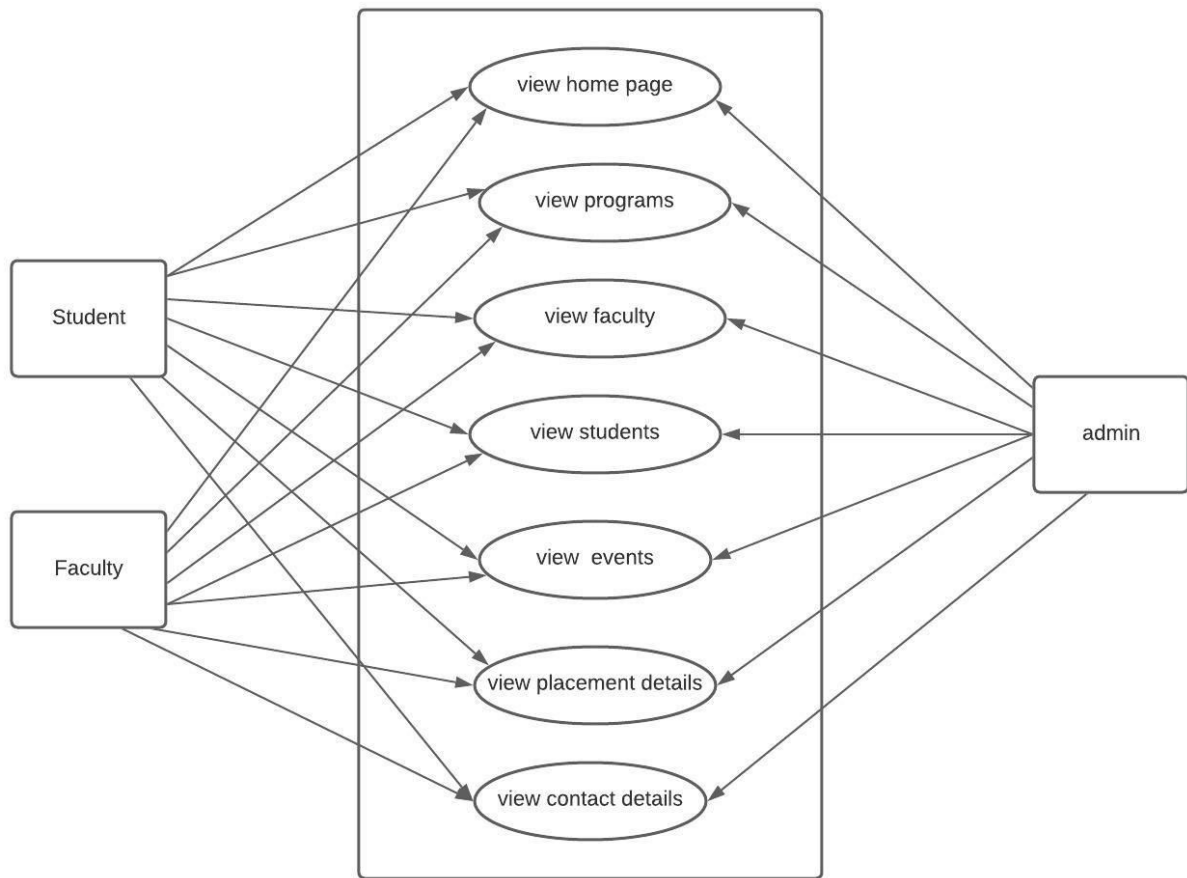
## 2.3 Design and Prototyping:

Design was started after analysis of requirements. We used UML diagrams to understand the design of the project.

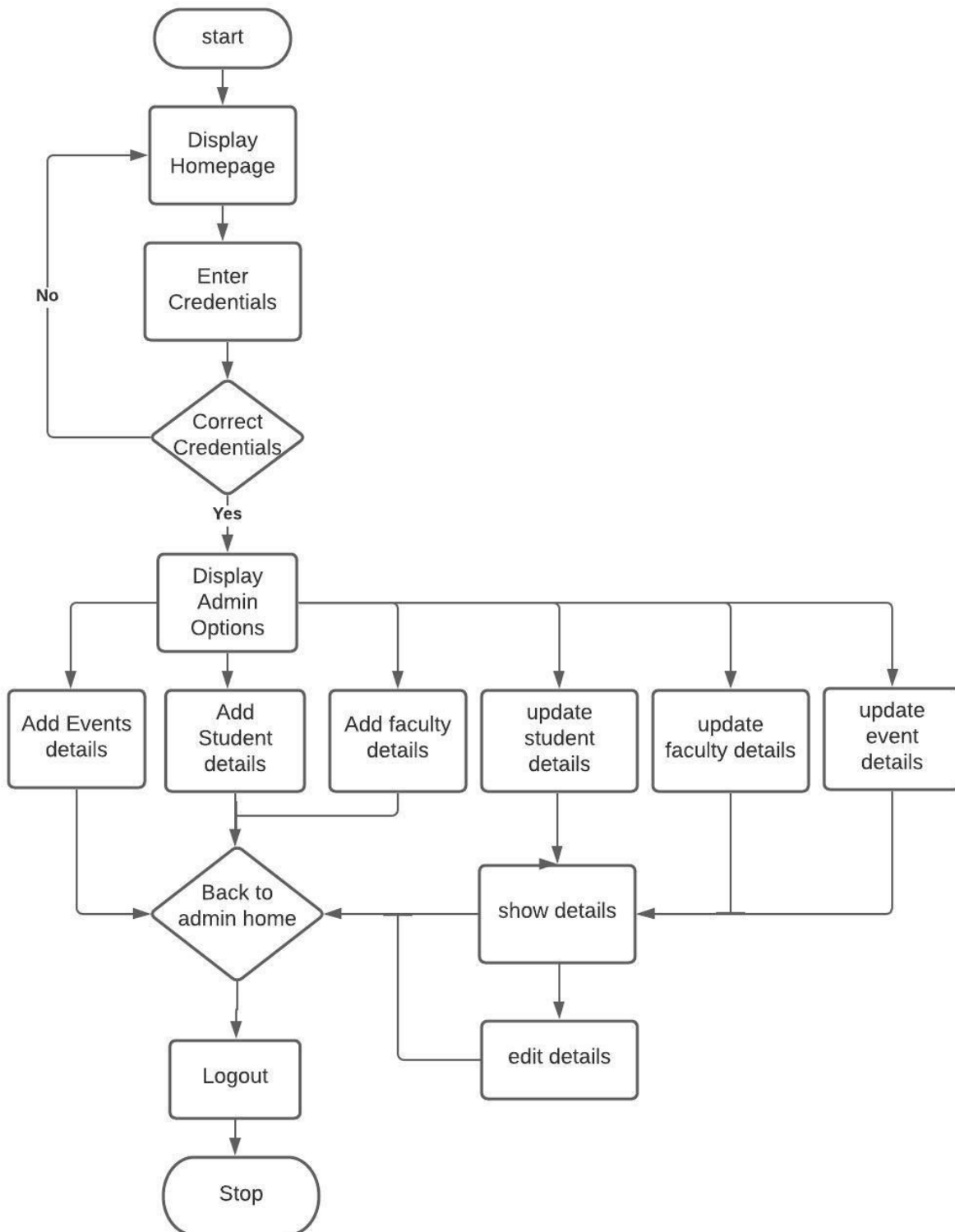
For our project we used *rapid throwaway prototyping*, in this method we developed an initial prototype rapidly based on requirements. This prototype contained a database table schema and basic front end for occupying those tables. We individually provided feedback on prototype and final requirements were updated. After that we started developing the final website.

## 2.4 UML

### 1. Use Case Daigram

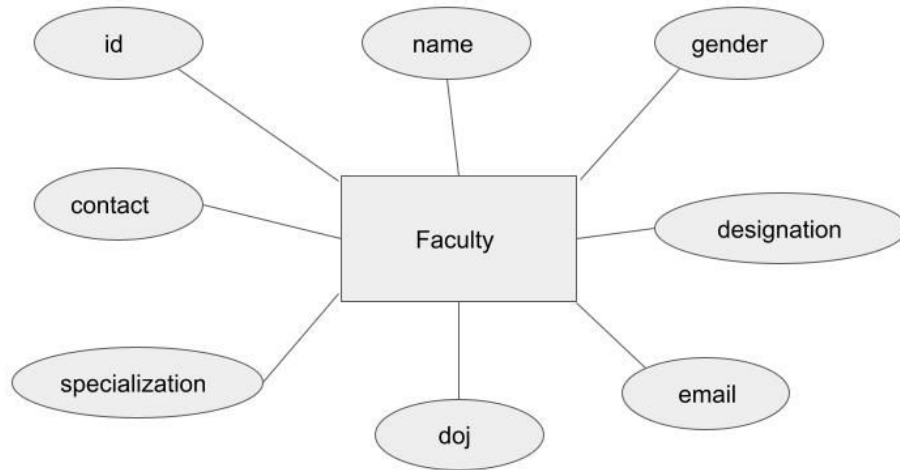


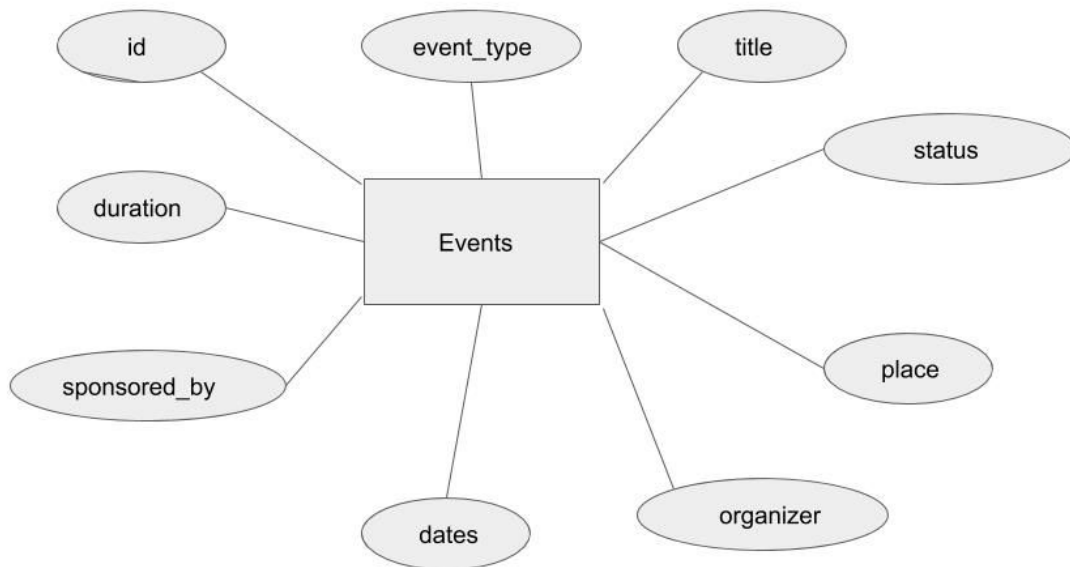
## 2. Flow Chart



### 3. ER Diagram

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## 2.5 Software Development

For developing the software, HTML,CSS and Bootstrap were used for developing front end. For back-end ,MySQL Workbench 8.0, Java 8, JSP , Struts 1.3 framework and Javascript were used. We used these technologies as they are reliable and popular for development of a website.

## 2.6 Interface:


Home | Computer Science Department - Chromium

localhost/new\_computing\_lab/home.htm

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**COMPUTER SCIENCE AND ENGINEERING**

Home Programme Facilities Administration Students Placements Events Contact Us

**About the Department**



The Department of Computer Science & Engineering was established in the year 1986. Since then, the department has held a position of pride in NITK. It has consistently fulfilled its role of

Programmes | Computer Science Department - Chromium

localhost/new\_computing\_lab/programme.php

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B-Tech M-Tech

**B.Tech(Computer Science and Engineering)**

The B.Tech in Computer Science and Engineering is one of the most popular programmes at N.I.T.K Surathkal. The programme was stated in 1986 and has been designed to cater to global demands and offers a balanced coverage of hardware and software systems. The programme includes elective courses covering thrust areas such as Distributed Systems & Computing, Parallel Architectures & High performance computing, High-Speed Networks, Designing with Network Processors, Security and Embedded Systems Cloud Computing etc. The B.Tech. programme enjoys an enviable placement of almost 100% year after year. About 25 to 35% of the students pursue higher studies after their graduation, mostly in U.S with scholarship and even without fellowship.

Average Intake (per year):110

Admission : Through JEE(Main) as per guidelines of MHRD

B.Tech Curriculum [2019]

Curriculum Archive

Academic Calendar: B.Tech.[2020]

**Programme Educational Objectives (PEOs)**

- To provide students with sound foundations in Basic Sciences and fundamentals in Engineering Sciences.
- To inculcate strong problem solving skills through the courses of CSE.
- To provide students with hands on experience in implementing various software development concepts.

localhost/new\_computing\_lab/programme.php practices, right professional conduct and responsible team leadership.



Facility | Computer Science Department - Chromium

localhost/new\_computing\_lab/facility.php

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General Facilities Lab Facilities

The department is equipped with state-of-the-art facilities to encourage research and to enable students to learn, understand and apply concepts.

**Meeting Room and Seminar Hall:**

The department has a meeting room equipped with LCD Projector and teleconferencing facilities. The department also has a Seminar Hall which has a seating capacity of 100. The seminar hall is used for conducting classes, seminars and workshops etc.

**Department Library:**

Apart from the central library with e-library facility, the CSE dept library also has about 2500 books.

**Computing Facility:**

The department has a data centre equipped with high end server systems.

**Networking:**

Backbone connectivity consisting of 24 Port Brocade make L3 Manageable distribution switch with SMF modules, besides more than 14 L3/L2 Network Switches, used for Network connectivity for the entire building . The LAN which is turn connected to the campus wide internet connectivity through Central Computer Centre of the Institute.

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Administration | Computer Science Department - Chromium

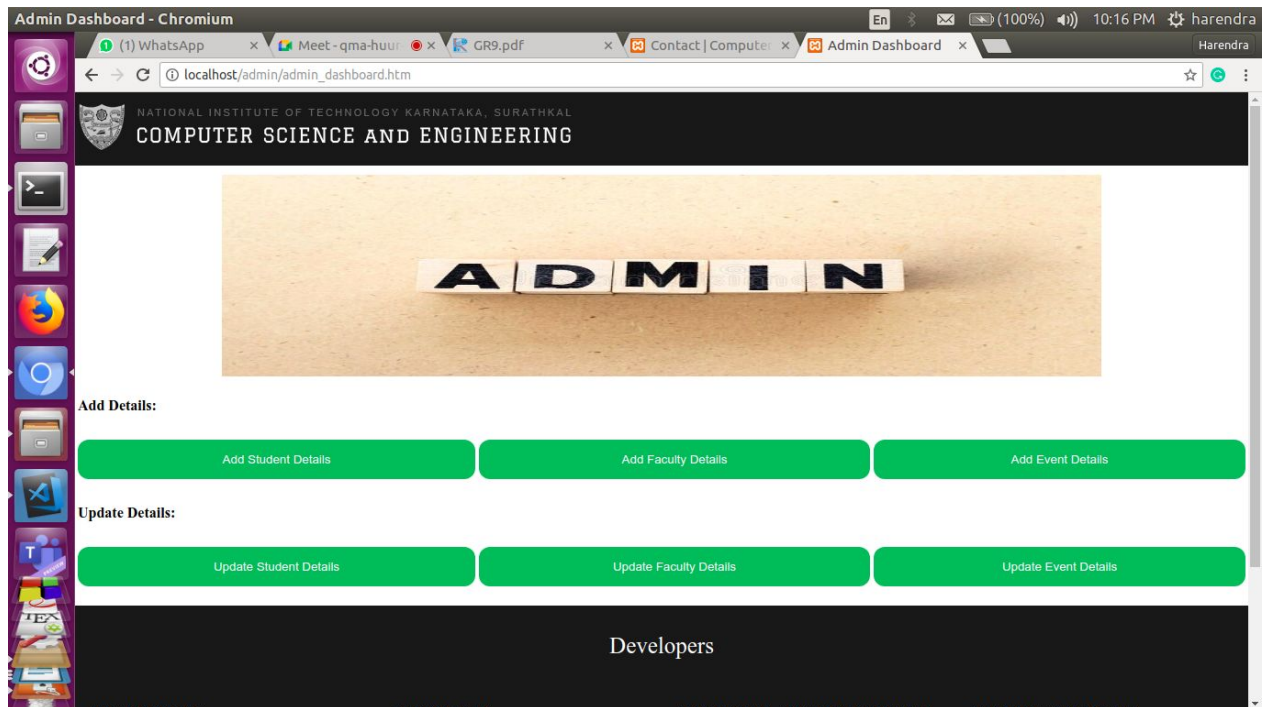
localhost/new\_computing\_lab/administration.php

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**Administration:**

Name	Designation	Specialization	Email	Contact
Alwyn Roshan	Associate Professor & Head of the Department	Algorithms, Complexity Analysis.	alwyn@nitk.ac.in	08242473407
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Sourav Kanti Addya	Assistant Professors	Cloud Computing, IoT	souravkaddya@nitk.edu.in	0824-2473153
		Machine Learning and Distributed		



Admin | Student - Chromium

localhost/admin/add\_student.htm?

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### Add Student Details

**Registration No**

**Roll No**

**Name**

**Age**

**Date of Birth**

**Gender**

☐ Male  
☐ Female

**Address**

Update Student - Chromium

localhost/admin/update\_student.php?

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Show by Student Id:

Student Id

Developers

<b>RISHI VERMA</b> M-tech CSE 2020-2022 Roll no 202CS022	<b>AYUSHI JAIN</b> M-tech CSE 2020-2022 Roll no 202CS003	<b>HARENDRA SINGH KUSHWAHA</b> M-tech CSE 2020-2022 Roll no 202CS010	<b>VASHUNG MUILUNG</b> M-tech CSE-IS 2020-2022 Roll no 202IS028
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Admin Login - Chromium

localhost/admin/edit\_btech\_cse.php?

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Registration No	Roll No	Name	Age	Gender	Degree	Course	Semester	Email	Contact	Edit	Delete
191273CS102	17cs002	AAKARSHEE JAIN	21	male	UG	CSE	1	abc@gmail.com	7062764287		
191747CS103	17cs003	ABHISHEK SINGH	21	male	UG	CSE	1	abc@gmail.com	7062764287		
191143CS104	17cs004	ADITYA KUMAR	21	male	UG	CSE	1	abc@gmail.com	7062764287		
191475CS105	17cs005	ADITYA SANTOSH	21	male	UG	CSE	1	abc@gmail.com	7062764287		
191148CS106	17cs007	AKANKSHA SANTOSH MORE	22	male	UG	CSE	1	abc@gmail.com	7062764287		
191596CS118	17cs018	DHARMATEJA	22	male	UG	CSE	1	abcd@gmail.com	7062764287		
191209CS119	17cs019	DWIJA PRASHANT	21	male	UG	CSE	1	abcd@gmail.com	7062764287		
191809CS120	17cs020	HARSHITA	21	female	UG	CSE	1	abc@gmail.com	7062764287		
191956CS121	17cs021	HARSHWARDHAN	21	male	UG	CSE	1	abcd@gmail.com	7062764287		
181337CO101	16cs001	JAY DHARMENDRA	22	male	UG	CSE	3	abode@gmail.com	7062764287		
181175CO102	16cs002	PATIL ABHISHEK SACHIN	21	male	UG	CSE	3	abcd@gmail.com	7062764287		

## **2.7 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

## **2.8 Deployment**

The deployment of the website was done on the local host itself.