

# NAGARJUNA COLLEGE OF ENGINEERING AND TECHNOLOGY

(An Autonomous college under VTU , Belagavi)



A Project Phase-1

Report  
On

## **“MONARCHY: A Web Portal for Department of ISE”**

Submitted in partial fulfilment for the course 20ISP57 of the degree

### **BACHELOR OF ENGINEERING INFORMATION SCIENCE AND ENGINEERING**

Submitted by,

Madan Mohan

1NC20IS018

Under the guidance of

Mr. Suresha S

Assistant Professor

Dept. of ISE, NCET

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING

**NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY**

(An Autonomous College under VTU, Accredited by NAAC with “A+” Grade)  
Mudugurki (V), Venkatagirikote (P), Devanahalli (T), Bengaluru-562164.

**2022-2023**

# NAGARJUNA COLLEGE OF ENGINEERING & TECHNOLOGY

(An Autonomous College under VTU, Accredited by NAAC with “A+” Grade)  
Bengaluru-562164, Karnataka, India

## DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING



## CERTIFICATE

This is to certify that the Project Phase-1 work entitled **“MONARCHY: A Web Portal For Department Of ISE”** carried out by MADAN MOHAN bearing 1NC20IS018 is bonafide student of Nagarjuna College of Engineering and Technology, an autonomous institution under Visvesvaraya Technological University, Belagavi in partial fulfilment for the course Project Phase-1 (20ISP57) Of Bachelor Of Engineering in **Information science and Engineering** during the academic year 2022-2023. It is certified that all corrections/suggestions indicated for internal assessment have been incorporated in the report.

**Name & Signature of the Guide**

Mr. Suresh S  
Assistant Professor  
Dept. of ISE

**Name & Signature of the Guide**

Dr. Sanjeevakumar M Hatture  
Professor  
Dept. of ISE

## ACKNOWLEDGEMENT

It is my proud privilege and duty to acknowledge the kind of help and guidance received from several people in preparations of this project. It would not have been possible to prepare this project, in this form without their valuable help, cooperation and guidance.

I would like to thank **NGI Management** for constant support and facilities provided in the carrying out of project in college premises.

I wish to record my sincere gratitude **Dr. B V Ravishankar, Principal**, Nagarjuna college of Engineering and Technology for his constant support and encouragement in preparation of this project and for providing library and laboratory facilities needed to prepare this project.

I would like to thank **Dr. Sanjeevakumar M Hatture, HOD**, Department of ISE, Nagarjuna College of Engineering and Technology for his valuable suggestions and guidance throughout the period of this project.

I thank my project coordinator **Dr. Sandhya G**, Professor, Department of ISE, Nagarjuna college of Engineering and Technology for your valuable suggestions and all the encouragement that leads towards completion of our project.

I would like to thank my project guide **Mr. Suresha S**, Assistant Professor, Department of ISE, Nagarjuna College of Engineering and Technology for your valuable guidance and all the encouragement that leads towards completion of our project.

Last but not least, we would like to thank our parents, friends, teaching and non-teaching staff of NCET.

**MADAN MOHAN (1NC20IS018)**

## **ABSTRACT**

The main aim of creating this project is to maintain the department individuality and to provide the full-fledged computer software for the automated digital view of the existing manual system. By this, we can store the data/information of the department for the longer time and made with ease to get accessed at any time. The required hardware and software are easily available and easy to work with.

Department website deals with all kind of course details, faculty details, and resources related to course are available. It can assist the user to concentrate on their other activities rather to concentrate on the record keeping. Thus it will help organization in better utilization of resources. The organization can maintain computerized records without redundant entries. That means that one need not be distracted by information that is not relevant, while being able to reach the information.

The main aim of developing this website is to automate the existing manual system by computer software. This webpage mainly depends on fulfilling the requirements, so that the important data/information can be stored for longer period of time. Basically the project describes how to manage for good performance and better services for the students as well as faculties.

This webpage is designed to attain all the planning done and will ensure that the website is developed with right information and also to set some goal for future developments. This website will mainly help the department to keep their individuality and also make ease for display of achievements done by the department in the campus.

Also this system will make sure that all the resources are utilized and the things that are built is easily available through our website for the students.

## TABLE OF CONTENTS

Sl. No	Chapters	Page No.
1	Introduction	1
2	Objectives and Functionalities of Project	2
3	Scope of the Project	3
4	Modules of Department Website	4
5	Features of the Department Website	5
6	Project Specification	6
7	Project Scheduling	8
8	Cost Estimation of the Project	9
9	Requirement Specification	11
10	Description of Website	12
11	Future Scope of the Project	21
12	Conclusion	22
13	References	23

## LIST OF FIGURES

<b>Fig. No</b>	<b>Figure Name</b>	<b>Page No</b>
7.1	Project Scheduling Table	8
9.1	Software Requirement Table	11
9.2	Hardware Requirement Table	11
10.a	Flowchart of Website	12
10.1.1	Home Page Flowchart	13
10.1.2	Home Page	13
10.2.1	About Page Flowchart	14
10.2.2	About Page	14
10.3.1	HOD Page Flowchart	15
10.3.2	HOD Page	15
10.4.1	Faculty Page Flowchart	16
10.4.2	Faculty Page	16
10.5.1	Achievement Page Flowchart	17
10.5.2	Achievement Page	17
10.6.1	Material Page Flowchart	18

10.6.2	Material Section	18
10.6.3	Materials Page [TEXTBOOKS]	19
10.6.4	Materials Page [QUESTION PAPERS]	19
10.7.1	Gallery Page Flowchart	20
10.7.2	Gallery Page	20

## CHAPTER 1

### INTRODUCTION

The main purpose of creating this website is to maintain the individuality of the department in whole campus when compared with other engineering departments .This provide the individual representation of ISE department in the whole campus and also proudly represents all the achievement done by the department students and department .This website contain all academic information about the department, as well as, research publications and profiles of faculty member .existing features like Jobs, Career opportunities and a specific page for each student will be launched soon.

The Department Website has been developed to override the problems prevailing in the practicing manual system .This software is supported to eliminate and in some cases reduce the hardships faced by this existing system .Moreover this system is designed for the particular need of the company to carry out operations in a smooth and effective manner.

The Department Website has been developed to handled the problem of manual data entry, which is prevalent in the current engineering department .It is designed for the convenience of students as well as for faculty and stall member within the university environment .The main purpose of creating this website is to endure that every department has an individual representation within the whole campus when compared with other engineering department .This provide individual representation of ISE Dept at State University on overall web presence .

The system is designed to minimize errors and ensure that the user are comfortable using it .This ensure that it can provide a reliable and user-friendly solution .The Department Website can also help improve the efficiency of the organization by allowing it to manage its resources more effectively.

For busy executives who are constantly on the move, our systems can provide them with remote access features that allow them to manage their workforce at any time.



## CHAPTER 2

### OBJECTIVES AND FUNCTIONALITIES OF PROJECT

#### Objectives:

The main objective of the Project on Department Website is to manage the details of department, Faculties, Course .It manages all the information about department, Faculty and organizes its maintenance as well.

The purpose of the project is to build an application program to reduce manual work for managing the department, and faculty. It tracks all the details about the department and its activities.

#### Functionalities:

- Provides the searching facilities based on various factors. Such as Department, Course, faculty.
- Department Website also manages the Faculty details online for Course details, Department. It tracks all the information, action of Faculty, Resources of Course etc.
- Shows the information and description of the Department.
- Manage the information of Department.
- Manage the information of Course.
- The Faculty Portal website is a one-stop portal that provides the searching facilities based on various factors. It manages Department details online for Course details, Department.
- It tracks all the information of Faculty, Resources of Course etc. It deals with monitoring the information of Faculty, Resources of Course etc. It deals with monitoring the information and transactions of Course.
- Shows the information of Course. Editing, adding and updating of Records is improved which results in proper resource management of Department data.

## CHAPTER 3

### SCOPE OF THE PROJECT

Management of Department is not only a simple procedure but also require a lot of time. We aim to provide an online library where our department lacks behind. Management and collection of books, Question papers and schemes is not only a simple procedure but also requires a lot of time. It helps you to collect perfect materials in detail and make it easily accessible.

It will help a person to know the concept of passed year perfectly and vividly. It will be also reduced the cost of time and this procedure will go on smoothly.

- Computer system having the facility of generating filling the various number of forms or documents at a time, makes it possible to save time, cost and effort. The system generates types of information that can be used for various purposes.
- The information generated by the system is used for used for a variety of purposes.
- It is satisfying the user requirement.
- Easily understandable by the user and operator.
- Easily operation can be performed.
- Good user interfaces is necessary.
- This is an expandable website.

## CHAPTER 4

### MODULES OF DEPARTMENT WEBSITE

- **Department Management Module:** Used for managing the Department details.
- **HOD Module:** Used for managing HOD details and message of HOD.
- **Faculty Module:** Used for managing the details of Faculty.
- **Achievement Module:** Used to mention all the individual and group achievements of ISE department.
- **Course Module:** Used for managing the Course information.
- **Gallery Module:** Used for managing the gallery information.
- **Login Module:** Used for managing the login details.
- **Users Module:** Used for managing the users of the system.

#### NOTE:

- It generates the report on Department, Student, and Faculty.
- You can easily export PDF for the Course materials.

## CHAPTER 5

### FEATURES OF THE DEPARTMENT WEBSITE

- Product and Component based.
- Creating & Changing Issues at ease.
- Targets & Milestones for guiding the programmers.
- Attachments & Additional Comments for more information.
- Various levels of reports available with a lot of filter criteria's.
- Accuracy in work.
- Easy & fast retrieval of information.
- Well-designed reports.
- Decrease the load of the person involve in existing manual system.
- Access of any information individually.
- Work becomes very speedy.
- Easy to update information.
- Easy to navigate.
- Provides all the comprehensive information about the department.
- All the event images are provided in the gallery.
- ISE department faculty details will be provided.

## CHAPTER 6

### PROJECT SPECIFICATION

#### Project Planning:

Software project plan can be viewed as the following:

- 1) **Within the organization:** How the project is to be implemented? What are various constraints?
- 2) **With respect to the guide:** Weekly or timely meetings with the guide with presentation on status reports. Guides feedback is also taken and further modification and developments are done. Project milestones and deliverables are also presented to the guide.

**For a successful software project, the following steps can be followed:**

- Select a project
  - Identifying project's aims and objectives
  - Understanding requirements and specification
  - Methods of analysis, design and implementation
  - Testing techniques
  - Documentation
- Project milestones and deliverables
- Budget allocation
  - Exceeding limits within control

- Project Estimates
  - Cost
  - Time
  - Size of code
  - Duration
- Resource Allocation
  - Hardware
  - Software
  - Previous relevant project information
  - Digital Library
- Risk Management
  - Risk avoidance
  - Risk detection

## CHAPTER 7

### PROJECT SCHEDULING

An elementary Gantt chart or Timeline chart for the development plan is given below. The plan explains the tasks versus the time (in weeks) they will take to complete.

	November				December				January			
Requirement Gathering												
Analysis												
Design												
Coding												
Testing												
Implement												
	W1	W2	W3	W4	W1	W2	W3	W4	W1	W2	W3	W4

**Fig. 7.1: Project Scheduling Table**

$W_i$ 's are weeks of the months, for  $i = 1, 2, 3, 4$

## CHAPTER 8

### COST ESTIMATION OF THE PROJECT

Software cost comprises a small percentage of overall computer-based system cost. There are a number of factors, which are considered, that can affect the ultimate cost of the software such as - human, technical, Hardware and Software availability etc.

The main point that was considered during the cost estimation of project was its sizing. In spite of complete software sizing, function point and approximate lines of code were also used to "size" each element of the Software and their costing.

The cost estimation done by me for Project also depend upon the baseline metrics collected from past projects and these were used in conjunction with estimation variables to develop cost and effort projections.

We have basically estimated this project mainly on two bases -

**1) Effort Estimation** - This refers to the total man-hours required for the development of the project. It even includes the time required for doing documentation and user manual.

**2) Hardware Required Estimation** - This includes the cost of the PCs and the hardware cost required for development of this project.

**3) Cost Estimation** – This includes the following types,

➤ **Benefit to Organization**

The organization will obviously be able to gain benefits such as savings in operating cost, reduction in paperwork, better utilization of human resources and more presentable image increasing goodwill.



➤ **The Initial Cost**

The initial cost of setting up the system will include the cost of hardware software (OS, add-on software, utilities) & labour (setup & maintenance). The same has to bear by the organization.

➤ **Running Cost**

Besides, the initial cost the long term cost will include the running cost for the system including the AMC, stationary charges, cost for human resources, cost for update/renewal of various related software.

## CHAPTER 9

### REQUIREMENT SPECIFICATION

#### SOFTWARE REQUIREMENTS:

Name of component	Specification
Operating system	Windows 93, Windows XP, Windows 7, Linux, Windows 8, Windows 10, Windows 11
Database	PDF files
Language	HTML, CSS, Java Script, Bootstrap, PHP.
Web sever	HTTP
browser	Any of Mozilla, Opera, Chrome etc.

Fig. 9.1: Software Requirement Table

#### HARDWARE REQUIREMENTS: [Minimum requirement to run the website]

Name of component	Specification
Processor	Pentium 630MHz
RAM	128 MB
Hard disk	20 GB
Monitor	15” color monitor
Keyboard	122 keys

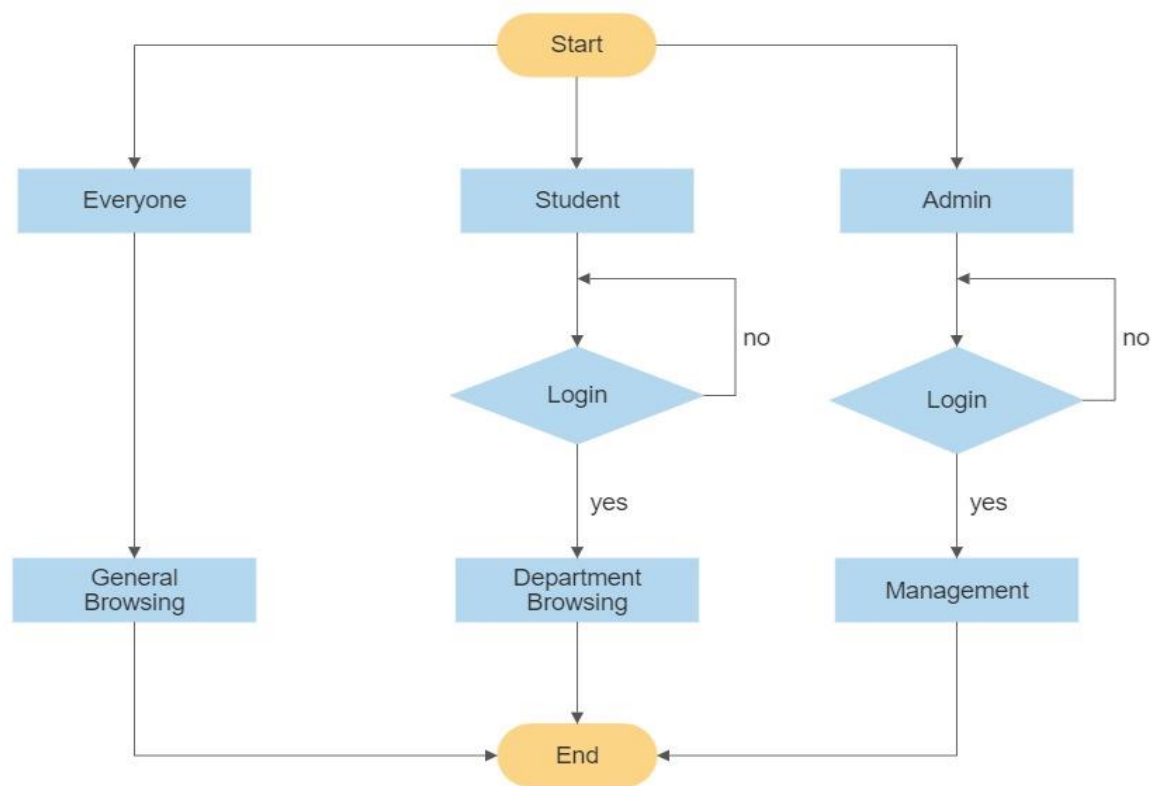
Fig. 9.2: Hardware Requirement Table

## CHAPTER 10

### DESCRIPTION OF WEBSITE

This website consists of Home page, About us, HOD details, Faculty details, Achievement page, Material page which consists of Textbook, Question paper and Schemas, Gallery.

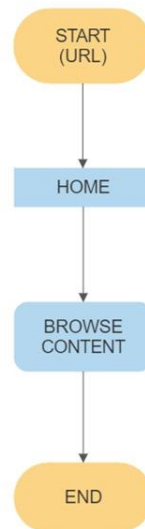
Now let us refer one by one of these pages,



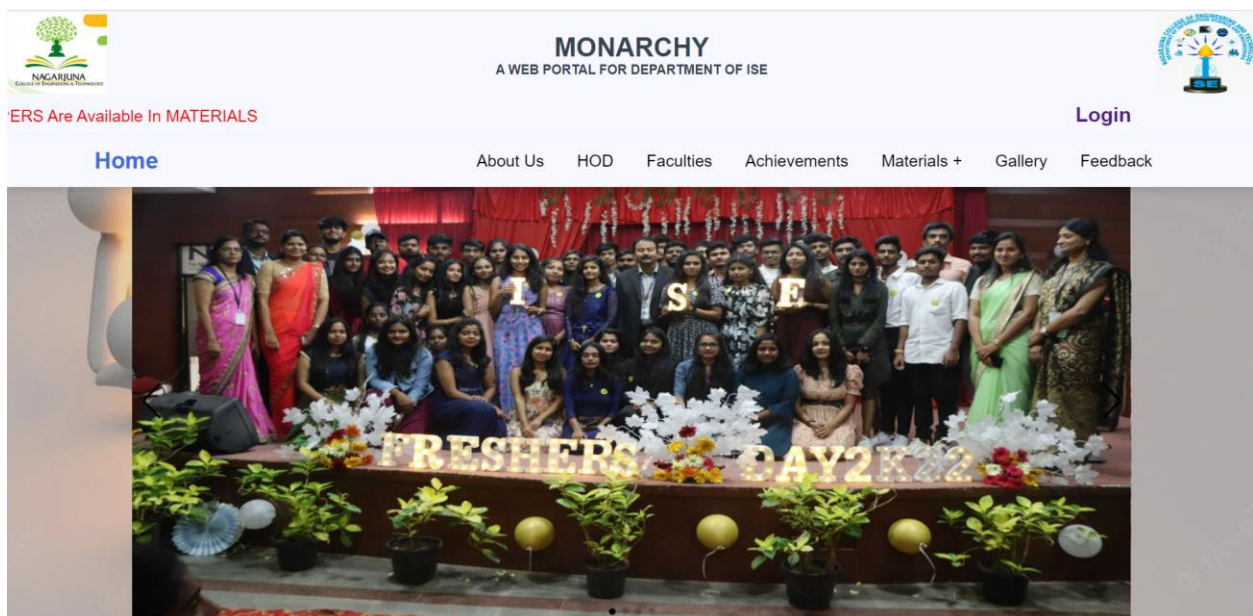
**Fig. 10.a: Flowchart Of Website**

## 10.1 HOME:

Home page is the main page of the website, where visitors can find hyperlinks to other pages on the site. Our page consists of some department related images, vision, mission, and PSO's.



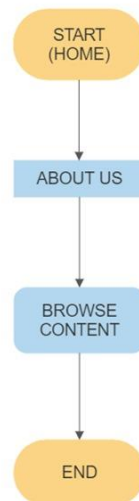
**Fig. 10.1.1: Home Page Flowchart**



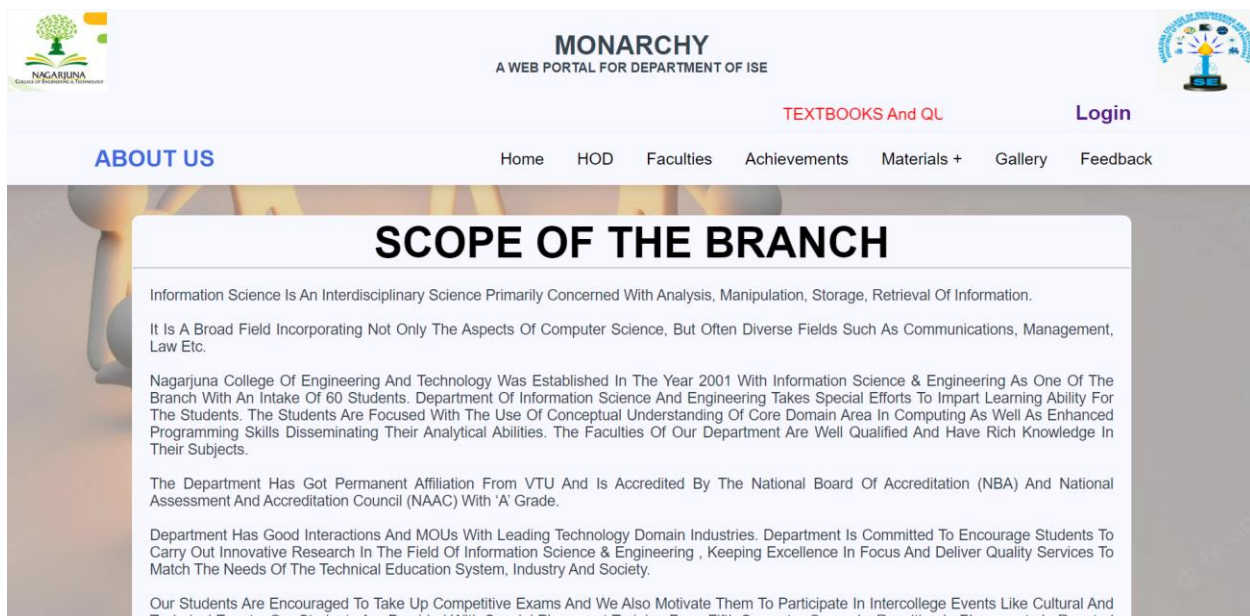
**Fig. 10.1.2: Home Page**

## 10.2 ABOUT US:

About us page is mainly used to provide the internal information of the website, where the department scope of the branch is mentioned. The history of the department will be expressed through short articles as mentioned.



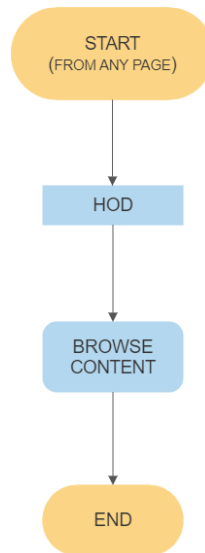
**Fig. 10.2.1: About Page Flowchart**



**Fig. 10.2.2: About Page**

### 10.3 HOD:

HOD page consist the detail of our HOD such as Image, Name, Designation, Graduation, and Mail ID. This page also contains the message of the HOD presented to the department.



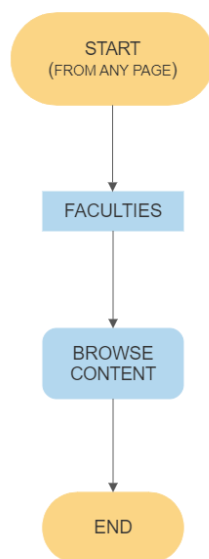
**Fig. 10.3.1: HOD Page Flowchart**



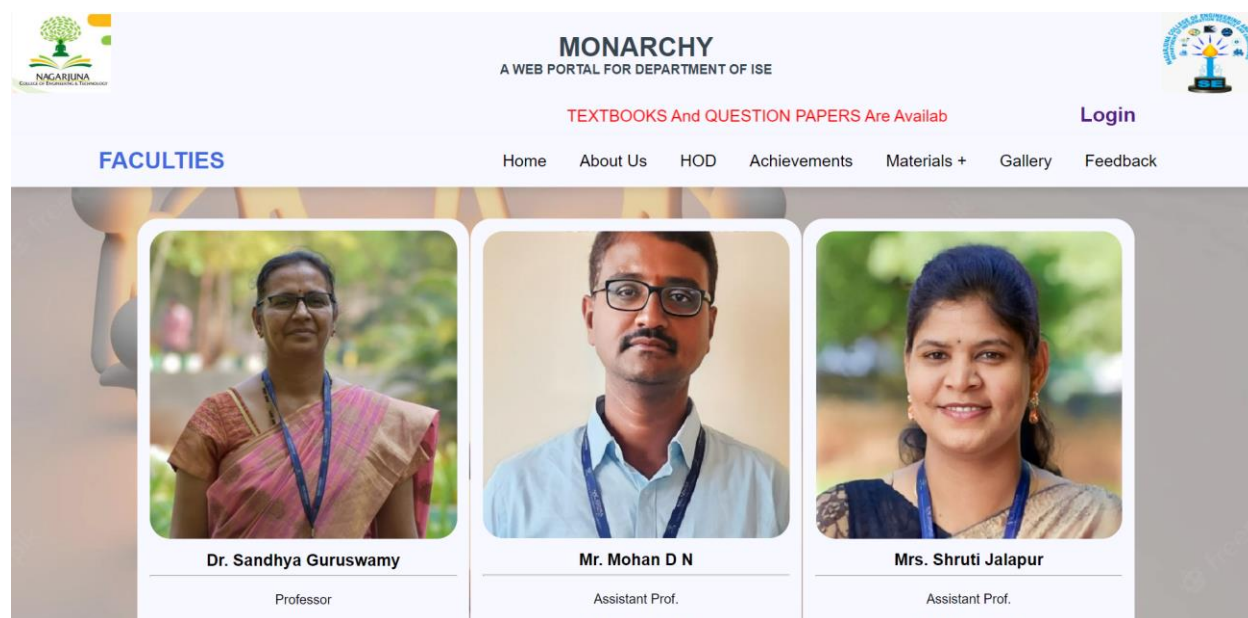
**Fig. 10.3.2: HOD Page**

## 10.4 FACULTIES:

Faculty page consists of the present faculty details of department of ISE. This page consisting of Image, Name, Designation, and Mail ID of each and every faculty present currently.



**Fig. 10.4.1: Faculty Page Flowchart**

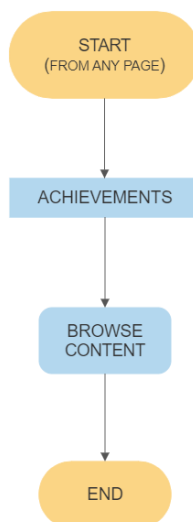


**Fig. 10.4.2: Faculty Page**

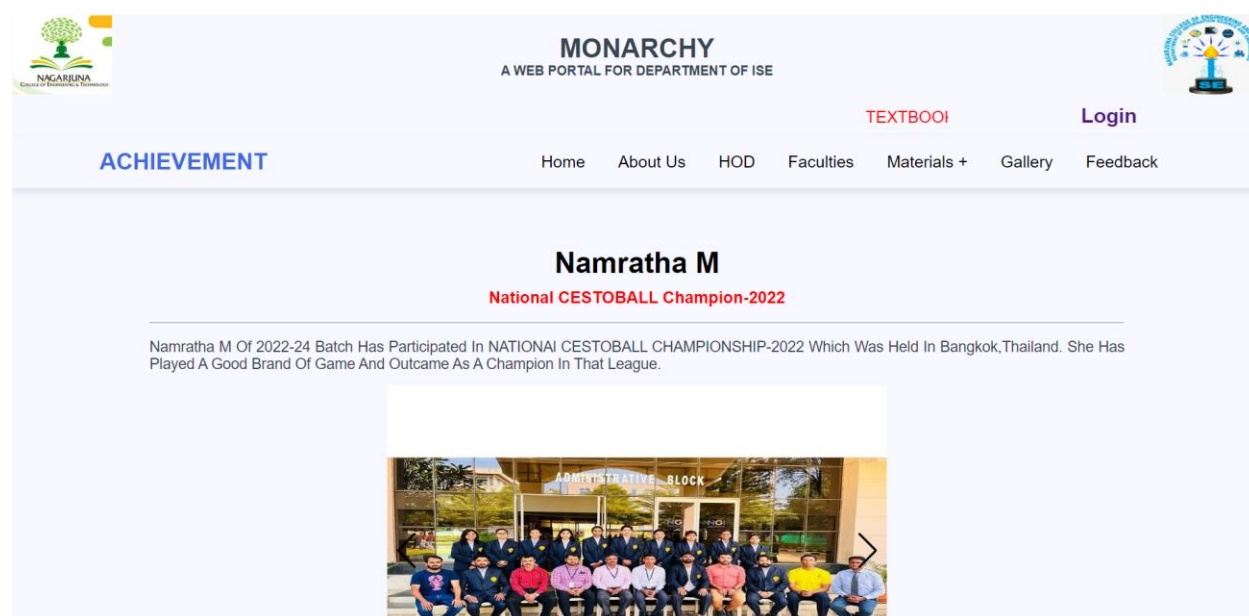


## 10.5 ACHIEVEMENTS:

Achievement page consists of all the achievements done by the students of ISE department both individually and in group. This is mainly represented to showcase the talent of ISE department Students and Staff.



**Fig. 10.5.1: Achievement Page Flowchart**



**Fig. 10.5.2: Achievement Page**



## 10.6 MATERIALS:

The minor issue which we come across in the department was lack of online library. So, we came up with this idea of creating department library consisting of Textbooks, Question Papers, and Schemas of ISE department. This page help students mainly to attain the materials required for their studies.

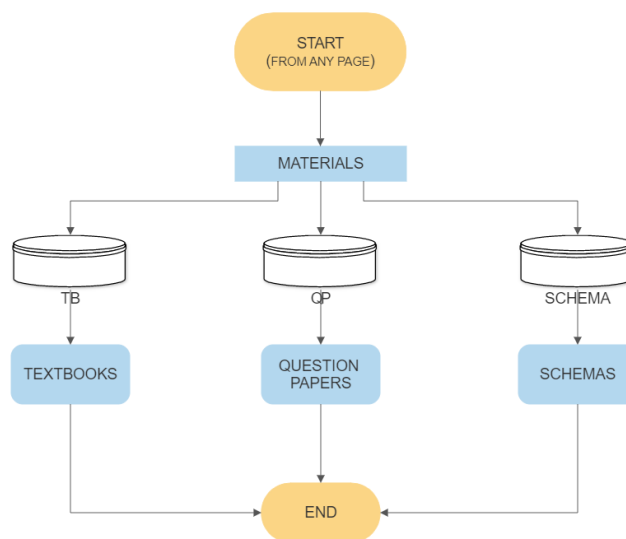


Fig. 10.6.1: Materials Page Flowchart

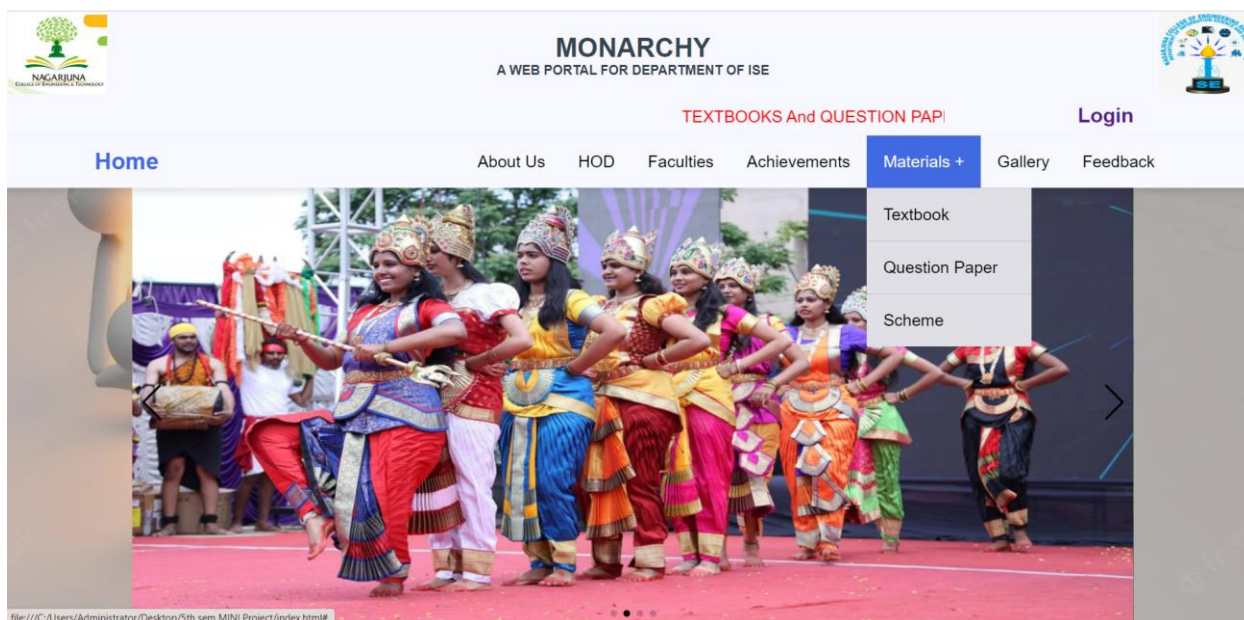


Fig. 10.6.2: Materials Section

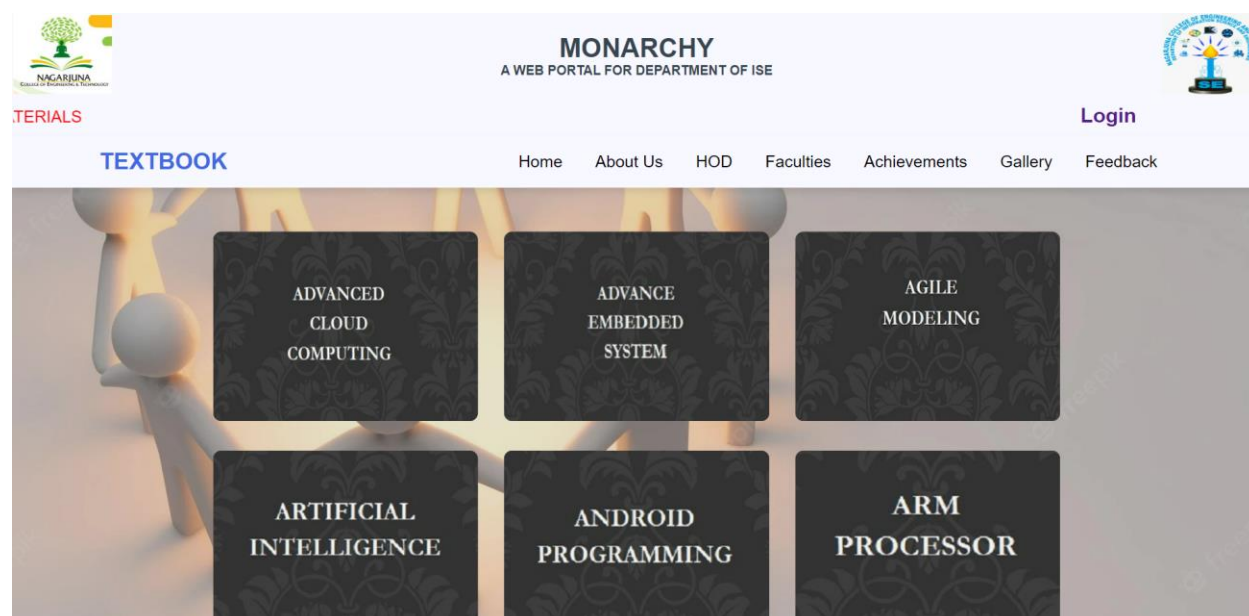


Fig. 10.6.3: Materials Page [TEXTBOOKS]

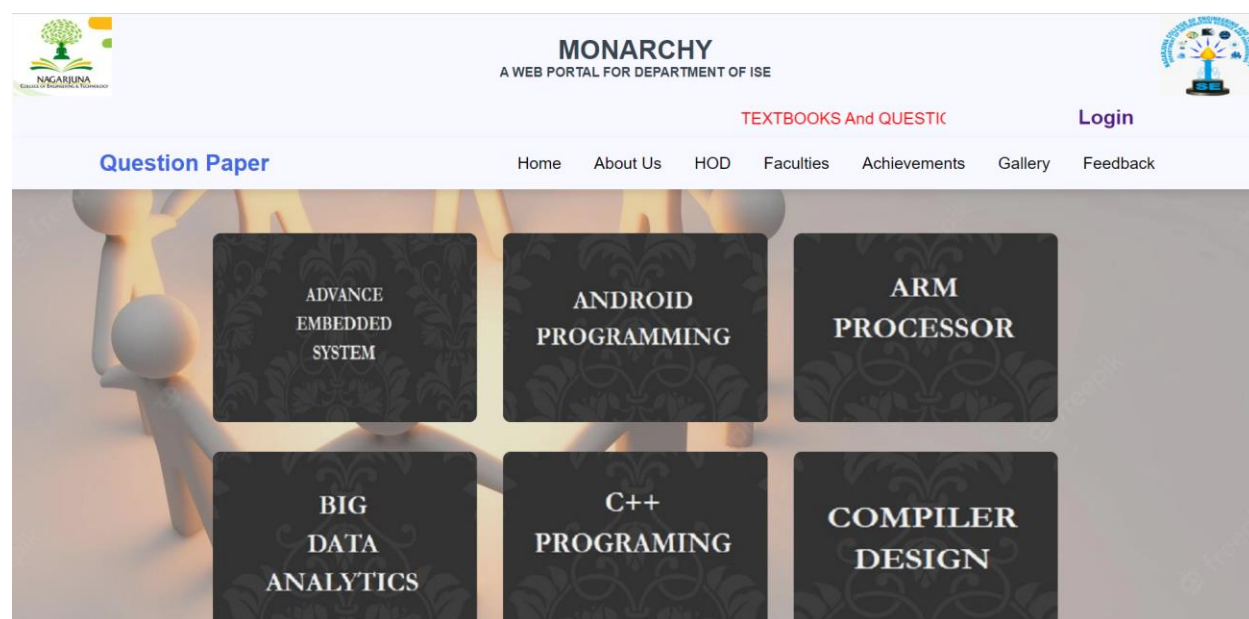
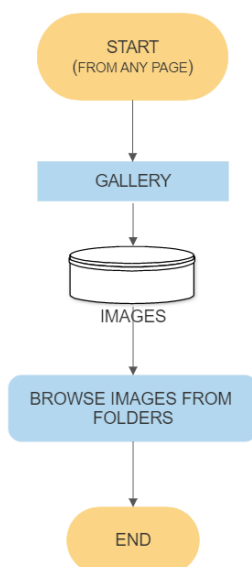


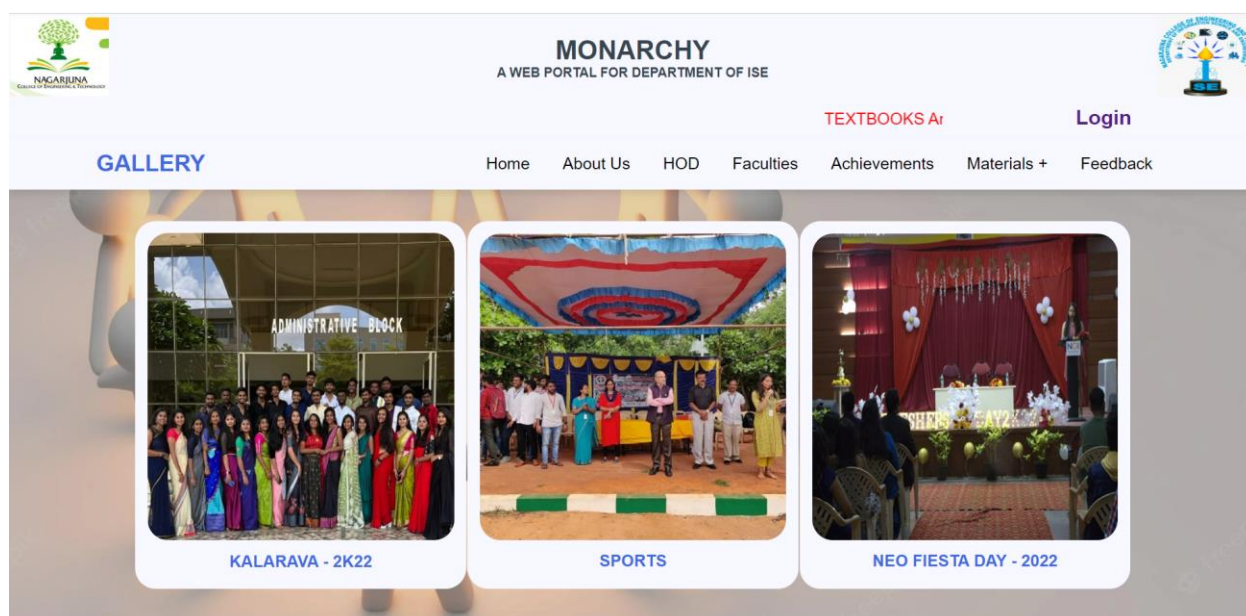
Fig. 10.6.4: Materials Page [QUESTION PAPERS]

## 10.7 GALLERY:

The main thing which matters for the memories of the department is photos taken on those events. To make those memorable moments beautiful, we uploaded all the related images of those particular events by creating a folder type format in the website.



**Fig. 10.7.1: Gallery Page Flowchart**



**Fig. 10.7.2: Gallery Page**

## CHAPTER 11

### FUTURE SCOPE OF THE PROJECT

- Can implement CHATBOT.
- Can implement attendance sheet, and result sheet.
- Can implement Student details.
- Can implement parent portal.
- Can include the Alumni details those who got highest packages.
- Can implement student and faculty login page.
  - Faculties can upload the materials and monitor the students.
  - Students can go through those uploaded materials.
- As of the materials section, we can create a portal which consists of the projects done by our seniors.
- Placement related information can be uploaded in a separate page.

## CONCLUSION

Our project is only a humble venture to satisfy the needs to manage their project work. Several user friendly coding have also been adopted. This website shall prove to be a powerful package in satisfying all the requirements of the department. The application provides appropriate information to users according to their required service.

Deployment of our application will certainly help the department to reduce the time in showcase the individuality of the department and also making the materials easily available for the students.

However, we should always keep in mind that website development does not start straight away with the coding and end by launching it. Web development lifecycle includes certain stages that have to follow to get a good result.

For awesome result, it might take some time. As per the Future Scope of the project, we can attain all those implementations as mentioned. Those implementations will make this website more reliable and also more interactive with respect to those components.

Since, this is the outline of the department website, there is a lot more to develop and also requires lot of time to attain the goal set to develop this website. This mainly helps to maintain the complete record of the department as mentioned according to the sections present.

## REFERENCES

- NCET college main webpage.
- Some of the top university websites.
- You Tube videos related to some of the styles.
- Our college Library for the reference of some old Question Papers.
- Google for collecting the Textbooks.
- Referred Event coordinators for gathering of images to upload in Gallery.
- Gone through some of the legal information related to ISE department.