# **Software Requirements Specification**

for

## Project on

# Development of website of Electrical Engineering department, IIT Indore

Prepared by Rishabh Kumar Yadav Rohit Nikam Pradeep Patidar

Piyush Gaurav

Prepared for
CS258 Software Engineering
Spring Semester 2019-20

## **Contents**

1. Introduction	3
1.1 Purpose	3
1.2 Intended Audience and Reading Suggestions	3
1.3 Project Scope	3
1.4 Definitions, Acronyms and Abbreviations	
2. General Design	4
2.1 Product Perspective	
2.2 Product Functions	4
2.3 User Classes and Characteristics	5
2.4 Assumptions and Dependencies	
3. External Interface Design	6
3.1 User Interfaces	
3.2 Hardware Interfaces	7
3.3 Software Interfaces	7
Acknowldegement	8

## 1. Introduction

#### 1.1 Purpose

The purpose of this project is to develop the website of the Electrical Engineering department of IIT Indore. This project is intended towards recreating and improving the state of the website and providing it with new and additional features as follows:

- Easy searching of student, college & employee information.
- Increase high throughputs.
- Minimizing redundancy.
- Making data more secure.
- Improving report generation process to improve decision making.
- Providing fast accurate and consist response.
- Proposed system is according to the current deman

## 1.2 Intended Audience and Reading Suggestions

This project is regarding the departmental website development and hence is restricted largely to the premises of the institute. The main readers of this SRS are the web designers contributing to the development of the website. This document is also intended for the department head, professors and project supervisors.

### 1.3 Project Scope

The scope of the website is to provide a user-friendly set of web pages that are easy to navigate. At the same time, it should provide sufficient information about the department and the institute.

#### 1.4 Definitions, Acronyms and Abbreviations

The following terms have been used:

- SRS: Software Requirements Specification
- IIT: Indian Institute of Technology
- CERP: Comprehensive Evaluation of Research Progress

## 2. General Design

## 2.1 Product Perspective

This product is an update of the existing website, ee.iiti.ac.in. This website is aimed towards providing the complete description of the department to its users. This includes the information about the faculty, their areas of interest, the information regarding type of activities being conducted and scope of research and internships

Website should be user-friendly, 'quick to learn' for the above purpose. The created website will be made available to all.

## 2.2 Product Functions

The website will provide overall information about the department and a few links for applications. This information will include the following:

- People: This includes the following:
  - Faculty members
  - Staff members Laboratory staff and Office staff
  - Students PhD, MTech, BTech students
  - Alumni
- Research: This section gives information about the various research areas available
  in the discipline and the people working in these areas. It also includes information

- about the laboratories, research papers published by the people of the department, citations and projects.
- Academics: This sections includes the description of the academic programs PhD,
   MTech and Btech programs, the courses being offered, scholarships, PhD internships
   and the awards and recognitions the people of the department have achieved.
- News and Events: This section contains
  - a) Links regarding application for PhD admissions and faculty positions.
  - b) Information about the coming events like seminars and CERP activities.
  - c) Placement Statistics
- Safety Regulations: This contains the safety guidelines to be followed by during the lab sessions. This also contains the classification of equipment into various safety classes.
- And many more information regarding department of electrical engineering.

#### 2.3 User Classes and Characteristics

There are mainly two types of users:

- 1. Students who are interested in BTech, MTech or PhD and are looking for information about the institute and the discipline. They will get more in-depth knowledge about the activities being done, the learning opportunities the discipline provides and also its statistics.
- 2. Students who are already studying in the institute and are seeking for some more information. The information may be regarding the upcoming events scheduled and/or project opportunities.
- 3. People willing to apply for faculty positions may get the news regarding the recruitment processes.
- 4. Existing faculties and professors.

#### 2.4 Assumptions and Dependencies

It is assumed that the user has a proper device to run the site. It may be a PC with Windows, Linux or Unix based platform or a mobile device.

## 3. External Interface Requirements

#### 3.1 User Interfaces

Upon opening the website, one sees the home page. The home page has the following sections:

- Photos: It contains a few pictures of activities being carried out.
- About Electrical Engineering: It contains a brief desciprion of the department.
- Events: It contains the information of upcoming events.
- Academics: Shows the different programs being offered.
- News: It contains the news regarding researches, achivements, awards etc.

Apart from the home page, there are the following tabs:

- About Us: The user can go to this tab to find out detailed information about the department, administration, contacts. If the user clicks this tab, a drop down menu show up giving the respective sections.
- People: This tab gives the information about the faculty, staff members, students and alumni (see 2.2). Clicking this tab is also followed by a drop down menu showing the respective sections. Clicking on any section will give a list of the people.
- Research: This tab has the following subsections:
  - Research Areas: This contains the information regarding the research areas of various faculty members.
  - Laboratories: This contains the information of the laboratories under the department along with their instructors.

- Recent Publication: This contains the recently published research papers.
- Projects: This contains the titles of projects being carried out along with their details (title, project incharge, duration).
- Academics: This contains the programs (and description), courses offered, scholarships and awards & recognitions.
- Open Positions: This tab is a link to apply for open positions. Clicling this link leads the user to a page showing three further links which are to apply for faculty positions, Ph.D. positions, project positions.

#### 3.2 Hardware Interfaces

Since the portal does not have any designated hadware, there are no direct hardware interfaces. The synchronisaton with the keyboard is, however, internally managed by the system underlying the device.

#### 3.3 Software Interfaces

The following are the software required necessary for running the website:

- Windows, linux operating systems
- Any web browser

The website also interacts with the storage of the device in order to store the cache files and downloads.

# **Acknowledgement**

We would like to express our sincere thanks of gratitude to our professor **Dr. Puneet Gupta** for giving us the opportunity to work on such a project from which we learnt a lot and gathered wide information.

We acknowledge our indebtedness **Dr. Saptarshi Ghosh**, the point of contact and the supervisor of the project for supporting us and for providing constructive feedback throughout the duration of the project.

We would also like to thank **Mr. Amit Meena**, our project guide for his guidance throughout the course which shaped the present work as its show.

At last, we would like to express our gratitude towards our friends and batchmates for providing us with feedbacks and constructive criticism throughout the course.