

# **SOFTWARE REQUIREMENTS OF LICT PROJECT MANAGEMENT SYSTEM**



## **SUBMITTED BY**

Sumit Yadav - 076bct088

Rahul Jha - 076bct049

Pratik Dahal - 076bct051

Prashant Bhandari - 076bct049

## **SUBMITTED TO**

Department of Electronics and Computer Engineering, IOE, PULCHOWK

## TABLE OF CONTENTS

|   |          |
|---|----------|
| <b>INTRODUCTION .....</b>                     | <b>1</b> |
| PURPOSE .....                                 | 1        |
| INDENTED AUDIENCE .....                       | 1        |
| PRODUCT SCOPE .....                           | 1        |
| REFERENCES .....                              | 1        |
| <b>OVERALL DESCRIPTION .....</b>              | <b>2</b> |
| USER NEEDS .....                              | 2        |
| OPERATING ENVIRONMENT .....                   | 2        |
| <b>SYSTEM FEATURES AND REQUIREMENTS .....</b> | <b>3</b> |
| DESCRIPTION .....                             | 3        |
| FEATURES.....                                 | 3        |
| EXTERNAL FEATURE REQUIREMENTS.....            | 3        |
| <b>ENTITY RELATIONSHIP DIAGRAM .....</b>      | <b>4</b> |

# Introduction

## Purpose

The purpose of this document is to build an online system that can keep record of research and projects done by Laboratory for ICT Research and Development (LICT), IOE Pulchowk, Tribhuvan University.

## Intended Audience

This system is meant to be used by members of LICT to make publications of research projects done at the lab.

## Product Scope and Use

The purpose of the LICT project management system is to record the details of research and projects done by the members of the organization in a convenient, accessible and managed way. This can help anyone to access and study the research work carried out by LICT.

## References

- <https://getbootstrap.com/>
- <https://docs.djangoproject.com/en/3.2/>
- <https://developer.mozilla.org/en-US/>

## Overall Description

### User Needs

The admin should be able to to the following:

- Give and revoke permission to make publications.
- Modify/view any of the existing database entries except passwords.
- Edit/delete any of the publications.

Non-members/visitors should be able to to the following:

- View all of the publications chronologically.
- Search for publications.

The members should be able to to the following:

- Make publications if they are authorized to do so.
- Delete/modify their own publication.
- View/search for publications as well.

### Operating Environment

Operating environment for the LICT project management system is as listed below.

- Operating system: Linux/Windows.
- Backend Framework: Django 3.2 LTS
- Database: PostgreSQL
- Platform: Chrome, Firefox, Safari .etc

# System Features and Requirements

## Description

The LICT Project Management System helps the lab members publish the details and findings of their research and projects, so that anyone can view and study the project by themselves.

## Features:

1. Any lab member or non-lab member should be able to view the publications that have been made in chronological order, as well as make search for the publications, without any login.
2. Each publication has its title and body along with optional images that can be inserted.
3. The body of the publication can be formatted using markdown syntax.
4. Once the publication has been made, it can only be edited/deleted by the publisher and the admin.
5. Only verified lab members are allowed to make publications.
6. The email id used during registration will be used for account verification as well as password reset.

## External Interface Requirement

### User Interfaces

- Front-end software: All major browsers.
- Back-end software: Python3, PostgreSQL Server

### Hardware Interfaces

- Any of the modern desktop/mobile operating system (Windows/Linux/Mac)
- Latest, stable releases of all major browsers. (Internet Explorer 9 and down is not supported)

## Entity Relationship Diagram

