

# TRIBHUVAN UNIVERSITY INSTITUTE OF ENGINEERING PULCHOWK CAMPUS

#### LOGTRACKER

# A COURSE PROJECT SUBMITTED TO THE DEPARTMENT OF ELECTRONICS AND COMPUTER ENGINEERING IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE PRACTICAL COURSE ON SOFTWARE ENGINEERING [CT 601]

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### 1 Introduction

Log Tracker is a web application designed to track projects and thesis updates. It was built as the Software Engineering Project in 5th semester, Computer Engineering.

Project URL: http://kvpnlvizbwcpjgz.bct.itclub.pp.ua/

It offers three distinct modes catering to different user roles:

#### 1.1 Admin Mode

#### An admin

- Can synchronize the student database from the API (http://assmnt.pcampus.edu.np/) provided by CIT, Pulchowk Campus
- Can create/edit a new project
- Can assign/edit students and supervisors associated with the project
- Can read the minutes, comments and download related attachments from each meeting
- Can call students for mid-term defense and final defense

#### 1.2 Student Mode

#### A student

- · Can add/edit minutes, comments and related attachments for each meeting
- Can create upcoming events
- Can ask approval from supervisor(teacher) for mid-term and final defense

#### **Student credentials format:**

- Email: <CAMPUS-ROLL-NO>.<FIRSTNAME>@pcampus.edu.np
- Password (case sensitive): <CAMPUS-ROLL-NO>

#### **Example:**

• Name: Surav Krishna Shrestha

• Email: 077bct089.surav@pcampus.edu.np

• **Password:** 077bct089

For master-level students' credentials, view this Excel file.

For bachelor-level students' credentials, view this Excel file.

#### 1.3 Teacher Mode

#### A teacher

- Can verify the minutes and related attachments written by students and add comments
- Can create upcoming events
- Can approve a project for mid-term and final defense

For teachers' credentials, view this Excel file.

#### Note:

For security reasons, users have the privilege of changing their password on their initial login.

#### 2 Features

#### 2.1 Admin Mode Features

- Synchronise student database (add new students if they don't have an account in the system)
- Create and manage projects.
- Assign students and supervisors to projects.
- View minutes, comments, and download meeting attachments.
- Initiate mid-term and final defense processes.

#### 2.2 Student Mode Features

- Add and edit meeting minutes and comments.
- Attach and manage related documents.
- Create and track upcoming events.
- Request supervisor approval for defense.

#### 2.3 Teacher Mode Features

- Review student-submitted minutes and attachments.
- Provide comments and feedback.
- Create and manage upcoming events.
- Approve projects for defense.

# 3 Tech Stack

#### 3.1 Frontend

- HTML Used for structuring web pages.
- CSS Used for styling and layout design.
- JavaScript (JS) Used for dynamic and interactive web functionality.
- Bootstrap A CSS framework for responsive web design.
- ejs A template engine for generating dynamic HTML content.

#### 3.2 Backend

- Node.js A runtime environment for executing JavaScript on the server.
- Express.js A web application framework for Node.js.

#### 3.3 Database

• MongoDB - A NoSQL database used for storing project and user data.

#### 3.4 Testing and other development tools

- Jest A JavaScript testing framework used for unit and integration testing.
- ESLint A static code analysis tool for JavaScript.
- Prettier A code formatter for maintaining consistent code style.

# 4 Local usage

1. Clone the repository:

```
git clone https://github.com/suravshrestha/logtracker.git
```

2. Navigate to the repository:

```
cd logtracker
```

3. Install the dependencies:

```
npm install
```

This might take a while to complete.

4. Create a '.env' file in the root of the project and set the following credentials:

```
#.env
SECRET=

# Admin credentials
ADMIN_NAME=
ADMIN_USERNAME=
ADMIN_EMAIL=
ADMIN_PASSWORD=
```

Note: For admin email, use 'ioe.edu.np' domain.

5. Start the development server:

```
npm run dev
```

You can view the application at http://localhost:3000/.

**Note:** When the development server is first run, it will populate the faculties using the data from config/faculties.json.

## 5 Team Members

- Sandhya Baral (077BCT076)
- Sujan Kapali (077BCT086)
- Surav Krishna Shrestha (077BCT089)