



# Development of Web Application to Automate Training & Placement Process

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**Abstract-** The smooth operation of training and placement operations on campus is the responsibility of the college training and placement cell. Up until now, the training and placement activity's workflow has been slowed down by the manual process of monitoring pupils and shortlisting them in accordance with recruiters' requirements. To solve this problem, we came up with a web application that streamlines all of these operations into one place with the least amount of work. It is a web-based platform that aids in addressing the issues the training and placement cell encountered during campus drives and other activities of a similar nature. Three modules will make up the system: Student, HOD, and T&P cell. Each module's workflow and position on the platform will be distinct. The training and placement cell will post all of the information about the forthcoming campus drive, including the eligibility requirements and the drive details, on the platform. The student's responsibility is to acknowledge the drive notification and have the option to participate in the drive at their discretion. The HOD can keep an eye on impending drives and look for newly arrived and positioned students.

**Keywords** —T&P, shortcomings, tracking, upcoming drives, time-consuming, modules, criteria.

## I. INTRODUCTION

To overcome the issues with the traditional manual approach, the "Training and Placement Management System" has been created. The difficulties our current system faces are supported by this programme, which aims to eliminate and, in some circumstances, lessen them. Also, this system is created to meet the demands of the business for efficient and successful operation. The programme is kept as simple as possible to reduce data entry errors. Also, it displays an error notice when

you enter invalid data. The user doesn't require any formal training to use this system. This alone demonstrates that it is user-friendly. The above-mentioned Training and Placement Management System can result in an error-free, secure, dependable, and quick management system. Instead of focusing on record keeping, it can help the user focus on their other activities. As a result, it will aid organisations in making better use of their resources. The information needed for the selection process, such as aptitude, reasoning, etc., as well as many websites for placement exams, can be searched for by students. All users can access information on events occurring at the college and the accomplishments of selected students. So, our project offers the capability of keeping student information and obtaining the requested list of applicants for businesses looking to hire individuals based on a specific query. This project's goal is to develop a workflow that will enable us to accelerate the T&P registration process. Additionally, this system will facilitate procedures like shortlisting and criteria analysis while keeping a list of students who were placed and students who chose to continue their education. By giving the placement cell a virtual means of communication with students, our application will offer a solution to all these issues. To solve this problem, we created a web application that unifies all of these operations into one roof with minimum efforts.

## II. PROBLEM DESCRIPTION

Purpose of this project is to create a workflow that will enable us to streamline the T&P registration workflow not only that, but this system will also ease in processes such as shortlisting and criteria analysis while maintaining a list of placed students and students



## VIII. USE CASE DIAGRAM

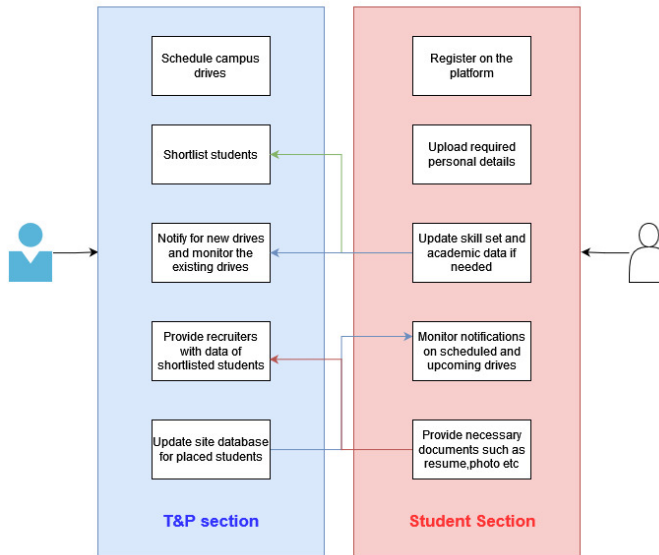


Fig. 7.1 Use case diagram

Use case diagram simply depicts the task, which a user and Admin can perform through our application.

needed for React, and provides additional structure, features, and optimizations for your application.

### Features:

- Next.js enables you to access CSS files from a JavaScript file. This is possible because Next.js extends its features of import.
- Fast refresh is now offered by default for all the projects on the 9.4 version of Next.js or newer. Fast refresh gives developers an immediate suggestion on edits made to your React components.
- The lazy loading feature of Next.js helps you to deliver a better client experience. The client might reject your application if your loading requires over 25 seconds.
- Next.js supports almost every web browser because they know browser compatibility is a headache for any developer. It is very flexible for supporting different kinds of web browsers like Firefox, Microsoft Edge, Opera, Google Chrome, etc.

## IX. TOOLS / PLATFORM

### SOFTWARE REQUIREMENT

- 1.OS Windows 10
- 2.IDE – Visual Studio code
- 3.Language – Next.js, Tailwind CSS, Node.js, TypeScript, Prisma, Blob Storage, MySQL
4. Designing tool – Draw.io

### Typescript

TypeScript is a strongly typed programming language that builds on JavaScript, giving you better tooling at any scale. TypeScript code converts to JavaScript, which runs anywhere JavaScript runs i.e. In browser or on Node.js.

### Features:

- **TypeScript is just JavaScript.** TypeScript starts with JavaScript and ends with JavaScript. Typescript adopts the basic building blocks of your program from JavaScript. Hence, you only need to know JavaScript to use TypeScript. All TypeScript code is converted into its JavaScript equivalent for the purpose of execution.
- **TypeScript supports other JS libraries.** Compiled TypeScript can be consumed from any JavaScript code. TypeScript-generated JavaScript can reuse all the existing JavaScript frameworks, tools, and libraries.
- **TypeScript is portable.** TypeScript is portable across browsers, devices, and operating systems.

### Next.js

Next.js is a React framework that gives you building blocks to create web applications. By framework, we mean Next.js handles the tooling and configuration

### Prisma:

Prisma is an open source next-generation ORM. It consists of the following parts:

**Prisma Client:** Auto-generated and type-safe query builder for Node.js & TypeScript.

**Prisma Migrate:** Migration system.

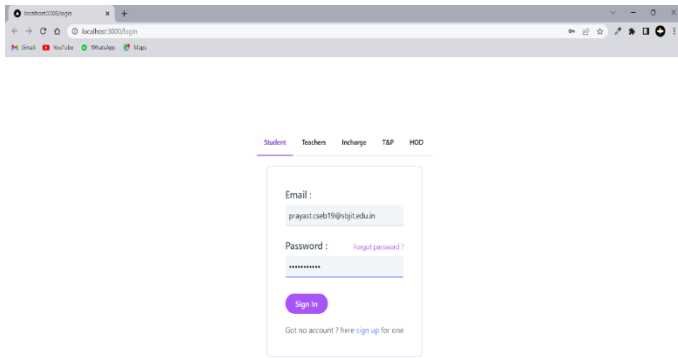
**Prisma Studio:** GUI to view and edit data in your database.

### Features:

- **The Prisma schema**  
The Prisma schema allows developers to define their application models in an intuitive data modelling language. It also contains the connection to a database and defines a generator.
- **Functions of Prisma models**  
The data model is a collection of models. A model has two major functions:
  1. Represent a table in relational databases or a collection in MongoDB.
  2. Provide the foundation for the queries in the Prisma Client API.

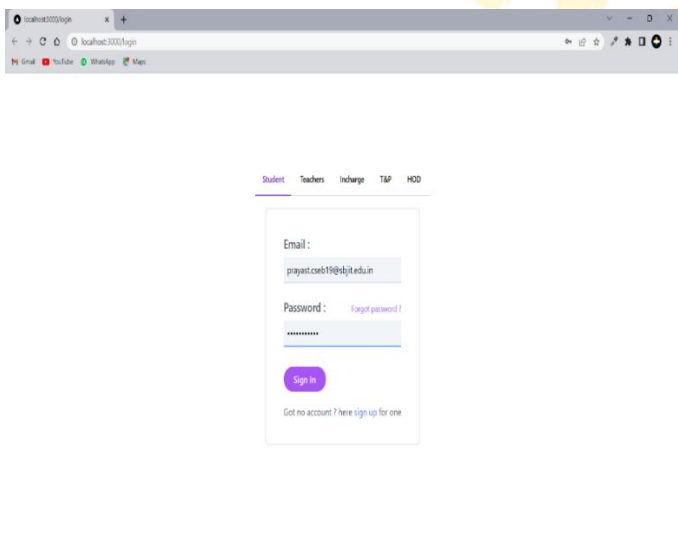


## X. RESULT & DISCUSSION



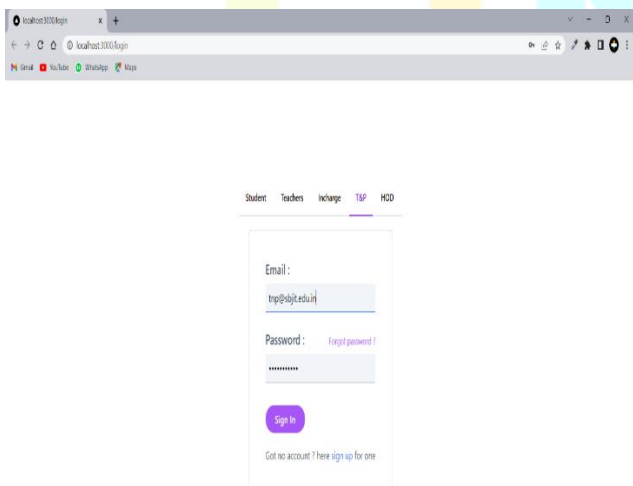
**Fig 8.1 - Student Login Screen**

Shows the login details necessary for a student to be authenticated. Notice the highlighted student view in the roles tab.



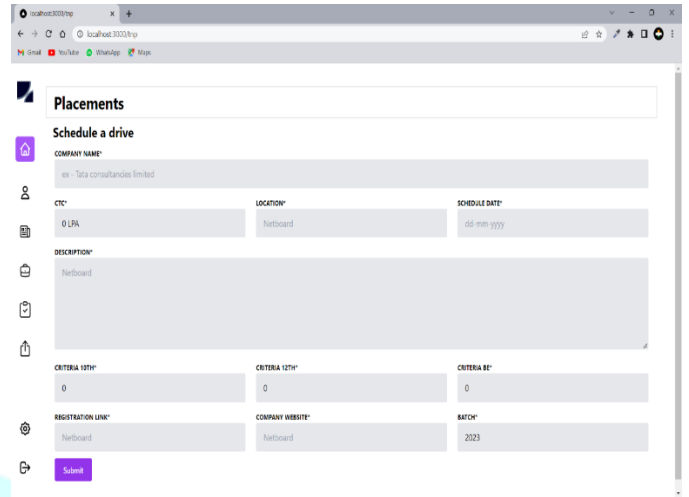
**Fig 8.2 - Student Login Screen**

Shows the User login details necessary for a student to be authenticated. Notice the highlighted student view in the roles tab.



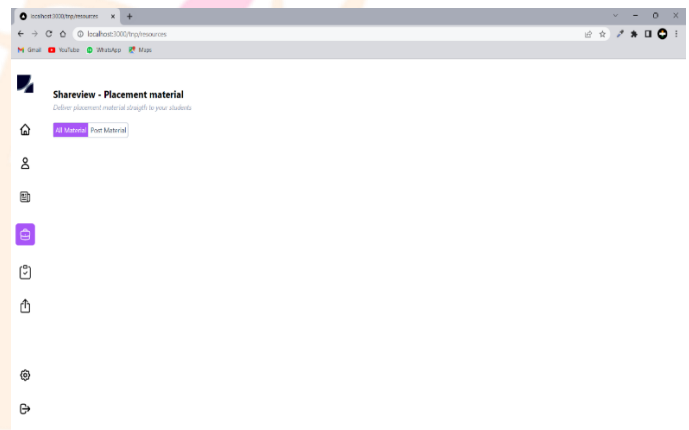
**Fig 8.3 – T&P Login Screen**

Shows the login details necessary for a student to be authenticated. Notice the highlighted student view in the roles tab.

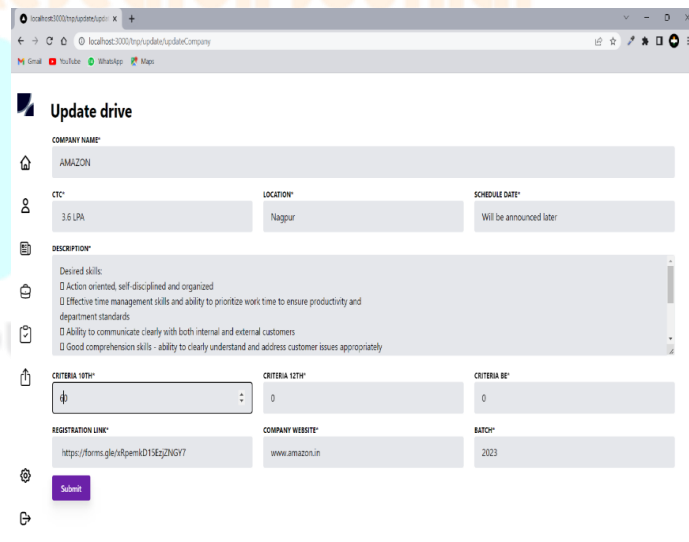


**Fig 8.4.1- Figure show the Schedule Drive**

Shows the details necessary for a student to be authenticated.



**Fig 8.4.2 – Figure show the Placement Drive**



**Fig 8.6 – Update drive Screen.**

It shows the updates of the drive and the criteria of the company.

and displayed **professional ethics** which will result in **lifelong learning**.

## XII. REFERENCES

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The screenshot shows a web interface titled "Shortlist Students". It includes a form to select criteria (Passing batch: 2023, 10th criteria: 50, 12th criteria: 0, BE criteria: 0) and a Department dropdown set to "CSE". Below the form is a table with the following data:

Name	Department	Email	Phone	10th Score	12th Score	BE Aggregate
Aman Hatkar	CSE	aman.cseb19@bjit.edu.in	1800800259	null	null	77.81 %
Khushi Dharnik	CSE	khushid.cseb19@bjit.edu.in	1800800251	null	null	84.60 %
Prjwal Kothekar	CSE	prjwalk.cseb19@bjit.edu.in	9922627607	null	null	81.73 %
Pranav Purkar	CSE	pranav.cseb19@bjit.edu.in	1800800248	null	null	91.27 %
Pranay Kharabe	CSE	pranayk.cseb19@bjit.edu.in	1800800249	null	null	80.21 %
Pranjal Deshpande	CSE	pranjal.d.cseb19@bjit.edu.in	1800800250	null	null	64.69 %
Pranjal Nikhare	CSE	pranjaln.cseb19@bjit.edu.in	1800800211	null	null	64.94 %
Prayas Tiwari	CSE	prayast.cseb19@bjit.edu.in	1800800212	null	null	62.94 %
Prayash Bhojwar	CSE	prayashb.cseb19@bjit.edu.in	1800800213	null	null	73.13 %
Purvasha Annapurne	CSE	purvasha.cseb19@bjit.edu.in	1800800252	null	null	73.81 %
R.Jayakrishnan	CSE	jayakrishnan.cseb19@bjit.edu.in	1800800214	null	null	73.98 %

**Fig 8.5.1 – Figure show the Shortlist students.**

Shows the necessary details and also show the status of the selected student.

The screenshot shows a web interface titled "Update drive". It includes a search bar with "amazon" entered. Below the search bar is a table with the following data:

Name	Batch	CTC	10th Criteria	12th Criteria	BE Criteria	Location
AMAZON	2023	3.6 LPA	0%	0%	0%	Nagpur

**Fig 8.5.2 – Figure show the Dashboard of Update drive.**

Shows the details of the company of the drive.

## XI. CONCLUSION

We have **designed** a mobile application and completed its partial development by applying **engineering knowledge** which provides an approach for Training and placement activity. It would assist the students in placement activities and always alert or give reminders to the student for the upcoming drives which solve the **social problem**. The application is reduced as much as possible to avoid errors while entering the data. It also provides error message while entering invalid data. No formal knowledge is needed for the user to use this system. Thus, by this all it proves it is user-friendly. Training and Placement Management System, as described above, can lead to error free, secure, reliable, and fast management system. We have **modern** tools like visual studio code to implement the project. We understood the importance of **individual and teamwork** during project **development and management**. While presenting our project in various seminar we have enhance our **communication skills**