Mini Project Report

on

Automative approach to Internship and placement management system

Submitted by

Renuka Bhure – 19
Rutwik Ghatol – 62
Vallabh Joshi – 72

Guide
Mr. Sushil Chavhan
(Asst. Professor, Dept of IT, YCCE)

Co-Guide
Mr. Kalpit Bhawalkar
(Team Lead(ML), Konverge.AI)

Department of Information Technology
Yeshwantrao Chavan College of Engineering, Nagpur
(An Autonomous Institute, Affiliated to RTM Nagpur Universiy, Nagpur.)

Session: 2021-2022

Automative Approach To Internship And Placement System

This project report is submitted to

Yeshwantrao Chavan College of Engineering, Nagpur

(An Autonomous Institute, Affiliated to RTM Nagpur Universiy, Nagpur.)

In partial fulfillment of the requirement

For the award of the degree

Of

Bachelor Of Engineering in Information Technology

By

Ms. Renuka Bhure
Mr. Rutwik Ghatol
Mr. Vallabh Joshi

Under Guidance of

Mr. Sushil Chavhan

(Asst. Professor, Dept of IT, YCCE)

Co-Guide

Mr. Kalpit Bhawalkar

(Team Lead(ML), Konverge.AI)

Department of Information Technology
Yeshwantrao Chavan College of Engineering, Nagpur
(An Autonomous Institute, Affiliated to RTM Nagpur Universiy, Nagpur.)
Session: 2021-2022

Yeshwantrao Chavan College of Engineering, Nagpur

Department of Information Technology

Session: 2021-22

Certificate

This is to certify that Ms. Renuka Bhure, Mr. Rutwik Ghatol , and Mr. Vallabh Joshi has completed a **Mini Project** course titled "***Automative approach to Internship and placement management system***" towards the partial fulfillment of requirements for the B.E. seven semester of Information Technology.

Submitted by

Renuka Bhure – 19

Rutwik Ghatol – 62

Vallabh Joshi – 72

Mr. Kalpit Bhawalkar
(Co-Guide)
(Team Lead ML , Konverge.AI)

Mr. Sushil Chavhan
(Academic Guide)
(Asst. Prof ,IT)

Prof. B. U. Bawankar
Project Co-ordinator(IT)

Dr. R. C. Dharmik
HOD (IT)

Declaration

We the undersigned solemnly declare that the project report entitled “automative approach to internship and placement system” submitted to Yeshwantrao Chavan College Of Engineering (YCCE, Nagpur) is based on our own work carried out during the course of our study under the supervision of Mr. Sushil Chavhan , Assistant Professor Department of Information Technology (Yeshwantrao Chavan College Of Engineering) and Mr. Kalpit Bhawalkar , Team lead ML (Konverge.AI).

We further certify that :

a. The work contained in the report has been done by us under the guidance of our supervisor(s).
b. The work has not been submitted to any other Institution for any other degree/diploma/certificate in this university or any other University of India or abroad.
c. We have followed the guidelines provided by the college in preparing the report.
d. We have confirmed to the norms and guidelines given in the Ethical Code of Conduct of the Institute.
e. Whenever we have used materials (data, theoretical analysis, and text) from other sources, we have given due credit to them in the text of the report and giving their details in the references.

Ms. Renuka Bhure

Mr. Rutwik Ghatol

Mr. Vallabh Joshi

Acknowledgement

We take this opportunity to express a deep sense of gratitude towards our guide **Mr. Sushil Chavhan** , Assistant Professor Department of Information Technology (Yeshwantrao Chavan College Of Engineering) and our co-guide **Mr. Kapit Bhawalkar** , Team lead ML (Konverge.AI) for providing excellent guidance , encouragement , and inspiration throughout the project work. Without their valuable guidance ,this work would never have been successful one. They are one of the best mentors, we will always be thankful to them.

We would like to extend our special thanks to our Project Coordinator **Mr. Bhushan U. Bawankar** who has helped us directly or indirectly to complete this project work.
We would like to thank **Dr. R.C. Dharmik** , Head of the department of Information Technology. He was very helpful and encouraging while doing research work.
We would like to thank **Dr. U.P. Waghe** , principal (YCCE) who has provided all institutional facilities as and when needed.

We would like to thank all our classmates for their valuable suggestions and helpful discussions and to the other people who directly and indirectly supported us.

Finally , a special thanks to our faculty members of the department for providing their cooperation throughout the course . It is often difficult to remember exactly where an idea originated and we would like to offer a thanks to all who have contributed in different ways and our apologies to them if we have inadvertently overlooked any specific acknowledge which they deserve.

Ms. Renuka Bhure
Mr. Rutwik Ghatol
Mr. Vallabh Joshi

Table Of Contents

List of Tables

List of figures

Abstract

Automative approach to internship and placement management system by machine learning. The increasing advantages of automated systems now are at the highest position as a result many manual processes are automated.

Since the automated system is in demand nowadays, educational infrastructures like colleges are making their manual or semi-automated system function completely on a computer. One such system that concerns a college is the placement system's automation. The project aims at developing a web application for the placement cell. The increasing advantages of automated systems now are at the highest position as a result many manual processes are automated. The benefits of the system will be to provide enhanced facilities and assemble all the placement related tasks carried out on various platforms to a single application

Chapter 01:
Introduction

Introduction

In today's date campus recruitment is common in all colleges yet the drive brings a lot of stress to students as well as placement officers.

Various software and other sector companies are conducting campus selections for choosing merit candidates. When campus selections are conducted the students are to submit their details to the concerned placement officer to apply for the hiring process.

This routine process is maintained manually, like gathering student details and shortlisting eligible students based on company criteria. Traditionally, all important information is displayed on the notice board as a result many students are not able to get the information within the time limit. Moreover, students manually submit their details, thus there are chances of errors or students failing to update their information on time.
Hence, there is a requirement to computerize the system to reduce the chances of error and provide more efficiency. The admin module plays an important role in our project. They provide validation of students' registration and updating of details. The admin will be able to see the students registered for any particular company and their status.

The increasing advantages of automated systems now are at the highest position ,as a result many manual processes are automated. Since the automated system is in demand nowadays, educational infrastructures like colleges are making their manual or semi- automated system function completely on a computer .
The data extracted from internship and placement management system can be very useful , if processed properly.

Thus , this approach provided a solution to raw data which can be further processed to extract valuable information out of it.

There are various prior studies conducted in order to automate the whole process of placement management along with internship management. Few paper listed below summerize their work in the field:

The paper “Placement support system” focuses on the automation of the placement cell. Authorizing the resumes, communicating about the varied job openings to the scholar community, managing the company relationship for inviting them for the placements, creating the location metrics, monitoring the progress of the choice process and communicating with different users. This system is often used as an application by the college to manage the student information concerning placements. Also helps companies coming for campus recruitment to ascertain student details. Before coming for the campus, companies can get information about eligible students alongside interested students.

The paper “Online Training and Placement System” gives a very efficient way of placement for students. In this system, the student does their registration in a very simple manner and the placement officer can easily get the information of students. The system can thus easily access the eligible students. In this system, information regarding the campus is sent to the student automatically. In overall architecture, data is stored and then as per rules and condition data is obtained and processing is applied on it such as making the report and sending mail to the student.

Some of the prior system has been developed to computerize the whole process of the practical training and make it accessible online. It came out as a comprehensive tool for coordinating campus drives and internships with the goal of facilitating improvements and providing a continuous communication to students.

Such systems provides facility of viewing both personal and academic information of students and companies, which is usually inserted and deleted by database administrator.

Internship and placement management system (IPMS) has been developed to computerize the whole process of the practical training and make it accessible online. It is a comprehensive tool for coordinating campus drives and internships with the goal of facilitating improvements and providing a continuous communication to students. It provides a structured way to display the statistics such that the data can be used for various purposes. A student can access the system for getting information about company drives and internship programs.

Such systems provides facility of viewing both personal and academic information of students and companies, which is usually inserted and deleted by database administrator (in some cases the companies itself).

In the existing Placement system, maximum work goes manually and is an error-prone system, takes time for any changes in the system. This big problem is the searching, sorting and updating of the student data and no any notification method available for giving information to the student except the notice board.

System focused on the automation of the internship placement cell. Authorizing the resumes, communicating about the varied job openings to the scholar community, managing the company relationship for inviting them for the placements, creating the location metrics, monitoring the progress of the choice process and communicating with different users.

Such systems are often used as an application by the college to manage the student information concerning placements. Also helps companies coming for campus recruitment to ascertain student details.
Before coming for the campus, companies can get information about eligible students alongside interested students.

It converts unstructured data into structured data and sorted format. All these are contributing to the control of the system.

To design an automative approach to internship and placement management system and to optimize the system for better use and performance.
To enable the system to work on dynamic data instead of static so as to save time.
Since the system currently gathers resume through google drive, therefore we can provide a solution to gather/collect the resume via PHP.

The existing internship and Placement system uses static data, therefore it is time consuming since we have to manually fill in the data. Also , the system uses the 2 modules namely admin and student therefore segregating data and delivering it to right module was to to be addressed.
In the existing internship and Placement system, maximum work went manually but since the we used an automative approach which eliminates the scenario of static data.
Thus , use of dynamic data was introduced in system in order to maintain consistent and updated data. We can collect information of all college students and fetch them according to criteria given by company. We have mainly two modules Admin/Training and Placement Officer (TPO) and Student .

The two modules will be given access to relevant information. The dataset for system implementation contains information about past data of students. These data are used for training the model for rule identification and for testing the model for classification. The admin can see the user information and will validate it, generate the student list base on company criteria.

Managing students working as intern at different companies situated at different locations. Therefore the main aim of the system is eliminate the hassles faced by faculty at institution and also student at internships.

Chapter 02:
Literature Survey

Literature Survey

Lei Wang[1] , proposed a systematic approach based on “Internet + internship and placement management” model from the perspective of building an management network platform. For the purpose of management , they used machine learning and clustering model to form clusters of database. Finally they concluded that, a systematic approach is essential in which Integrated Information Systems play a crucial role for effective management of internship andplacement management.

Chu-Sing Yang [2] proposed a systematic approach to place and manage content in such a distributed and complex system of internship andplacement. For the purpose of content management , they used heterogeneous distributed web server. Finally they concluded that, distributed servers tend to be more heterogeneous, and this heterogeneity will further increase the management burden.

Lu Shumin [3] , proposed that to promote the symmetries and transparency about information can provide more equal opportunities for various graduates.Thus giving students controlled access rights to certain information. For the purpose of transparency management , they used clustering and five meta-model. Finally they concluded that, In order to solve the deficiency about existed employment management system, symmetries and transparency should be introduced.

Mulla Kajal [4], proposed a systematic approach to provide student community to use collective intelligence to increase selection ratio and eases out process of creation of management information automatically. For the purpose, they used SMSIntegration, User Authentication . Finally they concluded that, their module focuses on managing the corporate relationship for inviting them for the placements as well other activities, monitoringthe progress of the selection process and communicating with different users.

Sentkil Thangavel [5], proposed that with the machine learning techniques the knowledge can be extracted from operational and historical data that resides within the educational organization's databases using. The dataset for system implementation contains information about past data of students. For the purpose ofmanaging historical data , they used data mining , machine learning algorithms like rainforest algorithms. Finally they concluded that, his model helps the placement cell within an organization to identify the prospective students and pay attention to and improvetheir technical.

Farheen Taqi Rizvi [6], proposed that the Placement Management System is developed as an effort to form a record of company and students by restricting such an outsized database thereto to a specific class of students or company. The application assists the placement officer to maintain the student data and sort them according to the percentage criteria required for the company and student can review his/her data overcoming the drawbacks of the existing system. For this purpose , they used PHP for managing databases , and full stack technology to manage the frontend and backend of the application. Finally, they concluded that is they add different features like a direct messaging chat between the company and the student. Which provides a convenient way of interaction between students and industry.

Mohd Talmizie bin Amron [7] , proposed that a Web-Based System of Internship Management has been developed to computerize the whole process of the practical training and make it accessible online. The portal allows internship eligibility checking, registration, visit schedule and monitoring of industrial internship program. For this purpose of computerization they used MongoDB in a cloud so that the database can be accessed from any machine and can be used effectively to manage data without consuming lot of space. Finally they concluded that this online system which is integrated with database system can help the coordinator to manage and monitor the application process that was done by the students and can have special features as it introduces the pre-registration stage for the student to register information about the host of organization that they would like to apply for internship program.

Akshata Bhalgat [8] proposed a smart and easy solution for placement activities by developing software which manages placement activities with user friendly GUI. . This system can be used as an application for the TPO of the college manages the student information with regards to training and placement. For this purpose they used machine learning technology , in order to cluster the database and retrieve meaningful information from it . They used k-means clustering and naïve bayes classifier along with ID3 algorithm for decision tree. Finally they concluded that the exam cell of the college can also be linked with the system so that there is no need to keep two separate systems and the database of exam cell can be connected with college database which will help in double verification of marks and other important details.

N. Hasti [8] ,proposed that design of thes system is used to solve the problems that occur in the system running at this time, so that it can facilitate an organization in carrying out its entire business process. For this purpose they used object oriented approach using the UML (Unified Modeling Language) modeling method. Finally they conluded that the system help treasurers in managing payment internship and printing transaction evidence, help the chief executive in managing internship submission by determining the company.

Chapter 03 :
Work Done

Work Done

3.1) Architecture

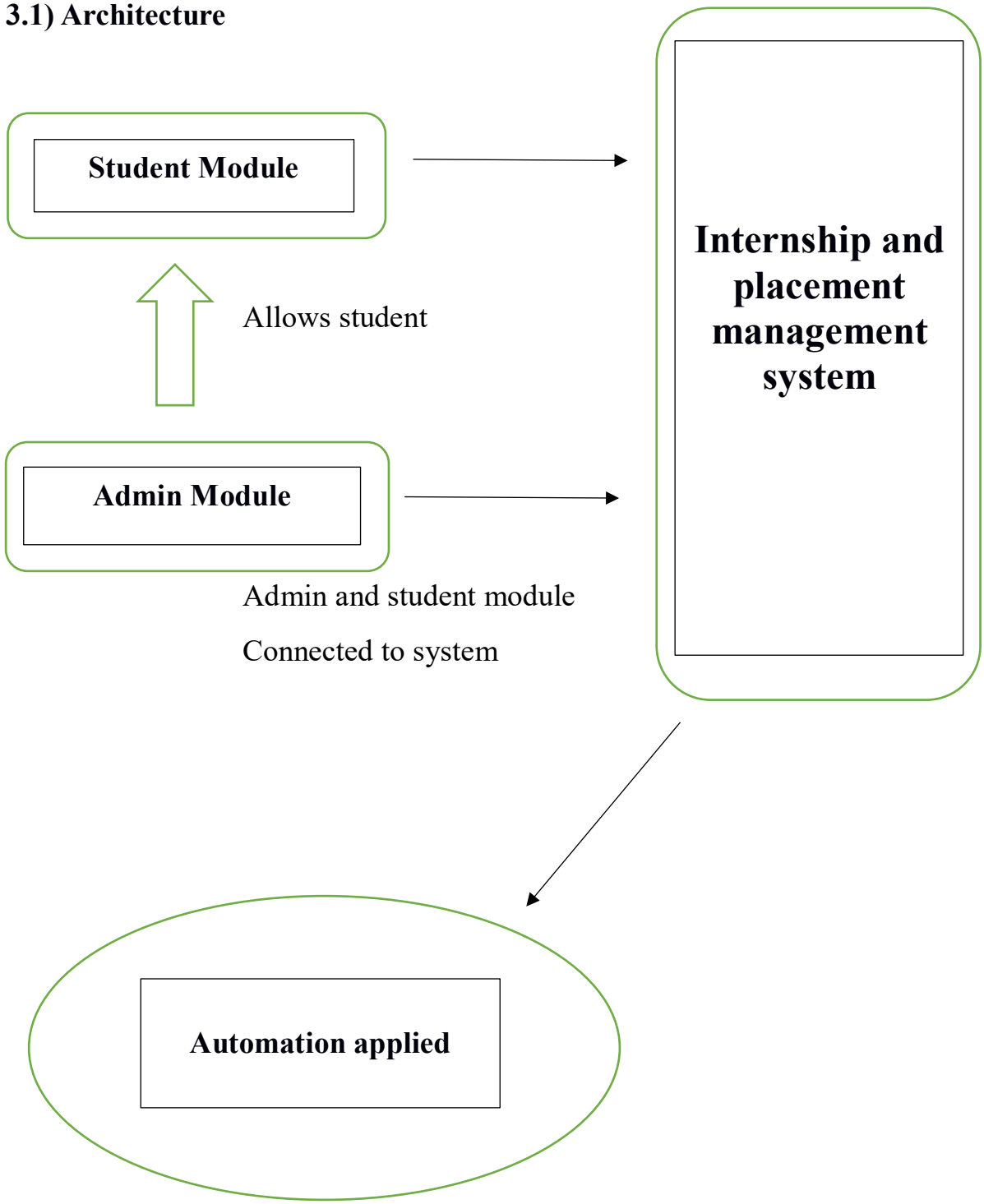

Figure 01 : Architecture

The proposed system consists of two major modules namely

1. Student
2. Admin

Each module has a different set of tasks to be done.

The application assists the placement officer to maintain the student data and sort them according to the percentage criteria required for the company and student can review his/her data overcoming the drawbacks of the existing system.

Following is the description for the two major modules:

1. **Admin Module:**
   The admin module has an authority to add student and Company to the system and provide their valid id and password. The main user of the admin module is TPO of the college. TPO of the college will able to update details such as campus drives.
   The various events related to the training and placement program is uploaded to the system by entering subject means event name.

2. **Student Module:**
   Student module deals with information of student. Student who has added by the administrator to the system successfully can only able to access the system with their valid user name and password provided by the administrator.They will get different tabs like placement tab, internship tab etc to access the information.

These two modules are connected to IPMS via a database using PHP.
This system is automated using the dynamic data .
Whenever user requests for data , the data is fetched from its appropriate schema and is displayed to the user.

3.2) Process

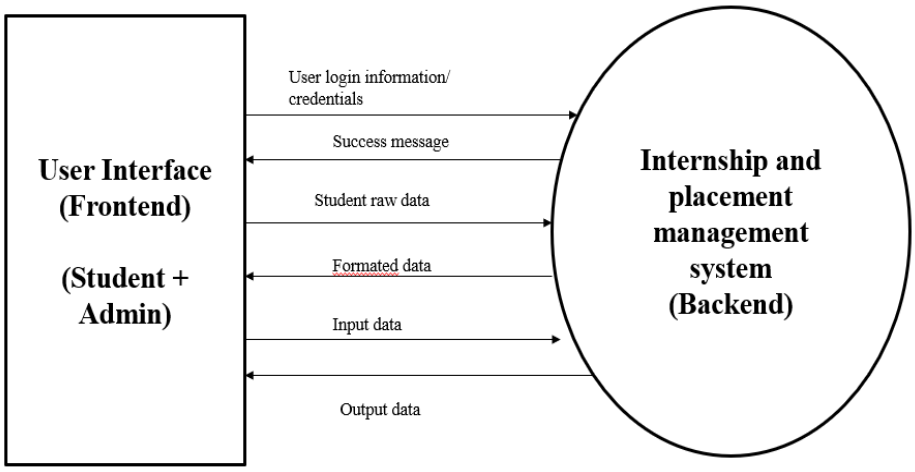

Figure 02 : Context Level DFD

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It can be manual, automated, or a combination of both.

A data flow diagram (DFD) is a graphical tool used to describe and analyze the movement of data through a system by depicting the flow of data, source or destination of data and the process that respond to change in data. The DFD is one of the foremost tools employed by the system analysis to model system components, that are:

- System Process
- Data Store
- The information flow in the system

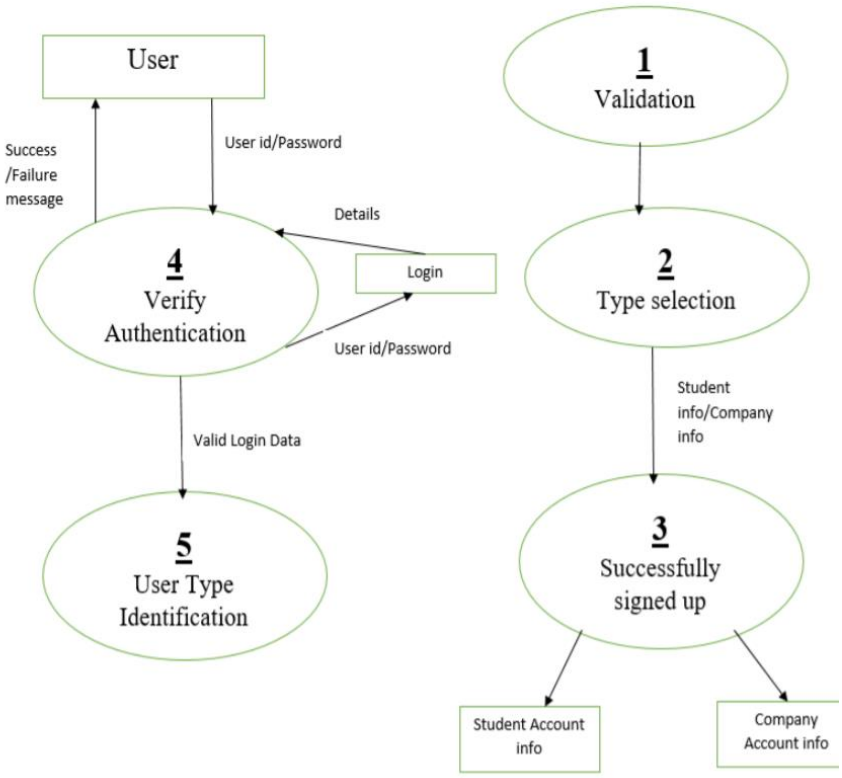

Figure 03 : ER Diagram of the work flow

ER model stands for an Entity-Relationship model. It is a high-level data model. This model is used to define the data elements and relationship for a specified system.It develops a conceptual design for the database.

It also develops a very simple and easy to design view of data. In ER modeling, the database structure is portrayed as a diagram called an entity-relationship diagram.

SignIn / SigUp Module:

- This is basically a validation of user credentials , the user will be asked the type i.e. the admin or the student .

- Then , they will have to create a account on the system , which eventually be saved to the database.

NAME	TYPE
fname	Varchar(50)
lname	Varchar(50)
Email_id (Student email)	Varchar(50)
pass	Varchar(50)

Table 01 : Student Credentials Database Table

NAME	TYPE
fname	Varchar(50)
lname	Varchar(50)
Email_id (Admin email)	Varchar(50)
pass	Varchar(50)

Table 02 : Admin Credentials Database Table

Student Dashboard :

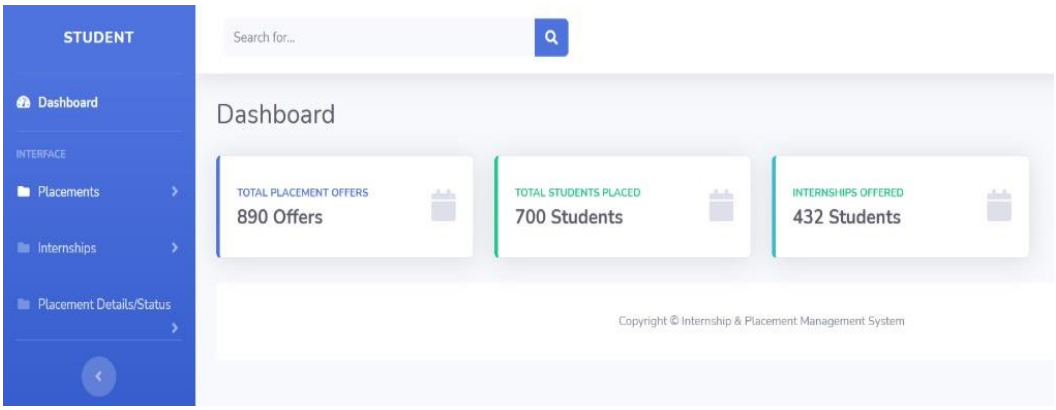

Figure 04 : Student Dashboard

Student Dashboard consist of following features:

Placements tab -> Gives information about the placement details .
It will give information about the companies visited with their attributes like package (in LPA) and the students who are selected in which companies along with their package.

Internships tab -> Gives information about the student internship details like their attendance. In internship tab , student will be able to add all the internships that they are doing during their academic session

Placement Details Status tab -> Gives information about student's placement current status , i.e. placed/unplaced , package offered .
In placement status Tab , student will be able to see all the companies that they are selected for along with the package in (LPA).

Admin Dashboard :

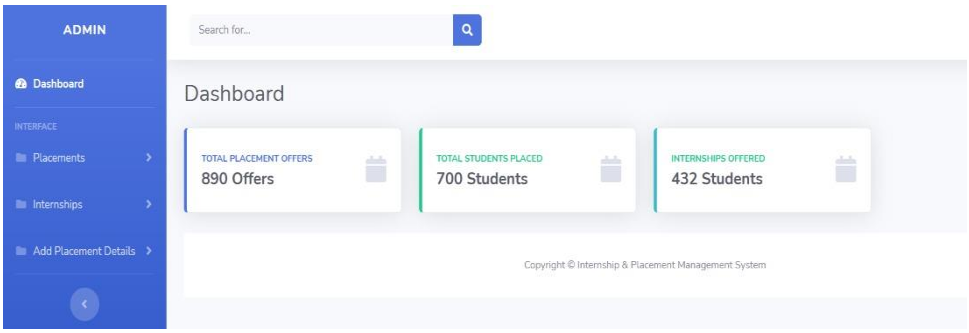

Figure 05 : Admin Dashboard

Admin Dashboard consist of following features:

Placements tab -> Gives information about the placement details .
It will give information about the companies visited with their attributes like package (in LPA) , and the students who are selected in which companies along with their package.

Add Internships tab -> Add internship tab lets the TNP officer to add the internship opportunity if there are any.
The same added opportunity will be reflected in the student dashboard to all the student.

Add Placement Details Status tab -> In Add placement details Tab , the admin can add the details of any company that is visiting , along with its attributes.

Other Features:

There are multiple provision given to user depending upn their role.
Provisions Like:

- Student Feedback: to collect the feedback from student about internship program , in order to improve for the future.

- Institute Evaluation : To collect the evaluation sheet of the college about the internship of student.

- Supervisor Evaluation : To collect the evaluation sheet of the supervisor under whom the student is completing internship.

- Weekly Log : It is given to students , in order to collect the weekly updates and key points of their learning in the subsequent internship.

- Attendance : Students are supposed to mark their attendance for the internships.

- The alert message: Here , the admin will add any alert message that they want to display to all students about any TNP activities.

Tabs	Rights Given To:
Add Internship	Student
Add Internship Opportunity	Admin
Add Current Drives	Admin
Add Placement	Admin through database
Alert Message	Admin

Table 03 : Rights / Access Table

3.3) Tools and technology used

3.3.1) Tools used

1) **Database -> XAMPP 64 Bit:**

   XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages.

2) **Editor -> Visual Studio Code version 1.62**

   Visual Studio Code is a source-code editor made by Microsoft for Windows, Linux and macOS. Features include support for debugging, syntax highlighting, intelligent code completion, snippets, code refactoring, and embedded Git.

3) **Version Control System -> Git and Github**

   GitHub, Inc. is a provider of Internet hosting for software development and version control using Git. It offers the distributed version control and source code management functionality of Git, plus its own features.

4) **Server - > Apache Server :** The Apache HTTP Server, colloquially called Apache, is a free and open-source cross-platform web server software, released under the terms of Apache License 2.0.

5) **Database - > phpMyAdmin :** phpMyAdmin is a free and open source administration tool for MySQL and MariaDB. As a portable web application written primarily in PHP, it has become one of the most popular MySQL administration tools, especially for web hosting services.

3.3.2) Technology used

We used Full stack technology in web development. It refers to the development of both front end(client side) and back end(server side) portions of web application. Through full stack web technology we have the ability to design complete web application and websites. They work on the frontend, backend, database and debugging of web application or websites.

Front end language we used:

It is the visible part of website or web application which is responsible for user experience. The user directly interacts with the front end portion of the web application.

- **HTML:** HTML stands for Hyper Text Markup Language. It is used to design the front end portion of web pages using markup language. HTML is the combination of Hypertext and Markup language. Hypertext defines the link between the web pages. The markup language is used to define the text documentation within tag which defines the structure of web pages. We have used HTML to structure the whole web site

- **CSS:** Cascading Style Sheets, fondly referred to as CSS, is a simply designed language intended to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page. We have used CSS in order to apply the styling to our website.

- **JavaScript**: JavaScript is a famous scripting language used to create the magic on the sites to make the site interactive for the user. It is used to enhancing the functionality of a website to running cool games and web-based software. We have used JS in order to add dynamic events to the site , for example: on click events applied to all the button in the system.

Front End Frameworks that we used :

- **Bootstrap**: Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular HTML, CSS, and JavaScript framework for developing responsive, mobile-first web sites. We have used bootstrap in order to make our website responsive. A website is called responsive website which can automatically adjust itself to look good on all devices, from smart phones to desktops etc.

Back-end language that we used:

It refers to the server-side development of web application or website with a primary focus on how the website works. It is responsible for managing the database through queries and APIs by client-side commands.

- **PHP:** PHP is a server-side scripting language designed specifically for web development. Since, PHP code executed on server side so it is called server side scripting language.

Database that we used:

Database is the collection of inter-related data which helps in efficient retrieval, insertion and deletion of data from database and organizes the data in the form of tables, views, schemas, reports etc.

- **SQL:** Structured Query Language is a standard Database language which is used to create, maintain and retrieve the relational database. Thus we used SQL in order to fetch and retrieve the data.

3.4) Problem Formulation

Since , the prior system Such systems provides facility of viewing both personal and academic information of students and companies, which is usually inserted and deleted by database administrator.

We had to formulate an approach in which we will eliminate the use of statistic data and use dynamic data to fetch from database. We have formulated methods to achieved the problem statement by developing a web application for the placement cell.

The Internship and Placement Management System provides two distinct modules for students and placement officers. It enables students to register online and upload their academic and personal details. They will have their portals to update information as necessary and can view recent and upcoming job postings on their dashboard. Whereas, the Placement Officers are able to utilize it to manage the student data as well as the hiring company's data concerning the available jobs. The benefits of the system is to provide enhanced facilities and assemble all the placement-related tasks carried out on various platforms to a single application. This will give both the placement officer and students an accurate communication channel and reduces repetitious work that has to be carried out.

The system gets automated in the online registration all the user, activation of the user and deactivation of the user, personalization to the user, resources to be provided online, communication between the users, and gives online feedback. Thus , the whole process is supposed to be automated , i.e. saving the data to the database , and then fetching the data appropriately from the database.

Chapter 04 :
Results and Discussions

Results and Discussions

4.1) Results

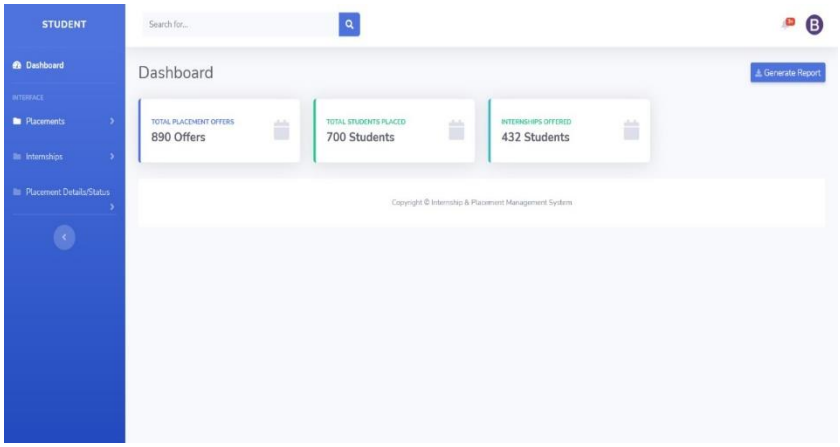

Figure 06 : Student Dynamic data dashboard

The student dashboard contains all the dynamically fetched data from the database from appropriate schema.

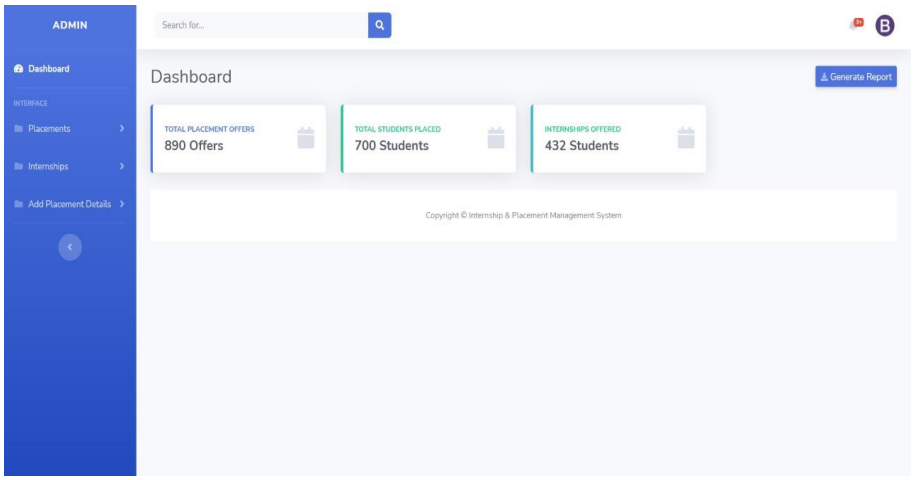

Figure 07 : Admin Dynamic data dashboard

The admin dashboard contains all the dynamically fetched data from the database from appropriate schema.

Figure 08 : Add Internship Opportunity

This is a feature introduced in order to add the internship opportunity by the admin in order to inform students about the upcoming and current opening of internships in company along with its details like duration, eligibility criterias , start date etc.

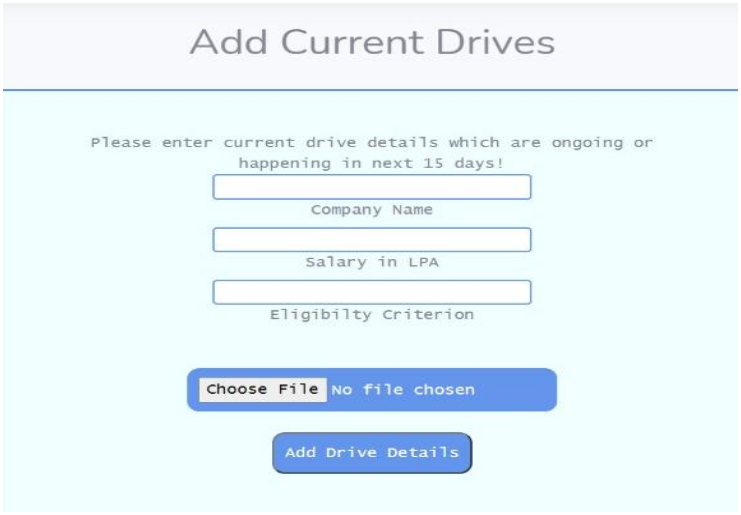

Figure 09 : Add Current Drives

This is a feature introduced in order to add the company that is about to visit the campus by the admin in order to inform students about the current drives happening along with its details like company name , salary (in LPA) , Eligibility criterias.

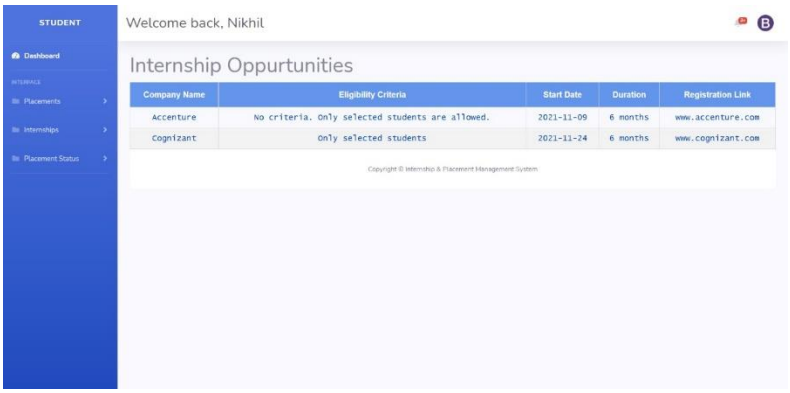

Figure 10 : Displaying Internship opportunity

In this feature the internship opportunity that is added by the admin will be displayed to the student as well as the admin dashboard.

Figure 11: All placement tab

In this feature there will be a list of students who got placed in different companies so far along with their email id, their company name and the salary (in LPA) they are offered.

This feature is visible to student as well as admin.

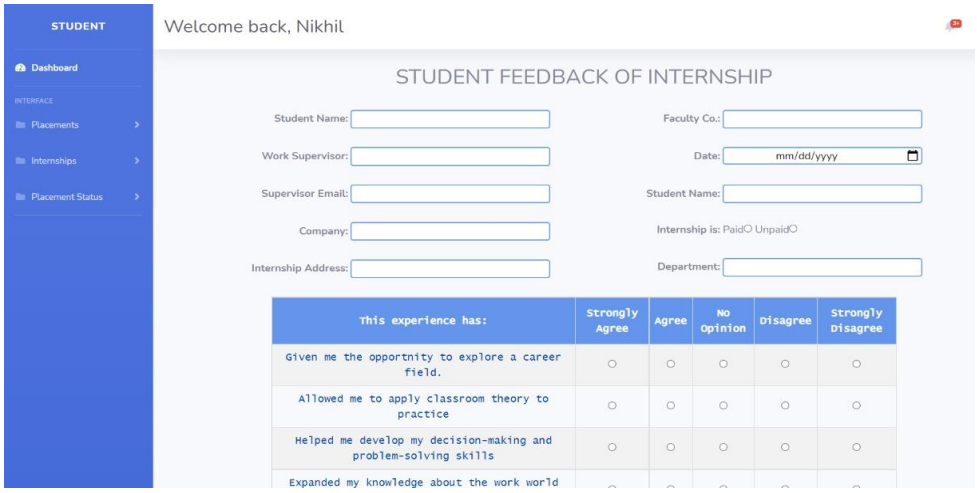

Figure 12 : Student Feedback Form

Student feedback form is the feedback form circulated to the students to collect the feedbacks from students about the internship program in order to improve the program for future.

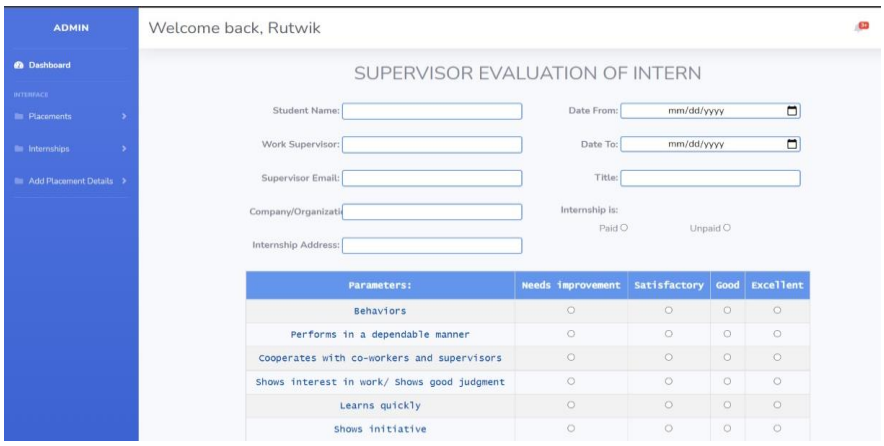

Figure 13 : Supervisor Evaluation

This is a feature introduced supervisor of internship to evaluate the performance of student based on given factors.

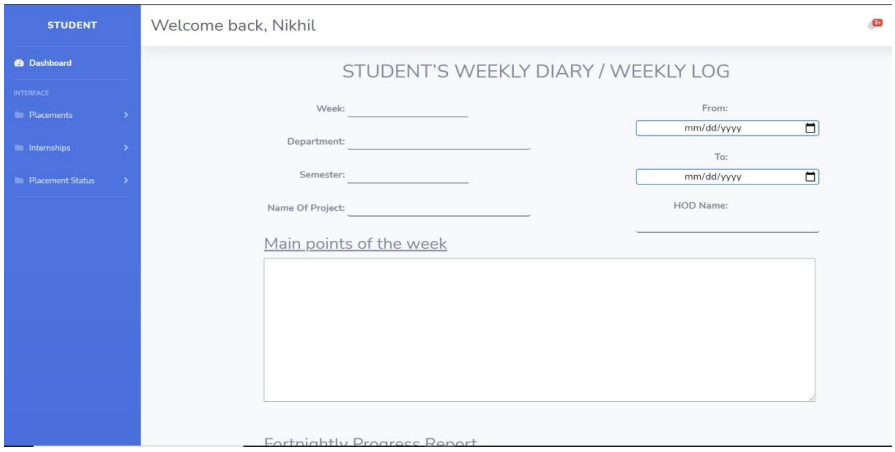

Figure 14 : Student Weekly Log

This a feature introduced in order to let the student write about their weekly progress and their learnings during internships in their weekly log.

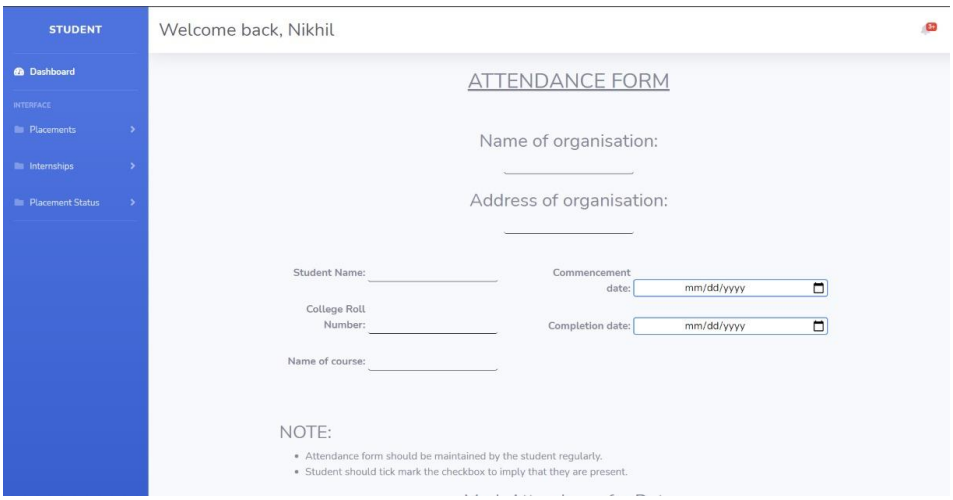

Figure 15 : Attendance Form

When the student is going to their internship location , it becomes quite difficult for the institution to maintain the attendance of each student correctly , there are chances of having error.

Thus attendance form is circulated to each student on daily basis and is used in order to record the attendance of student during their internship days.

4.2) Discussion

Since , the current system was not automated as discussed above , therefore we have designed a system which is completely automated and computerized.
Moreover , the current limitations have been dissolved by the new one and the whole process is optimized. The result of analysis carried out for this system is based upon different use cases based on different scenarios , and it was inferred that the proposed solution passes based on different aspects like maintainability, accessibility and user friendliness.
The prior system majorly used static data which is not an efficient way to deal with large amount of data , therefore this system made use of dynamic data to retrieve meaningful information out of it which posses a great scope for future additions and enhancement.

The system can successfully login authorized person to system and register them.
In our system admin can check the student list those eligible according to criteria given by the Company.
This gave both the placement officer and students an accurate communication channel and reduces repetitious work that has to be carried out. Another features used in this system like feedback forms and evaluation forms are some of the features that were never introduced in prior system but this system made use of these feature efficiently.

The benefits of the system provided enhanced facilities and assemble all the placement related tasks carried out on various platforms to a single application.

This system output a collaborative data for each and every student in training and placement section. The students are able to observe their attendance, improvements, feedbacks based on data collected.

It will be easy for the training and placement department to analyze, access and assess the data as to number of students who got placed and number of students that remained unplaced during end of the year.

Thus it reduces a lot of extra work and saves lot of time and money.

Chapter 05:
Future Scope

Future Scope

Until now , the system is restricted to manual attendance filling but there is huge scope of Implementing a GPS Attendance management will help the organization/college to know whether the student is going to his/her workplace while attending the semester long internship.

The backup procedure can be comprised to make sure of the database integrity.

We can give more advanced software for placement management system including more facilities.

A messaging feature can be introduced in application between the student and TNP officer in order to convey any queries that student has. Additionally, email alerts can be provided to students in case if any new activity takes place which ensures that no important announcement is missed.

Chapter 06 :

Appendix

Appendix

Abbreviation	Full Forms
IPMS	Internship and placement management system
TPO	Training and placement officer
TNP	Training and placement
Dept.	Department
DFD	Data Flow Diagram
ER	Entity Relationship
PHP	Hypertext Preprocessor
HTML	Hypertext Markup Language
CSS	Cascading Style Sheets
JS	JavaScript
SQL	Structured Query Language

Table 04 : Abbreviation Table

Chapter 07 :
References

References

[1].D. Mosedale, W. Foss and R. McCool, "Lessons learned: administering Netscape's Internet site", IEEE Internet Computing, vol. 1, no. 2, pp. 28-35, 1997.

[2].A. Iyengar, E. MacNair and T. Nguyen, "An analysis of web server performance", Proceedings of the IEEE 1997 Global Telecommunications Conference, 1997-November.

[3].R. McGrath, T. Kwan and D. Reed, "NCSA's World Wide Web server: design and performance", IEEE Computer, November 1995.

[4].Aliza Bt Sarlan, Wan Fatimah Bt Wan Ahmad and Dismas Bismo, "Student Industrial Internship Web Portal", IEEE Conference Publications, vol. 1, pp. 1-10, August 2008.

[5]. J. C. Ferraz, H. Rush and M. Ian, Development Technology and Flexibility: Brazil face s the industrial divide,IEEE London:Routledge, 1992.

[6].M. Arlitt and C. Williamson, "Web server workload characterization: The search IEEE Conf 2000 for invariants",IEEE Proceeding of the 1996 ACM SIGMETRICS Conference, 1996-April.

[7].M. Arlitt and T. Jin, Workload Characterization of the 1998 World Cup Web site, February 1999.

[8].C. Yoshikawa, B. Chun, P. Eastham, A. Vahdat, T. Anderson and D. Culler," Using smart clients Proceedings of the 1997 USENIX IEEE Annual Technical Conference, 1997-January-6-10.

[9].R. McGrath, T. Kwan and D. Reed, "NCSA's World Wide Web server: design and performance", IEEE Computer, November 1995.

[10].M. Garland, S. Grassia, R. Monroe and S. Puri, Implementing distributed server groups for the World Wide Web, January 1995.

[11].C. S. Yang and M. Y. Luo,IEEE "Efficient support for content-based routing in web server clusters", Proceedings of the 2nd USENIX Symposium on Internet Technologies and Systems, 1999-October-11

[12]. Mr. R. J. Laird, Dr. C. R. Turner Mima," Interactive Web based Placement Management – Principles and Practice using OPUS"IEEE CGU-WACE, 2008

[13]. Tynjälä, P., Perspective into learning at the workplace, Educational Research Review IEEE, 3, 2008, pp.130-154.

[14].F Pedregosa, G. Varoquax, A. Gramfort, V. Michel, B. Thrion, O. Grisel, et al., "Scikitlearn: Machine Learning in Python", Journal of Machine Learning Research,IEEEvol. 12, pp. 2825-2830, 2011

[15]. Martin Fowler with Kendall Scott. UML Distilled - A brief guide to the standard object modeling language. IEEE Addison Wesley Longman, July 2001.

[16]. K. M. Passino, "Bridging the gap between conventional and intelligent control", IEEE Control Systems Magazine, pp. 12-18, 1993.

[17]. K. J. Astrom and J. M. Thomas, "Intelligent control: an overview and evaluation" in IEEE Handbook of Intelligent Control: Neural Fuzzy and Adaptive Approaches, NewYork:Van Nostrand Reinhold, 199.

[18]. B. Armstrong, O. Khatib and J. Burdick, "The explicit dynamic model and inertial parameters of the PUMA 560 arm", Proc. 1986 IEEE Int. Conf. Robotics and Automation, pp. 510-518.

[19]. B. Chen, R. Fearing, B. Armstrong and J. Burdick, "NYMPH: A multiprocessor for manipulation applications", Proc. 1986 IEEE Int. Conf.Automation, pp. 1731-1736.

[20]. J.J. Craig, P. Hsu and S. S. Sastry, "Adaptive control of mechanical manipulators", Proc. 1986 IEEE Int. Conf. Automation, pp. 190-195.

[21]. B. Espiau and R. Boulic, "Collision with proximity sensors", 3rd Int. Symp. Robotics Research, pp. 94-102, 1985.

[22]. Rafizah Mohd Hanifa, Shamsul Mohamad, Ida Aryanie Bahrudin and Muhammad Firdaus Kamarudin, "Development of pusat pengajian diploma industrial IEEE training Trans Tech Publications, vol. 321–324, pp. 2528-2531, July 2013.

[23]. Hasmin Isahak. Hirman Sidi, Muhammad Fakharul Hilmie Bakar and Sani Songli, IEEE Web-based industrial training management system, Universiti Malaysia Sarawak, March 2003.

[24]. I Ele Sylvester, Akinola Olatunji Alani, Egete DO and B.I Ele, Computerization of students' industrial work experience scheme (SIWES) registration and payment system in Nigeria, Scholars Academic and Scientific Publisher, pp. 104-116, 2017.

[25]. Jason A Miller, The implementation of web-based project management system by the general contractor: transferring from hard-copy to digital format, Purdue University, IEEE April 2011.

[27].A. Fox, S. Gribble, Y. Chawathe and E. A. Brewer, "Cluster-based scalable network services IEEE ", Proceedings of SOSP '97, 1997-October.

[28].C. S. Yang and M. Y. Luo, "Design and implementation of a environment for building scalable and highly available web server IEEE ", Proceedings of 1998 International Symposium on Internet Technology, 1998.

[29].M. E. Crovella, R. Frangioso and M. Harchol-Balter, Connection scheduling in Web servers, April 1999.

[30].V. Almeida, A. Bestavros, M. Crovella and A. Oliveira,IEEE "Characterizing reference locality in the WWW&quot.