

An Intelligent Unique Student Identity and Student Profile System(USISPS)

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Abstract

In the age of digitization, educational institutions need to have strong systems in place to manage student data effectively and securely. This criteria is satisfied by the Unique Student Identity and Student Profile System (USISPS), which provides a thorough framework for creating, maintaining, and managing student profiles. Each student is assigned a unique identification, ensuring a consistent record throughout their academic journey. The system reduces the likelihood of errors and duplication by ensuring the uniqueness and ease of retrieval of each student's records through the use of unique IDs. The project's objectives include building a thorough database to hold comprehensive student profiles, a user-friendly interface to facilitate rapid data entry and retrieval, and strong security measures to protect private data. Educational institutions, online and distance learning platforms, student information portals, education research and analysis, vocational programs, and training programs are among the areas in which the application operates. Research indicates that more than 60 million Indians with a range of educational backgrounds graduate annually. In order to improve their employment chances, a similar number of students enroll in colleges to pursue various educational degrees. A student portal is offered by many organizations or colleges, and it mainly contains data on attendance, costs, resources unique to the college, academic information, and placement possibilities. Information on the student's prior coursework, certificates, extracurricular and co-curricular activities, parent personal information, and download choices for certifications and student personal information are all missing from the site and Automatic resume recommendation System for HR's which student best fit for job.

Keywords: Unique Student ID, Student Profile, Data Management, Student Information System, Database Connectivity,, Administrative Efficiency, Automation, Data Integrity, User Interface, User Experience),Random Forest,Linear Support Vector Machine,NB classifier,Logistic Regression

1. Introduction

Amidst the sweeping wave of digitization that is altering businesses around the world, the education industry is at a crossroads, where effective and secure student data management is no longer a luxury, but a need. The increasing complexity of academic ecosystems necessitates a unified and creative system that ensures data accuracy, effortless accessibility, and steadfast security. To clear up this trouble, the Unique Student Identity and Student Profile System (USISPS) emerges as a innovative answer with the intention of revolutionizing how academic establishments around the arena build, preserve, and administer scholar

profiles. USISPS improves statistics first-rate and administrative efficiency at the same time as additionally laying the basis for a globally linked academic network by using combining current technology and a forward-questioning framework.

At the heart of this device is the challenge of a unique student ID to every learner, making sure a constant and without problems available file all through their academic career. This wonderful identification removes errors and redundancies, and streamlines data retrieval processes, appreciably enhancing administrative performance.

With everything being digitized, it is imperative for the educational institutes to have robust systems in place for the effective and secure maintenance of student data. This requirement is met by the Unique Student Identity and Student Profile System (USISPS) which allows the creation, updating and maintenance of student profiles in a well defined process. A record of all students in the institution for the entire time of their education is made consistent by allocating each student a unique identifier. The chance for mistakes and duplication's decreases dramatically since student records can be easily retrieved thanks to a unique identification number that guarantees the records' uniqueness. The aims of the project include development of a data center which is capable of holding records containing student profiles, easy entry and access to information using an appropriate interface, and privacy control of sensitive information[3], [4]. According to USISPS applications can be utilized in educational establishments, institutions of online and or distance education, student information systems, vocational and training courses. It assists in building and managing comprehensive student profiles that further help such functions as monitoring academic progress, resources allocation and managing certifications. The system is significant for educational research and analysis activities and enhances the administrative processes. As an example, the system can be used by online education organizations to control the number of classes attended by students, their academic achievements and their successful placement after training. It can also be further used in conjunction with other modules such as career guidance and other performance metrics which adds to its applicability[5], [6].

The system is highly beneficial to users as it improves workflow management efficiency, allows for fewer mistakes to be made, and facilitates the searching of data. More specifically, USISPS uses single student IDs from Individual Schools to remove Duplication and discrepancy in student records. The interface is also designed such that entering and retrieving data is easy thus lowering the workload of the administrative staff. Detailed information on students is under sufficient protection from unauthorized access and complies with data privacy. The combination of automation and data integrity features further improves system reliability. These features enhance the overall experience of users thus allowing institutions to concentrate on high standards of academic work. Also, the centralized system database allows for scalability in terms of the total number of students looking forward to enrolling in the educational programs[7], [8].

Systems in the current state of affairs are quite often designed without considering a common structure of students' data management comprehensively. Usually these are primitive, dealing with registers of attendance, fees paid and possible placements, while usable student profiles remain untapped. Missing are vital data such as a student's past courses taken, awards earned, skills pursued and,

pertinent to all, biographical data. It is more alarming that some systems do not have any data protection measures warranting severe violations of data. Poorly designed user interfaces and manual operations can contribute to mistakes, repeat calculations, and slowness in administration. They compromise the general speed and quality of data management processes and therefore affect students, administrators and the organization[9], [10].

USISPS solves these problems by having a database that captures all student's academic and personal details. It ensures data integrity through unique IDs to eliminate errors and duplication. User friendly interface for fast data entry and retrieval to boost administrative workflow. Strong security to protect private data to prevent breaches and unauthorized access. Automation to reduce manual work and errors. Scalable to accommodate increasing number of students for different educational setup. USISPS addresses existing system limitations and sets a new benchmark for data management in education[11], [12].

The system is designed with a couple of objectives: constructing a centralized and thorough database for comprehensive pupil profiles, imposing an intuitive and person-pleasant interface for seamless information entry and retrieval, and employing superior security measures to protect sensitive statistics. By addressing those goals, the USISPS caters to various packages throughout academic establishments, distance getting to know structures, vocational packages, and studies-oriented domains.

India, with over 60 million students graduating annually across numerous academic disciplines, exemplifies the need for one of these system. The call for for robust solutions is in addition underscored via the rising enrollment in better schooling applications aimed toward enhancing employment opportunities. While present student portals supplied by using institutions generally offer information on attendance, academic performance, and site opportunities, they regularly lack comprehensive functions. Missing elements consist of information of previous academic achievements, certifications, extracurricular sports, and parental information, along functionalities for securely having access to or downloading crucial documents.

By addressing those gaps, the USISPS goals to transform the management and accessibility of student information, allowing instructional establishments to gain better levels of records integrity, privates safety, and administrative automation.

ML, an interdisciplinary field, offers a range of supervised and unsupervised techniques for prediction, feature selection, and classification tasks, making it invaluable in fields like education, healthcare, business, agriculture, and bio-sciences [13]. ML and deep learning models are capable of handling complex datasets, making them suitable for a variety of tasks in automatic resume generation, such as selecting different text according to job role. SVM, it is a classic algorithm that works well for text classification tasks like job classification. And used in term frequency inverse document frequency. It finds the optimal hyperplane to separate different job categories based on features extracted from resume text, such as TF-IDF vectors. Ensemble learning, which integrates insights from multiple models to improve prediction accuracy, includes three main approaches: bagging, boosting, and stacking. Random Forests are an ensemble learning technique that combines multiple decision trees. They can capture complex relationships in the resume data and are robust against over-fitting. To identify imbalance text classification. Random Forests

are suitable for job classification tasks where interoperability is important. LSTM(Long Short Term Memory) and RNN(Recurrence Neural Network)-Name entity recognition.NLR,rule based model-Recognize different style of writing formats,CNN-segmentation model,PCA- extracted the feature,to produce the lower-dimensional feature set ,KNN- Classify paragraph or sentence in the resume,XGBOOST- decide the label taken the appropriate threshold is calculated.For security purpose of application RSA algorithm is used ,AES algorithm is used in verification and validation of certificates.

The aim of this paper is to suggest and element the Unique Student Identity and Student Profile System (USISPS), a complete answer for modernizing scholar data manage in educational environments. This machine seeks to address the essential demanding conditions of facts accuracy, accessibility, and protection with the aid of introducing a framework that assigns a completely precise identification to every scholar, making sure a regular and dependable educational record at some point of their educational journey..With strong database control integration User-friendly consumer interface and advanced security protocols, USISPS aims to improve administrative efficiency. Remove statistical redundancy and assist with holistic tracking of student records that include academic achievement, extracurricular and personal statistics - - - This initiative aims to fill the gaps in the current student portal. and help various institutions Eco-friendly, scalable, and stable techniques are being adopted across the world to manage student data. The structure of this paper is as follows: Section 2 covers materials and methods; Section 3 presents the results; and Section 4 discusses findings in detail.

2. Background

In the digital age, managing student data efficiently and securely is a critical challenge for educational institutions. The Unique Student Identity and Student Profile System (USISPS) addresses this need by providing a framework to create, maintain, and retrieve student profiles using distinct identifiers. This system reduces errors, eliminates duplication, and ensures seamless data handling across an individual's educational journey,Enabling the students to preparing well formatted resume according to the job role,downloading the certificates anytime supporting institutions in managing sensitive information responsibly[1], [2].

A unique student identity system is created to keep a detailed and personalized record for each student, ensuring that their academic, behavioral, and extracurricular information is stored in one central profile. This system usually contains important details such as personal information, grades, attendance records, disciplinary actions, and accomplishments. By assigning a unique identifier to each student, schools or educational institutions can enhance communication, monitor progress, and offer personalized support. This unique identification also aids in efficiently managing large student populations, minimizing errors in record-keeping, and ensuring that students' academic paths are accurately tracked over time. The student profile system extends beyond merely recording academic information. It can also encompass personal interests, learning preferences, career goals, and behavioral insights. This comprehensive perspective enables educators to take a more individualized approach to teaching, helping to spot potential challenges early and providing tailored interventions. Furthermore, such systems can promote collaboration among teachers, parents, and counselors, creating a more nurturing environment for student development and offer students customized pathways to success.

3. Literature review:

Elva and Besnik's,[13] BCert application leverages the Ethereum blockchain and Solidity smart contracts to create a secure, decentralized framework for verifying and issuing academic certificates. By integrating AES encryption and IPFS for secure data storage, the system ensures transparency, immutability, and fraud prevention. Key features include modules for certificate verification, university management, and accreditor validation, enhancing efficiency and reducing reliance on intermediaries. Testing revealed BCert's scalability, security, and resource efficiency, supporting large-scale certificate processing. Future enhancements include QR codes for easier access and improved user experience, highlighting blockchain's transformative potential in global academic credential management.

Gunaseelan et al.[14], developed a machine learning-based system to automatically extract key sections from resumes, such as skillsets, education, and work experience, aiming to streamline candidate evaluation for specific job roles. They processed a dataset of 333 resumes, employing feature engineering techniques like part-of-speech tagging and word similarity, and trained supervised models using manual data labeling. A multi-level classification approach, with XGBoost outperforming other classifiers, was used for heading prediction and segment categorization, achieving high precision, recall, and F1-scores. The system demonstrated its effectiveness by extracting skillset information from 85% of test resumes and converting unstructured data into a structured format. Future improvements include support for more file formats and enhanced segmentation accuracy across all resume sections. Daniel et al.[15], developed the LEDA framework to address privacy and security concerns in EdTech by prioritizing a "local-first" approach over cloud-based solutions. The framework emphasizes data control, privacy, and reduced vulnerability through local technologies like Bluetooth and QR code-based interactions while incorporating ethical, legal, and technical considerations. While local-first solutions enhance privacy and trust, challenges such as complexity and usability were noted, highlighting the need for hybrid methods in some cases. The authors concluded that the LEDA framework offers a viable solution for managing educational data securely, balancing privacy with the advantages of cloud computing.

Raluca et al. [16], developed CryptDB, a system for executing SQL queries on encrypted data while preserving user privacy, even in the event of server compromises. CryptDB uses innovative encryption techniques, including a dynamic "onion encryption" model, deterministic and homomorphic encryption, and a database proxy to balance security and efficiency. Testing showed it handles 99.5% of typical SQL operations with minimal performance impact (14.5%–26%). The system protects sensitive data from unauthorized access, even by database administrators, but has limitations for complex computations. The study demonstrates CryptDB's feasibility for privacy-preserving database management and recommends further enhancements for more intricate queries. Diana[17] investigated enhancing European eID infrastructures like eIDAS to support academic services, focusing on cross-border identification and data exchange. They introduced a connector module and modified eIDAS nodes to manage academic attributes, enabling services like Erasmus registration and university WiFi access. Using an iterative development approach, they ensured compatibility with previous frameworks like STORK while addressing sector-specific needs. Despite challenges such as national system compatibility and user consent, the modifications improved attribute retrieval and interoperability. The study concluded that these enhancements facilitate efficient cross-border digital identity management, with recommendations for standardizing methods and expanding attribute capabilities.

4. Materials and methods

A. Database Design :

Database design is crucial in controlling data duplication and ensuring a comprehensive data model for a database. This model includes conceptual, logical, and physical storage parameters necessary to create a database using Data Definition Language (DDL). A fully attributed data model encompasses all attributes for

each entity. The process of database design involves multiple stages executed by database designers, as outlined below:

Conceptual Design

The objective of the conceptual design stage is to construct a Conceptual model based upon the previously recognized requirements, but nearer to the final physical model. Conceptual diagrams:

A conceptual diagram is a great visual to help illustrate and reinforce the core ideas behind a design. These diagrams are not elaborate technical drawings, instead they abstractly represent the general idea, spatial linkages, circulation patterns, or functional zoning of a design. It is because of this that they can bring huge value to the understanding of a design proposal

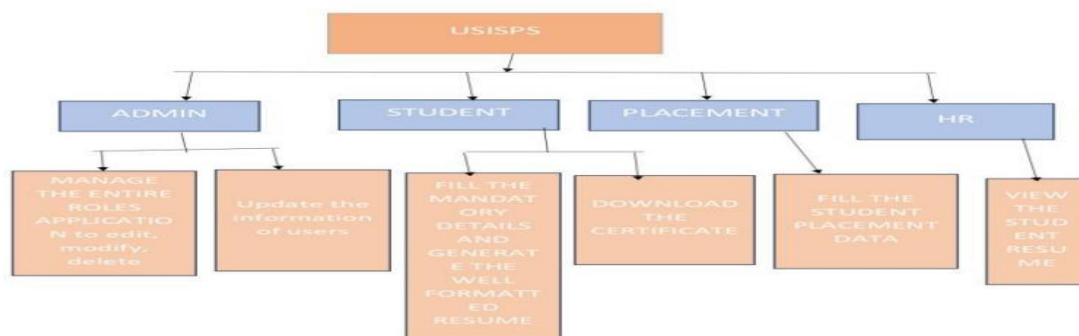
using clear, easy to understand visuals. A commonly used conceptual model is known as an Entity Relationship (ER) model. Entity-Relationship Diagram (ERD) is a popular high-level conceptual data model. It is a complete, logical illustration of data or an organization for a business area. The E-R model is very crucial for mapping denotations and interactions of real-world enterprises onto a conceptual Schema. The ERD Fig.1 shown below gives the entities in USISPS, the relationship between the entities and attributes of both entities and their relationships. The ERD describes all data that are input, stored, transformed, and produced by the system. It also emphasizes solely on data objects, their attributes, and the relationships that connect different data objects.

B. Architecture Design

The phase of the design of computer architecture and software architecture is denoted as a high-level design. The model in selecting the architecture should understand all typical lists of modules, brief functionalities of each module, their interface relations, dependencies, database table, architecture diagram, and technology details, etc. The main goal of architecture design is to communicate ideas, concepts, and technical specifics pertaining to architectural projects in a clear, succinct, and efficient manner. Client presentations, project proposals, technical documentation, design reports, and research papers are just a few of the uses for it. Aiming to communicate intricate architectural concepts to both technical and non-technical audiences, the writing style is usually formal, exact, and precise. Writing in architecture design focuses on clear, concise, and effective communication of ideas, concepts, and technical details related to architectural projects. The assimilation testing design [12] is carried out in a particular phase. After the necessities of the system are determined, the essential specifications for the hardware, software, data resources, and the information products that will satisfy the functional requirement of the proposed system can be determined.

This architecture ensures a secure, scalable, and high-performance **Unique Student and Student Profile System**. It supports modern authentication methods, role-based access, and seamless integration's, making it a robust choice for educational institutions. Furthermore, it enhances operational efficiency by

streamlining data management and automating administrative tasks. With its modular design, institutions can easily extend functionalities to adapt to evolving educational needs. The system's focus on security and compliance ensures that student data remains protected while providing a seamless user experience for students, faculty, and administrators alike.



The combination of PHP and XAMPP still offers an innovative and beautiful web development process thanks to its simplicity, flexibility, and efficiency. Also we php is is a server-side scripting language commonly used for data-rich web sites and web applications. It has excellent database support, such as for MySQL, which makes it a stellar choice for backend development.

It can be accompanied by XAMPP, which is an open source web server offering users PHP, Apache and MySQL for establishing an environment that allows developers to develop their applications without any dedicated server. These features make a great developer experience for both, beginners and professionals

What really attracts developers to PHP is its easy integration with frameworks, CMSs (like WordPress), and third-party APIs that dynamically creates web solutions in a scalable manner. PHP has evolved to stay relevant, with built-in security functions, support for object-oriented programming (OOP), and an active developer community. Furthermore, having an environment that is easy to configure means less reliance on setting up various components or compatibility issues, providing much more opportunities to focus on productivity. In combination, PHP and XAMPP give developers the tools and capabilities they need to create powerful web applications.

Together, PHP and XAMPP empower developers to create innovative, user-friendly, and high-performing web applications efficiently

HTML, CSS & JavaScript are the fundamentals of contemporary web development and therefore these are the most innovative and attractive technologies to build interactive and graphical web applications. HTML stands for Hyper Text Markup Language, and it is used to create the backbone of a webpage, helping developers structure content in an organized manner. Trained on data until October 2023 CSS (Cascading Style Sheets) adds visual flair, allowing for complex styling, layouts, and animations that

make for a seamless, engaging user experience. As a powerful programming language, JavaScript gives interactivity and dynamic behavior to the website.

A powerful programming language, JavaScript introduces interactivity and dynamic functionality, creating responsive and engaging web pages. With these elements working in harmony, this digital experience supports the evolving needs of modern users.

This triad is innovative because they are always growing and willing to try new things. The web has come a long way with technologies, such as HTML5, CSS3, JavaScript frameworks, including React, Vue, and Angular, for creating interactive, rich applications

CSS animations, flex box, and grid have changed the game of web design, and JavaScript handling the real-time interactions of APIs and web applications is even more crucial. Despite its age, HTML, CSS, and JavaScript are still at the core of modern websites, thanks to a large number of people and impressive technical updates, allowing developers to make websites that look amazing but also work really well.

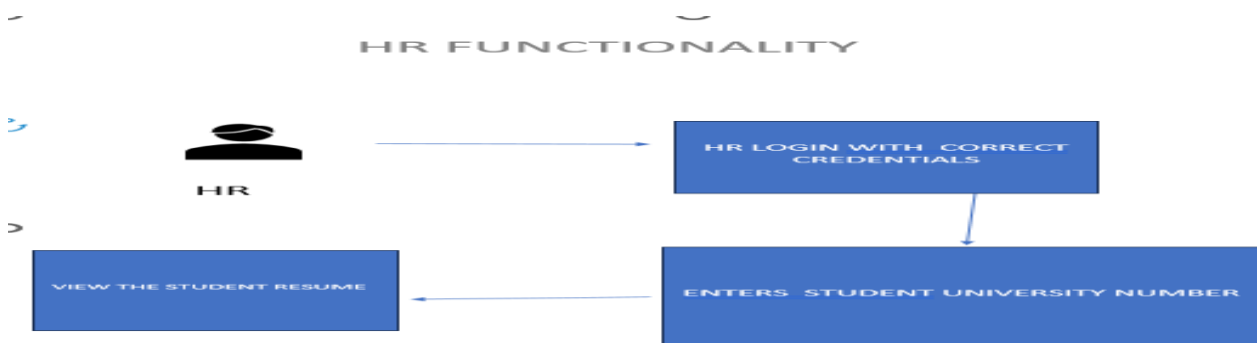
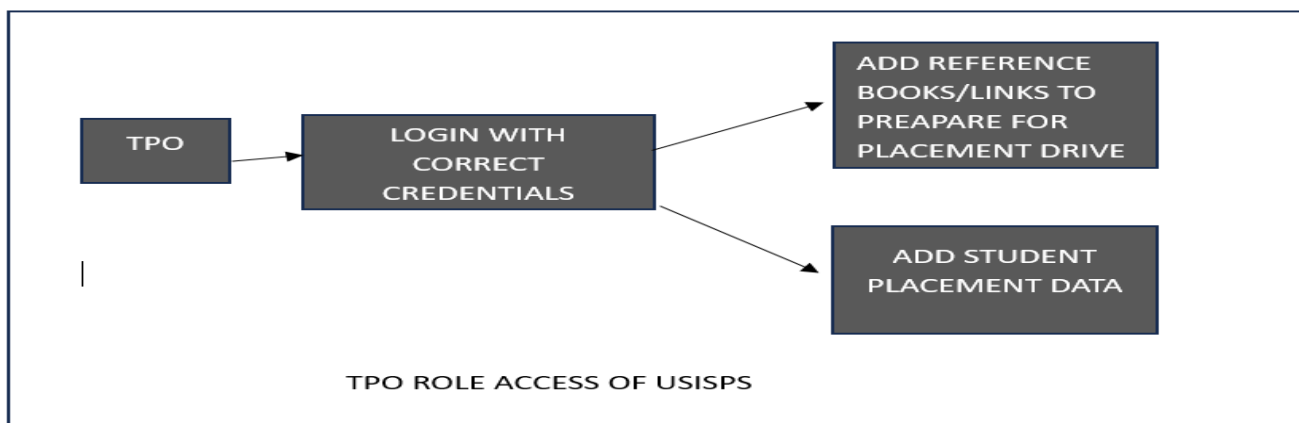


FIG1:HR LOGIN

HR login into portal with the correct credentials and enter the student university number view the student well formatted resume and view the certification through links for direct viewing.



TPO Admin login to the USISPS portal with correct credentials and allow to add reference books/links to prepare for placement drive and add student placement data.

Flowcharts:

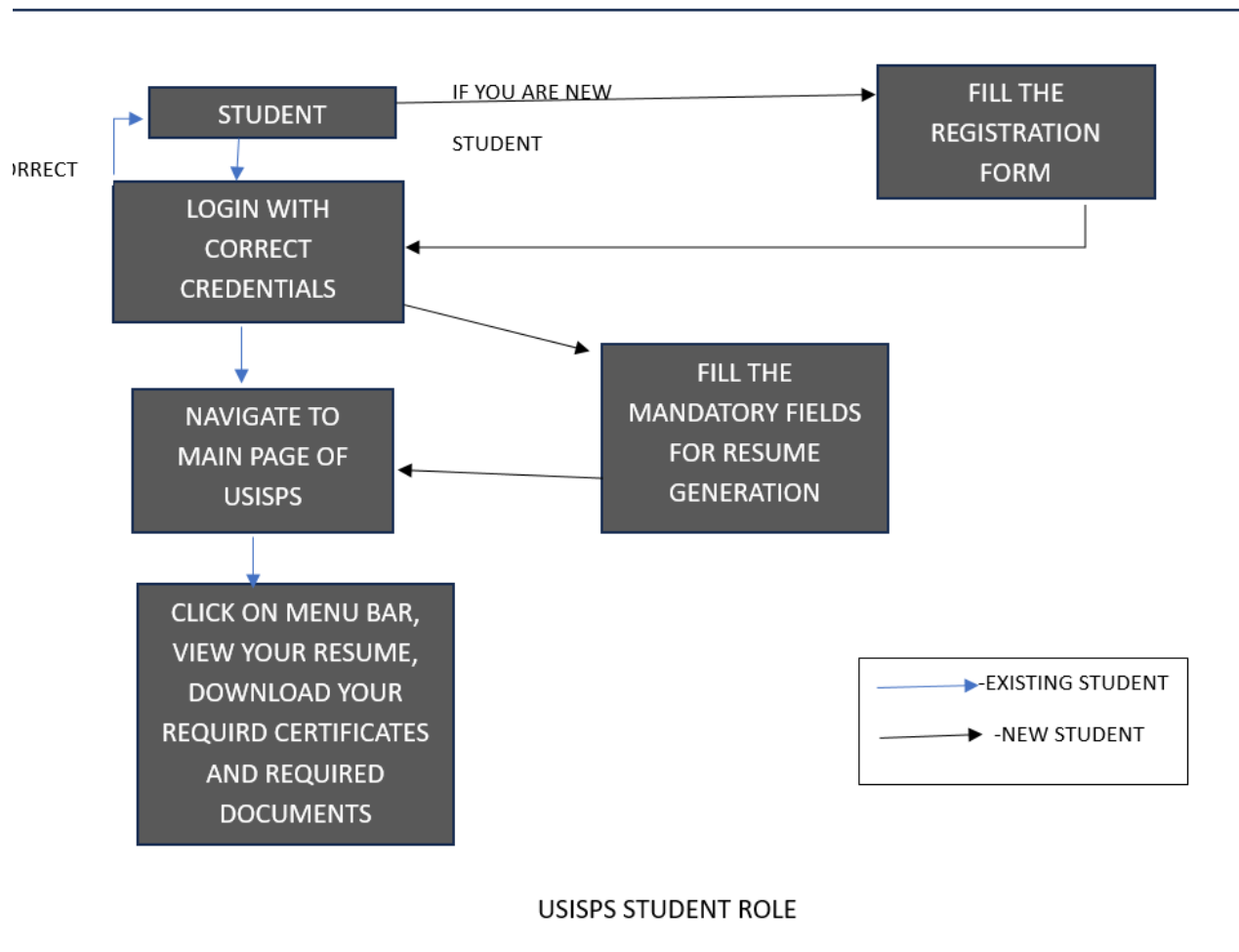


FIG2: ENTIRE PROJECT FLOWCHART

Almost all the colleges contains most contains student portal, The flowchart outlines the operational framework of the Unique Student Identity and Student Profile System (USISPS), detailing the steps involved in user authentication, data entry, profile management, and data retrieval. It begins with a login process, where students enter their credentials to access the system. If the credentials are incorrect, the user is prompted to reset the password. Once authenticated, students proceed to the dashboard, which acts as the central hub for all profile-related activities.

Student login to the portal login as student with his credentials,if he old user he will navigate to the main page of USISPS page update,add or modify his details.If he was the new user,he need complete the registration process,and fill the mandatory details and again login student portal then he download required documents and well-formatted resume.



FIG 3: STUDENT ACCESS PORTAL

For students who are already registered, the system verifies their existing information, allowing them to update mandatory fields if required. New users must fill out basic, mandatory details before submitting the form to initiate their profile creation process. Once these details are entered, the user is directed to the main dashboard, where they receive a unique student identifier that serves as a consistent reference for all future interactions.

The dashboard is divided into multiple sections, including contact information, career goals, academic profile, technical skills, extracurricular activities, placements, and personal details. Each section allows students to provide and update specific details about their educational journey, achievements, and aspirations. The system incorporates verification steps for critical updates to maintain data accuracy and integrity. Additionally, the flowchart shows the option to perform data validation and corrections, ensuring profiles remain current and error-free.

The final stage involves tools for automated resume generation by using ML algorithm and data export .Enable the students to download the certification anywhere and anytime. These features enable students and institutions to generate customized reports based on the stored data, download them as needed, and utilize them for applications such as career progression, research, or institutional records. The system concludes with options to return to the validation page for further refinements or exit upon task completion, ensuring a smooth and comprehensive user experience.

Integrating the application with the core functionalities turn the student data into excel data train the model with personal information.SVM, it is a classic algorithm that works well for text classification tasks like job classification.And used in term frequency inverse document frequency.It finds the optimal hyperplane to separate different job categories based on features extracted from resume text, such as TF-IDF vectors.

Ensemble learning, which integrates insights from multiple models to improve prediction accuracy, includes three main approaches: bagging, boosting, and stacking. Random Forests are an ensemble learning technique that combines multiple decision trees. They can capture complex relationships in the resume data and are robust against over-fitting. To identify imbalance text classification. Random Forests are suitable for job classification tasks where interoperability is important. LSTM(Long Short Term Memory) and RNN(Recurrence Neural Network)-Name entity recognition.NLR,rule based model-Recognize different style of writing formats,CNN-segmentation model,PCA- extracted the feature,to produce the lower-dimensional feature set ,KNN- Classify paragraph or sentence in the resume,XGBOOST- decide the label taken the appropriate threshold is calculated.For security purpose of application RSA algorithm is used ,AES algorithm is used in verification and validation of certificates.

Automatic resume recommendation:

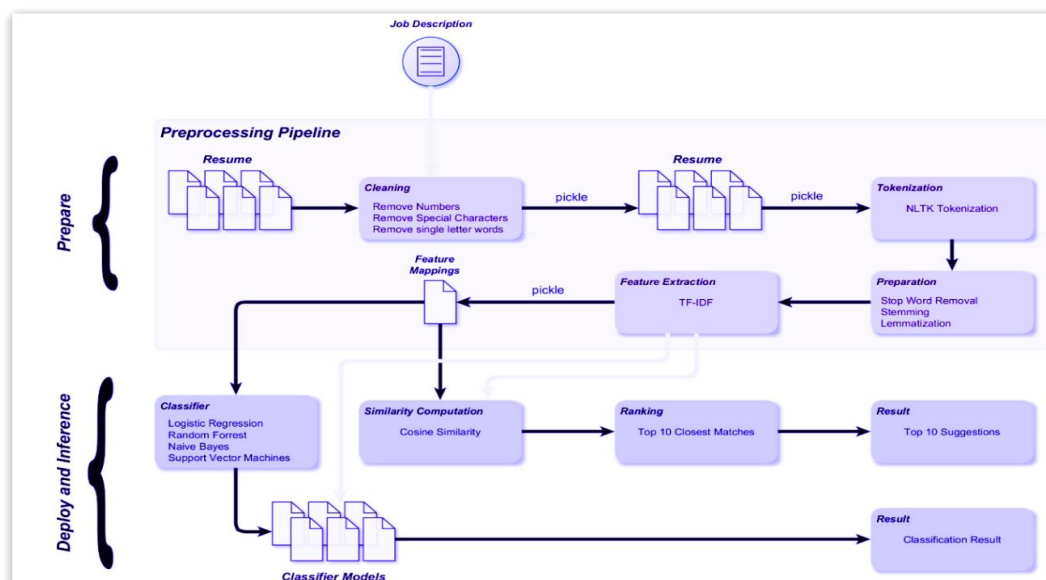


FIG 4-HR AUTOMATIC RESUME RECOMMENDED SYSTEM

At deployment and for inference, several machine learning models are used to categorize and pair resumes with job listings. Here's a quick rundown of the different trade-offs these three models have:

Random Forest (RF): A type of ensemble learning which trains multiple decision trees. It returns the most common prediction result among all trees, as such improve the accuracy of prediction and also reduce over-fitting.

NB classifier: A probabilistic model, based on Bayes' theorem with strong feature independence. It is particularly adept at dealing with high-dimensional data and is therefore well-suited for text classification work such as resume screening.

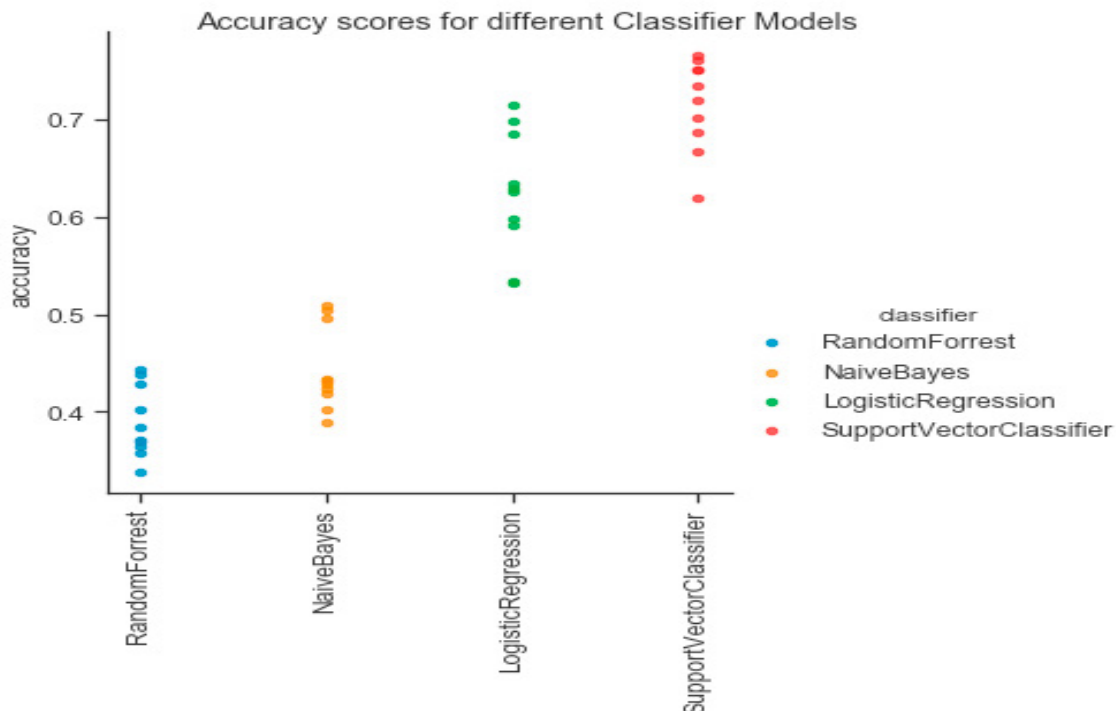


FIG 5. A complete framework of the proposed model

Logistic Regression (LR): A statistical model that uses a logistic function to model binary outcomes. Logistic Regression is very interpretation and can perform well when the relationship between features and output is close to linear.

Linear Support Vector Machine (Linear SVM)– A strong model with above average accuracy and is used as a smoothed support vector classifier. Linear SVMs, particularly suitable in the case of high dimensionality, achieve a clear separation between classes, improving the precision of the model.

TPO LOGIN:

The placement enters the placement data i.e, the student final placed company, final salary package, Total companies cracked by student, Total no. of company, reference links for the placement training.

5. Results

We have started our experiment with RF classifier, the extracted tf-idf features set is fed into the RF classifier to predict the resume category. The RF classifier yielded an accuracy of 38.99% on 10-fold cross-validation. The obtained results were not satisfactory and hence we used another popular classifier named “NB” for this task. NB classifier predicted the categories of resume with an accuracy of 44.39%, which was improved than the earlier classifier’s accuracy (RF). However, 44.39% accuracy of NB classifier indicated that more than 50% of the resume was misclassified. We have used another classifier “Linear SVM” on the same data and achieved 78.53% accuracy. In order to improve the model accuracy, LR classifier was used and obtained 62.40% of accuracy which was lower than that of accuracy of “Linear SVM” classifier. The accuracy of all the models was calculated using 10 fold cross-validation, the average accuracy obtained from the classifiers was presented in Table 1.

The accuracy score of Linear Support Vector Classifier (Figure 5) higher compared to other models have we found this model to reliable and best fit for our objective. Continue with our best model (LinearSVC), we are going to look at the confusion matrix as shown in Figure 6, and show the discrepancies between predicted and actual labels. This is for the classification scope of our problem.

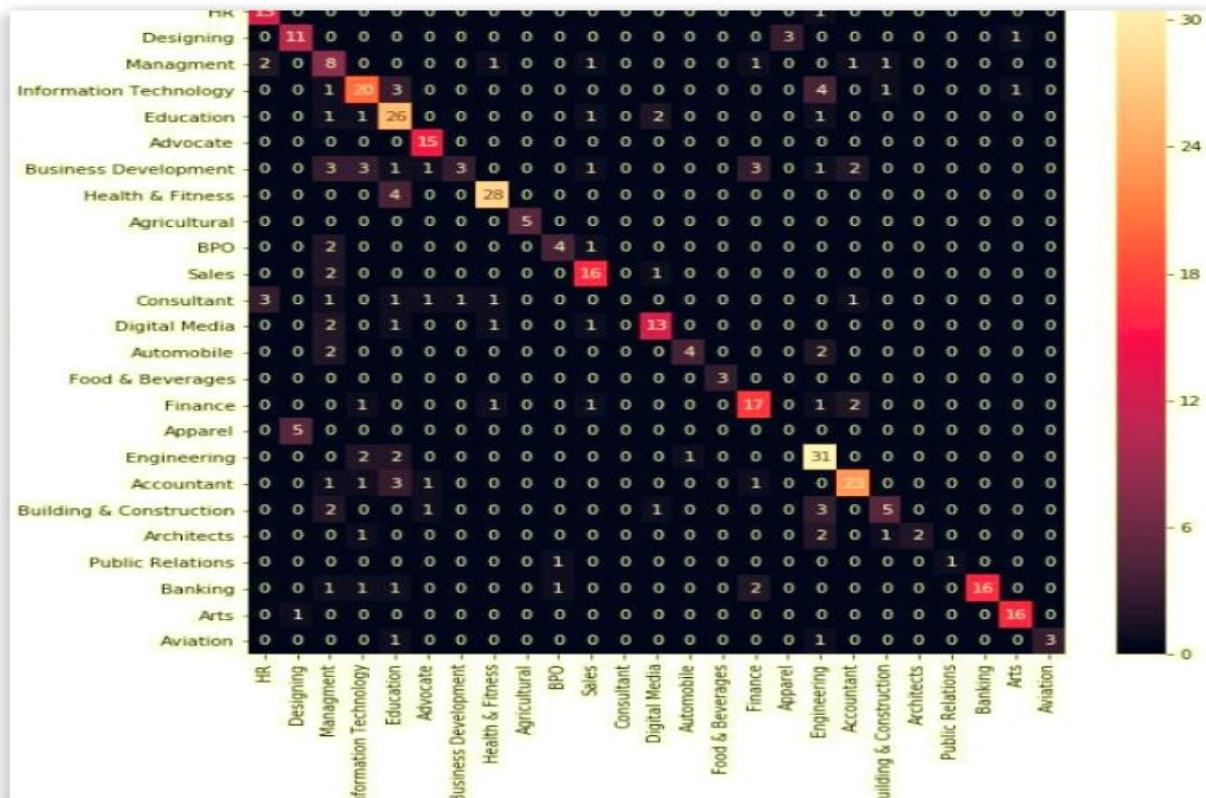
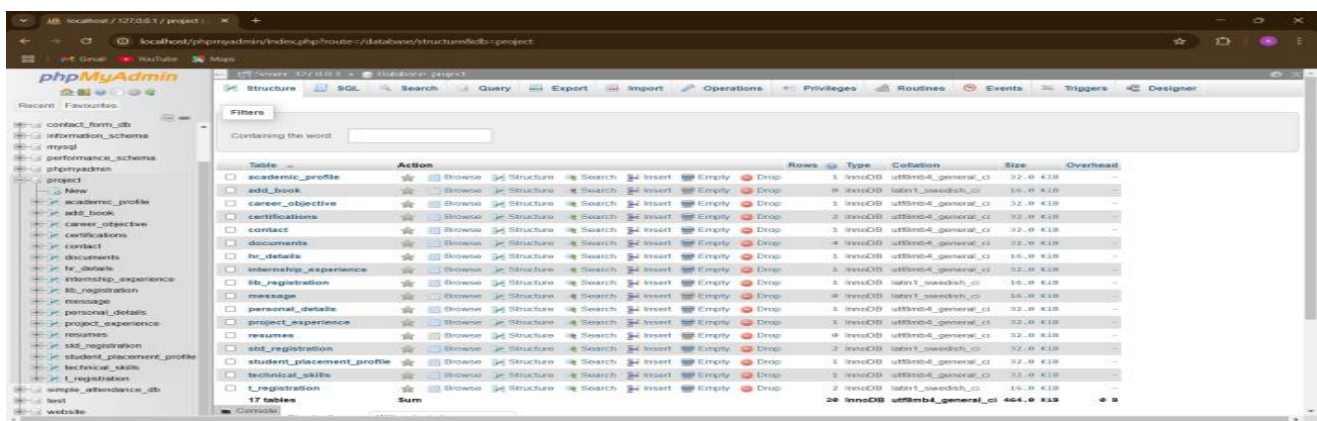


FIG6-Confusion matrix using Linear SVC classifier

Credibility of the shortlisting process, as they would be able to screen thousands of resumes very quickly, and with the right fit, which would not have been possible for a human to do in near real time. This would aid in making the recruitment process efficient and very effective in identifying the right talent. Also, this would help the recruiter to reduce the resources spent in identifying the right talent making the process cost-effective. On the second level, the Model provides the ranking to the CVs as per their fit vis-a-vis the job description, making it easier for by Giving There Sum Elistin order of their relevance to the job. There commendation made by the model are currently For the varied industry but the model and be further enhanced to target specific industry which would make it more effective, and give better recommendations.

TABLE1:Results using the different classifiers

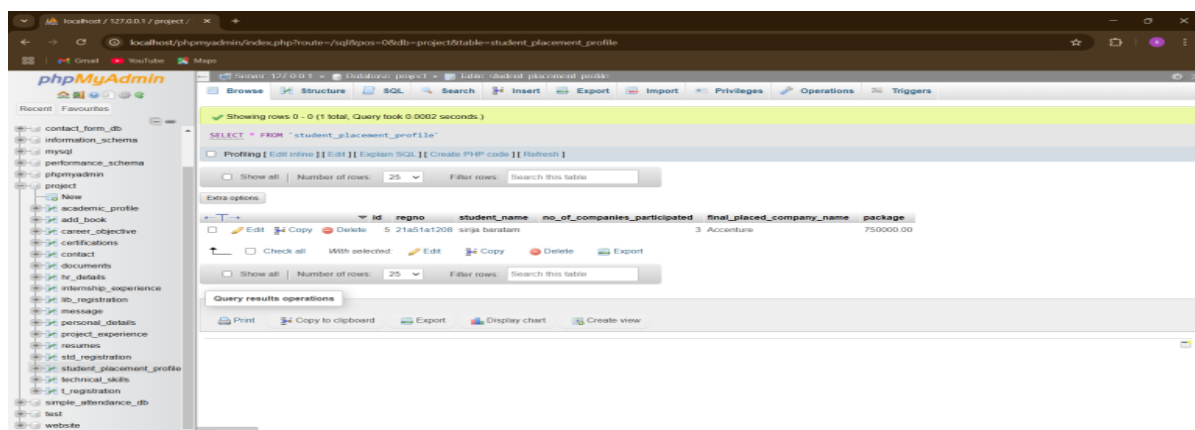
Classifier	Accuracy
Random Forest	0.3899
Multinomial Naive Bayes	0.4439
Logistic Regression	0.6240
Linear Support Vector Machine Classifier	0.7853



The screenshot shows the phpMyAdmin interface for a database named 'project'. The 'Structure' tab is selected, displaying a list of 17 tables. Each table entry includes icons for browsing, structure, search, insert, empty, and drop, along with its row count, type, collation, and size. The tables listed are: academic_profile, add_book, career_objective, certifications, documents, hr_details, internship_experience, lib_registration, message, personal_details, project_experience, resumes, sid_registration, student_placement_profile, technical_skills, t_registration, and website.

FIG 7: AVAILABLE TABLE OF ALL USERS IN DATABASE

A structured database has been implemented to facilitate the storage and management of various types of files within the system. This database enables users to add, delete, and modify documents as needed. Tables 2 through 5 provide an overview of the records stored in the Unique Student identity and student profile system(USISPS) across multiple interactions. These tables play a vital role in documenting system operations and tracking data consistency.



The screenshot shows the phpMyAdmin interface for the 'student_placement_profile' table. The 'Table' tab is selected, displaying the table structure with columns: id, regno, student_name, no_of_companies_participated, final_placed_company_name, and package. A query is executed, showing one row of data for a student with regno 521451a1208, student_name 'srija baratham', no_of_companies_participated 3, final_placed_company_name 'Accenture', and package '750000.00'.

FIG 8: TPO TABLE

TPO team updates the student data like reference of books for the placement and maintain the placement data of the student. Figures 4 to 10 showcase the graphical user interface of the Unique Student Identity and Student Profile System (USISPS), highlighting the main page that both users and administrators can navigate to access the system. Figure 6 presents the admin login page, where administrators can sign in using their assigned credentials. For general users, registration is mandatory before gaining access to the system.

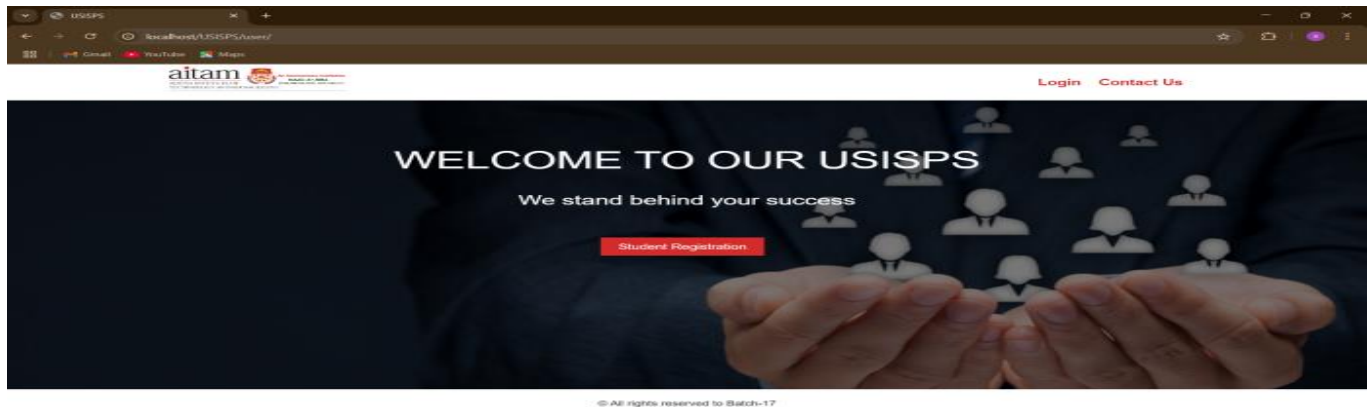


FIG 9: MAIN HOME PAGE OF USISPS PORTAL

Different users login with correct credentials through portal according to the functionalities for maintain the roles duties all users must login through the portal and update details and maintain records of the student and update the profile of the student.

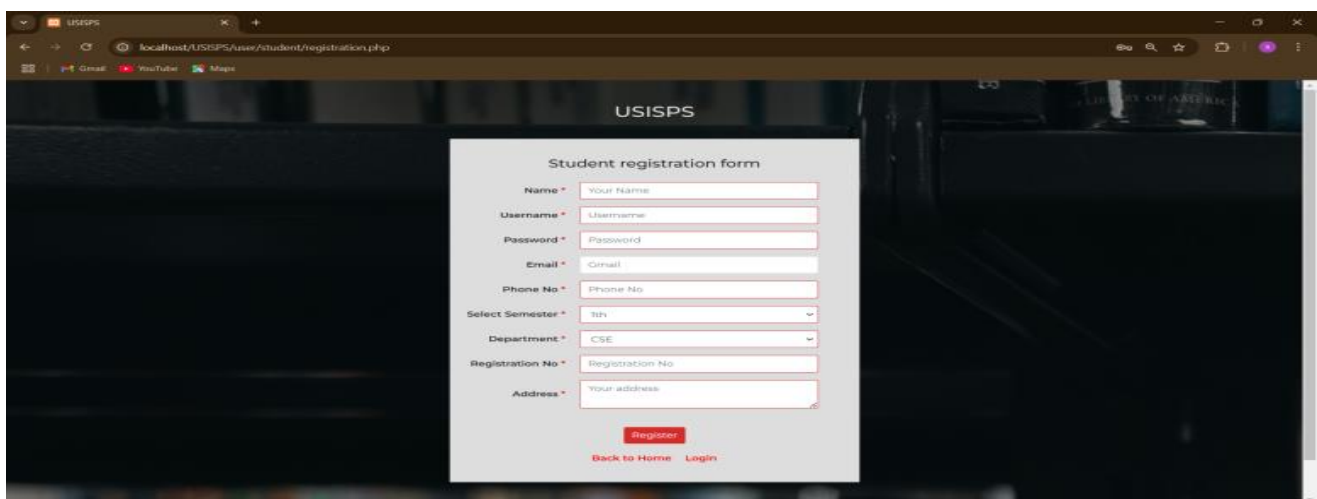
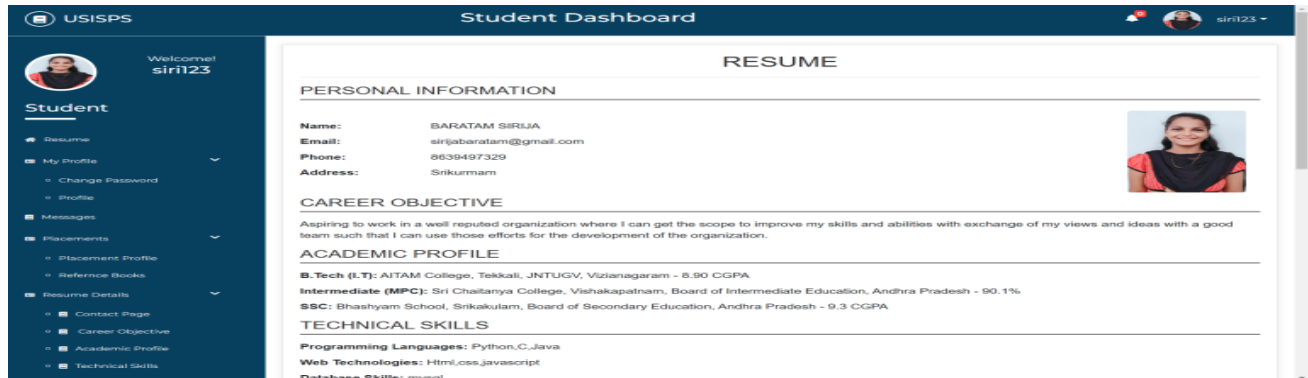


FIG 10: NEW STUDENT REGISTRATION

College registration for the new candidate fill the important details ,to access the facilities provided by the college to track the academic details. Depict the registration process for new students and , which is managed by the admins. Only administrators have full control over adding, modifying, or removing

student records from the system's digital archive. Additionally, admin can frequently update the system meet user demands .



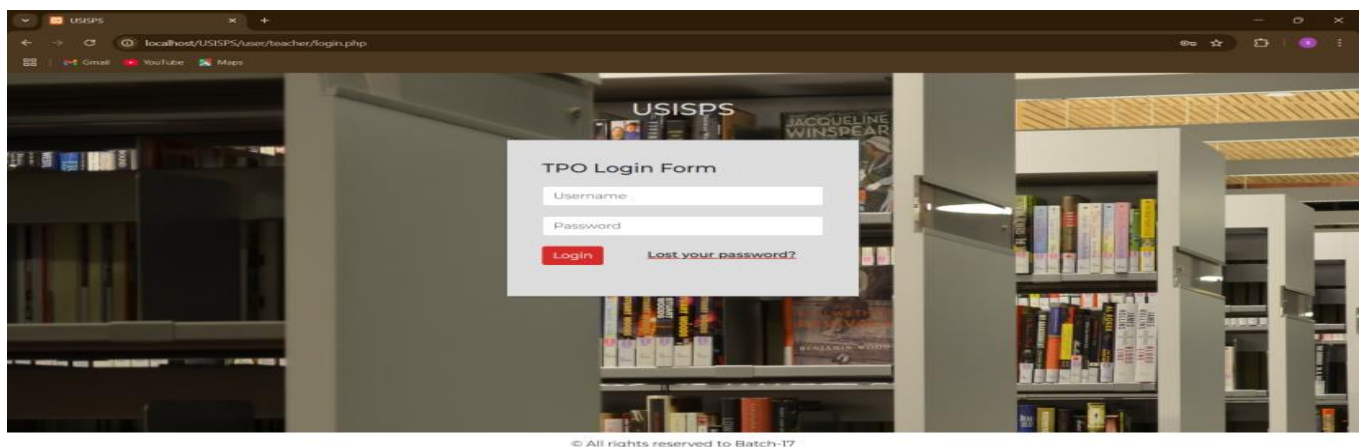
The screenshot shows the 'Student Dashboard' for a user named 'siri123'. The dashboard is divided into a left sidebar with navigation links (Resume, My Profile, Change Password, Profile, Messages, Placements, Placement Profile, Reference Books, Resume Details, Contact Page, Career Objective, Academic Profile, Technical Skills) and a main content area titled 'RESUME'. The resume is structured as follows:

- PERSONAL INFORMATION:**
 - Name: SARATAM SIRUA
 - Email: sirjaseratam@gmail.com
 - Phone: 8638497329
 - Address: Srikumam
- CAREER OBJECTIVE:**

Aspiring to work in a well reputed organization where I can get the scope to improve my skills and abilities with exchange of my views and ideas with a good team such that I can use those efforts for the development of the organization.
- ACADEMIC PROFILE:**
 - B.Tech (I.T):** AITAM College, Tekkali, JNTUGV, Vizianagaram - 8.90 CGPA
 - Intermediate (MPC):** Sri Chaitanya College, Vishakapatnam, Board of Intermediate Education, Andhra Pradesh - 90.1%
 - SSC:** Bhashyam School, Srikakulam, Board of Secondary Education, Andhra Pradesh - 9.3 CGPA
- TECHNICAL SKILLS:**
 - Programming Languages:** Python, C, Java
 - Web Technologies:** Html, css, javascript
 - Database Skills:** mysql

FIG 8: RESUME GENERATION ACCORDING TO THE STUDENT DETAILS

Through the details filled by the student, the well formatted resume is generated to apply to any job role.



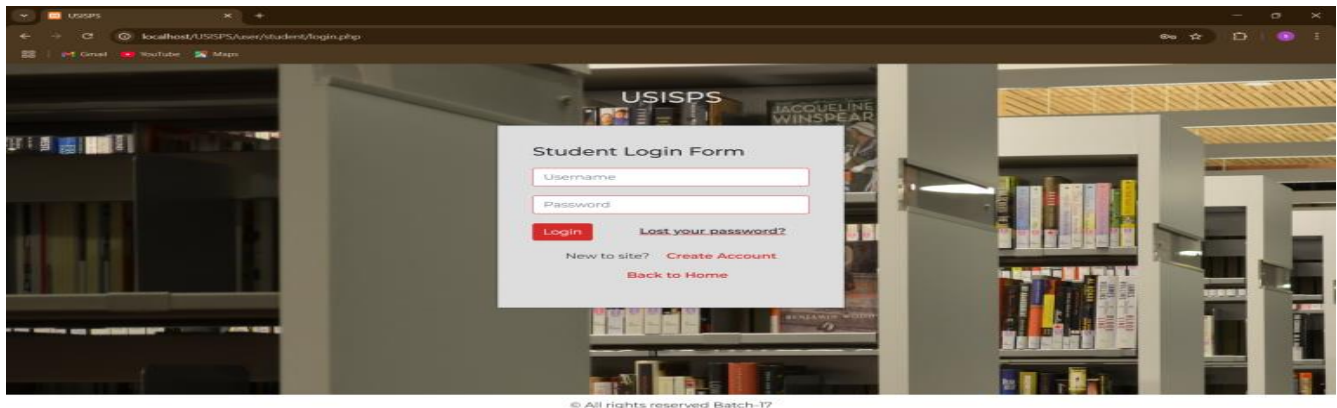
The screenshot shows a web browser window displaying the 'USISPS' login page. The background is a library with bookshelves. A 'TPO Login Form' is overlaid in the center, containing the following fields and elements:

- Username:** A text input field.
- Password:** A text input field.
- Login:** A red button.
- Lost your password?:** A link.

At the bottom of the browser window, a copyright notice reads: '© All rights reserved to Batch-17'.

FIG 9:TPO LOGIN FORM

The placement enters the placement data i.e, the student final placed company, final salary package, Total companies cracked by student, Total no. of company, reference links for the placement training.

**FIG 10:EXISTING STUDENT LOGIN FORM**

Student login with username and password to access the facilities of the portal if and only if registration completed.

6. Discussion

The Unique Student Identity and Student Profile System (USISPS) represents a significant advancement in the management of student data within educational institutions. By assigning a unique identifier to each student, the system ensures seamless tracking of academic records, reducing redundancy and errors commonly found in traditional data management methods. The integration of advanced security measures further strengthens data privacy and access control, mitigating risks associated with unauthorized access and data breaches. Additionally, the centralized database design improves administrative efficiency, facilitating quick retrieval of student information for academic and professional purposes and HR's resume recommended system to select pool of the candidates who is best fit for the job.

Beyond administrative benefits, the USISPS enhances the student experience by offering an automated resume generation feature, enabling students to create structured and professional resumes aligned with industry expectations. The incorporation of machine learning techniques, such as Support Vector Machines (SVM) and Random Forest classifiers, improves data processing and classification, ensuring accurate student profile management. Moreover, the system's adaptability to online education platforms and placement services makes it a versatile tool for academic institutions. Overall, USISPS bridges existing gaps in student information systems by introducing a scalable, efficient, and secure approach to student data management, aligning with the evolving digital landscape of education.

7. Conclusion

We proposed a Full Stack web application unique student identity and student profile system for the user friendly website for target audience. As the world converting into digitized, we are providing the well formatted resume according to the job role and enabling the students to download requires documents and certificates. We believe that there is a lot of scope for Educational institutions, online and distance learning platforms, student information portals, education research and analysis, vocational programs, and training program

Key Words:

Unique Student ID, Student Profile, Data Management, Student Information System, Database Connectivity, Data Security, Privacy Protection, Administrative Efficiency, Automation, Data Integrity, User Interface (UI), User Experience (UX), Ensemble learning, Machine Learning, Training, Classification, Feature Selection, Data Integration, High-Dimensional Data, Random Forest, Support Vector Machine (SVM).

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