



ONE POINT STUDENT VERIFICATION (OPSV) SYSTEM FOR PLACEMENT CELL

Sourav Sharma¹, Sonali Lama², Radhika Ladha³, Palka Lodha⁴, Rohit Soni⁵,

Dr. Reena Gupta⁶

Student, CSE, GITS, Udaipur, India ^{1,2,3,4,5}

Associate professor, CSE, GITS, Udaipur, India⁶

Abstract: Placement cell required huge amount of data of companies and students. This is very complicated task to compile different type of requirements of companies for students and vice versa for companies at one platform. So, there is one proposed system in form of One Point Student Verification (OPSV) System, which have rich data of students and companies at one platform. OPSV collect both detailed personal information of students by linking their Aadhar no. and professional and academic information from their college. OPSV is a portal where companies are registered themselves and put their own wants. OPSV system classified companies' requirement automatically on the basis of student's interest and auto approach system is activated. By seeing students' interest in job, recruiter directly approach them. OPSV is a medium where large number of available jobs are easily identified by the student and also large amount of students' detail are identified by the recruiters also.

Keywords: One point student verification, OPSV, Placement, Aadhaar, Recruiters.

I. INTRODUCTION

The world has been completely transformed via digital technology-smart phones, tablets, and web-enabled devices. This increase demands of Mobi-devices in all sectors. Students are the most important parts of these sectors who largely contribute in nation development. So, it is very necessary to digitalized information of students for digital transformation. Every year huge number of valuable students are pass out and they search their desire in market to serve the nation.

At the same time, Government and private sectors also increase their heights towards nation. This will increase the job opportunities, economic growth, infrastructural growth etc. to fulfill job opportunity requirements all companies will try to get best. For selecting the best one, companies will organize campus drives in different colleges, being part of job fairs, provide more internship, conduct recruitment exams, hackathons etc. All these methods are very financially tiering.

There is high priority of one platform where students and companies will be come on same stage and correspond to each other with minimal cost.

One Point Student Verification (OPSV) system is the one which fulfill this requirement. This platform has one place where student can register himself through their college. Similarly, recruiters or companies can register themselves in this portal and add their requirements.

According to the companies' requirements OPSV automatically filter out the students on the basis of their interest area. After filtering, system will generate the link for particular company and send it out on interested students' mail id and contact number. Students will give their response via their biometric which is registered in their Aadhaar database. After receiving positive response from students' side, company will contact to them and complete their recruitment process.

OPSV is actually one platform for students and companies to design and compile their own choice. It provides easiness and effectiveness in searching desired job and valued candidate from the best out of a billion.

II. LITERATURE REVIEW

In Today's Scenario, student sector is very conscious, aware and focused about their carrier. Students are involved in carrier built- in activities from class ninth onwards. It can be easily said that after their degree courses, very huge number of students will come out in market for completing their dreams in very enthusiastic way. It is our responsibilities to build infrastructure and opportunities for the enthusiastic candidates that provides right guidance and path for better development of nation.



Nation’s growth will require one platform to manage the dreams and career of aspiring candidates. So that to fulfill the dreams and expectations of individuals and organization, this paper presents One Point Student Verification (OPSV) system.

III. METHODOLOGY

Knowledge of recent job availabilities, assemble huge amount of students’ information at one digital platform and examine student interest or suggest right career path for their bright future, is very challenging task. For completion of above task, paper present OPSV system which is very useful in examining and filtering the students according to their educational details and interest.

OPSV system works in four modules. Firstly, it collects all verified personal details with biometric of students from the Aadhaar database. In second module, it collects all professional or academic details of students from the respective college’s database. In third module companies will enter their job requirements with all required job standards. In fourth module OPSV itself filter student’s database according to the student’s interest and company requirements. And then send the OTP for confirmation. When student give their conformation OPSV schedule the interview process for student with the company.

A. Collection of Student’s Personal Detail

Students fill their all-personal details like Name, Father Name, Mother Name, Address, Area of Interest, College Name, Email-ID, Date of Birth, Aadhaar no. etc. All these details are verified by the system with their Aadhaar database. For verification of the details OPSV send one OTP to their Aadhaar registered number. After confirmation student’s personal details are saved in OPSV database. Module working process is shown in figure 1.

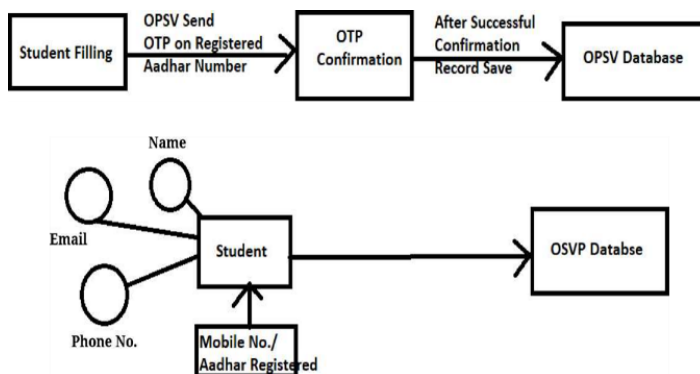


Fig. 1 Student Personal Data Collection

B. Collection of Student’s Professional Details

After verification of personal details, respective college authority will fill the professional details of the student and verified it on their own side. Professional details like student enrolment number, course, branch, semester percentage, SGPA etc. Professional details verification process is done by the main authority of respective college through their digital mark. Figure 2 shows the functionality of professional data collection of students.

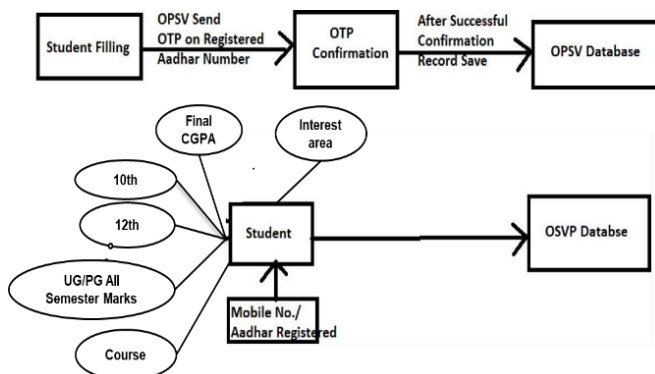


Fig. 2 Student Professional Data Collection



C. Companies Registration and Putting Job Opportunities:

Firstly, if companies either Government or Non-Government wants to part of OPSV system, then it is necessary to register the company. Company fills their details like name, address, area of working, type etc. After registration, company will put their requirements in the system.

D. Filtering of Students and take Confirmation from the Students through OPSV

After putting the requirement by the company, OPSV automatically generates a confirmation link and send to all students that fulfill the required company criteria. When the students confirm their interest via portal then OPSV automatically schedule requirement process.

The whole work is done in Bootstrap with React framework and Mongo DB as backend.

IV. WORK FLOW

OPSV basically works in two roles. First role is to take inputs from students' side and on the second, providing information of requirements of employer side.

A. At Employer End

Based on the educational qualification large numbers of students are gathered into groups. When a recruiter posts a job and it matches with the student's profile then a job alert is triggered to the respective student along with the information of the recruiter. In the recruiter platform when an industry visits new to the site, first the employer registers their industry norms and provide a complete detail about the industry. After registration the employer gives, the skill set required to get employed in the concern industry. When employer gets a large number of students, they had the privilege to shortlist the candidates and send them job alerts if applicable. Basically it will be a mobile application in which our (users or students) Aadhar number will register and there will be all details of students registered with that Aadhar number like name, age, qualifications, interest areas and many more. Figure 3 and 4 is shown the sequence diagram of employer side and flow chart of admin login respectively.

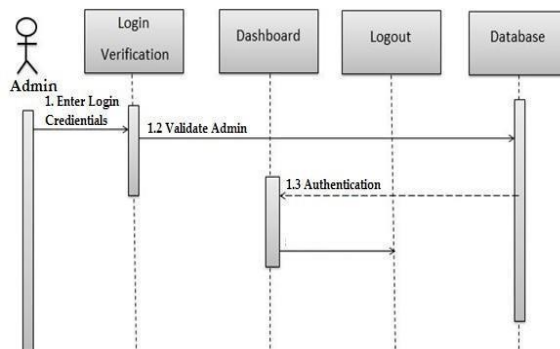


Fig. 3 Sequence Diagram at Employer Side

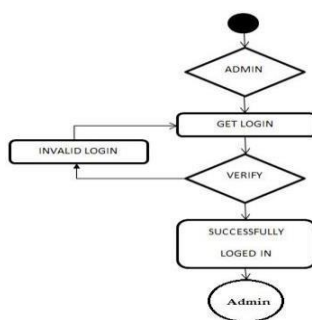


Fig. 4 Flow chart of Admin Login



B. At Candidate End

Whenever a new student will register, he or she just needs their Aadhar number to register. All above information will be saved on government portal later it will stored in their database whenever the companies will be hiring new candidates they will approach to government portals and they will provide all details they need for new hiring candidates like language, domain, interest areas, % etc.. And the Government portal will filter it from there database and will shortlist the students and share their details to the company than later on those companies will send messages to those shortlisted students along with one link that if candidate is interested, he or she can go through there link and register themselves through there biometric than companies will reduce your response and they will contact to those candidates directly.

V. GROUPING THE STUDENTS & SENDING JOB ALERTS

The main important, unique and beneficial task of OPSV is to group the students according to their interest area and filter them according to the company's requirement and send them the notification. For this purpose, OPSV perform this task as after collecting all the information about each student, the next stage is to group the students. By Examine the complete profile of the student along with their educational qualification the entire list of students who record their details using the application will be separated into small groups of people who possess the common education background. This is done to list the students who have same eligibility criteria for a job vacancy. When an employer wants to hire a set of students for his/her industry, after providing the eligibility criteria of his industry a list of students who possess the same will be displayed to the employer. Therefore, the employer gets air shortlisting the number of students among the list of available. Finally, employer posts the job for the shortlisted candidates. And those candidates who have shortlisted will be informed with an active message of the particular job and a complete information about the industry is provided to a student along with the contact details of the industry.

VI. SYSTEM ANALYSIS

Gathering the student details digitally is very useful for examine the student's educational and personal information. As result, the entire educational details of the student are collected from a single platform using the Aadhar no. as a primary key gathering and storing student's data The separated into groups and finally each student receives a job alert if the criterion of the student's profile. System will analyse by testing methods that shown in figure 5.

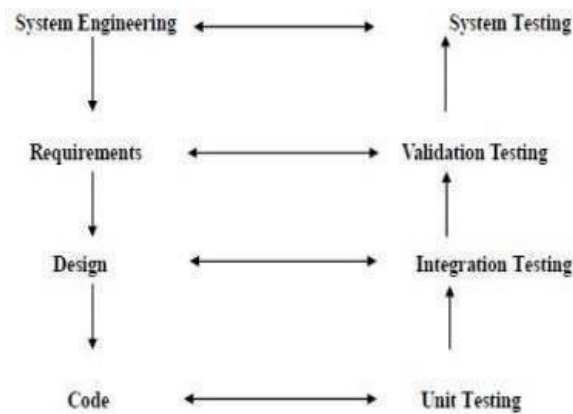


Fig. 5 System Analysis Phases based on Testing.

VII. CONCLUSION

There is a requirement of a single mobile application which uses modern technology to store students' biometric details and college details to help in effective tracking for job alerts, fellowships, schemes. The working model should provide integration between National Academic Depository, Digital Locker & Instant Aadhaar (Aadhaar Portal). This App will provide the link between Aadhaar Number & Roll Number and the students should update the data of "Aadhaar Number" along with "Roll Number" on National Academic Depository (It is like Linking roll. no. with Aadhaar No.). This will help in Verification of AICTE Approved Institutes, Verification of Students and Message service for students like job alert This was the first considerably large and important project undertaken by us during B.tech course. It was an experience that changed the way we perceived project development. The coding could not be started before the whole system was completely finalized. Even then there were so many changes required and the



coding needed to be changed. It made us realize how important the system analysis phases are. The project is a classic example of the adage that learning of concept needs to be supplemented with application of that knowledge. On the whole, it was a wonderful experience developing this project and we would consider our education complete without undertaking such a project, which allowed us to apply all that we have learned.

REFERENCES

- [1] <http://www.codebind.com/android-tutorials-and-examples/android-mysql-database-tutorial-android-login-php-mysql/>
- [2] H. Gupta and M. Patel, "Method Of Text Summarization Using Lsa And Sentence Based Topic Modelling With Bert," 2021 International Conference on Artificial Intelligence and Smart Systems (ICAIS), 2021, pp. 511-517.
- [3] P. Patil, S. Dalmia, S. Abu Ayub Ansari, T. Aul and V. Bhatnagar, "Automatic text summarizer," 2014 International Conference on Advances in Computing, Communications and Informatics (ICACCI), New Delhi, 2014, pp. 1530-1534
- [4] Sen, S., Patel, M., Sharma, A.K. (2021). Software Development Life Cycle Performance Analysis. In: Mathur, R., Gupta, C.P., Katewa, V., Jat, D.S., Yadav, N. (eds) Emerging Trends in Data Driven Computing and Communications. Studies in Autonomic, Data-driven and Industrial Computing. Springer, Singapore. https://doi.org/10.1007/978-981-16-3915-9_27
- [5] Kothari, R., Choudhary, N. and Jain, K., 2021. CP-ABE Scheme with Decryption Keys of Constant Size Using ECC with Expressive Threshold Access Structure. In Emerging Trends in Data Driven Computing and Communications (pp. 15-36). Springer, Singapore.
- [6] B. V. Barde and A. M. Bainwad, "An overview of topic modeling methods and tools," 2017 International Conference on Intelligent Computing and Control Systems (ICICCS), Madurai, 2017, pp. 745-750, doi: 10.1109/ICCONS.2017.8250563.
- [7] K. Nokkaew and R. Kongkachandra, "Keyphrase Extraction as Topic Identification Using Term Frequency and Synonymous Term Grouping," 2018 International Joint Symposium on Artificial Intelligence and Natural Language Processing (iSAI-NLP), Pattaya, Thailand, 2018, pp. 1-6, doi: 10.1109/iSAI-NLP.2018.8693001.
- [8] BERT: Pretraining of Deep Bidirectional Transformers for Language Understanding. Jacob devlin, Ming -wei chane, Kenton lee, Kristina Tautanova
- [9] Blei DM, Ng AY, Jordan MI (2003) Latent dirichlet allocation. J Mach Learn Res 3(Jan):993–102
- [10] Wang, Dingding & Zhu, Shenghuo & Li, Tao & Gong, Yihong. (2009). Multi-Document Summarization using Sentence-based Topic Models.. ACL-IJCNLP. 297-300.
- [11] Tong, Zhou & Zhang, Haiyi. (2016). A Text Mining Research Based on LDA Topic Modelling. Computer Science & Information Technology. 6. 201-210. 10.5121/csit.2016.60616.
- [12] Guo-Hua Wu and Yu-Tian Guo, "An enhanced LSA-based approach for update summarization," 2015 12th International Computer Conference on Wavelet Active Media Technology and Information Processing (ICCWAMTIP), Chengdu, 2015, pp. 493-497
- [13] K. C. Giri, M. Patel, A. Sinhal and D. Gautam, "A Novel Paradigm of Melanoma Diagnosis Using Machine Learning and Information Theory," 2019 International Conference on Advances in Computing and Communication Engineering (ICACCE), Sathyamangalam, India, 2019, pp. 1-7, doi: <https://doi.org/10.1109/ICACCE46606.2019.9079975>
- [14] Ameta, U., Patel, M., Sharma, A.K. (2021). Scrum Framework Based on Agile Methodology in Software Development and Management. In: Mathur, R., Gupta, C.P., Katewa, V., Jat, D.S., Yadav, N. (eds) Emerging Trends in Data Driven Computing and Communications. Studies in Autonomic, Data-driven and Industrial Computing. Springer, Singapore. https://doi.org/10.1007/978-981-16-3915-9_28
- [15] Cherukuri, Aswani Kumar & Srinivas, S.. (2006). Latent semantic indexing using eigenvalue analysis for efficient information retrieval. Int. J. Appl. Math. Comput. Sci. 16. 551-558.
- [16] Li, Juanzi & Fan, Qi'na & Zhang, Kuo. (2007). Keyword extraction based on tf/idf for Chinese news document. Wuhan University Journal of Natural Sciences. 12. 917-921 10.1007/s11859-007-0038-4
- [17] Alghamdi, Rubayyi & Alfalqi, Khalid. (2015). A Survey of Topic Modeling in Text Mining. International Journal of Advanced Computer Science and Applications. 10.14569/IJACSA.2015.060121