**Appendix A**

**Letter to the Client**

**DELIA B. OGAN**

President

NONESCOST Alumni Association

Dear Maam,

Greetings!

I am **Eduard Rino Q. Carton**, currently pursuing my Master's degree in Information Technology at NONESCOST, Sagay City. As a requirement of my course, I am working on my Capstone Project, which involves developing an application system that will benefit the community or school.

The title of my Capstone project is "**Alumni Tracker with Job Matching using AI Integration**" which aims to manage alumni data and match jobs using AI Integration. The system will generate reports on alumni, employers, employment rates, and job postings.

I would like to request permission to conduct an interview and gather data from the functions of the alumni association. The information gathered will not be confidential and will be used to enhance the flow of the application system.

Thank you for considering my request.

Truly yours,

Sgd.

**Eduard Rino Q. Carton**

Researcher

**APPENDIX B**

**Self-made Questionnaire for ALMAI**

|  |  |  |  |
| --- | --- | --- | --- |
| *Name:* |  | *Date:* |  |

**Alumni Tracker with Job Matching using AI Integration Survey Questionnaire**

The following questions ask you about the Alumni Tracker with Job Matching using AI Integration. Circle the number that most closely indicates the extent to which the item is present in the system.

Scale:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 5 - Strongly agree | 4 - Agree | 3 - Moderately agree | 2 - Disagree | 1 - Strongly disagree |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| No. | Question | Rating | | | | |
| **In terms of managing NONESCOST Alumni’s data.** | | | | | | |
| 1 | The system can manage alumni’s profiles. | 1 | 2 | 3 | 4 | 5 |
| 2 | The system can manage alumni’s education | 1 | 2 | 3 | 4 | 5 |
| 3 | The system can manage alumni’s work experience | 1 | 2 | 3 | 4 | 5 |
| 4 | The system can manage alumni’s skills assessment | 1 | 2 | 3 | 4 | 5 |
| 5 | The system can manage alumni’s job preferences | 1 | 2 | 3 | 4 | 5 |
| **In terms of integrating AI using Job Matching Algorithm to provide personalized job recommendations.** | | | | | | |
| 1 | The system can recommend best jobs for alumni | 1 | 2 | 3 | 4 | 5 |
| 2 | The system can recommend best candidates for the posted job | 1 | 2 | 3 | 4 | 5 |
| **In terms of integrating AI using Natural Language Processing (NLP) Algorithm to analyze text and providing suggestions.** | | | | | | |
| 1 | The system can analyze text spelling errors and suggest corrections. | 1 | 2 | 3 | 4 | 5 |
| 2 | The system can analyze text for grammar errors and provide suggestions for corrections | 1 | 2 | 3 | 4 | 5 |
| **In terms of generating reports** | | | | | | |
| 1 | The system can generate alumni report per batch | 1 | 2 | 3 | 4 | 5 |
| 2 | The system can generate alumni report per college | 1 | 2 | 3 | 4 | 5 |
| 3 | The system can generate alumni report per course | 1 | 2 | 3 | 4 | 5 |
| 4 | The system can generate employer report per industry | 1 | 2 | 3 | 4 | 5 |
| 5 | The system can generate employment rate report by batch | 1 | 2 | 3 | 4 | 5 |
| 6 | The system can generate employment rate report by college | 1 | 2 | 3 | 4 | 5 |
| 7 | The system can generate employment rate report by course | 1 | 2 | 3 | 4 | 5 |
| 8 | The system can generate a job posting report per year | 1 | 2 | 3 | 4 | 5 |
| 9 | The system can generate a job posting report per month | 1 | 2 | 3 | 4 | 5 |

**APPENDIX C**

**Questionnaire for ISO 25010: Software Quality Standard**

**Evaluation Sheet for the Alumni Tracker with Job Matching using AI Integration**

Dear Evaluator:

         The undersigned is evaluating and gathering data for the project called Alumni Tracker with Job Matching using AI Integration. It has been conceptualized and designed for use as a guidebook to the Master in Information Technology students of Northern Negros State College of Science and Technology.

         In this connection, your kind assistance is requested in the evaluation of this project regarding its effectiveness and acceptability in terms of the following areas of concern:

A.    Functional Suitability

B.    Performance Efficiency

C.    Compatibility

D.    Usability

E.    Reliability

F.    Security

G.    Maintainability

H.    Portability

Furthermore, I humbly ask for your honest suggestions and recommendations in order to improve the development of the project.

Very truly yours,

**Eduard Rino Q. Ccarton**

Researcher

|  |  |
| --- | --- |
| Name of Evaluator (Optional): |  |
| Field of Specialization: |  |

**Direction:** Please rate the Alumni Tracker with Job Matching using AI Integration in accordance to its effectiveness and acceptability to the five (5) point scales below.

5 – Very Good

4 – Good

3 – Acceptable

2 – Poor

1 – Very Poor

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| A.    Functional Suitability | 1 | 2 | 3 | 4 | 5 |
| B.     Performance Efficiency | 1 | 2 | 3 | 4 | 5 |
| C.     Compatibility | 1 | 2 | 3 | 4 | 5 |
| D.    Usability | 1 | 2 | 3 | 4 | 5 |
| E.     Reliability | 1 | 2 | 3 | 4 | 5 |
| F.      Security | 1 | 2 | 3 | 4 | 5 |
| G.    Maintainability | 1 | 2 | 3 | 4 | 5 |
| H.    Portability | 1 | 2 | 3 | 4 | 5 |
|  |  |  |  |  |  |

**Suggestions/Recommendations**

|  |
| --- |
|  |
|  |
|  |

**References**

Jaiswal, S., Gaud, S., Ansari, S., & Gaikwad, R. (2021). Alumni Tracking System. International Research Journal of Engineering and Technology (IRJET, 8(4), 1185-1188. doi: 10.31764/IRJET.8.4.1185

Bista, B., Shakya, A., Joshi, B., Pokhrel, A., Dangol, L., Kedia, M., & Baral, D. S. (2021). An Alumni Portal and Tracking System. Journal of the Institute of Engineering, 16(1), 7–14. https://doi.org/10.3126/jie.v16i1.36529

Suryana, D., Yulianto, A. F., & Hadiyanto, H. (2020). Development of a Web-Based Alumni Tracking Information System at SMKN 1 Garut. Journal of Physics: Conference Series, 1528(5), 052052. doi: 10.1088/1742-6596/1528/5/052052

Luciano, R. G., Alcantara, G. M., & Bauat, R. (2020). Design and Development of Alumni Tracking System for Public and Private HEIs. International Journal of Scientific & Technology Research, 9, 12-19.

Mukherjee, A., Roy, A., Lath, M. K., Ghosal, A., & Sengupta, D. (2019). Centralized Alumni Management System (CAMS) - A Prototype Proposal. In 2019 Amity International Conference on Artificial Intelligence (AICAI) (pp. 967-971). Dubai, United Arab Emirates: IEEE. doi: 10.1109/AICAI.2019.8701383

Mona, E., Ranjani, H., Sowmya, V., & Sivakumari, S. S. (2021). Alumni Social Networking Site. International Journal of Scientific Research in Computer Science, Engineering and Information Technology, 6(1), 467.

Kumar, T., Prateek, Y., Atharga, P., Rajashekarappa, D., & Parvati, V. K. (2019). Alumni Database Management System. INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH & TECHNOLOGY (IJERT), 7(10), NCRACES – 2019.

Patil, C., Patil, N., Kapse, K., Joshi, N., & Chavan, S. (2017). Alumni Interactive System Using Mining. International Journal of Engineering Science and Computing, 7(11).

Dai, D., & Lan, Y. (2017, April). The Alumni Information Management Model Based on "Internet +". In Proceedings of the 7th International Conference on Education, Management, Information and Mechanical Engineering (EMIM 2017) (pp. 38-42). Atlantis Press. doi: 10.2991/emim-17.2017.8

Sadi, Lucitasari, D. R., & Khannan, M. S. A. (2019). Designing Mobile Alumni Tracer Study System Using Waterfall Method: an Android Based. International Journal of Computer Networks and Communications Security, 7(9), 196-202.

UMOSO, C. M. (2021). ATS ANALYSIS, DESIGN AND DEVELOPMENT OF THE ALUMNI TRACKING SYSTEM OF THE LICERIO ANTIPORDA SR. NATIONAL HIGH SCHOOL-DALAYA EXTENSION. International Journal of Arts, Sciences and Education, 2(1), 15–31. Retrieved from <https://ijase.org/index.php/ijase/article/view/45>

Setyaningsih, R., Abdullah, A., Prihantoro, E., & Hustinawaty, H. (2022). DIGITAL SKILL: OPTIMIZING THE UTILIZATION OF INFORMATION TECHNOLOGY BY PESANTREN UNIVERSITY IN ALUMNI TRACKING ACTIVITIES. Proceedings of International Conference on Communication Science (ICCS), 2(1), Journalisim, ICT and Digital Media.

Case, T. L., Gardiner, A., Rutner, P., & Dyer, J. N. (2013). A LinkedIn Analysis of Career Paths of Information Systems Alumni. The Journal of the Southern Association for Information Systems, 1, 1-13. <https://doi.org/10.3998/jsais.11880084.0001.102>

Hufana, M. C. S. (2019). An Alumni Tracer System for Saint Louis College. Ascendens Asia Journal of Multidisciplinary Research Conference Proceedings, 3(4).

Safi'i, I., & Priyantoro, P. (2019). Tracer Study as an Effort to Improve Alumni Careers in Kadiri University Job Placement Service. KONSELI: Jurnal Bimbingan dan Konseling (E-Journal), 6(2).

Ardiansyah, T. M. (2021). Web-Based Abulyatama Alumni Information System. International Journal Education and Computer Studies (IJECS), 1(2), 38–42. <https://doi.org/10.35870/ijecs.v1i2.600>

Permana, F. C., Firmansyah, F. H., Sari, I. P., & Hernawan, A. H. (2019). Developing a Tracer Study Information System Based on SMS Gateway to Support Career Development Program in UPI, Cibiru Campus. Advances in Social Science, Education and Humanities Research, 401, 252-256.

Asroni, Juanita Yusanti, & Riyadi, S. (2019). Dashboard-based Alumni Tracer Study Report Using Normalized Data Store Architecture. In Proceedings of the 2019 8th International Conference on Software and Computer Applications (ICSCA '19) (pp. 70-74). Association for Computing Machinery. doi: 10.1145/3316615.3316635

Soegoto, H. S., Wahdiniwaty, R., Warlina, L., & Heryandi, A. (2018). E-tracer study implementation of Indonesia Computer University alumni. Journal of Education Research and Review, 6(2), 38-46.

Rosales, G. J. P., & Lagman, A. C. (2017). Development of Industry Academe Linkage Alumni and Placement Portal. In Proceedings of the 2017 International Conference on Information Technology (ICIT 2017) (pp. 184-189). Association for Computing Machinery. <https://doi.org/10.1145/3176653.3176669>

K. N. Prafajar, H. Vallyan, N. L. P. A. Candradewi, I. S. Edbert and D. Suhartono, "Multiclass Job Recommendation System in the IT Field between Classification and Prediction Method," 2022 International Conference on Green Energy, Computing and Sustainable Technology (GECOST), Miri Sarawak, Malaysia, 2022, pp. 181-186, doi: 10.1109/GECOST55694.2022.10010659.

Aherdi, N. B., Chokshi, D., Pande, S., & Khamparia, A. (2021, July 12). Criminal Identification System using Facial Recognition. *Proceedings of the International Conference on Innovative Computing & Communication*.

Aprudi, Syafri. (2022). Web-Based Design of a Crime Information System Dashboard at the Musi Rawas Police Station. Jurnal Komputer, Informasi dan Teknologi (JKOMITEK). 2. 10.53697/jkomitek.v2i1.613.

Babbie, E. (2017). Basics of social research (7th ed.). Cengage Learning.

DeVellis, R. F. (2017). Scale development: Theory and applications (4th ed.). Sage publications.

**Curriculum Vitae**

**PERSONAL INFORMATION**

Name   : Eduard Rino Q. Carton

Birth Date  : September 30, 1997

Birth Place : Molocaboc, Sagay City

Civil Status: Married

Religion   : Roman Catholic

Spouse   : Meralynn F. Carton

Father   : Eduardo M. Carton

Mother   : Edabel Q. Carton

Address   : Alijis, Bacolod City

**EDUCATIONAL BACKGROUND**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | | **Post Graduate** | |  | |
|  | | Present | | **Master in Information Technology**  *Northern Negros State College of Science and Technology*  Sagay City, Negros Occidental | |
|  | | **College** | |  | |
|  | | 2014-2018 | | **Bachelor of Science in Information Systems**  ***Cumlaude***  Carlos Hilado Memorial State University – Alijis Campus  Brgy. Alijis, Bacolod City | |
|  | | **Secondary** | |  | |
|  | | 2010-2014 | | **Molocaboc Integrated School**  ***Salutatorian***  Molocaboc, Sagay City | |
|  | | **Primary** | |  | |
|  | | 2006-2010 | | **Molocaboc Integrated School**  Molocaboc, Sagay City | |
| **EXPERIENCE** | | | |  |
|  | | 2022-Present | | **Software Developer (Co-Founder)**  *Juancoder IT Solutions*  Bacolod City, Negros Occidental |
| 2018-Present | | **IT Programmer**  *Bacolod Four Leaf Clover Corp.*  Bacolod City, Negros Occidental |
|  | | 2015-2017 | | **Student Aide** |
|  | |  | | *CHMSU – Alijis (Regitrar’s Office)*  Bacolod City, Negros Occidental |
| **ACHIEVEMENTS** | | | | |
|  | | A.Y 2014-2015 A.Y 2015-2016 A.Y 2016-2017 | | **Dean’s List**  Institute of Information Technology (IIT)  *CHMSU – Alijis* |
| A.Y 2014-2015 A.Y 2015-2016 | | **Outstanding in Technology Awardee**  Institute of Information Technology (IIT)  *CHMSU – Alijis* |
|  | | A.Y 2016-2017 | | **Service Award in Technology**  Institute of Information Technology (IIT)  *CHMSU – Alijis* |
|  | | 2018 | | **Best in ITE Senior Capstone Project**  ADVISE MOBILE: A WEB AND MOBILE BASED GUIDANCE CONSULTATION SYSTEM  *CHMSU – Alijis* |

**Achievem**

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