Alphonse BIZIRAREMYE

REG | kigali, nyarugenge

**Industrial attachment report**

220011657

**DECLARATION**

I hereby declare this industrial attachment is prepared and submitted by me as partial fulfillment of the requirements for the industrial attachment program at Rwanda Energy Group (REG) where make internship activities.

I further declare that the information presented in this report is based on my personal experience and observations during the internship period, along with relevant information obtained from credible resources. Any reference, quotation, or materials user from other sources have been duly acknowledged and cited.

I acknowledge that the internship work and its outcomes presented in this report are the result of my own efforts, under the guidance and my supervisor. The internship was carried out from 30th January 2023 at headquarter of Rwanda Energy Group(REG), located nyarugenge.

I affirm that I have adhered to the ethical standards and guidelines set by the institution and the organization throughout the internship duration. I take full responsibility for the authenticity, accuracy, and originality of the content presented in this report.

I understand that any act of plagiarism or misrepresentation in this report is considered as serious offence may result in disciplinary action, including the rejection of this report and any related academic consequences.

Also I acknowledge and appreciate the support, guidance and cooperation extended by all individuals who contribute to the successful completion of this internship and preparation of this report. Their assistance has been invaluable in enriching my learning experience.

I affirm that all the information provided in this declaration is true and correct to the best of my acknowledge and belief.

I grant permission to the institution and the organization to use this report for academic and research purpose, while maintaining the confidentiality of any proprietary or sensitive information contained herein.

**DEDICATION**

I dedicate this industrial attachment report to my family, friends, and loved ones who have supported and encouraged me throughout my academic journey. Their unwavering belief in my abilities has been a constant source of motivation and strength.

I am grateful for the understanding and patience they have shown during the demanding and challenging moments of this internship. Their love, encouragement and moral support nave been instrumental in helping me overcome obstacles and achieve success.

I would also like to extend my heartfelt gratitude to the faculty and staff of Rwanda Energy Group(REG) for providing me with the opportunity to pursue this internship. Their guidance, knowledge and expertise have played a significant role on shaping my understanding of software development and fostering my professional growth.

Additionally, I want to express my appreciation to my internship supervisor MANISHIMWE EMMANUEL, for their valuable guidance, support, and mentorship throughout the internship period. Their expertise, feedback, and encouragement have been instrumental in enhancing my technical skills and expanding my knowledge in the field of software development.

Finally, I would like to dedicate this report to all individuals within the organization where I completed my internship. Their willingness to share their knowledge and expertise, and their collaborative spirit have contributed immensely to my learning experience. I am grateful for the opportunities they provided me to work on real world project and gain practical insights into the software development industry.

This report is a testament to the collective efforts and support of all who have played a significant role in my internship journey. I am truly grateful for their contributions, and this dedication is a token of my appreciation and gratitude.

**ACKNOWLEDGMENT**

In this report I can express my sincere gratitude for the opportunity to undertake an internship in the field of software development at Rwanda Energy Group. I am thrilled to accept the offer extended to me and eagerly look forward to contributing my skills and knowledge to the company project.

I am fully aware of the significance of this internship in shaping my professional career, and I am committed to making the most of this valuable experience. I am confident that working with the talented team at Rwanda energy group will provide me with the necessary exposure to enhance my technical skills and gain practical industry experience.

I would like to express my appreciation to Rwanda energy group team for giving me this opportunity. I am eager to learn from the experienced professionals at your organization and contribute to the development of innovative software solutions. I am excited about the chance to collaborate on challenging projects and apply the theoretical knowledge I have acquired during studies.

I understand that the internship will commence on 30th January 2023 and conclude on 7th April 2023. I assure you that I will dedicate myself to the tasks assigned to me and actively participate in all relevant training and development programs offered by Rwanda energy group.

Once again, I would like to express my sincere appreciation for granting me this internship opportunity. I am excited about the learning and growth that lies ahead during my tenure at REG. please feel free reach out to me via email or phone if you require any further information or have any specific instructions to me.

[Biziyaremyealphonse@gmail.com](mailto:Biziyaremyealphonse@gmail.com)

0783857284

**ABSTRACT**

This internship focused on software development, providing an opportunity to gain practical experience in a professional setting. The objective was to enhance technical skills and knowledge while working on real world software project. Throughout the internship, the primary responsibilities included collaborating with team of experienced developers, participating in the software development life cycle, and contributing to the design, coding, testing, and debugging of various software applications.

The internship provided a valuable learning experience in multiple aspects of software development, including understanding the project requirement, implementing software solution, and employing best coding practices. It involved utilizing industry standard programming language, frameworks, and tools to develop software application that addressed specific needs and requirements. The experience helped to improve proficiency in areas such as programming logic, algorithm design, and troubleshooting software issues.

Furthermore, the internship fostered an understanding of the importance of effective teamwork, communication, and time management in a professional software development environment. Regular meeting and code reviews with the development team facilitated knowledge sharing, constructive feedback, and continuous improvement. The opportunities to collaborate on team projects also enhanced shills in version control, collaborative coding, and agile development methodologies.

Overall, the internship in software development provided a comprehensive introduction to the practical aspects of building software applications. It equipped the intern with valuable technical skills, industry knowledge, and an understanding of the software development life cycle. The experience gained during this internship will serve as a foundation for future endeavors in the field of software development and contribute to the intern’s professional growth and career aspirations.

Table of Contents

[CHAP1.INTODUCTION vi](#_Toc136374315)

**List of tables**

No table of figures entries found.

**List of figures**

No table of figures entries found.

**List of symbols and abbreviations**

# CHAP1.INTODUCTION