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Department: Information and Communication Technology

Option: Information Technology

FINAL REPORT FOR EXPERIENCE GAINED AT THE GYM RWANDA.

From 4th May 2026 **to** 19th June 2026

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Submitted on, 22th June 2026

Academic year: 2025-2026

DECLARATION

I, Samuel Ishimwe, hereby confirm that I have adhered to all rules, regulations, and ethical standards in the preparation of this document. I affirm that this Industrial attachment report (IAP) is an accurate and honest accounts tasks I undertook and responsibilities during my internship. This report is my own original work, with no instances of plagiarism or copying involved.

Prepared by:

Samuel Ishimwe

Date: 19th June 2026

Signature:



Supervised by:

Olivier Nkurunziza Karera

Signature:



APPROVAL

This is to certify that Mr. **Samuel Ishimwe** a student at **RP Tumba college**, has successfully completed industrial attachment at **The Gym Rwanda**.

The attachment was undertaken in the department of **Information Technology** from 4th May to 19th June, covering a total period of 7 weeks.

During this period, the student was exposed to practical training, gained valuable industrial experience, and demonstrated discipline, commitment, and willingness to learn.

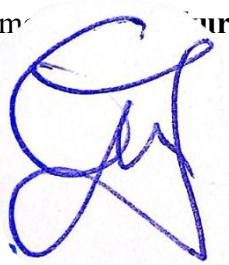
We hereby approve that the above-mentioned student has duly completed the industrial attachment as required.

Company supervisor name

Position: **Senior Devel**

Date: **19th June 2026**

Signature and Stamp:



urunziza K



ACKNOWLEDGEMENT

I would like to express my sincere gratitude to everyone who contributed to the successful completion of this Industrial Attachment Program.

First and foremost, I am deeply thankful to The Gym Rwanda for providing me with this invaluable learning opportunity. Special thanks to my supervisor, Mr. Olivier Nkurunziza Karera, whose guidance and mentorship greatly enhanced my understanding of the field. Your support and feedback were instrumental in shaping my experience, and I am immensely grateful for your patience and encouragement throughout this journey.

I would also like to thank my academic supervisors and institution for their continuous support and for equipping me with the foundational skills necessary for this attachment. The knowledge and skills I acquired in my studies were essential in helping me tackle real-world challenges effectively.

Lastly, I am grateful to my family and friends for their unwavering support and encouragement, which motivated me to perform my best.

Thank you all for making this experience enriching and memorable.

DEDICATION

I dedicate this Industrial Attachment Report to my family, whose unwavering support, encouragement, and belief in my potential have been a constant source of strength throughout my journey.

I also dedicate this work to my mentors and instructors, whose guidance and knowledge have greatly contributed to my academic and professional growth. Finally, to my friends and colleagues who have motivated me and shared in my accomplishments, I am deeply grateful.

Thank you all for your invaluable role in helping me reach this milestone.

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LIST OF ABBREVIATIONS

IAP: Industrial Attachment Program

API: Application Programming Interface **UI:**
User Interface

UX: User Experience

IDE: Integrated Development Environment

TTL: Technical Team Lead

GraphQL: Query Language for APIs

Definition of Terms

- **ReactJS:** A JavaScript framework for applications frontend.
- **Node.js:** A **runtime environment** that lets you run JavaScript on a server instead of just inside a web browser.
- **NestJS:** A **framework** built on top of Node.js that provides a structured, organized blueprint for building enterprise-scale backend applications.
- **Typescript:** A programming language that adds type definitions to JavaScript.
- **User Experience:** UX refers to the overall experience a user has when interacting with a product, system, or service.
- **User Interface:** UI is the space where interactions between humans and machines occur.
- **Application Programming Interface:** An API is a set of rules and tools that allows different software applications to communicate with each other.

CHAPTER 1: GENERAL INTRODUCTION

1.1 Organizational Profile

The industrial attachment program at Tumba College is designed to enhance the skills students acquire in the classroom by immersing them in professional environments. This program, which is a mandatory part of the curriculum, lasts for eight weeks or more provides students with hands-on experience that complements their academic learning, bridging the gap between theoretical knowledge and real-world practice.

This training offers students an invaluable opportunity to understand the realities of the workplace, overcome challenges, and prepare for their future careers. By applying theoretical concepts in a practical setting, students gain insights into the working environment, which significantly contributes to their preparedness for employment.

My internship at The Gym Rwanda, from 4th May to 19th June, allowed me to apply my academic knowledge in a fast-paced technology company. The Gym Rwanda is committed to developing world-class software engineers in their programs, and during my time there, I was involved in various technical tasks, including software development, mobile app development and professional skills.

This internship not only sharpened my technical abilities but also provided me with a deeper understanding of the operations within a tech company, the value of collaboration, and the challenges within the tech industry. This report highlights the tasks I undertook and the lessons I gained during my seven weeks of internship at The Gym Rwanda.

1.2 Objectives of the Industrial Attachment

1.2.1 General Objectives

The main goal of the industrial attachment program is to provide students with the opportunity to apply theoretical knowledge in a practical setting into the real-world. This experience helps students become familiar with real-world work environments, develop strong interpersonal skills through interactions with supervisors, technicians, and colleagues, and enhance their problem-solving abilities in fieldwork scenarios. It also aims to accelerate students' learning, allowing them to quickly adapt to and address challenges in the workplace.

1.2.2 Specific Objectives

The specific objectives of the Industrial Attachment Program include:

- Gaining hands-on experience with tools, technologies, and processes relevant to the chosen field.
- Enhancing professional communication skills through collaboration with diverse teams and clients.
- Developing essential work attitudes such as curiosity, self-confidence, maturity, and self-reliance.
- Developing critical thinking and decision-making abilities by participating in problem-solving activities.
- Helping students assess their interest in the occupation they plan to pursue after graduation.
- Improving time management, project planning, and organizational skills in a real-world setting.
- Understanding the challenges and dynamics of working in a team and adapting to workplace culture.

1.3 Information of the Organization

1.3.1 Profile of the Organization

The Gym Rwanda is a technology training and talent development organization dedicated to equipping young Rwandans with practical software engineering skills that meet international industry standards. Through intensive hands-on training, mentorship, and project-based learning, The Gym Rwanda prepares aspiring software developers to become competent professionals capable of contributing to local and global technology ecosystems.

The organization focuses on bridging the gap between academic learning and industry requirements by providing real-world software development experience. Trainees are exposed to modern technologies, collaborative development practices, agile methodologies, version control systems, and professional workplace standards. This approach enables learners to develop both technical and professional competencies required in today's competitive technology industry.

The Gym Rwanda offers training in various areas of software engineering, including front-end development, back-end development, full-stack development, database management, software testing, and software project management. Through continuous learning, teamwork, code reviews, and mentorship programs, trainees gain practical experience in designing, developing, and maintaining software applications.

The organization plays an important role in strengthening Rwanda's technology ecosystem by nurturing local talent and preparing young professionals for employment opportunities in technology companies, startups, and digital innovation projects. By promoting excellence, innovation, and continuous learning, The Gym Rwanda contributes significantly to the development of a skilled workforce capable of driving technological advancement and economic growth.

Vision

To develop highly skilled and industry-ready software engineers who can compete and contribute effectively in the global technology sector.

Mission

To empower young professionals through practical, hands-on software engineering training, mentorship, and real-world project experience, enabling them to build successful careers in technology and contribute to digital transformation initiatives.

Core Values

Excellence

- **Maintaining high standards in training, software development, and professional conduct.**

Continuous Learning

- **Encouraging curiosity, innovation, and lifelong learning in technology and professional development.**

Collaboration

- **Promoting teamwork, knowledge sharing, and effective communication among trainees and mentors.**

Innovation

- **Embracing creativity and modern technologies to solve real-world problems.**

Integrity

- **Upholding honesty, accountability, professionalism, and ethical behavior in all activities.**

Impact

- **Developing solutions and talent that contribute positively to society and the growth of the technology industry.**

CHAPTER 2: PERFORMED ACTIVITIES IN INDUSTRIAL ATTACHMENT PROGRAM (IAP)

2.1 General Activities Undertaken

During my industrial attachment at The Gym Rwanda, I actively participated in various software development activities that enhanced both my technical and professional skills. My responsibilities primarily involved developing and maintaining web application features using modern technologies such as React, TypeScript, Tailwind CSS, and PostgreSQL.

I collaborated with fellow trainees and mentors in a team-based development environment where we followed industry-standard software engineering practices. This included participating in project planning sessions, implementing assigned tasks, integrating APIs, debugging applications, and testing software functionality to ensure quality and reliability.

Additionally, I gained valuable experience in version control and collaborative development through the use of Git and GitHub. I regularly created feature branches, submitted pull requests, addressed review comments, and improved my code based on feedback received from mentors and peers. These code review processes helped me develop a deeper understanding of clean code principles, software design practices, and professional development workflows.

The industrial attachment also exposed me to agile development practices, effective communication, teamwork, problem-solving techniques, and project management concepts. Through these experiences, I strengthened my ability to work collaboratively within a software development team while delivering high-quality solutions that met project requirements.

Key activities I undertook included:

- **Leading the Team:** I took on the role of team lead, where I coordinated tasks among team members, facilitated communication, and set priorities to ensure smooth progress on assigned projects. This role involved managing timelines, delegating tasks, and providing support to team members when needed.
- **Code Review and Quality Assurance:** I was responsible for reviewing my teammates' code submissions on GitHub to maintain the quality and functionality of our project. This involved checking for code consistency, best practices, and ensuring that new code did not introduce bugs or conflicts.
- **Preparing for Demos:** I also prepared for project demos by compiling the team's work, creating presentations, and rehearsing project workflows. These demos provided an opportunity to showcase the team's progress, discuss challenges faced, and gather feedback from supervisors and TTL's.

These activities not only enhanced my technical skills but also helped me develop strong leadership abilities, effective communication skills, and a better understanding of version control processes within a collaborative environment.

2.2 Specific Activities Undertaken

During my industrial attachment at The Gym Rwanda, I was responsible for various detailed tasks that involved both design and development for a web application called Monishare Carsharing.

Here are the main activities I completed:

2.2.1 Designing the App with Figma

One of my primary tasks was creating a user-friendly design for the app using Figma, a popular design tool. I worked on developing some layout designs for important screens to ensure that the app looked appealing and was easy to use. This involved planning the layout of each page, selecting suitable colors, and ensuring consistency across different sections. The designs helped guide the structure of the app and made sure that the interface was simple and user-friendly.

Figure 1: Authentication pages

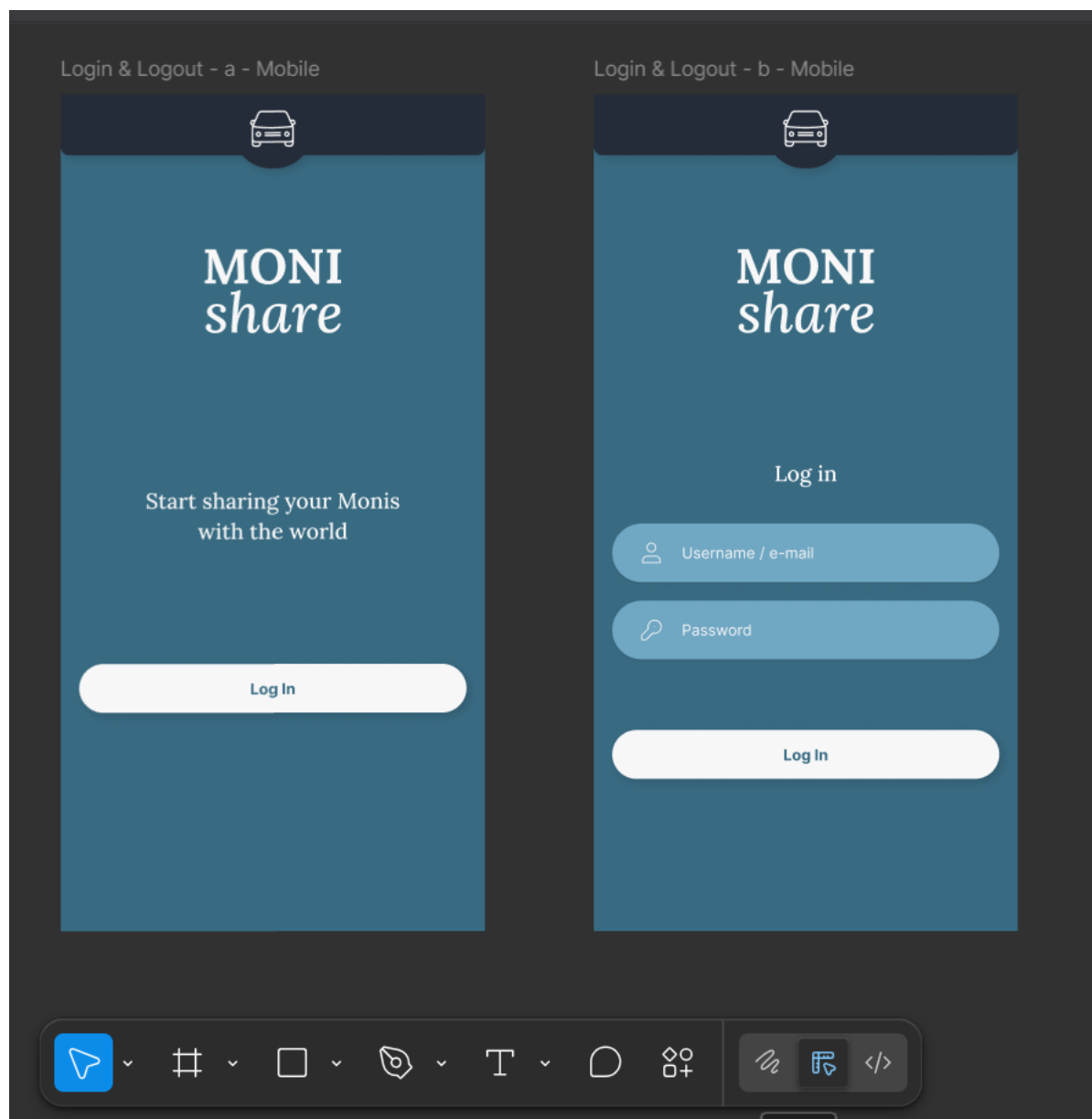
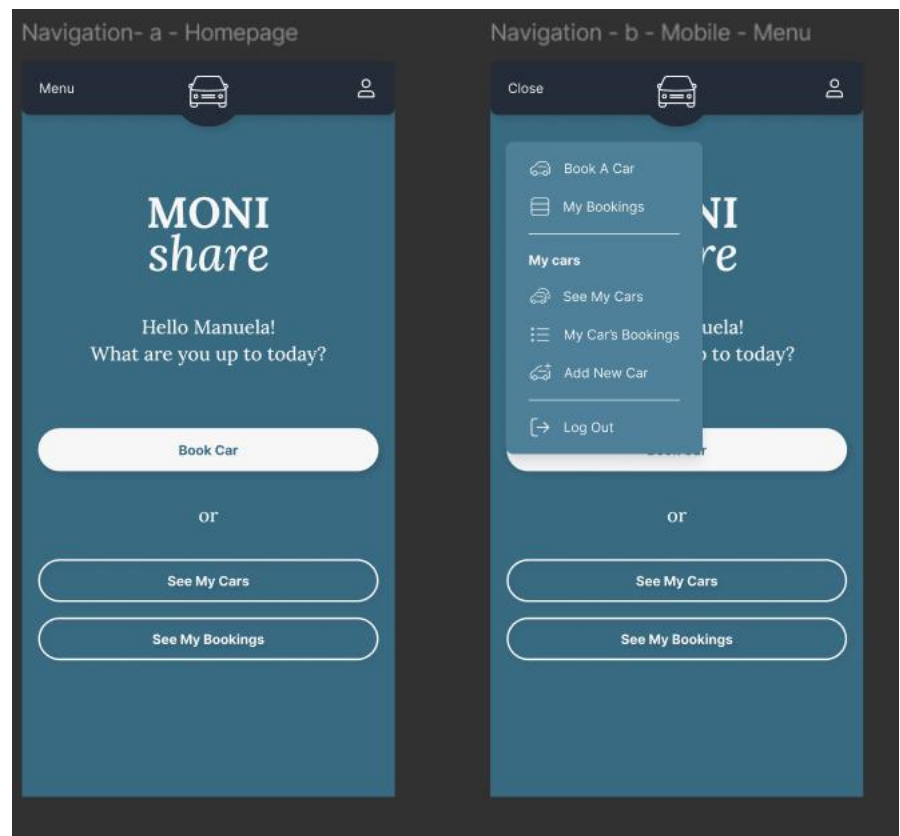


Figure 2: Welcome page



2.2.2 Building web Application

Registration Page: I spent two weeks creating a registration page that allows new cars to be registered during sprint 2 of the project

Figure 3: Register form



Offer own car - a - Mobile

Menu  

NEW CAR

Name
e.g. My Nice Moni Car

Type
Moni Cooper

License Plate
e.g. M-XY 123

Horse Power
110

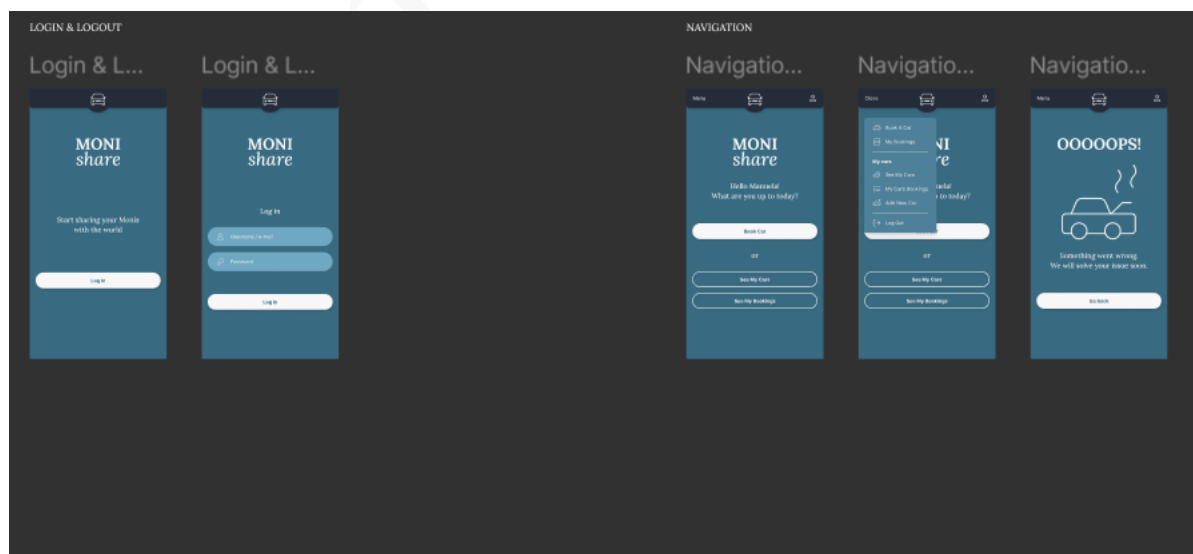
Fuel type
e.g. 150

Additional Information
e.g. No smoking

Cancel Add Car

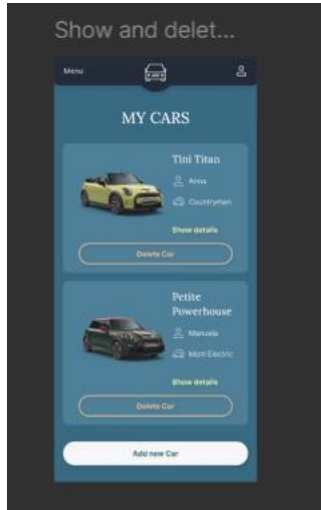
- **Dashboard Layout and Sidebar:** During sprint one we designed a dashboard and home like page which is as referred in a picture

Figure 4: Dashboard layout & sidebar



- **My Cars Page:** I built the My Cars page for managing my own cars and decide whether to delete them or not

Figure 5 my cars page



2.3 An Analysis of Learned Knowledge and Applied Skills

During my industrial attachment at The Gym Rwanda, I was able to develop a variety of technical and soft skills that greatly contributed to my professional growth. This section provides an analysis of the knowledge I gained and the skills I applied throughout my internship.

1. Soft Skills

- Problem-Solving

Resolving technical challenges such as implementing internalization and debugging issues required strong problem-solving skills. I learned to break down complex tasks into smaller steps, which helped me work more efficiently and find effective solutions.

- Communication

collaborating with team members required clear and effective communication, especially when explaining complex ideas and ensuring everyone was able to get it. I developed the

ability to present my ideas clearly and discuss project requirements, which ensured smooth teamwork and project alignment.

- Teamwork

working closely with a wide-ranging team at The Gym Rwanda helped me appreciate the value of different opinions and contributions. I learned the importance of collaboration, which enhanced our ability to solve problems collectively and created a supportive work environment.

- Time Management

balancing multiple tasks, including mobile implementation, backend integration when there's an issue, and issue fixing, required efficient time management. I learned to prioritize tasks, set achievable goals, and stick to the deadlines, ensuring that I completed my assignments on time without sacrificing quality.

- Adaptability working in a fast-paced tech environment required flexibility and a willingness to adapt to new tools and technologies. I developed the ability to learn quickly and embrace change, which is crucial for thriving in the dynamic field of technology.

2. Technical Skills

- Mobile App Development (Monishare Carsharing web application)

I advanced my skills in mobile development, particularly through my work with ReactJS, Typescript, Figma. I designed and implemented various user interfaces to ensure they were simple to use, and optimized for mobile use and computer use, enhancing the app's overall user experience. Working on UI and UX elements also helped me understand the importance user interactions.

- Backend Integration and Data Handling

- Internalization Enhancement one of my key tasks was to implement internalization in three languages: English, French, and Kinyarwanda. This involved creating language files, integrating them into the app, and testing the text display across various components. This experience taught me how to adapt content to serve a diverse user base and reinforced my understanding of user accessibility across languages.

- **UI/UX Design with Figma**

Using Figma, I developed UI/UX designs that guided the app's layout and visual elements. This helped me understand the design process from wire framing to prototyping, ensuring that the app's interface was both user-friendly and visually appealing. Designing with Figma also gave me practical experience in collaborating with team members to iterate and improve designs based on feedback.

- **Bug Fixing and Code Optimization**

Throughout the attachment, I also had the responsibilities to identify and resolve various issues within the app, such as fixing the logout functionality and correcting typographical errors. This experience improved my debugging skills and emphasized the importance of code quality and user experience.

My industrial attachment at The Gym Rwanda was a transformative experience, allowing me to bridge the gap between theoretical knowledge and practical application. The combination of technical and soft skills I gained has prepared me well for future challenges, encouraging confidence in my ability to contribute effectively to any team. As I advance in my career, I am committed to building on this foundation, continuously improving, and growing professionally.

CHAPTER 3: INDUSTRIAL ATTACHMENT LIFE EXPERIENCE

3.1 Observations during the Attachment

Throughout my industrial attachment at The Gym Rwanda, I made several key observations that significantly contributed to my professional and personal growth. These experiences helped to solidify my understanding of various technical skills, as well as improve my soft skills, both of which are crucial in my future career.

1. Application of Theoretical Knowledge

During my time at The Gym Rwanda, I observed a clear connection between the theoretical concepts I had learned in class and their real-world application in software development. For example, I gained hands-on experience applying theoretical knowledge

in practical scenarios, which established my understanding. This experience directly complemented the knowledge I gained in my coursework and demonstrated how classroom learning can be implemented in professional environments.

2. **Real-World Problem Solving** throughout my attachment, I faced challenges that required innovative problem-solving. For example, I worked on issues related to mobile app performance optimization and UI/UX design improvements. I learned how to approach these problems by breaking them down into smaller tasks, conducting research, and collaborating with my team. I also developed my problem-solving skills by learning to approach complex issues with a clear, step-by-step process. Despite all of that I did not get the opportunity to work with some complex technologies, such as machine learning or AI integration, which I would have liked to explore during the attachment.
3. **Value of Communication**, one of the key observations during my attachment, was the importance of effective communication in a technical environment. I realized that communicating technical ideas clearly and succinctly was essential when discussing progress or troubleshooting issues with my team. Since all my colleagues were technical, I was able to enhance my communication by explaining complex technical topics in a more detailed manner. I developed better communication skills, specifically in explaining technical concepts to others with similar technical knowledge. Unfortunately, I did not face situations where I had to explain technical concepts to non-technical stakeholders, which would have expanded my communication skills further.
4. **Team Collaboration and Dynamics** working within a highly skilled team provided valuable insights into how collaboration operates in a tech environment. I gained a deeper understanding of team dynamics, learning how to leverage the skills of diverse team members to achieve better outcomes. This experience was important for enhancing my teamwork skills, which are directly relevant to collaborative software development projects I may encounter in the future.
5. **Adaptability in a Fast-Paced Environment**

The dynamic and ever-changing nature of the tech industry required me to be adaptable throughout my attachment. I had to quickly adjust to different tools, frameworks, and methodologies, such as React Native for mobile development and Git for version control.

Adapting to these tools and processes taught me to be flexible and stay updated on new technologies, which is critical in a fast-paced, technology industry. I gained experience working with multiple technologies, enhancing my ability to adapt to new tools and practices. Even though I had all that experience I did not get the chance to explore some of the more advanced tools for cloud deployment and DevOps practices, which I believe would be useful for full-stack development. The need to adapt to new tools and processes directly aligns with my training in computer science, preparing me for rapid changes in technology in the professional world.

3.2 Critique of the Attachment Experience

Although my industrial attachment at The Gym Rwanda was an invaluable learning experience, I encountered several areas where the experience could have been enhanced. These improvements would have further enriched my skills and broadened my exposure to the latest industry practices.

1. Depth of Technical Training

While I gained practical experience in mobile app development, the training lacked depth in some technical areas. For instance, while I learned how to build mobile applications, more structured training on advanced database management and network protocols would have helped me further refine my technical skills. I also gained valuable hands-on experience in mobile app development, which deepened my understanding of software development principles. I was not exposed to more advanced topics such as cloud-based services or backend architecture, which would have been beneficial for developing a more rounded skill set. A deeper technical training would have complemented the knowledge I gained in my academic studies, helping me become a more versatile developer.

2. Exposure to Cutting-Edge Technologies

Throughout the attachment, I noticed that there was limited exposure to emerging technologies, such as cloud computing and machine learning. These technologies are becoming increasingly important in the tech industry, and exposure to them would have

better prepared me for current and future industry demands. I also improved my skills in mobile development and UI/UX design, but I lacked exposure to some newer technologies. I did not gain practical experience in cloud services, machine learning, or artificial intelligence, which are highly relevant in today's tech landscape. Integrating these technologies into the attachment experience would have helped me bridge the gap between the tools I learned in class and the ones used in the evolving tech industry.

3. Feedback and Mentorship

Regular feedback sessions were not as frequent as I would have liked. Constructive criticism would have helped me identify areas of improvement earlier and refined my skills. A more structured approach to mentorship, where supervisors could offer regular guidance, would have accelerated my learning process. I was able to grow independently, but more frequent guidance would have streamlined my development. Having more feedback would have been invaluable in strengthening my technical and professional abilities, aligning with the goal of continuous improvement encouraged in my training.

4. Project Management Skills

While I had some exposure to project management tasks, there was a lack of structured training on methodologies like Agile or tools such as Jira. Gaining a deeper understanding of these concepts would have been beneficial for effectively managing projects and deadlines. I was exposed to basic project management tasks, but without formal training. I did not have the opportunity to use advanced project management tools or methodologies that would have better prepared me for future roles. Structured project management training would have complemented my technical skills and prepared me for leadership roles in software development projects.

CHAPTER 4: GENERAL CONCLUSION AND RECOMMENDATIONS

4.1 Summary

My industrial attachment at The Gym Rwanda provided an excellent opportunity to translate academic theory into practice. During this period, I worked on several key projects that significantly enhanced my technical skills in web application development (Monishare App), UI/UX design, and internalization using React, and Typescript. I was actively involved in tasks such as implementing user registration, designing the dashboard layout, developing the profile

page, fixing logout issues, and improving the app's internalization in three English language. Through these activities, I not only refined my technical abilities but also developed soft skills, including communication, teamwork, problem solving, and time management.

4.2 Conclusion

In conclusion, my time at The Gym Rwanda was incredibly valuable for my personal and professional development. The hands-on experience allowed me to bridge the gap between academic learning and real-world applications in the technology sector. It has made me more confident in my ability to contribute to the software development field, particularly in mobile app development and working in collaborative team environments. The exposure to real-world challenges has equipped me with the technical and interpersonal skills necessary to succeed in future roles.

4.3 Recommendations

To further improve the industrial attachment program at The Gym Rwanda, I recommend the following:

- **Encourage More In-Person Collaboration:** While remote work offers flexibility, greater in-person interaction can significantly enhance teamwork, mentorship, and communication. It's recommended that The Gym Rwanda encourages interns and employees to work in the office more frequently, especially for team meetings and collaborative projects. This will foster stronger interpersonal relationships, facilitate easier knowledge transfer, and improve the overall office culture.
- **Expand Communication Channels Beyond Slack:** Slack is an excellent tool for team communication, but relying solely on it may limit engagement. It's advisable to explore additional communication tools such as Microsoft Teams, Zoom, or even face-to-face meetings, especially for brainstorming sessions or cross-functional collaboration. This variety of platforms can suit different types of communication and improve clarity and accessibility for all team members.
- **Provide Regular Face-to-Face Mentorship and Feedback:** While remote work has its advantages, having regular face-to-face sessions with mentors can significantly enhance learning. It's recommended that The Gym establish scheduled in-person mentorship and feedback sessions where interns can engage directly with their supervisors or mentors. This will not only help in addressing concerns in real time but also create more opportunities for growth through immediate, personalized feedback.
- **Encourage Cross-Departmental Interactions:** In addition to technical skills development, providing opportunities for interns to engage with departments outside of their core roles (e.g., HR, Marketing, and Operations) can help them understand the holistic workings of the company. Regular cross-departmental meetings or social events can expose interns to various aspects of the business, encouraging a broader mindset and strengthening collaboration between different teams.
- **Foster a More Structured Onboarding Process:** While The Gym Rwanda's internship experience is already well-organized, a more structured onboarding process could further

benefit newcomers. This might include having a clear, documented roadmap for the first few weeks, which includes in-office introductions, shadowing senior employees, and setting clear learning objectives. This structured approach could give interns a better sense of direction and purpose early in their attachment.

- **Create a Social & Networking Space:** Offering dedicated spaces for social interaction (both virtually and in-person) can help interns build stronger networks within the company. Regular team lunches, social gatherings, or virtual happy hours can provide a relaxed environment where interns and full-time employees can connect, exchange ideas, and learn from each other.
- **Implement Hybrid Work Flexibility:** While recommending more office days, recognizing that flexibility is also valuable for work-life balance is crucial. A hybrid work model can be implemented, allowing interns to work from the office a few days a week while maintaining flexibility to work remotely when necessary. This balance can encourage higher productivity while catering to individual work preferences.

REFERENCES

The Gym Rwanda: <https://www.the-gym.rw/>

Expo documentation: <https://docs.expo.dev/>