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FULL STACK DEVELOPER

a. Presentation of the company

This internship report describes my experience as a full-stack developer intern at Joza-IT, a consulting firm specializing in development and architecture. The company is active in the tertiary sector, providing services to businesses as diverse as the SNCF, Belambra, Light and Shadow, among others. This small-sized company has close to 20 full-time employees, most of whom are full stack engineers. The owner is Mr. Nicolas Le Coz, who had previously worked for the SNCF but left to start his own company in 2015. Offering various intern positions, Joza-IT generally recruits staff with three to five years of experience.

b. Presentation of the general function in the service

Over the course of 6 months, I was part of a team of 4 people working on the SoBet and Esportips projects. My supervisor, (Tawfic Jaffar) is the lead developer.
He was a student at Epitech in 2016 and has more than 4 years of full-stack dev experience.

He worked as a full-stack dev in multiple company such as 6 DEGRES, IONISX, Incarna and JUMP.

c. Work Description and skill set acquired

My main responsibilities included:

- resolving bugs
- Designing tests to improve the stability of the product
- developing new features for these mobile applications

Additionally, I was also involved in managing the API and backend aspects of the projects.

Skills that were necessary to fulfill the expectations of the internship supervisor include:

- Listening (in order to understand the needs of the client)
- Intuition (based on knowledge, experience, and sometimes gut feeling) in order to take the client needs and give clear insight to help improve the product
- Presentation skills, the ability to provide an organized explanation of what progress was made for the day, and why (methodology)

- Perseverance (if one solution is not adapted to the problem, then another must be found, researched, tried and then explained).
- Oral skills and diplomatic skills were also important to the supervisor.

d. Description of existing situation, current company status

The company's working method is AGILE, and they have a strong emphasis on learning, with regular training sessions held to explore new technologies. Joza-IT has a diverse set of experienced developers who can provide innovative solutions while keeping the architecture simple and understandable.

When I started the internship, I was provided with a Mac laptop with preinstalled software needed to work on the projects.

A list of Software I used while working on project:

• Xcode and Android Studio to work on their respective (IOS-android) Environment.

• Intellij Idea Ultimate Is used to work on the API and Back-end of both projects.

• PostgreSQL, which is the database, used to store data

I joined the two already existing projects (SoBet and Esportips) which had begun in 2019 but started and stopped over a period.   During my time working on the projects, I was able to:
- Implement the group features which were previously deactivated (large success)
- Create a routine the enables the clients to push notifications to all users on all devices (also an important breakthrough on the project and large success)
- Contributed important work towards rebranding SoBet (reformatting logos, type fonts, layout design)

e. Timeline / breakdown of the work in a one-week period
- Every day: DSM (Daily Scrum Meeting): To present our daily progress to the client
- Friday: Back Log Refinement : Weekly meeting to improve product backlog items.
- Monday: Sprint planning: Meeting to plan the next sprint's tasks, resources, and goals.

f. General appreciation of the internship and relationships-built team members / clients

During the internship, I gained a solid understanding of mobile application development and improved my skills in the technologies used. I also had the opportunity to work on the backend and API parts of the project which allowed me to become more familiar with different technologies such as:

 Java JS, React, PostgreSQL, Swift, java-Android and Kotlin.

The internship provided me with an excellent opportunity to acquire new skills and improve my abilities as a full-stack developer.

I had a very good work environment in the offices of Joza-IT in the 8th arrondissement of Paris, with a work schedule consisting of 4 days in the office and one day, usually Thursday, of working at home. The office was extremely well equipped with common areas, full kitchen and I had my own desk throughout the internship.

The ambiance within my team was very professional and we all helped each other. The company also hosted training sessions, seminars and some team building events around the Christmas holidays including a potluck dinner (where everyone brought as dish from their family traditions or home country) and ice skating.

My internship did require the development of a commercial relationship because we worked directly in the presence of the client and were called upon to interact with our client daily. This was a very interesting experience in a real-world work situation as clients do not always exactly know or understand what they want for their own product, and it is not possible to use highly technical vocabulary. Concepts need to be translated from the developer's 'language' to easier to understand explanations when we are problem solving with them.

g. List of Engineering Skills acquired during the internship

During my internship, I gained extensive knowledge in coding by working on various aspects of the project. The following technologies and languages were utilized:

- Java with Android Library: open-source platform for developing android apps
- Swift: Apple's programming language for building iOS, and macOS apps.
- JavaScript with React Library: a popular front-end library for building user interfaces, combined with JavaScript for back-end and API development.
- PostgreSQL: an open-source relational database management system.
- Certificate Manager: a tool for managing and organizing digital certificates.
- Redux: a library for managing application state in JavaScript applications.

h. Conclusion

This internship has been a valuable experience for me, both in terms of professional development and learning about the inner workings of a consulting firm. The AGILE methodology and the emphasis on learning about the culture of the company have been particularly helpful for my progress. The internship also allowed me to gain skills in different technologies, such as Java and big data.

However, it should be noted that one negative point of the experience was that I didn't have the opportunity to work on multiple projects, which could have provided a more diversified experience.

Overall, I am grateful for the opportunity to intern at Joza-IT and believe that the skills and knowledge I acquired will be beneficial in my future career as a full-stack developer.