Department of Computer Science
City University of Hong Kong
Placement Activity Logs

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Student Name   :   LIAO Hua Xin

Student Number   :   56264031

Company Name   :   Virtual Economy Technology Limited

Department Name   :   Computer Science

The attached activity logs for the following period have been read and agreed:

1 June 2022 - 12 April 2023

Work Supervisor's Name : _Miss Pan Carrie_____

Work Supervisor's Signature: _Carrie Pan (Apr 14, 2023 12:06 GMT+8)_____ Date: _Apr 14, 2023_____

Academic Supervisor's Name : _Dr. ZHAO Qingchuan_____

Academic Supervisor's Signature: _Qingchuan Zhao (Apr 14, 2023 12:59 GMT+8)_ Date: _Apr 14, 2023_____

Placement
Final Report

SID:56264031
Hua Xin Liao

I. Acknowledgement

I really want to thank the guidance of my seniors for teaching me so many good practices and allowing me to gain so much knowledge in the past few months. I did not expect to meet so many wonderful developers at my workplace, always willing to help and answer my questions. Also special thanks to the Management for making my integration at the company smooth and enjoyable. Although I have encountered numerous challenges during the internship (such as getting sick), the HR was always very understanding and caring about my health.
Lastly but not least, I would also like to thank people which I have not worked directly with (not developers), as I have learned skills which are also important even though they are not related to coding.

II. Objectives of Placement

The objectives of the placement are primarily focused on preparing the student to work in a real-life work environment. As we spend most of our time studying computer science concepts and topics, most of us have no actual real working experience and the dynamics that come from working. This is essential for students like me, who did not have any previous experience, allowing me to be more prepared for my upcoming graduation and graduate job. This experience has helped me to adapt working with different backgrounds and coding styles. Taught me how a smooth cooperation between teammates is essential for delivering projects in time and meeting the expected quality.

III. Description of Company

V-Systems, the company where I am interning, is a blockchain focused organisation. It offers several blockchain focused solutions, both centralised or decentralised. Other services include NFT as a service, asset-based tokenization and many others. All those services are targeted to develop real world applications.

IV. Description of Department

I am working in the Hong Kong office in the front-end developers team. The front end team in Hong Kong as for now, is composed of 4 people including myself and the other placement student. Our main focus is delivering and developing front-end related projects given by our tech lead and product manager. The projects may involve decentralised blockchain solutions or centralised ones. If we are working on centralised solutions, we often have to closely communicate with the back-end team to integrate all the functions properly and avoid miscommunications and delay in project delivery.

V. Work Assignments

When I joined the company, I was assigned minor tasks which were aimed for me to learn more about the V-Systems blockchain as most of our solutions need the integration of the SDK to query the blockchain, either to store or retrieve information. My first task was simply to develop an inside website, which was the perfect project for me to get familiar with the tools and CI/CD of the company. As I have worked on different projects, I have been assigned to different projects in cooperation with my colleagues as well. My first time working alongside one of my colleagues was quite challenging as I have never worked in a real-world project and I was quite nervous to mess up. My senior was very patient and guided me through the development process and assignment specific tasks are isolated and won't interfere with each other making the development process smooth and steady. I was also taught how to handle merge conflicts. In the past few months, I have been assigned to work on an internal project which required a lot of refactoring. The development process was not easy at all as the codebase of the projects had the codeprint of many developers, including someone that are not primarily front-end developers. As I developer myself, I have to admit I am not very satisfied with my work in the last project as I did not manage to keep my code clean as I was more focused on not breaking it. Fortunately the upcoming plan of revamping the project will give me the opportunity to properly deliver the

project following good coding standards and using the updated tech stack.

One of the last tasks I have been assigned to is a project that was initially assigned to our Malaysian team, and I had the opportunity to answer their questions and give them some advice that reminded me of the time when I had just joined the company.

VI. Analysis of CILO

1. Cilo I

Working at V-Systems I had the opportunity to talk with developers of different backgrounds during the development of the project. I also had meetings with my project manager and tech lead. Sometimes I had the opportunity to strictly communicate with the designer as well when some requirements were not very clear and needed more time to discuss and figure out how to tackle different problems. Lastly but not least, had the opportunity to join meetings with clients but did not directly been in contact with them.

2. Cilo II

Working in a relatively small environment and being able to see all parts of the company, I was able to see how the different parts of the organisation communicate with each other. From how the peer review between my seniors is performed to how clients and our product manager discuss the requirements of future projects.

3. Cilo III

This is the aspect I have improved the most as a developer. I had the opportunity to hone my programming skills. Not only have I been enchanted with knowledge about languages I knew before the start of the internship (JavaScript) but I had to learn important language skills such as React Native and Typescript which nowadays is essential for coding.

Not only programming skills but learn about cloud services such as Cloudflare,vercel and AWS and how to implement them in projects.

4. Cilo IV

As I have been assigned some solo projects, I had the opportunity to work independently and learn to manage effectively my time to deliver the project within the deadline. Although for one of my projects I had to work overtime in order to finish before the deadline, I have kept a professional attitude towards my responsibility and made sure to finish it in extra time.

5. Cilo V

I have worked with my colleagues in different projects, especially with the Malaysian team. It is not always easy to collaborate on the same project especially because of the distance and it is not always easy to collaborate in distance. Even with all those difficulties, I managed to work quite successfully with them. On the other hand, working with developers and designers with people in the office was surprisingly easy as everyone was willing to promptly communicate changes and work together to solve common problems.

6. Cilo VI

There were periods of time when most developers were all busy working on different projects so I felt the necessity to not always seek help from seniors whenever I have encountered some challenges but to try to find the solution myself. This allowed me to increase my problem solving capabilities and learn to give specific solutions to specific problems.

VII. Analysis on Programme

As my position at V-System is Front End developer, I do not think my degree programme has any strong classes that have prepared me for my placement. Although we have an internet application class, it is quite outdated and does not teach the most essential concepts in front

end development. On the other hand, we have other classes which teach us programming basic and computer science concepts that allow us to come up with solutions when a problem arises. It is understandable that we do not have classes regarding devOps, specific development language as those are learned through work and personal projects but a well structured web related programming class would help my future peers in computer science to be more prepared for the placement programme.

VIII.   Experience Gained

I personally feel like I have learned a lot. Not only have I learned new frameworks and programming languages, but I have learned how to work in a team following various CI/CD flows. I was also encouraged to think about solutions as well for different problems we have encountered in satisfying client requirements which lead me to learn more about the enormous sea of IT solutions available and decide which one would fit the best for different circumstances. I also have drastically enhanced my knowledge in blockchain technology and learned more about its limitations and possible use cases which I was not aware of. Overall, I am extremely satisfied with what I have learned, and I considered myself very lucky to be able to work with so many talented developers in the office

IX.   Self-Reflection

During my placement I have realised how many technologies out there I am not aware of, and how we can tackle the same problem with different solutions that have different pros and cons. The path of a computer science student is never ending as new solutions come out every day and before I have never really thought about it. Combined with my self-driven motivation to learn more, I will cover up for the past few years that I have not learned about all these kinds of technologies for gaining as much knowledge as possible to face my last years. Another weakness I used to have been to rely entirely on forum to answer my coding questions and never went to check the documentation itself. This part of me has changed since I start working as I started to read

documentation and it allowed to increase my knowledge about how certain behaviour are implemented and not only what they do. Although I do not have many classes left in my last year, this is the best opportunity for me to take advantage of what I have learned in the past year to focus on my final year project and be proud of how far I have come.