INDUSTRIAL TRAINING REPORT

FACULTY OF COMPUTER SCIENCE AND INFORMATION TECHNOLOGY (FCSIT) UNIVERSITI MALAYSIA SARAWAK (UNIMAS)

TITLE :

Industrial Training Report at Taiyo Yuden (Sarawak) Sdn. Bhd.

NAME : ALVIN ANAK SAMAIL

MATRIC NUMBER : 65389

PROGRAMME : WC10 - SOFTWARE ENGINEERING (SE)

1. Title

To maintain and develop a web application programme for LAN server for factory process system usage at Malaysia-Sarawak Taiyo Yuden (MSTY) which handle a lot of project from company to develop a data team management.

2. Keywords

Objectives:
1. Independent
2. Teamwork
3. Disciplines

Activities:
1. Meeting with Manager
2. 5S Culture
3. Ice Breaking

Result:
1. Communication
2. Hands on skill
3. Master programming skill
4. Problem solving

3. Objectives

To develop a skilled student and graduate through Industrial Training who can match the industry requirements in the upcoming years. I have learnt how to interact with the manager and other intern effectively in order to execute the projects that have been given to me in a professional way. Through this internship, I was taught to have problem solving abilities and be able to do my work as perfectly as I can in order to not burden the team. I also learnt about the work ethics that the employee should have in the workplace.

Besides that, in the mean time when I was in working places I learnt how to do my work diligently and independently with my learning skill and comes out with the improvement in my programming skill-set and adding my skill-set in presentation.

Lastly, it's boost my confidence and way of how I handle the work in working area and be polite to each of the company employee and asking for the guidance from them to ensure the productive of the work in the workspace. Although it's been a hard time to survive without even having a holiday but must be struggle to handle the project well.

4. Description of the training programed

I. 977, Persiaran Elektronik 2, Sama Jaya Free Industrial Zone, 93350 Kuching, Sarawak.

II. Responsible Supervisory :

Name :	Mr Pan Kuong King
Email :	pankuongking@msty.yuden.co.jp
Department :	Production Room (ML1A)
Position :	Department Manager
Role :	Manager
Name :	Miss Esther Anak Francis
Email :	esther.francis@msty.yuden.co.jp
Department :	Production Room (ML1A)
Position :	Senior Coordinator
Role :	Supervisor
Name :	Miss Vanessa Christie Anak Lubong
Email :	vanessa.christie@msty.yuden.co.jp
Department :	Production Room (ML1A)
Position :	Engineer
Role :	Co-Supervisor

III. Task:

1. **Complete the proposed web-application system project**

The first day of report duty our intern has sign a Non-Disclosure Agreement (NDA) for data security of the company, our team is named as Production 1 (ML1A)-Front Process in the factory area will take the data from the individual process line. There are several project has been assigned for each of our team is first determined how the level of programming language of student had, problem solving skill, independent, communication and understanding. Our team will wait until the laptop has been provided by the company to do our project with the personal laptop is not granted. After received and understanding the concept product of Multi-Layer Ceramic Capacitors (MLCC) through the training we has assigned the project that for improve the system of company, we start by checking the system code and difficulties and functionalities for the system. If there are not clear image of the system, the supervisor will bring to visit the system again to make sure the student understand. Note that this system using wide server where everyone can access the system through LAN. Another method we can understand the system is by asking the employee there where OJT leader of the process. Just like other company all the process has their own hierarchy, processs also have individual team leader and manager (in bigger concept). The data that might be used in the process will be captured and later will be stored at the database. The server data of the system was taken such as when the system complete will be become the report or summary of the product at the end.

2. **Production Room Management**

Our production team in Taiyo Yuden Sarawak is a wide area factory located on Samajaya where the production of MLCC of electronic component and produce for usage at the component of electronic part from chemical part and become the inductor for the electronic component in the technology era. The Multi-Layer Ceramic Capacitor (MLCC) is layered with certain layer of the inductor as much as possible. It has the ceramic layer which gives to the better quality of the electronic component as per request of the customer and the CSR rule of the company. Each system is marked by a front process and back process marker the bearing of the system flow of the process from the beginning until the end of chip production.

Front Process

New system must be from or under requirement from the process need and manager power. System that from other branch of Taiyo Yuden which is Japan and Singapore is connect to each other and will retrieved the data at the same time by the data team member upon notification from email used which is Thunderbird develop by IT department. We also received additional project from the supervisor when there is complete project such as Weighing System. Upon receiving the project, it will be our duty to develop and to ensure the data is recorded and been save into the database. Details of the project and additional project of company such as ground process area andduration of the employee of the working area. In order to get the project done, the team has prepare and connect the internet connection for the resources reference of the project to be done with a wide process to place the respective older system.

Back Process

The back process factory is shaping the ceramic chip shape and how the look of the capacitors in the end and its controlled quality by get the best shape of the product and avoid not good product. As the products reach the end of process, a shape care is priority in produce of good chip, above the average. This is to make sure that the ceramic capacitors is produce well and be given to the customer in good condition and stored in the database. This process usually just to shaping the chip and removing the shape that contain other material from the chip or to separating the "NOT GOOD" chip which is fail product to be given to the customer. A daily report of the system will check to make sure the average of the data record reach the company goal. Where the person in charge will produce the system that can read the data for the record for the average counter and the chip produce on the day (daily data recorded).

Middle Process (MLCC)

Layered Shape Form (LSF) is a method where to separate the layered big chip become tiny shape where a procedure that is carried out from the shaping triangle of the chip will become tiny shaped chip. This procedure is too pilled out the assess part of the chip to get the perfect shape of the chip capacitor and the durability of the chip. The shaped chip from the cupboard all the remains just that the smaller chip is produce when comes to this process, the process will begin to cut and separate the chip by using blade and laser and after cut it will comes out with the first look of the chip. Empty chip shells is a sign that the chip is broken or not good. As for the ceramic look of the chip, it will be examined to see the durability of the chip, induct-or function, ants and also power it can supply. The live separating of the chip from the shape is called "Darabe". They often used the basket to prevent the chip messed up from the table them from emerging into the surface. In a natural process, these chip produces would used simple thing as they do not have to conserve many thing to do this. Personal Protective Equipment (PPE) always been given in the company to make sure the safety of the factory are care well and controlled. The data from the server will be recorded and will be updated to the worldwide of Taiyo Yuden branch chip producer.

3. Proposed Project

The first project to be done is called “Seikei Scanning System” where this system functionality is to record the data from the rolled before the ceramic layer been shaped and updated in the database. The database contains information such as the location of the factory, days the process of the layer taken to be and also the average of the not good data was key-in. Data entry was done daily by assigned for each operator by shift, each tiny layer will compact together to form chip where attempted fail will cause the chip to become not good. As for the system updates, the same person in charge will update the data inside the pc leader and about the data of their chip such as layer and cover plan on that day is recorded and save.

The second project to be done is called the “Insatsu Printing System” where this system functionality is to measure the calculation of material been mixed together to shape the piece layer of the chip. This is start from the material mixed from the process using chemical and form a layered chip where the mixed amount must be controlled and concise. This system will calculate and evaluate the adjustment record of the system where to control the chip produce. At the end it can store the data of the calculation and also the pattern of the data saved. The operator will start the operation if the mixed chemical is mixed well and used properly by leader right to start the machine process. At the end, it will record the average and pattern of the chip to produce the best quality.

4. Additional Project

Part of the internship programmed is to educate the student also to train the student to handle the project among the employee itself. At Taiyo Yuden, for my team I was able to complete the project within 4 month before the intern training end. We operate installing the system in the factory process to receive the data from the process to get the data recorded daily and update daily. The next project is just to refine the existing system where to maintain the system inside the server for example, filter, data entry, and flow of the process. Another project also has the similar identical function but this system is to calculate the average of the good and not good chip in every time of the chip produces. Another project also I had to handle the continuous design of the employee to develop the system until the end and gladly the system studies are easier to understand since it product base learning. I also do CSR audit with the Human Resource Department (HRD) to show them what the intern student did in the company and was the student threat with right or wrong, at the end it will comes out with the good record of the company even many failure of good chip encounter. At last, project last to be expected mass emergence, that I have to design a new thins using the new Js language native which can takes up to 2 week completes.

Every day, I produce the logbook report and conducts a maintenance for the system data where to get the data more easier to be read and where my supervisor spend a lot of time to look at my system progress before it be release and around the process. Among all the system project the additional particular side is to teach me coding with patient and understand the requirement of the user how we do the relocation of the data on the server flow and look likes. I also have to use mobile phone to search for the code reference to ensure that the functionality of the system is cared off. As for the supervisor, I always noticed them when after the system of mine is complete and explain to them. The topic will be different every week for assigned project. The project will be released after the success remark by the supervisor and manager itself. Due to lack of resources large of the code are from my own knowledge and self-learning. As an alternative, I conduct a study and research after the end of the working hour at the home and a solution provider with the help of my own personal laptop to gain some resources. At this point the company challenges me to be more productive in coding.

IV. Benefits gained from the Internship

Fieldwork Skills :

- Capable of programming language like : php, JavaScript, HTML, CSS.
- Learnt a proper way of problem solving and algorithm.
- Understand on how to do data record for the server database for company record.
- Learnt on how to calculate the chemical used by using the given data.
- Learnt new language which is Python during the intern.
- Additional physical experience on installing the system inside the tablet.
- Learn to troubleshoot the laptop.

Non-Fieldwork Skills :

- Improve communication skill.
- Increase self-esteem.
- Improve time management.
- Improve self-disciplines.
- Learnt on how to use Excel in a proper way.
- The importance of teamwork in executing any task have been learn.

5. Conclusions and further prospects

I. The internship that I have completed with the Taiyo Yuden Sarawak Sdn. Bhd. Was ssince then has made me realize the importance of pursuing my degree so that I also can be of help to industry area. I gained a lot of experience especially regarding my programming skill and how to handle a lot of project. Such knowledge has been gained by associating with these great people at MSTY. I truly believe that my programming skill can help to improve the company as long as there is willingness and determination of accepting me as their employee.

II. For the MSTY staff and interns, there are so many good aspects that amaze me such as schedule working hours which used current office hour Monday-Friday (8:00 AM-5:00 PM), cheerful surroundings the office area made me feel calm in doing my work and also considerate manager. It also gives me an opportunity to improve my soft skills including social and communication skills as it is an important skill to go through in the working life. I also learned how to code with new coding language which is Python to get the data from the process area.

III. I hope that I will end my final year with great results and qualification and continue my path in helping to continue my project until the success and also continuous to produce the good system of the process are of MSTY. I am also planning to go for contribution in the industry area in the future years for my career.

IV. I hope that MSTY can collaborate with the JTY in terms of accepting the employee to working in the industry area and production in order to increase the technology to UNIMAS students. UNIMAS also can take part in lab research of the factory area in order to help the production more reliable in the future. I also hope that MSTY will encourage more students to have their internship at Taiyo Yuden (Sarawak) Sdn. Bhd. as it gives more benefits to the students.

6. Appendices

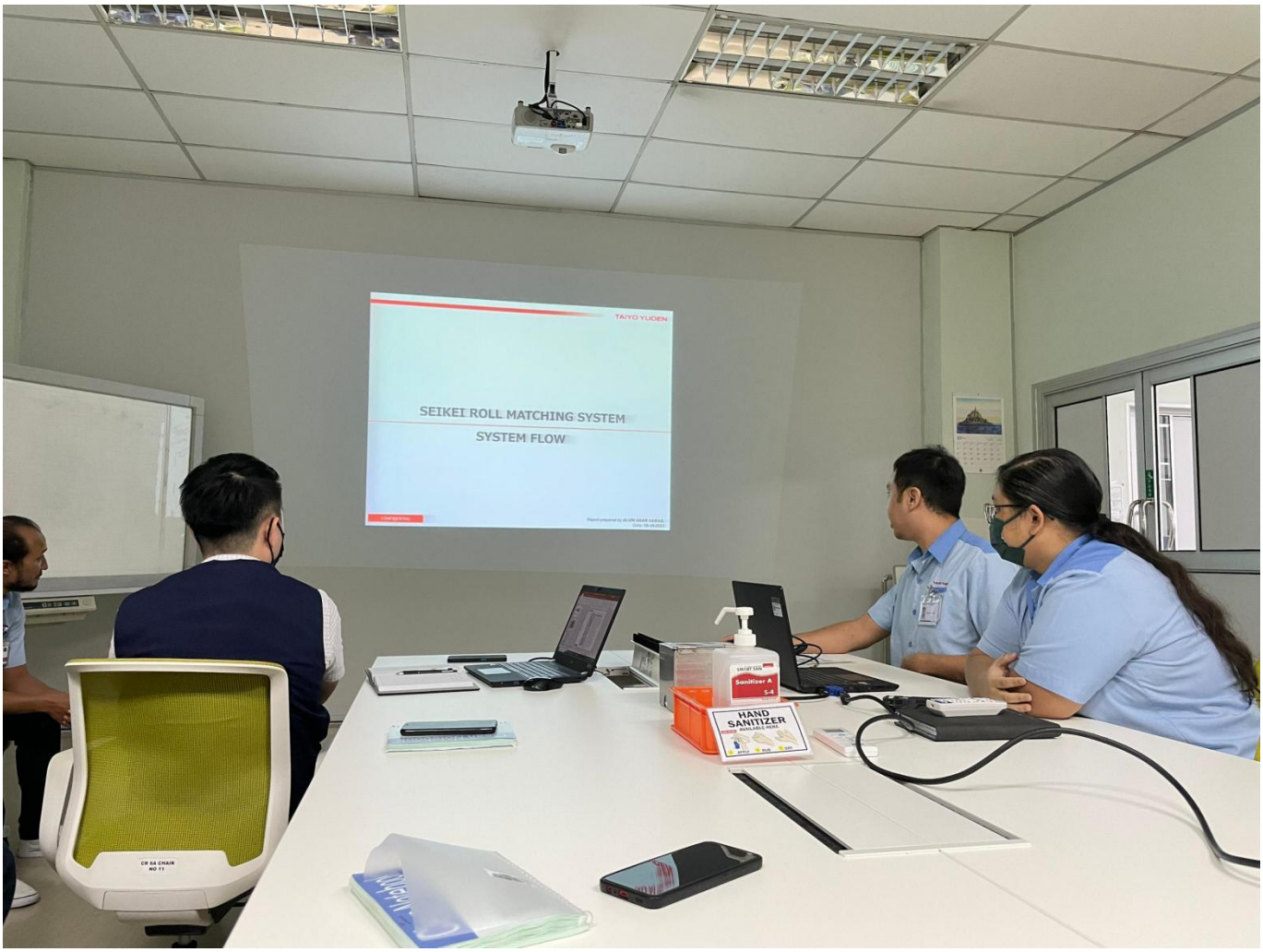
The picture session with MSTY supervisor, INTERN student and UNIMAS lecturer after the visit presentation :

The picture of me during visit presentation to lecturer UNIMAS :

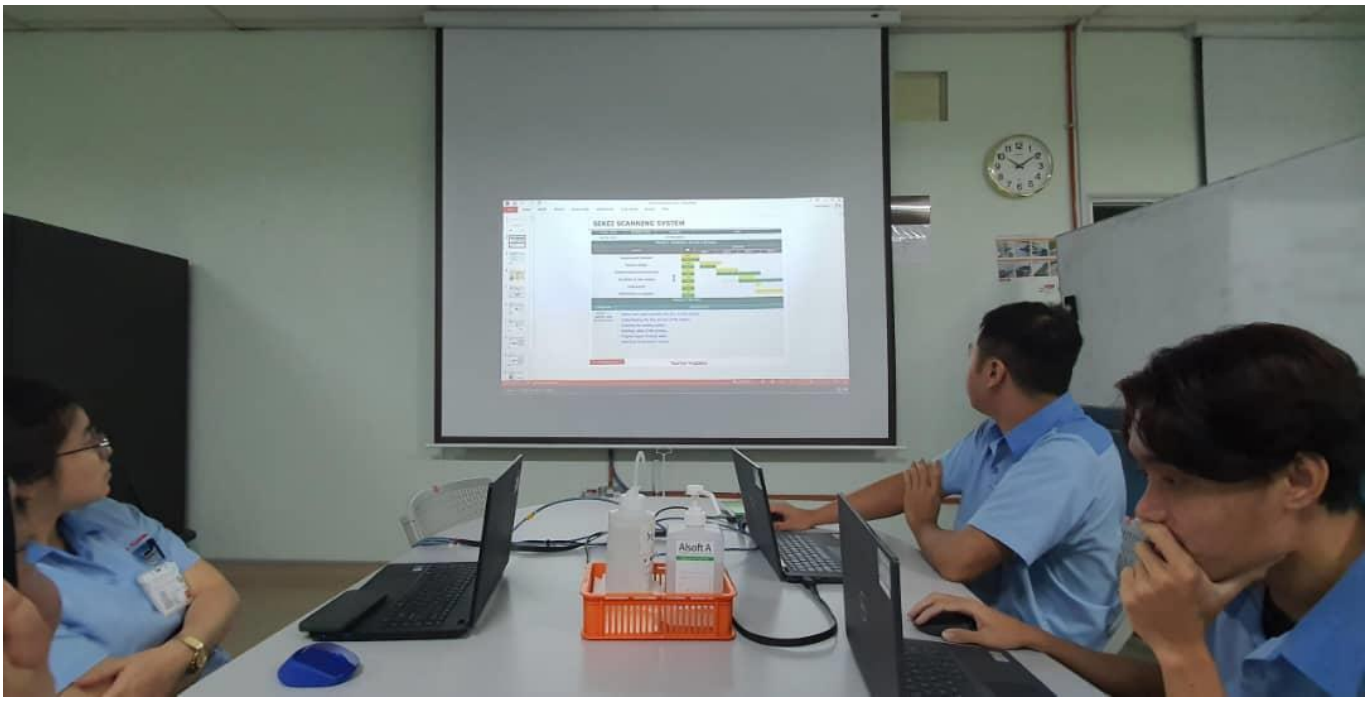
The picture of me setting up the pc for factory usage and data record :

The picture of me connecting the wired LAN network to the PC for process use :

The picture session of presentation of the project to the department manager :

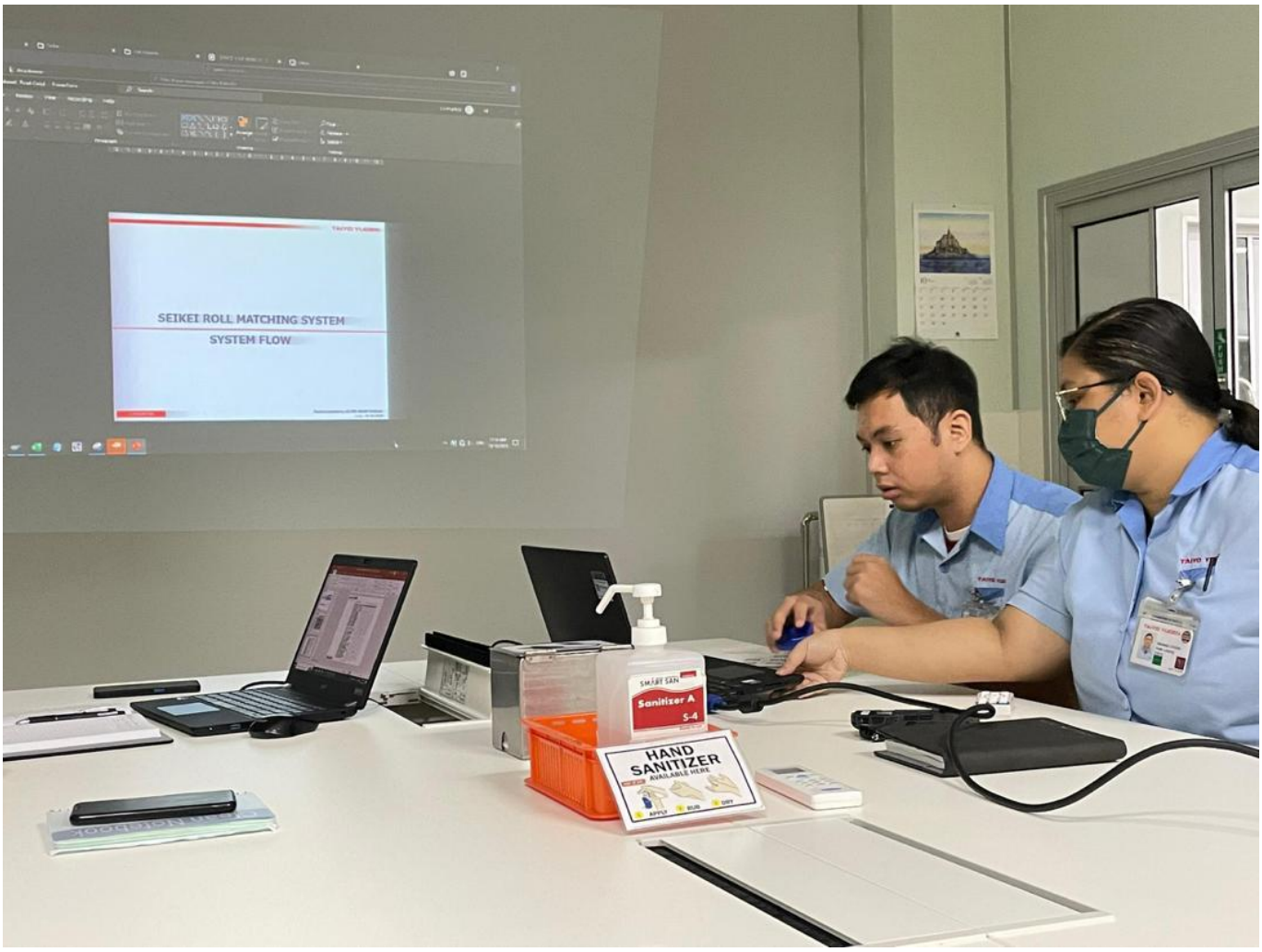


The picture of me presenting to my supervisor of monthly report of the project :



The picture of me presenting to manager regarding the second of my system project:

The picture of me setting up the system before presentation to department manager :



The picture of me presenting to my supervisor of monthly report :