

**Semester I 2019/2020**

Subject : Technology and Information Systems (SECP1513)

Section : 03

Group : 6

Task : Industrial Visit 1 – CICT UTM

Due : 11/11/2019

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**Introduction.**

            On Monday, 21 October 2019, Industrial Visit Program has proposed and arranged a visit for the first-year students from the School of Computing for the course of Technology and Information System to Center for Information and Communication (CICT) UTM. Unfortunately, the gallerium in CICT was moved to PSZ, Perpustakaan Sultanah Zanariah, UTM. Despite that, section 03’s lecturer of Information and Technology System, Dr. Haswadi Hasan has done his responsibility in making sure that this industrial visit would go well. There has been about 36 people of section 03 students that have joined the industrial visit. The person in charge of introducing and explaining the information about CICT was Mr. Zahari.

**Details of Journey/Work Plan**

* 3.40 P.M: Students of Section 03 gathered at the PSZ and started to enter the Gallerium.
* 3.45 P.M: Mr. Zahari introduced himself and started the tour of CICT exhibition.
* 4.00 P.M: We explored the exhibition to take a closer look at each invention.
* 4.20 P.M: The visit ended

**Detailed Descriptions**

Mr. Zahari started the explaining by talking about printer. Before the current technology of printer exist, Mr. Zahari mentioned that Computer Science students used to print all the work by using Impact Printer. Assignment, notes, report and other works have been printed by using this machine. In comparison, the situation to print any works by using this machine and current printer is also very different. To use the machine, students must take their turn and queue in a line outside the computer laboratory as there were so many people who would want to print their works, especially during submission day. It was different from now as several of students already has their own printer in their room. Nowadays, students do not have to queue up in a long line while waiting for their turn to print their works. However, this previous technology of printer has its own powerful features. For instance, the machine can print over 10 000 slips within only an hour. Hence, it is proven that this machine can be considered as a high-speed printer.

Next, Mr. Zahari also talked about the usage of mainframe in UTM in the past.  
The mainframe of PCs and its various parts were shown at the primary spot. As the younger generation, we were truly stunned after discovered the IBM Mainframe PC before us. All of those various parts are considered as IBM Mainframe PCs. Moreover, Mr. Zahari discussed too about servers in UTM. Currently, UTM contains 4 processors. It is a high device for system application and data analysis. Another astonishing certainty is there was a 4 MB floppy circle. We need to concur that UTM spent a great deal of cash to gather them and store them in their places. Aside from the centralized computer PCs there was additionally some old age PCs.

He also explained about RAM technology. He informed us that during his era, there were EEROM, EROM, SDRAM and DDR. Nowadays, it is easy to implement RAM in the electronic device as the technology is becoming more advanced. In the past, Mr. Zahari stated that the students must make and create RAM themselves. On the positive side, it is more practical, and students also would have great experience in making the RAM. They must have all the tools and equipment to create the RAM, for instance the circuit, EROM and connect it ourselves. Students of Computer Science now mostly learn about the stimulation and theory of content, different from the style of education in the past.

Furthermore, there were also other technologies around the galleria. For instance, there were Film Copy Machine ‘Extek 2101 Model’, Recordak Micro-File and Mainframe Data Storage (Model: IBM 9345B22).

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| Name/ Model | Description | Image |
| Film Copy Machine ‘Extek 2101 Model’ | The ‘Silver Film Duplicator’ was used to produce negative to positive microfilm copies. The microfilm negative copies served as references to users while the positive copies were started in UTM Library special collection. The reason for this was to ensure that the master copy of each UTM thesis is preserved and traceable in UTM Library collection. |  |
| Recordak Micro-File | The ‘Recordak Micro-File’ machine was used to capture small images of UTM theses. The images were recorded into microfilms or microfiche. It utilized a special film; the ‘Kodak Ektachrome’ which was 35mm in size and with a capacity of 100 feet per film roll. This machine was first used in UTM Library around early 1980’s until around 2007. |  |
| Mainframe Data Storage (Model: IBM 9345B22) | The usage of Mainframe system at UTM began in the 1970s at Computer Centre, UTM campus, Kuala Lumpur. It served as a data control of students and staff information. The mainframe has been used for almost 20 years for various components and functions such as processing, storing, securing and printing the University’s information data. |  |

**Students’ Feedback (Reflection)**

* 1. **What is your goal/dream regarding your course/program?**

Our course, which is Software Engineering is one of the crucial aspects for the future.As time progress further , advanced technology will be created with the existence of great software to ensure human’s life will become easier. Hence, one of our dreams is that we wished to create more programs that are more efficient and faster. Although the current technology are already great enough, there are still weaknesses and shortcomings that cannot be overcome and also room for improvement. Thus, we strongly believed that one day, our course Software Engineer would create a better version of current program that already overcome all the weaknesses and shortcomings. Hence, technology will become more advanced in the future.

Next, our dream in Software Engineering is also to improve the database management. Our world is developing day by day. Thus, database management is one of the most crucial aspects that will affect the business. Having a perfect fitting database management is a key component of today's business. When someone wants to get more profit from their business, they need to take some steps such as data model, data consistency, data security, data protection, multi access and more. All these steps are always done by database management system. Thus, we think that database management is important to us as the future of software engineers.

* 1. **How does this visit impact on your goal/dream regarding your program?**

Visiting CICT is a really good experience for me and other students in UTM, especially in Computer Science. The previous technology that are still existed there have made us realize that the world already changed so much with the presence of technology. It also helps in increasing our design thinking and creativity level, as we managed to compare the features of both previous and current technology. We also learned to appreciate the current technologies that surround us as we often neglected how important these inventions are.

Furthermore, we believed that each of weakness of the technologies that exist today can be eliminated, same as how the previous or old technologies become better as time progresses. For example, the weakness of Impact Printer which is its size have been overcome and today’s printer can be simply put in everyone's room. In addition, the visit also teaches us to become an open-minded software engineer and believe that nothing is impossible in this world. The previous generation have created so much invention that everyone wouldn’t think of in the past, and maybe the unthinkable technology in our time can also be easily created in the future. For example, most people back in the day believed that computer or machine could never take human’s job but nowadays artificial intelligence technology is growing concern among community as it is taking more job on behalf on human.

* 1. **What is the action/improvement/plan necessary for you to improve your potential in the industry?**

First, it is important for us to gain experience as much as we can. This is because experience help computer science students a lot in facing difficulties everyday just to solve user’s problem or to create new technology. Thus, we will try to participate actively in any events or works in both practical and theory in order to enhance our capabilities in the industry. A lot of experience will eventually reduce the rate of us doing mistake during work.

Apart from gaining experiences, as a future IT field engineer, there is a very important skill which is quick adaptation to new technology. We must train ourselves not to over bind to a technique but instead we must learn the latest technology so that we can adapt to the rapidly changing IT field. For example, we can focus on some popular tech websites such as TechCrunch and learn the latest frameworks of several programming languages such as React Native for JavaScript.

**Task for each member**

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| Name | Task |
| Amjad | * Photograph. * Reflection. |
| Adilah | * Record audio. * Planning and drafting the report. * Reflection. |
| Yong | * Taking notes for every machine. * Reflection. |
| Abdullah | * Record video. * Reflection. |