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**FACULTY OF COMPUTING  
SEMESTER I - SESI 2023/2024**

**SECP 1513 - S07 - G08  
TECHNOLOGY AND INFORMATION SYSTEM**

**GROUP ASSIGNMENT - REPORT ON NALI 2023 VISITATION**

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Our short interviews during NALI 2023:

[https://youtu.be/12TE7KCKTJ8?si=uiD\\_3XPUXzCYS3c](https://youtu.be/12TE7KCKTJ8?si=uiD_3XPUXzCYS3c)

### **Interview's script**

#### **Probased**

Jason	So, what is this project about?
Presenter	My research? Okay, I build application for supporting project-based learning because I'm a lecturer in university when I implement project based learning, it required a lot of documentation and a lot of things to do and very trouble somehow. So, I had some evidences that many challenges when applying this method. So, I want to overcome this problem by building this application. We called it probased. So, we digitalize the activity of project-based learning, which you will be familiar later in second semester. So, I'm going to digitalize all the thing so we built an application. The application aimed for lecturers or teachers who want to apply project based learning in their class.
Jason	Oh, okay. And my second question is how will this project impacts the students?
Presenter	So, I already implemented project-based learning but without the application which is manually. We see the impact of project-based learning has a lot of advantages. For example, the problem-solving skill is increasing, so if I implement this into the application, it will speed up my assessment activity. For example, to give my student about assessment task, it will give me a feedback immediate response compared to the previous one, when I do it manually, it takes a lot of time and calculations. So, we still result the same product or the same finding, so I sure that there's a lot of advantages when we applied the based learning in the application or a system.
Jason	What inspired you to do and create this project?
Presenter	Because when COVID-19, the problem solving for student is decreasing. When I distribute the question especially about project-based learning to the student, the score is very small 2 over 5. So, can you imagine my student will graduate one semester later with a very low grade. So, I want to change the way I deliver the material and the way I teach. After search so all things / papers, it said that project based learning itself is good with an application. So, I just apply it to my class and the score is increasing. Although it's not in the significant part but it's still good.
Jason	So, do you face any challenges right now?
Presenter	Yes, for right now I faced a bit difficulty in applying the system because there's a lot of user using my system. May be for the future, we will have training for others university wants to use my application. One to two days training to use this app, for teachers, students and admin.
Jason	My last question is how do you plan so students are more familiar with this application?
Presenter	So, for students to get more familiar to these applications, students should be given a project / task. For example, I manage in transit internship activities, I already collected company that will be related to my class and then I will distribute my students to certain company so they can solve certain problem of the company and make it their projects. I also can consider my students to use my application and it will act as the automats.
Jason	Okay, that's all from me thank you.

## Experiential Learning Through Gamification

Jason	Hello, can you tell me a bit of what this booth is about?
Presenter	Okay, I'm from urban and regional planning. So basically, this project is for our studio. We try to improve students experience through game. They play the game and then from the knowledge they get through the game, they apply to their final projects. First, we introduce our students to SIMCITY. Have you played SIMCITY?
Jason	Yes.
Presenter	Okay, for beginner who is our students without any knowledge, they can easily play that game because of the friendly interface. They need to plant the wood and build the houses and then commercial and public safety. So when they understand what is the impact to the residence. For example, when factory is built next to the houses, pollution, traffic jam and something like these. So, students especially first year students, we can't teach them very technical theory because it will be very difficult for them. So, that's why we encourage them to play the game and experience by themselves and then they will be more understand and able to apply to the project. And other than SIMCITY, we also introduce LEGO BRICKS, there are some online game where students can only play by themselves but for LEGO BRICKS, like as this is the start, we create different scenario. For example, at the side we have river, we have planting area, so what is the best design for example where can they build road, where can they build school and facility, so they can interact. This encourage team working, they can also interact which is the best idea. If we change the scenario, what happen next. So, when playing games online and physical games like this, they can apply their knowledge in their projects. For example, this is a project, a plan, normally for every semester students are given a real site not an imaginary site. So, they need to understand the site, what is the potential of the site and propose the design concept. So, that's why they need to understand what is the impact if they located low cost housing, medium cost housing, high cost housing next to for example water tank, so they played the game and the apply the knowledge in real life. So, the idea is about game for students enjoy and for more fun learning.
Jason	Oh okay. So how does this project impact the students and lectures?
Presenter	Positive impact is that study can enjoy and have fun. And are able to interact, especially LEGO BRICKS. They can interact and you know they can enjoy and try an error in different scenario. And then the relationship between lectures and students can become closer. They enjoy learning and at the same time they can apply the knowledge. At the same time, the lecturers also enjoy the projects and finally the design can become more creative because they understand the impact their action towards the surrounding.
Jason	Ok, so what inspire you to do this project?
Presenter	We understand that students cannot be too technical especially for new students. They cannot focus for long time like lecturing. Instead of us explaining, we try to experience different style of learning. So, when the student play the game, it is the same but the environment is more enjoy and make them love more about this subjects.
Jason	Okay, thank you.

### UTM ECO Mobile App: Geo-tagged Ecotourism on UTM

Liew	What is the project about?
Presenter	The project is called UTM ECO Mobile Application. It is a digital database for biodiversity exploration
Liew	Okay, so can you tell us about how this project impacts students, teachers and lectures?
Presenter	This application can make the students such as from faculty of built environment and surveying which the lecturers allow the students to go out and explore about the site. So, at the same time they are also doing their outdoor learning. So, they can conduct outdoor learning and collects data at the same time. The data they collected by our UTM ECO users can be used as a digital platform for our other students or visitors.
Liew	Oh wow, that's sounds very good, so what is your plan so that the students, teachers or lectures can be familiarize with this idea or like apply in anywhere?
Presenter	Because this is an application which we called citizen science which is platform used to collect data and give it to the scientific company. So this process will encourage student to continue participating in this activity and then lastly to contribute to the science and development.
Liew	Wow okay, what inspired you to have this idea?
Presenter	The idea came from my team leader, he is currently conducting his classes to collect data and then we can reuse this data for not only using for the class. So, it is not just for the students but to have bigger audiences which is visitors and the public.
Liew	Wow gresat, so the last question is do you think the idea will face any challenges?
Presenter	The most primary issues is the technical. Because we need large databases to collect these data and we need to subscribe these databases to able to store these data. So we need to find a way to collect the data and save it in a citizen science platform and provide open source for the public to reuse these data and develop their own application.

### Mini Industry NXT-PRIME: Burger Factory

Jason	Can you tell us a bit of what is this booth about?
Presenter	Okay, so the booth is about NXT Prime. Why we use NXT prime because it is a combination of 2 LEGO which is LEGO MINDSTORM NXT and LEGO SPIKE PRIME. So this to show a solution to improve processing and technology. Beside that, we also provide the knowledge of element of system of robotics.
Jason	How to you think that this project will impact the students or the industry?
Presenter	When the knowledge of element of system of robotics, they can see the real situation, how the element is used in the industry.
Jason	What inspired you to do this project?
Presenter	The thing that inspired me is that I want to make RBT to be famous as we have RBT course but not that famous.
Jason	Do you think the idea will face or is facing any challenge in education or in industry?
Presenter	Every product actually have their challenges, so here we also have challenges. For example, some school they don't have the cost ton buy this LEGO product. So we need to think a way to solve this problem.
Jason	Last question, how to you plan so that students, teachers and lectures in school are familiar with this platform?
Presenter	So we provide exhibition to the school, so we will teach them about the element of the system of robotics. So they can be familiar with this project.
Jason	Thank you.

## Archvision VR: Empowering Next-Gen Architects Through Immersive Design Pedagogy

Jason	So can you tell us a bit about what is this booth about?
Presenter	This project is about implementing virtual reality technology when we teaching the architecture designing students. So, we use VR in the teaching rather than traditional teaching way. We usually assign our student to develop a 3D drawing and 3D design using 3D modelling software. And this can improve their understanding of spaces.
Jason	How does this project impact the students or the industry?
Presenter	For the industry, I can say is quite new in Malaysia but it has been majorly used in western. So we are actually way behind. And then in Malaysia there is one place which is doing virtual reality as part as their business, participation with their clients which is GPT. By implementing VR in studies, students will have better understanding.
Jason	What inspired you to do this project?
Presenter	Due to COVID-19, when that time student are quite lacking of in terms of understanding, so that's why I have been doing this because it is quite late to teach back again. So, we need new technology to help us.
Jason	Do you think the idea will face or is facing any challenge?
Presenter	Currently, we have challenge as it need a lot of money because the system linking the software and the tools is quite expensive and it require stable internet connection and with just one VR headset, we can't build a virtual community so we need more in order to build a virtual community.
Jason	So, how to you plan so that this project is familiarize in our education?
Presenter	Currently, I'm doing a virtual tour to few events and also invited by other lectures from other department to introduce this in their class, so I already experience teaching theory and history subjects which are boring subjects, right? When we talk about history, we felt sleepy so in my section, rather than going to sleep, I will meet them virtually to visit the historical building around the world.
Jason	Thank you.