

# System Development International Project Report

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## Introduction

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System Development International Project is an intensive course held during spring break. I took this course for three reasons:

1. This course is conducting in English. It is easier for me as an overseas student who is not very good at Japanese to understand the teaching content.
2. This is a course focus on the social value of the computing system and software. I could have the chance to learn about the business dynamics and software life-cycle especially the project management and the verification stage of product development.
3. This course is project-based learning. I would be able to involve in group work and get to know more new friends from different research fields and to exchange our ideas and thoughts. At the same time, I could also take a business oriented project which is different from the normal technology projects I took.

## About Team Work

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The very first thing we did in the lecture was to find the other four students in the class to build a team. I met some old friends as well as made new friends at this session. We formed a group of five which contained two girls and three boys, reached a good gender balance. The next activity was to make an object by using the aluminium sheet. Everyone in the class explained with very innovative delineation of their crafts and I was very inspired by their global and imaginative ideas. Our team members introduced themselves to the others and decided the word "Cyberpunkies" starting with "C" as our team name. In the following team building session, we tried to build different objects by using LEGO blocks and designed our own team mascot. Each team also entrusted special meaning to their mascots according to the LEGO parts. I felt every student has their own ideas and they were

very different from one to another. For example, many students picked the same LEGO part but they all have different explanations to their selections. After several team building activities, we gradually got known each other better and got used to others' characters. These relaxing activities helped a lot to construct trust among the team. During these sessions, I had improved my communication skills and presentation skills as well as obtained good friendship with my the members in our team.

In order to design the correct product which has social values to the market, we had many brainstorming together to figure out the product concept. Finally, we quickly achieved consensus to make a phone APP which could help recluses get back to the social activities and overcome their communication disorder. Every member of our group had contributed and shared ideas during the discussion. I found that we must not keep silence in the group discussion because we need to make others understand what we are thinking and 分享 the information in order to build a large information pool so that our ideas will not be confined to our own points of view. I deeply felt that our group had a very nice discussion vibe because everyone can patiently listen to others talking and give their moderate comments and suggestions. Even though some ideas cannot be agreed at the beginning, we could calm down and analyze in order to find out the wrong logic and fix it, or the presenter showed to the others more information and evidence to persuade the others to accept the idea. Through the five-day discussions, we never argued with each other because of difference and contradictions. This is very important in teamwork --- learn to listen to your teammates and jump out from your own thinking habits. Furthermore, in our team, we had a member who was acting as a leader to organize the discussions in every session. Three of us were mainly in charge of different parts of the product development. There was another teammate was responsible for the support work such as preparing for the documents and working log. We all have a clear division of labor so during the work, the efficiency had been improved a lot.

## About Software Development

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In this lecture, we not only learned the software and system but more importantly, the purpose of developing a system/software and how do we do it. Software development is way more than technology. The essence of software development is to create social value for the product. The social values of a product are reflecting on the customers and the market. The

lecture introduced two important concepts: Built a thing right and Built the right thing.

To build a thing right, we only need the right technologies. However, whether the product is being needed has not been considered. This kind of product is not successful and it is a kind of waste of time, labor force and money. In order to build the right thing, the lecturer introduced us a business model called Lean Canvas. It contains nine evaluation sections to evaluate uncertain ideas, which covers the market, company, customers, and competitors. For the product, the most important factor is the customer segment. The developers must catch the demands of customers, attract the investors and early adopters to support their products. We were taught to use a method called "PERSONA" which is to imagine the target customers by the developers themselves. We firstly decided our product theme, then we tried to create two target customers by giving them characteristics. During several rounds of discussions, we gradually modified the characters and made the image of our product more and more clearly. This is called KAIZEN in Japanese which means verifying the product to find out problems and then trying to find solutions to improve the situation. By applying this method, we soon locked up our target customers and focused on the usage of the product. Last but not least, the following life cycle of a business product can be maintained by different business models.

## Conclusion

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This lecture is a business-oriented class. It taught us how to design a successful product which actually has social values and market. A great product should not be shining for its technology, but also the impact on the society brought by it. It also gave me an opportunity to make a lot of new friends with different backgrounds and learned from them about their ideas, as well as improved my team collaboration and communication skills.