Yichen: The problem I want to solve is the material management problem in Robotic Club because I feel like the Robotic Club sometimes has a tight budget. We have lots of teams and we have lots of members. Based on my past experience in Robotic Club, I always feel like there isn't enough material. As a result, I want to build a database that may help with this kind of problem.

Mr. Ortwan: Get it, okay.

Yichen: The first question I want to ask is how do you usually manage the materials right now?

Mr. Ortwan: The way I set up most of the materials as you know each student or each team has their own shelves to work with. On those shelves, they get their small tools and materials. With the class, I just give them enough staff they need for the classes. That's based on what is commonly used like screws, nuts, steels. That's what they have. With that, they can do most of the things they need. They don't need to access the rest of the materials because based on the challenges, they only need what they have in that box. For steel and aluminum, they can get them by themselves.

Yichen: Do you usually know how much materials are used by the classes or clubs?

Mr. Ortwan: I don't know the exact number of how much comes in and how much comes out. I always rely on my memory to manage the materials and purchase new ones. Every year we order, I'm just assuming based on how much has gone but I don't know how much materials left.

Yichen: Do you think the way you manage the materials right now is efficient?

Mr. Ortwan: No

Yichen: What do you think are the biggest challenges for managing the materials?

Mr. Ortwan: The first challenge is that people sometimes don't clean up because it is easy for students to throw materials in random boxes. They may be too lazy to put it back or they just don't know where to put it. The second challenge is that the uniqueness of the designs makes the clubs know what exactly kinds of parts do they need versus the class, it is easier to know what they need. How many materials are used also depends on how many teams signed up. For example, this year we have five teams while we only had three teams last year. Besides that, I don't know how much stuff exists and I don't know how much stuff I need to order. Another challenge is the trick in the ordering process. For example, I want to order something now, parts are usually from Hongkong. It takes at least a month to arrive here.

Yichen: Which part of the material management can be solved by IT solution?

Mr. Ortwan: I expect a system to track the number of materials and an identification system to indicate the location of the materials.