

Internal Meeting 1

Date & Time: 13 Jan 10:00am - 12:00pm

Venue: School of Economics study lounge

Attendees: Ren Mengxi, Wang Sijia, Wang Tianjing

Absentees: Null

Agenda:

1. Discuss about sponsor requirements
2. Further analyze the sample data and decide on methodologies and technologies to be used
3. Discuss about the overall contents for proposal report and allocate work for individuals

Details:

1. Update Tianjing with details about our first sponsor meeting that she missed
2. Do we need the 'out' data?
As some students may enter from the main gate but exit from the linkbridge, where only pressing button is required instead of tapping student card, the 'in' and 'out' data may not match. Considering the reliability, we decide not to ask for the 'out' data.
3. This data is new to our sponsor as well. They did not study it before and not sure what can be driven. So we need to look into the data and decide what objectives we can achieve, and what methodology we may use.
 - a. Some insights can be drawn from exploratory analysis phrase like peak hour analysis and visiting trend for different schools.
 - b. Group detection will be our main focus because we also find it interesting to study whether students visit library alone or as groups. We are not sure which specific method will perform the best to answer this question, but the main idea is to use Clustering here.
 - c. Going deeper on the groups we detected, Association Rule analysis may also be useful to study who is more likely to come with whom. However, with the relatively big number of individual students, this may be done at a school level.
 - d. Hogging rate analysis is a bit blur to us as there is no data related to the activities student do inside the library. This remains secondary for now unless we have more information.
4. Some data preparation will be needed before analysis. We renamed the columns, did some adding and dropping, and mitigated missing values, multi entries, outliers accordingly.
5. In the process of exploring, we already used JMP and Tableau to draw some basic graphs. SAS may be the main tool for later analysis in terms of familiarity, but we will explore other tools if necessary. As we aim to build a lightweight web app in the end, most likely Java and JavaScript will be used for programming, and SQL acts as the database connector.

Action Plan:

Item	Person in charge	Deadline
Consult Prof.Kam about the problems we found during preparing proposal	All	Jan.13
Update Wiki	All	Jan 15
Prepare proposal	All	Jan 15