

Singapore Management University

ANLY482 Analytics Practicum

Supervisor Minutes 10 as on 27th March 2017

Time Start:	2.30pm
Time End:	3.30pm
Location:	SIS Meeting Room 4-5
Recorded by:	Alson Tan
Vetted By:	Peh Zhan Hao

Attendees:	
Prof. Kam Tin Seong Heng Kok Chin Peh Zhan Hao Alson Tan	Associate Professor of Information Systems (Practice) Undergraduate, Singapore Management University Undergraduate, Singapore Management University Undergraduate, Singapore Management University

Agenda

1. R Model
2. Feedback of Interim Paper

No.	Discussion:	Action by:	Deadline:
1	R Model <ul style="list-style-type: none"> • If the OR operator is chosen, Triple Science students will always get lower L1R4/L1R5 scores which doesn't make sense • We iterate the model such that the students' scores is seen in the model • A flow diagram is needed to explain what is happening in the black box, an aid to help us explain the process of iteration • Don't use crowd-based server to upload the app e.g. shinyapps. Instead, do it on a private server as students' information may be leaked • If the work flow is followed, where is the option for them to upload the data? • The structure is done using excel, there will be checking on R to flag out things which are not correct, so that the school can see what is going on • When R reads the data, it will be read to see if that is the format that the application wants to use • We need to be able to put back the student's names for the convenience of the school • If they didn't select a subject in the model, you can recommend them to add it in • Show in terms of a rulers for visualization instead of just scores, e.g. min on the left, max on the right • Originally the box plot is shown vertically, but the school feedback that parents might think students are doing badly if it's at the bottom, so we changed to horizontal box plot 		

	<ul style="list-style-type: none"> • The subject and score title is not needed • Use bigger marker to show students' scores, and change to brighter colours such as red • You don't want to have different colours, just need to increase font size • Write out the report/user guide to inform the school how to interpret the box plot. Explain to them how they can use the tool properly • If you're at the outlier, it means that you're in trouble and a signal for students to work harder • Do a usability study – whether the user will be able to interpret it correctly • Subject heads can use the subject level analysis to identify good and bad students • Question from the school: Based on their current streaming criteria, what's the cutoff point for different streams? • There is a R library called tableplot, which sort the grades in ascending order, and if it is top 40 students for example, what are their science, Maths scores (more than 70), and L1R4 look like • The school can get an idea that, if they use top 40 ranking students, can these students meet the science and Maths score cutoff as well? • Basically we want to provide a tool that they can figure out themselves • There are many reasons why a student is in top 40. It might not be Maths and Science, but can be English and Geography or other subjects. • In that case, is it wiser to adjust the Maths and Science scores, so that the students can secure more students for the particular streams • The colour in the tableplot example shows the intensity of the value • Sort from the highest average to the lowest (top to bottom ranking), and x axis is the Maths and Science scores • Are the scores mutually exclusive? Top 45 might not be added into the top 110 for Double Science • We can choose to use the static version, or the interactive version that selects the number of rows (e.g. students) • Sometimes the teachers like to have hard copy user guide that they can refer • Come up with 1 version to get some idea which one they prefer, hardcopy or online 		
2	Feedback of Interim Paper		
	<ul style="list-style-type: none"> • We are suggested to look through some journal papers on Learning Analytics, to find out more ideas how to conceptualize our idea • We can also think about how can we start our business • SPRING singapore: provide fund and a potential direct client, seed funding for one year • The main thing is: How to make it more impressive so that it will be commercially viable 	Edufy	3rd April 2017 (Monday)