

Singapore Management University

ANLY482 Analytics Practicum

Supervisor Minutes 7 as on 6th March 2017

Time Start:	2.30pm
Time End:	3.20pm
Location:	SIS Meeting Room 4-7
Recorded by:	Heng Kok Chin
Vetted By:	Tan Yong Kiong, Alson

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

Agenda

1. Planning the R Model
2. Actions Planned

No.	Discussion:	Action by:	Deadline:
1	Planning the R Model		
	<ul style="list-style-type: none"> Went through slides and talked about the interface Prof. Kam mentioned that the target user of the application will affect how the UI will be like The end product needs to meet the actual workflow by the school to be useful for them End product will more likely be used in the planning For example, if this year, paper is easier, the paper next year will be tougher, the grade will go down a little bit If we set the cutoff line higher, will we be able to have enough students for Triple Science, Double Science The model is based on what you have now, it will serve as an explanatory model We want to translate to something useful for the school Prof. Kam mentioned that for students, you want to show the statistics, this is your current score, your past score, this is how you stand against your seniors (match with about the same score for past) and what have they achieved. Then see by subject combinations what L1R4/L1R5 scores the seniors has achieved Mainly looking at 'O' Levels score, continuous data, libraries to recommend are multiple linear regression, use lm method at the core of R (no additional libraries required) From the school perspective, by looking at the students' result to make a better decision or better view 		

	<ul style="list-style-type: none"> The team asked Prof. Kam regarding the architecture of the R Model (e.g. how does the data connect to the R and stuff) <p><u>Mixed Model</u></p> <ul style="list-style-type: none"> Fit Model -> Mixed Model -> PSLE and overall scores into the construct model, 'O' Levels into the Y Its Partial Least Squares, Standard Least Squares does not take the time into consideration Search the JMP for tutorial (Mixed Models), can do three kinds, find the few that can fitted by year <p><u>Panel Data Analysis</u></p> <ul style="list-style-type: none"> Search: "Panel Data Analysis jmp pro" Watch the video "Repeated Measures and Panel Data Models" In R there is a specific library called "plm" for R for Panel Data Analysis It is actually a Least Square Model Can look at the API Arrange data by each year For example, the data, same students, the batch 2014, SA1, take into consideration the sequence of the events occurred Promote an explanatory model (prescriptive model) than a predictive model So the school don't have to commit to answering to the students if they don't perform as well Need to talk to the school principal again to get better idea of what exactly they want or they need when planning to decide the cut-off point for the student moving from Sec 2 to Sec 3 		
2	Actions Planned		
	<ul style="list-style-type: none"> Continue to generate graphs for analysis using JMP Pro Work on the R Modeling and come up with two different functions 	<p>Alson</p> <p>KC & Zhan Hao</p>	<p>11th March 2017</p>