

## ***FIRST INTERVIEW WITH CLIENT 29/oct/2019 - APPENDIX 1***

***Me: Hello, this is the first interview between myself and My Client, Mr Baker. Hello Mr.Baker***

B: Hi

***Me: It is to my knowledge that there is currently an issue with predicting grades for IB Students. Can you elaborate?***

B: Yes, I have had a problem with the system for quite some time now... I believe it's internal, but, essentially, there are two main problems with my current system. Firstly, if someone's grades fluctuates, or they are very volatile, for instance getting a 7.4 then the next test getting a 4.5, then back up to a 6.4, it is difficult to predict his grade because I can't really see a trend. Also, say Mr.Burger next door may predict grades differently than I do, even if we have the same student because of course we have our own biases.

***Me: So, you are suggesting there may be inconsistencies with how individual teachers predict grades. Some Teachers may be more strict or biased towards students?***

B: Yeah

***Me: Alright. If there were a new system, Is there any information that I need to keep track of?***

The grades of the students I teach. These generally come from assessments and exams.

***Me: Also, what do you do as a Mathematics Teacher?***

B: Teachers Classes, mark assessment, marks internal assessments, predict grades for his students

***Me: Great! Now, in terms of software, and hardware, how do you currently use your resources to predict grades? Are there any problems with it?***

Well...I currently use Microsoft excel; I have rows of students and columns of all of their grades. The grades are only from the year I taught them, so that means from quarter 1 to quarter 4. The school website has a way of storing the grades of students. I also use my memory, like, the opinions I have towards students, and how I feel their grades will project in the future. In Math predicted grades are mainly based on semester exams since: Everyone sits the exams at the same time (student's can't tell others what is in the test and Semester exams cover multiple topics (thereby they are more like the final exam)).

Also, there is currently no formal system for the process of predicting grades. We tell the academic advisors what we think they will get by looking at their grades, especially in semester exams. The predicted grade is based on a progress grade, which is basically 50% of the semester 1 exam and 50% of the semester 2 exams. 50 50 split.

Currently, the school doesn't allow me to put much emphasis on whether the student has been improving, e.g. if their sem 1 exam was 5.0 and their sem 2 exam was 5.9 this shows an upward trend, and perhaps we should predict 6.0? Instead of an average of the two, I mean.)

In terms of problems in the system, perhaps there is some inconsistency from teacher to teacher. I feel the problem that, firstly, there is no formal way to manage the grades. Yes, the school system makes us put in the grades, but sometimes that kinda gets hard to manage just because of the way it's structured. On top of this, there is no formal way of predicting grades, like, I would like there to be a system to calculate them for us. 'Cause it's sort of unfair to other students if they have a teacher of different marking standards.

***Me: If there were a new system, software system, what would you like to have as features?***

One, The system could take the grades from the school website so we don't need to enter them again.

Two, I would Perhaps make a graph to make it easier to see the trend (student grades improving etc...)

Three, It would be nice to Predict grades by pressing a button or something like that.

***Me: Thank you Mr.Baker!***

B: Pleasure

## **SECOND INTERVIEW TRANSCRIPT- APPENDIX 2 13/Feb/2020**

**Me: Hello Mr.Baker, this is our second formal interview.**

B: Hello

**Me: Okay, I've created a system for you that allows you to predict grades, manage grades and create spreadsheets of grades limitlessly. You can create classes, add students (given that they have an account), and edit grades. One test I wanted to do is if the system is usable by you, so I will not tell you how to use the system. I've already created an account for you, just log**

B: Thank you

\*Uses the system for 5 minutes\*

**Me: Okay, can I ask you some questions about my system?**

B: Sure

**Me: Firstly, did the system manage to perform what you wanted in the system?**

B: yep.

**Me: Was it easy to use?**

B: Yeah, everything was in front of me so I found it easy to navigate. The Names on the buttons, like "add student" and staff are very self-explanatory. I like how all calculations of the grades and graphs are automatically done whenever I put something in, and I really liked how I could just press the "edit" button and enter in the grades in those boxes then press "done". It was simple for me to use.

**Me: Okay, now I'll go through these success criteria. This is just a list of all things that we discussed last year, about what you wanted in the system, I'll just ask you if it was achieved, Okay?**

B: yep

**Me: Were you able to enter, edit, and delete student grades?**

B: Yes, with the edit box thing I just told you.

**Me: Were you able to perform any action in 3 clicks**

B: Apart from the clicks of entering the grades, yes. But, when I wanted to create a class, there was no back button, so i had to enter randomly then delete the class

**Me: Okay. Were the predictive grades accurate enough for you to predict the grades of the student?**

B: Definitely, I enjoyed how there were a lot of indicators, and even the probabilities, which can be very helpful. But, I liked most that despite all of the numbers and graphs, there was still a composite predictive grade for me to just see, in case the trend was hard to see. However, I thought the two prediction lines were the upper bounds and lower bounds of the prediction, but now I realise that they were two different styles of prediction

**Me: Did you encounter any errors?**

B: Well, no errors.

**Me: By the way, if you enter a grade below 1.0 and more than 7.9, the system will not allow entry**

B: good... bolding may be a bit abrupt, perhaps turning it a different color would be better. Like Red?

**Me: Were you able to contact any student?**

B: No

**Me: Can you reopen your system, and tell me if any data is lost**

B: No, everything is still there

**Me: Were you able to search for students?**

B: Yeah, first name and last name. I liked how it was not case sensitive.

**Me: Apart from visual aspects of the system, would you recommend any functional update? Features you'd like added, or removed?**

B: Well, I quite liked the layout, I thought it was clear enough to see where everything was. Also, the system as a whole met the specifications discussed at the start of the process... I remember them. Although the orange green graph lines were a little confusing and some labels are like... abbreviated, I liked how the graph, the trend was the highlight, and the next biggest thing on the screen was the predicted grade. Improvements... One: As you know already, I like to compare grades with other students, classes averages and stuff like that, so it would be nice to have an option to display a sort of "class average" line on the graph, like "press this button to display the class average line" so I can compare students. Building on this, if I can see multiple students trend on the same graph to compare would be good. Also, add a contact student feature, so I can be in contact with the student in any way

**Me: So comparison is rather important to you?**

B: Very

**Me: Well, Thank you, Mr.Baker, for being my client over the duration of my project, hopefully you'll be able to use this system in future! Its been a pleasure**

B: Thank you, Sam!

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