

Appendix

Initial Consultation - Transcript

The following is a transcript taken from a conversation between me and my client (note, English is her second language)

Student: So mom...I have heard from you that you are having trouble managing patient data, is that correct?

Client: Yes, that is correct.

Student: So, I'm planning on creating a program to help solve this problem. What are you currently using to manage patient data? What is your current system?

Client: My current system is the dental software called Dentrrix but I have to input stuff...and they don't have any templates...you know...for some of the information I want to put in. So if I miss it, I miss it, and I cannot keep track with it.

Student: So what I am hearing is that it is hard to use this software due to being unable to put all of the information you want into it?

Client: Yeah.

Student: So, in my program that I am designing, what would you want it to do differently?

Client: I want it to be a little bit more detailed for each patient's restorative procedure, so any problems when they come back, when I open up the program, I know exactly what the material I use, the color I use, the cement I use...

Student: Could you list for me all the information you would want?

Client: Yeah, so I do need to see the patient's name, date of birth, sex, date of service, the tooth they need serviced, because they have teeth from #1 to #32. And I want to know about the kind of restoration, like do they need a filling, or an inlay, onlay, veneer, crown, or the tooth cannot be restored, and if they tooth needs to be restored, I need to know the kind of material that I will

use: composite material, porcelain material, or zirconia material. I also need to know what adhesive I'm using like bonding adhesive or cementation adhesive. I also want to know the color of the restoration, the name of the cement used so I know if it was successful or not. And, the service I do: do I have to do same day service or some additional service to finish it? And, I need to know if I did a follow up for a patient, and if I gave them post-op instruction, and what kind of instruction it was: by verbal or by video. Finally, I want to know if I gave them a date to come back for recall, for teeth cleaning, or for an annual checkup to make sure that they are okay. That's a lot of information that I need.

Student: So you want all of this information in this program.

Client: Yes.

Student: So now I'm going to list off some functions and ask you if you want them: the ability to add a patient, delete a patient, modify the data on a patient, and be able to have all the information saved for the next time you use the program. Would you want all of that?

Client: Yes.

Student: Would you want the ability to sort patients by information such as their name and material?

Client: Yes.

Student: Would you also like a function to search for a patient by name, by...

Client: By name? Yes, by name. Usually by name. Because when they are coming with their name, we can search by name which is the best. If a patient calls and they say their name and that they have a problem, we can search their name and find their history.

Student: Got it. I'll make sure to integrate everything you want into my program when I am developing it. Thank you for your time.

2nd Meeting - Transcript

The following is a transcript taken from a conversation between me and my client

Student: Hi Mom. I've finished designing how the program you want will look and function.

Client: Great! Can I take a look?

Student: Of course! Here you go.

[5 minutes of the client viewing the diagrams (See Criterion B: Design for reference)]

Student: So what do you think?

Client: Looks great!

Student: Do you have any questions or concerns about what I have so far? I know that I wasn't able to put in all the categories that you wanted so I would like your input.

Client: I think the information categories you have right now should be good enough....I think you should change the adhesive category to bonding instead because I also use cement as a bonding material and not just adhesive. Also I think you should change composite material to just material. If I'm doing a filling then I would use composite material but if I'm doing a crown then it would be different.

Student: Ah I see. Got it! I will make sure to edit these categories. Are there any other concerns you have?

Client: I think you should change the option when selecting teeth from "Child & Adult" to "Primary & Permanent" because there are times when children have both kinds of teeth.

Student: Oh I didn't know that. I will make sure to change that as well. Anything else?

Client: So far so good now. Thank you.

Student: That's great to hear. Now before I start working, could you please list for me the different options for the categories?

Client: The procedures should be crown and filling. The materials should be flowable composite, packable composite, zirconia, and emax. Bonding should be adhesive and cement. Color should be B1, A1, A2, A3, and A3.5....Oh, also BL. That should be it.

Student: Wow that's a lot! Thanks, Mom. I will get working on programming this as soon as possible. Thank you for your time.

3rd Meeting - Transcript

Student: Hey, Mom. I'm finally done working on the program for you. Are you free to take a look at it and let me know what you think?

Client: Sure, I would be happy to.

Student: Great! I already installed it on the family computer so let me just boot it up.

[Program is opened up]

Student: So I have a list of test criteria that I need to have you make sure the program fulfills. I'm going to go over them one by one. First, can you make sure that you can add patients?

Client: Sure. Let me just add in your dad.

[Inserts data to add a patient]

Student: So did the program successfully add a patient?

Client: Yes it did. I can see that I added your dad to the table.

Student: If you select him in the table and then right click, you can click the view button to see all of the information.

Client: Oh I see. Yes, I think the program added the data correctly.

Student: Next, let's check if the program can save data. So just go ahead and press the save

button and exit the program.

Client: Okay.

[Program is closed]

Student: So if you go into File Explorer you can see the text file next to the program called “patientData.txt”. If you click on it, then you can see how the program saves the data.

Client: Yes, I can see. Where are the teeth that I need to service?

Student: It’s the line with a bunch of ones and zeroes. The ones represent the teeth you need to service.

Client: Okay I see.

Student: So now reopen the program to see if all the data was saved.

[Program is reopened]

Student: So did all of the data gets saved upon.

Client: Yes, all of the data was saved after I closed the program. I can still see your dad right there.

Student: Yay. So next let’s check the delete feature. So select Dad and right click and then press the delete button. Then quit out of the program and check the text file from before and let me know if it deleted successfully.

Client: Got it... Yes I can see that the data has been erased and that the text file is now blank. I think your delete works.

Student: Sweet. Now let’s reopen the program so that we can test the search feature.

[Program is reopened]

Student: So now add two patients so that we can test searching for a single one.

Client: Okay. Let me add you and your dad then.

Student: So just type in one of the names in the name search filter.

Client: Okay. I'll search for you then. How do I press search?

Student: It searches automatically as you type in the information.

Client: Oh, that's cool.

Student: So did the search features work?

Client: Yes, the search feature worked. I can see only your name in the table.

Student: Great. What's next...now let's check if the editing feature worked. So just pick one of the patients you made and edit some of the data.

Client: Okay. Let me first look at your data...I think I will add #30 to your teeth to service.

Student: Try editing some of the other data so that you can see the change in the table.

Client: Got it. I'll also change your color to A1 then. Yes, I can see that the color has been changed...and #30 was added to the teeth. I think the editing features work fine.

Student: That's good to hear. Alright next on the list is if the table responds to adding, deleting, and editing. Since you've already done all three, would you say that the table is responding successfully?

Client: Yes, I can see that the table changes whenever I make a change.

Student: Great. Next, we need to check if patients are sorted alphabetically based on last name and then first name.

Client: The table just has you and your dad and I can't really tell if its sorted since you have the same last name. I'll add your grandma as well then...Yes, I can see that it sorts the patients by last name and then first name. Good job.

Student: Thank you. Okay, last but not least, please check that this program gives an error message if you try to add a patient without putting all the data in.

Client: Okay. Let me click the add button...

Student: And then just hit confirm.

Client: ...Yes, I can see the error message telling me I have invalid data inputted.

Student: Perfect! Now that the testing criteria are over, are there any improvements you would like me to add to the program. It can be anything.

Client: One thing that would be nice is adding the date of service for each patient so that I know when they'll be coming into the office and I can know what my schedule will look like.

Student: Got it. Anything else?

Client: Another thing would be putting the date of completion for a patient's procedure so I know who I have already worked on.

Student: Do you think you would want them in two separate tables?

Client: Yes, I think that would be helpful...Something else you could add is the recall date for when a patient is scheduled to come back for a checkup or cleaning. That would also be helpful in planning my schedule.

Student: Got it. Anything else you would like?

Client: One more thing. It would be really helpful if you included the patient's contact information such as phone number or email address as well in case we need to get in touch with a patient about their appointment or something else.

Student: Perfect. Thank you so much for the opportunity to work on a program for you. It was really fun. Thanks, Mom.

Client: I'm happy to hear that!