Appendix A: Consultation with Client

First interview with my client Mr. W via email

Me:

Hello Mr. W,

As I've mentioned, I would like to help you take better notes and organize all the information for school. I can create a Java program that will allow you to create mind maps, which can run on your Mac computer. To do so, please send me your initial visualization of the application's layout. Let me know if you have any questions or special requirements.

Best,
Candidate

Mr. W:

Hey Candidate,

Thanks for proposing a personalized solution! I've tried another mind mapping software last week — it only charges $10 a year but it's still too complex and over-the-top for me. Just to clarify, I wish to digitize my handwritten notes into mind maps, and when I'm studying, I hope I can zoom the canvas to particular sections. I don't want the program menus and such to distract me, so please keep it as minimalistic as possible.

I've drawn a rough design of what I wish to see:
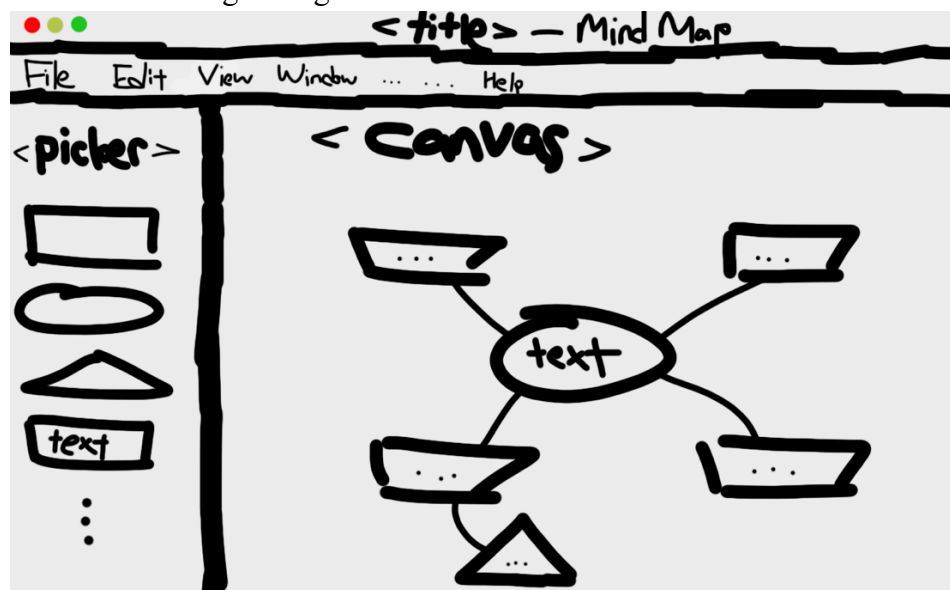
When editing text, I want to be able to change the font and size. For all the rectangles/circles/triangles or text, refer to them as mind map elements.

For my Social Studies final in January 2019, I hope that you can make me that program by then so I can make mind maps to study the causes and effects, timelines, etc.

Mr. W

Me:

I can definitely create the program based off your design. I've noted those requirements and set a tentative deadline of December 2018 for the program. By then, you should be able to run the program on school computers or on your Mac to test its functionality.

In your depiction of the program, how would you like to add those mind map elements?

Candidate

Mr. W:

Oh, by December would be great! When adding the mind map elements, I want them to be added through many places. Because I want the option for the "picker" sidebar to be hidden, is it possible that you implement an "add" menu to the top bar next to "edit" as well as in a right-click menu? Other than that, dragging from the picker is fine with me.

I assume that when the program closes, my entered information is lost, right? Is it also possible if you can add an "open file" option similar to Microsoft Word? Under the file menu, can you add an export function to a JPEG or some other image, because I need to save it for use in Word.

Mr. W

Me:

Alright, I'll add those requirements. Keep in mind that the right-click menu will be context-aware and display different options depending on where the mouse is located. For example, if it's on a mind map element, it'll provide an option to delete it. I can for sure implement save and export to image functionality.

I noticed that you have not indicated in your diagram on how to link mind map elements with lines. How would you like to add them in the program?

Candidate

Mr. W:

I appreciate your patience with my requests; I'm not too familiar with the actual integration of features. If you can add a submenu to the right-click context to pick the first/second element to link together, that would be perfect. Also, I would like to be prompted for adding lines if the line is selected in the "picker" sidebar.

Otherwise, that is all the functionality that I wish to see in this simple, yet promising program. Thank you, Candidate!

Mr. W

Me:

That sounds good and thanks for clarifying. If I have any additional questions, I'll be sure to contact you.

Candidate

Second interview with my client Mr. W via in-person demonstration (January 8, 2019)

Me:

Hi Mr. W, thanks for taking this time to discuss about the program I made! I'm interested in hearing your thoughts of it and how well the program has worked for you.

Mr. W:

Hey Candidate, no problem, I'm very glad that you were able to make this for me. So, for the last week or so, I've been using the program in conjunction with my standard processes of note taking and reviewing for classes. I've even exported a few images from it and pasted them into my notes. First of all, I greatly appreciate how you made the program very clean and minimalist-looking! I didn't expect the program to be this simple and easy to use compared to other mind mapping programs that I've tried. Adding shapes, removing them, editing all aspects of them… it's very intuitive! I feel that this is ultimately beneficial when I, or any user, thoroughly understands the program and how to work it, but … maybe after a couple of years when I come back to this program, or distribute it with friends, I might need to get a refresher on how to use it.

Me:

Oh, I understand. Sometimes I have that issue with certain complex programs after not using them for a long time and coming back to realize that I've forgotten the fundamental controls and operation of it. I will definitely add some sort of documentation, but where would you like to access it?

Mr. W:

The documentation? I was thinking of something less overwhelming, so not a manual, but more like a quick start guide if you know what I mean.

Me:

Yeah! Something brief and concise. I could see that being very useful.

Mr. W:

Rather than putting it in a separate file or a website, is it possible if you put it on a separate page within the program. So, something that can display as one of those pop-up windows.

Me:

I was thinking of something like that. For sure, I'll add a guide to the help menu.

Mr. W:

Alright, that's good to hear. I have a few additional points that I have recorded about the program that do not satisfy me at the moment. First things first, there is a bug, let me show you right now. When I set a shape as the origin and another as the endpoint, a line appears and that's great. Another thing: the smoothness and fluidity of the program is amazing! I've never used any program that's like this. I appreciate that very much!

Me:

Ah, thank you! I try my best to make everything optimized and very responsive.

Mr. W:

Mm-hmm. Okay, as you can see, I'll just save the mind map right now, and when I open it back up… The lines disappear! Everything else loads in perfectly, including the zoom level and how far I've panned, but not the lines.

Me:

Hmm, I must have not implemented that yet. I'll get that fixed for sure.

Mr. W:

That's good. As well, could you allow me to zoom in and out with keyboard controls, so like, control and plus or minus, instead of the mouse wheel?

Me:

That seems like a very easy addition and I'll definitely integrate that!

Mr. W:

Great! I have a few more things I want to talk about. Let me just add a few shapes and connect them… Okay so, when I drag the shapes onto each other, one shape always appears above the other. I'm fine with having the white background of them, but is it possible for you to allow me to change the order of them? I know in Google Docs or Word, you could send a picture to the front or back, you know what I mean?

Me:

Oh, I haven't thought of that. It must be the way I show the shapes on-screen. I will add some sort of menu that lets you change the order of shapes.

Mr. W:

A menu works for me, perhaps in the menu that appears when I right-click. Just to be next to all the other controls for customization. Alright, another thing that I wish to see added is a grid. Sometimes I want to precisely align shapes or just be aware of where I am in the whole mind map. A grid would be helpful.

Me:

I agree. Adding a grid seems simple enough, like a cartesian plane. And would you like to be able to toggle it on and off?

Mr. W:

Yeah that would be good. I don't want the grid to be showing all the time or else it'll look like I'm doing math homework! One last thing, how difficult would it be for you to add an option to center myself my mind map? What I mean by that is, sometimes I might get lost in the map, probably by panning far, and I want to get back to where my shapes are.

Me:

Yeah! I could look into how I can accomplish that. I do agree with how it's very easy to get lost in the mind map right now.

Mr. W:

Thank you again! This program has been very useful to the way I visualize my work, it's very simple. Let me know if you have any questions or concerns about these new features.

Me:

Thank you for providing me with all this feedback! It's very helpful to know how the program works in the real world. Please contact me if you have any additional features or bug reports for the program.

Mr. W:

Great! Thanks again.

Third interview for final feedback with my client Mr. W via email

Mr. W:

Hello Candidate,

I would like to first thank you for creating this program for me. It has fulfilled all of my desires and requests for features. The program is very straightforward to use, adding shapes is intuitive via the menus and left sidebar, it's very fast as well! I could drag shapes easily and also drag the mind map to move around smoothly and zoom as well. You added a plethora of options to customize the shapes from a right-click away and adding lines between them is simple enough. Saving and opening those files is just like all other editors. I've never had the program crash or freeze, which is very nice, especially for some of my larger mind maps that I've made for my Social Studies test a few weeks ago. It's amazing how it was able to be just as fast to use with like 20 or so shapes on the screen.

I can see that the grid I requested from our last interview was added, and the lines between shapes are now saved in files. Thank you for that!

Mr. W

Me:

Hi Mr. W,

No problem at all! Thank you for all the feedback and being my client for this project. I'm glad to hear that this solution has worked for you. As a final note, is there any sort of additional feature request or bug that you could let me know about? I feel that this program has the potential of being developed further on.

Best,
Candidate

Mr. W:

Yeah, the program has worked very well for me, and its simplicity has definite benefits compared to the other mind mapping programs I've tried.

I have a few features that I've noted down that would make the program even better. Some of them are more crucial than others in terms of user preference. I would first like to see options to undo and redo. The program is straightforward enough, but I made some errors sometimes and I think that a simple keyboard shortcut would be more efficient. I

also would like to have the program detect whether mind map has been changed since the last time I saved, and also have the program prompt me to save if I accidentally close it after making some changes. I also noted that when I'm saving, saving as the same file name as a pre-existing file will immediately save. This only happened once, but I think the program does not care if it's replacing another file when saving. I think the program should check that. I have a few more things about customization, most notably the size of shapes should be able to be changed. Different line types, such as dotted and dashed, for connecting lines and the shape's border would be beneficial. An arrow could be shown at the endpoint of the line, which could also be customized. Lastly, sometimes I accidentally set a shape as origin, and I would have to reopen the program to clear that, which bugged me.

Mr. W

Me:

Thanks for your reply. All of those suggestions of yours are very understandable and good. I've made a note of them for possible future development on the program. In the meantime, I hope that the program has been of help to your studies and I hope you have a good week ahead!

Candidate

Mr. W:

Thanks again for making this program for me. It has been a great help!

Mr. W