Appendix

1. Bibliography:

[Insert any resources that you used or relied on for your research INCLUDING those that helped you with code examples, rule clarifications, sprite resources, etc.]

https://vounalinux.info/tkinter/arid

https://younglinux.info/tkinter/tkinter

2. Interview transcript

Client Interview 1

Me: Could you tell me about the problem you are experiencing?

Mrs Rees: So as you noticed we have been having issues with the new smartboards. They have been malfunctioning. To run an exam I like to open a screen with the timer for the students to see and obviously a document with their subjects so there is no mix ups but it is all very messy on the screen and the substitute invigilators get confused and accidentally shut one or another window and occasionally the apps just don't want to run at the same time and the timer collapses. We could write it on the whiteboard but it's always a pain to find a working marker and for the people at the back to see clearly so they have to interrupt the exam and clarify when they finish so it's all a mess. I really don't like this and I want you to help me design a new solution for this.

Me: Do you have a vision of what you want the program to look like?

Mrs Rees: Yes I definitely know what i want to get. So I want you combine the two together - the subjects and the timer. Also, I want there to be a clock that shows the current time because not everyone in the auditorium can read mechanical wall clocks. Also an ability to enter multiple exams, not just one. And I want a button that can finish an exam's timer.

Me: Do you see it more like a one timer and a table with each exam or an individual timer for every exam?

Mrs Rees: I think each exam should have its own timer to clear confusion.

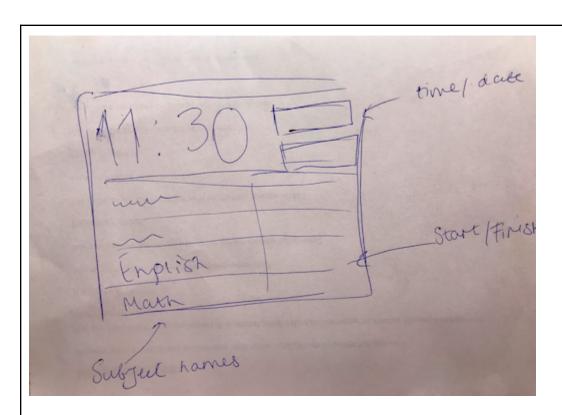
Me: Any additional features you would like to be added?

Mrs Rees: I want an indication that the exam finishes soon like a 5 minute alarm or something but it's also for each exam.

Me: I propose the program needs to be user friendly?

Mrs Rees: Yes, yes definitely, we have teachers of different ages so I want it to be very easy for them to navigate too. Another thing is you need to arrange everything on the screen the way so that everyone will see the screen because the auditorium room is big so the people in the back can see too.

Me: Great, I will update you on my progress.



This is the sketch Mrs. Rees showed me during an interview.