

## **Design Justifications**

### **Minimalistic UI**

I decided to tackle this project from a bare bones standpoint simply because many of the users of this application are going to be in a lab environment, where they need to focus, so the data is as close to accurate as possible. Adding other colors, bells, and whistles would only serve as a distraction.

### **Black and White**

As stated above, I want the user to be able to focus as much as possible –meaning I want them to follow the dots perfectly- therefore black and white –proven to be some of the easiest colors to focus on when mixed- would help foster this.

### **Centered Everything Else**

I centered the text and buttons because I wanted the user to be able to immediately interact with the application. When we read we look to the center first, then follow cultural norms starting at the top left corner. Thus to allow the most immediate interaction, this is being used in a lab environment where time is a lot of money, would be to shorten the gap between the user and the content.

### **Friendly Prompts**

This serves to create a human connection with the user and to inform them of what they are doing. If they feel connected to the task, they will be motivated to perform much better –we need the most accurate data- and perform more calmly, and with more focus. The prompt also serves as a warning so the user can prepare before proceeding.

### **No Countdown**

I decided that the countdown would serve, yes to give the user to prepare, but will also stress the users out, or even spike their adrenaline –you know how people get when they know they're about to enter a fast paced environment- and cause them to proceed carelessly and thus this would provide potentially invalid data.

### **Inline Event Handling**

This was done as it was convenient and the process of handling the event was not exhaustive.

### **Fixed Screen Size**

This was done to first keep the users from toying around with it distracting themselves from the test, and to also make the coding of the calculations easier to ensure data accuracy.

### **High Capacity Modularization**

This was done with the code to make development rapid, troubleshooting painless, and maximize code reusability.

### **Function Control Flow**

The changing of application states is done by calling functions and passing the stage from function to function. This is done to sequester each section of the application to minimize confusion during development.