**[Starting the Program]**

1. Upon powering on the device via the micro USB cable, the program will run automatically after the desktop has booted.

OR

1. The desktop also has a clickable icon, labeled “Clinical Mats” that can be double clicked in order to execute the program.

**[Program Flow]**

1. Introduction State
   * Allows researcher to select between the three modes, “Front to Back”, “Left to Right”, and “Random”. By choosing a mode you can proceed to the countdown state.
2. Countdown State
   * Displays a ten-second timer which countdowns to zero. Once the timer hits zero seconds, it will automatically move into the trial state.
3. Trial State
   * Based on the choice from introduction state, will run the appropriate algorithm. Please see **[Algorithm Overview]** for more in depth detail. After 20 steps have been counted, it will proceed to the result state.
4. Result State
   * Final state, which will show the amount of time the trial, took to complete. You have the option to begin a new trial from this state, which will take you back to the introduction state.

**[Algorithm Overview]**

1. Front to Back Mode

* A completely random mat selected as the starting point.
* If the starting mat was in the front section, after pressing on said mat, it will randomly select one of the two bottom mats.
* If the starting mat was in the back section, after pressing on said mat, it will randomly select one of the two front mats.
* From this point, it will continuously switch between the front and back sections, randomly selecting either the left or the right mats.
* Once 20 steps have been completed, the trial is finished and data will be displayed.

1. Left to Right Mode

* A completely random mat selected as the starting point.
* If the starting mat was in the left section, after pressing on said mat, it will randomly select one of the two right mats.
* If the starting mat was in the right section, after pressing on said mat, it will randomly select one of the two left mats.
* From this point, it will continuously switch between the right and left sections, randomly selecting either the top or the bottom mats.
* Once 20 steps have been completed, the trial is finished and data will be displayed.

1. Random Mode
   * A completely random mat selected as the starting point.
   * From this point, a random mat that is not the current target mat is chosen.
   * Once 20 steps have been completed, the trial is finished and data will be displayed.