



HUMANTRAK MANUAL

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WHAT IS HUMANTRAK?

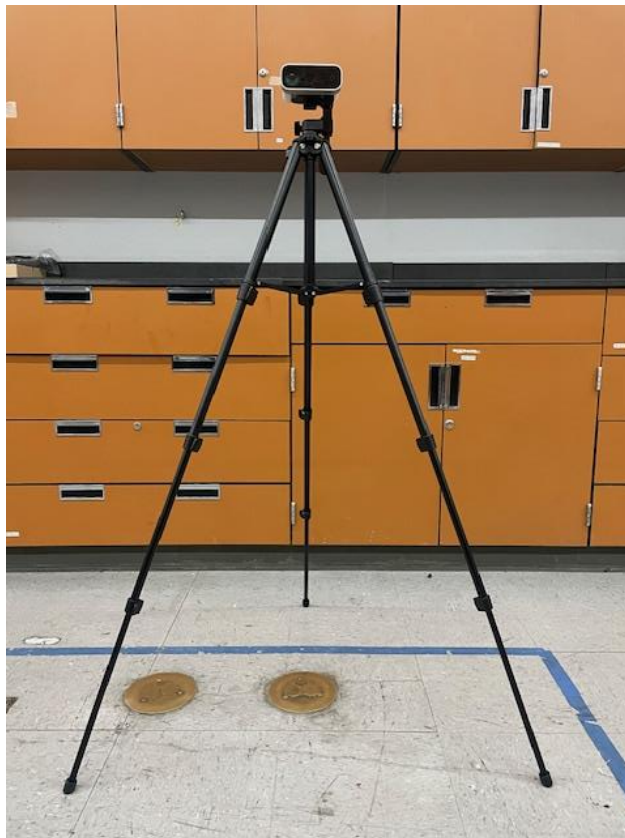
HumanTrak is an advance motion analysis system designed for precise and efficient assessment of human movement patterns. It combines high-definition motion capture technology with biomechanical analysis to provide real-time feedback on an individual's range of motion, balance, and movement efficiency. HumanTrak is ideal for applications in sports performance, rehabilitation, and clinical assessments, as it offers practitioners detailed insights into joint kinematics, movement quality, allowing for targeted intervention and improved outcomes. With a user-friendly interface and detailed reporting, HumanTrak enables trainers, therapists, and medical professionals to make data-driven decisions for optimizing physical performance and recovery.

HUMANTRAK SETUP

Step 1. Locate the HumanTrak, which should be stored in an orange pelican case that is pictured below. When opened, inside should be the laptop on top with a wireless keyboard underneath along with the rest of the equipment needed.



Step 2. Remove the camera, tripod, and cords needed from the pelican case. Extend the legs on the tripod all the way, and screw the camera to the tripod until it is snug in place. Position the camera to where the back is always on the same side as the camera angle.

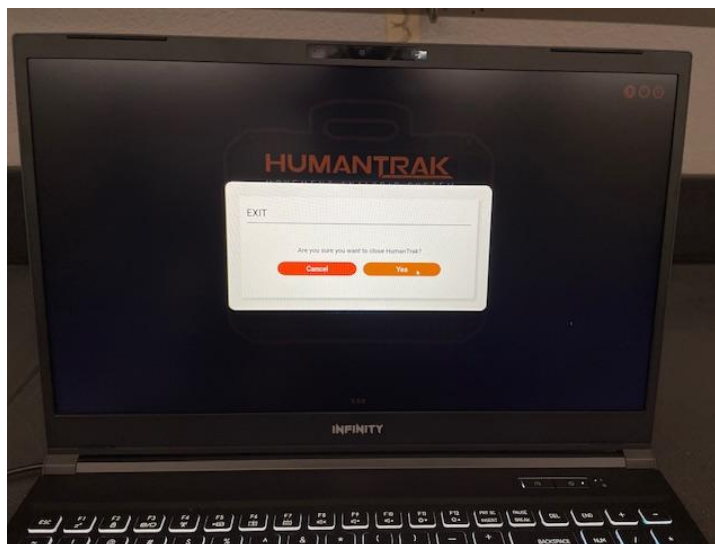
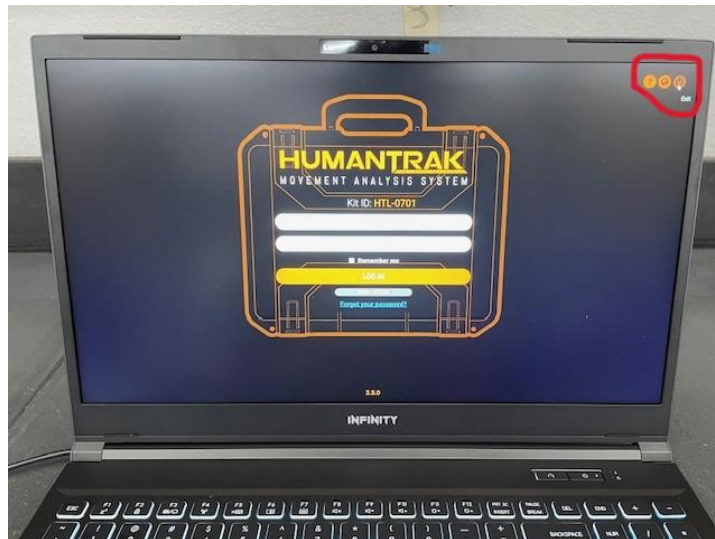


Step 3. Once tripod has been safely secured and camera mounted, insert cords into the correct outlets on the camera. One cord is used for power, and the other for video. Then connect cords to any USB outlet you have available on the laptop. Once cords are connected, power on the laptop and a white light will appear on the back of the cameras. This indicates that the cameras are turned on. This is the only way to power the camera on.

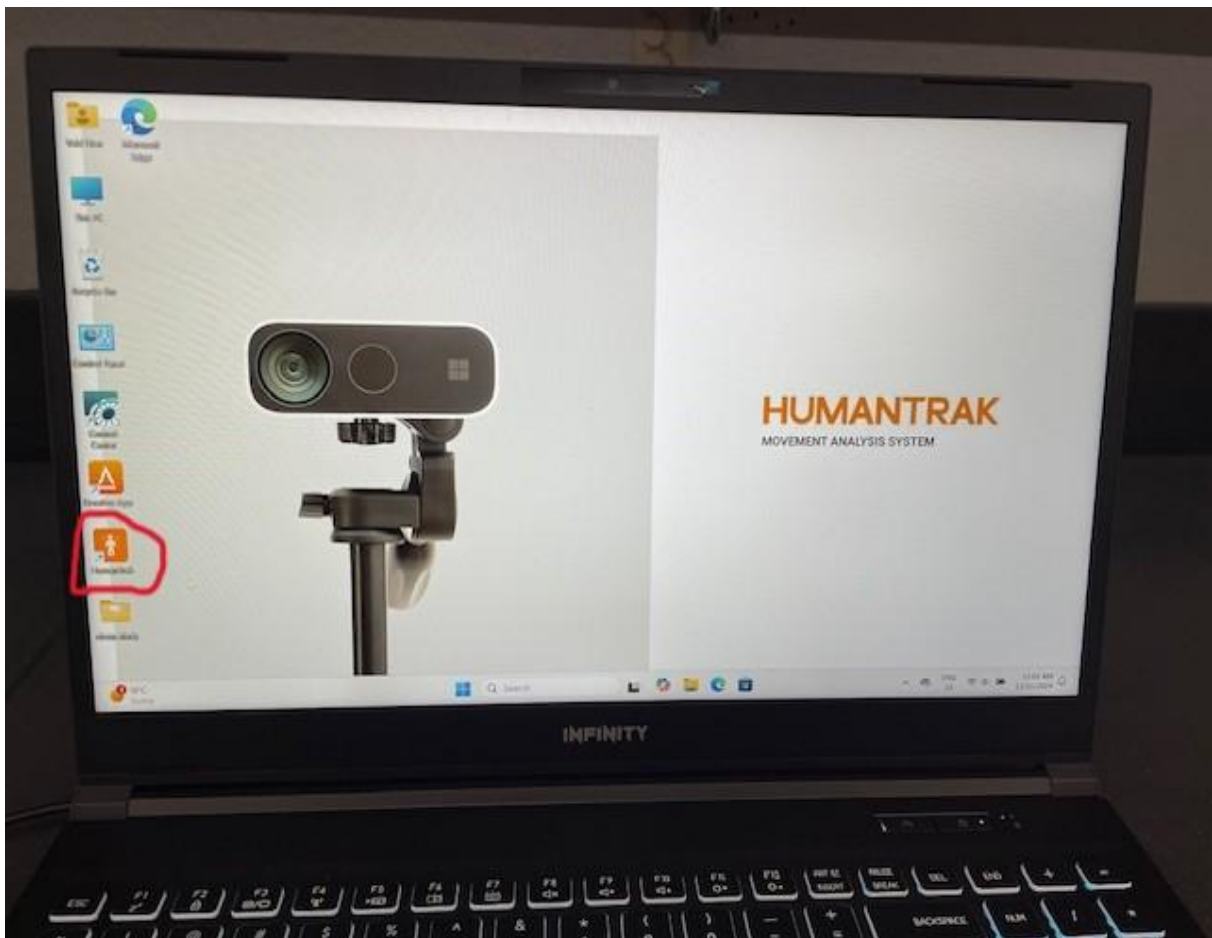


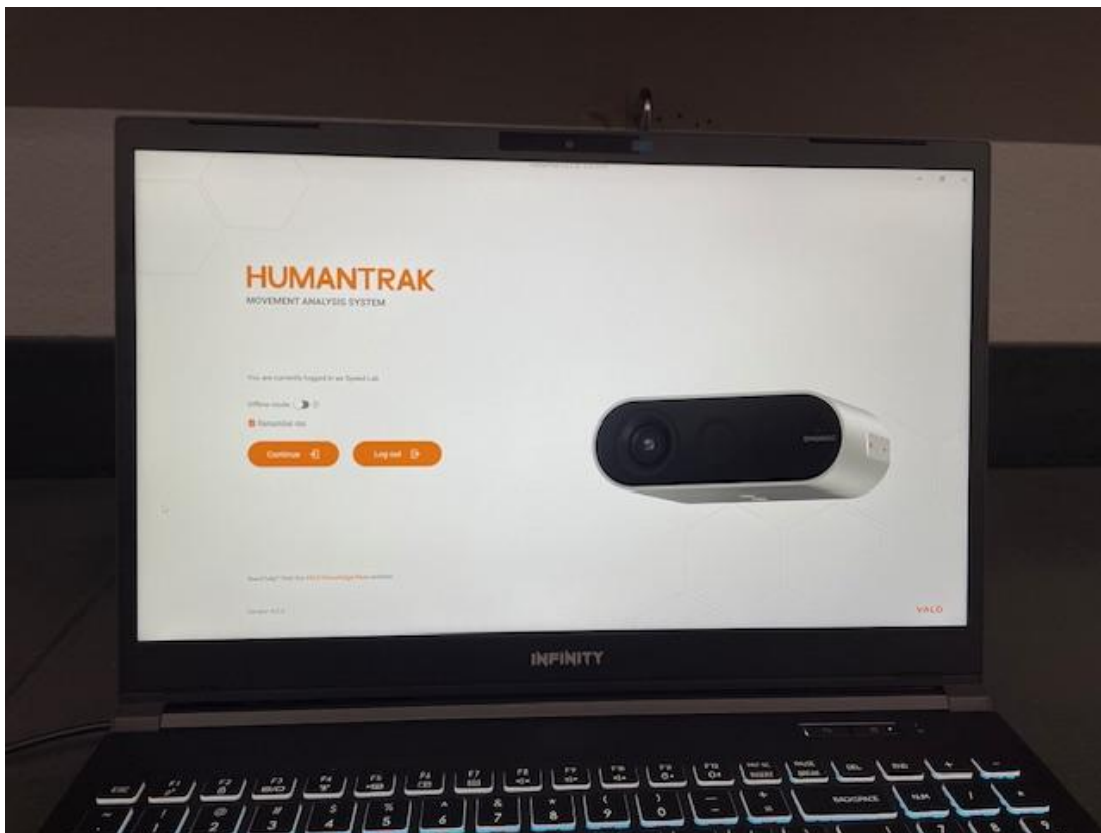
FORCEDECKS APP SETUP

Step 1. Ensure the laptop is connected to the charger and it is plugged into a power source. HumanTrak can function without it being connected to a power source as long as it has a certain amount of battery percentage. However, for more efficient testing and to reduce lag it is recommended that laptop is connected to power source during testing. Power on the laptop, do not do or click on anything. A HumanTrak app will immediately appear. This is the old software and is no longer compatible locate the power button in the top right corner and click on it and exit the app.



Step 2. Once the old software is closed, the desktop screen will appear with numerous of apps visible. Double click on the icon labelled "HumanTrak" to open the desktop app. Once opened, the app will load up and then direct to the login screen. If you are not logged in, then you must sign in to the desired profile you wish to use. If app is still logged in under the desired profile, then just click "Continue" to advance.

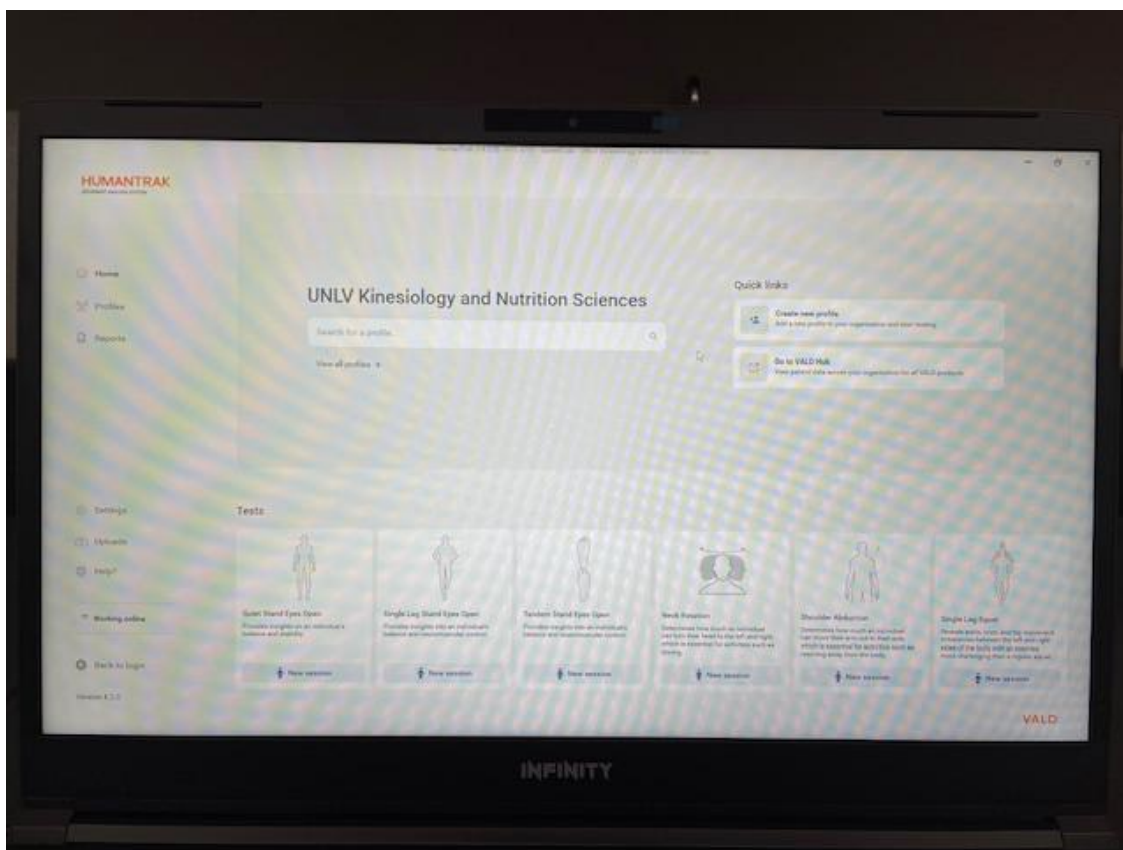


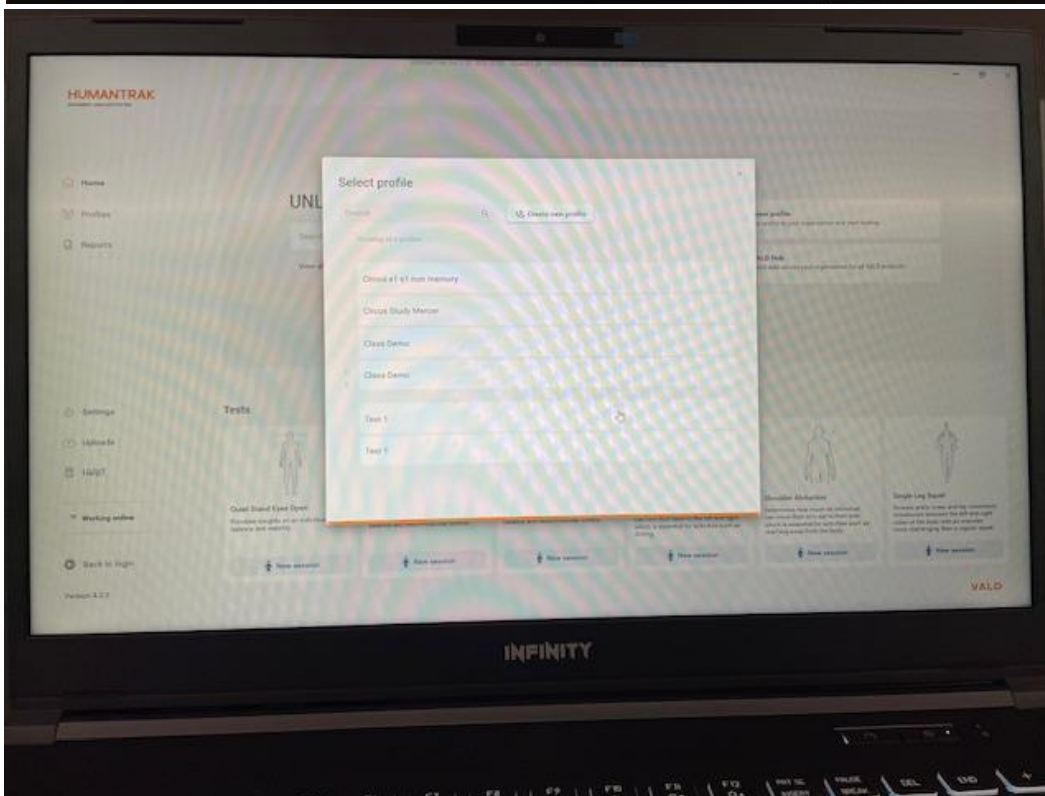
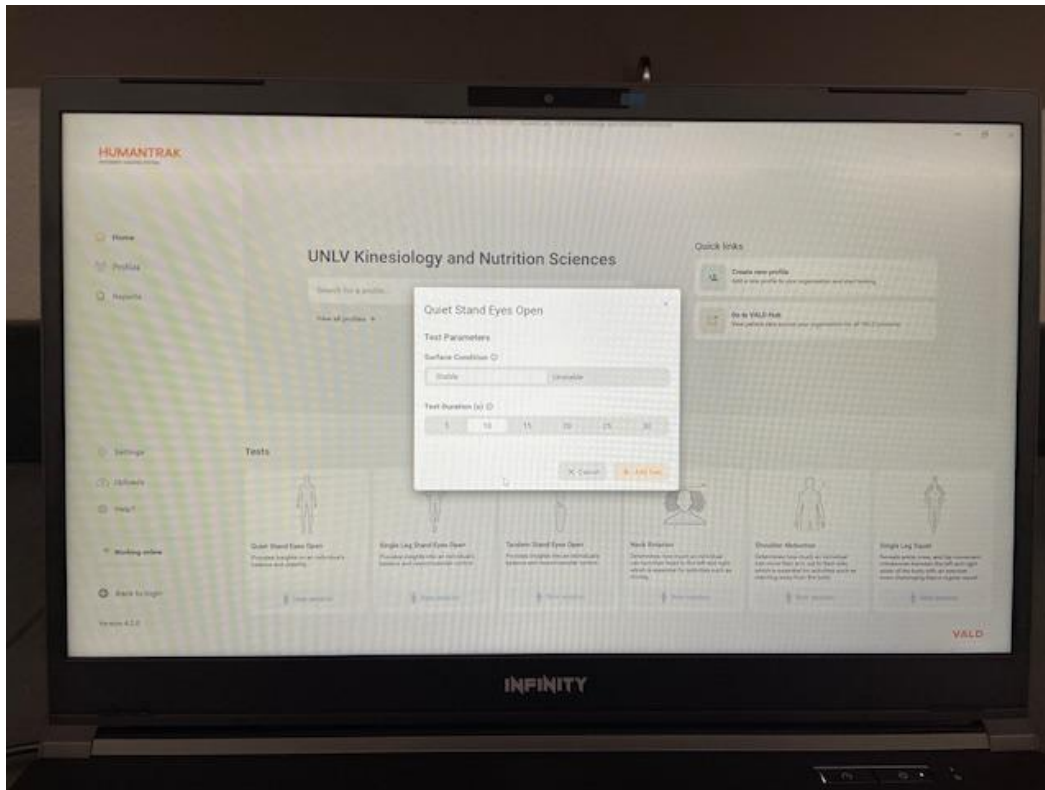


Step 3. After logging in successfully, the home page will appear. On the home page should be displayed in large bold black letters the name of the account for whom is logged in (i.e. UNLV Kinesiology and Nutrition Science).

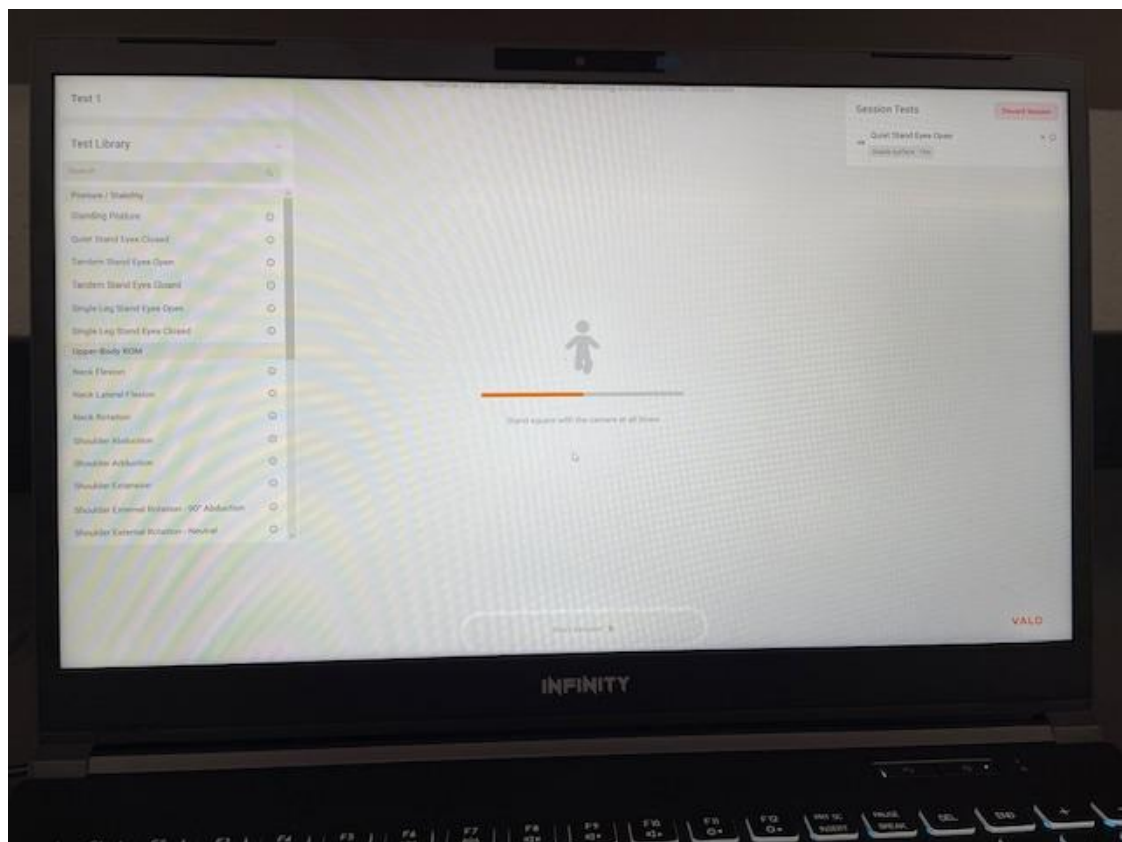
Towards the bottom of the screen under the subcategory "Test" you will see six of the most frequently used tests displayed. To begin a testing session, click on "New session" inside the box of the test you wish to administer. For this example, we selected "Quiet Stand Eyes Open" and set the timer of the test at 10 seconds and select Add Test. Next, it will ask "Select profile" and just select the appropriate athlete.

Sidenote: This is just to begin the testing session, but you do not have to perform this test. If one of the six test that are suggested on the home screen are not any you wish to administer, just load a test to advance to the testing session. From there you can select and remove which test you want for your testing battery. You will see did this in the next step.

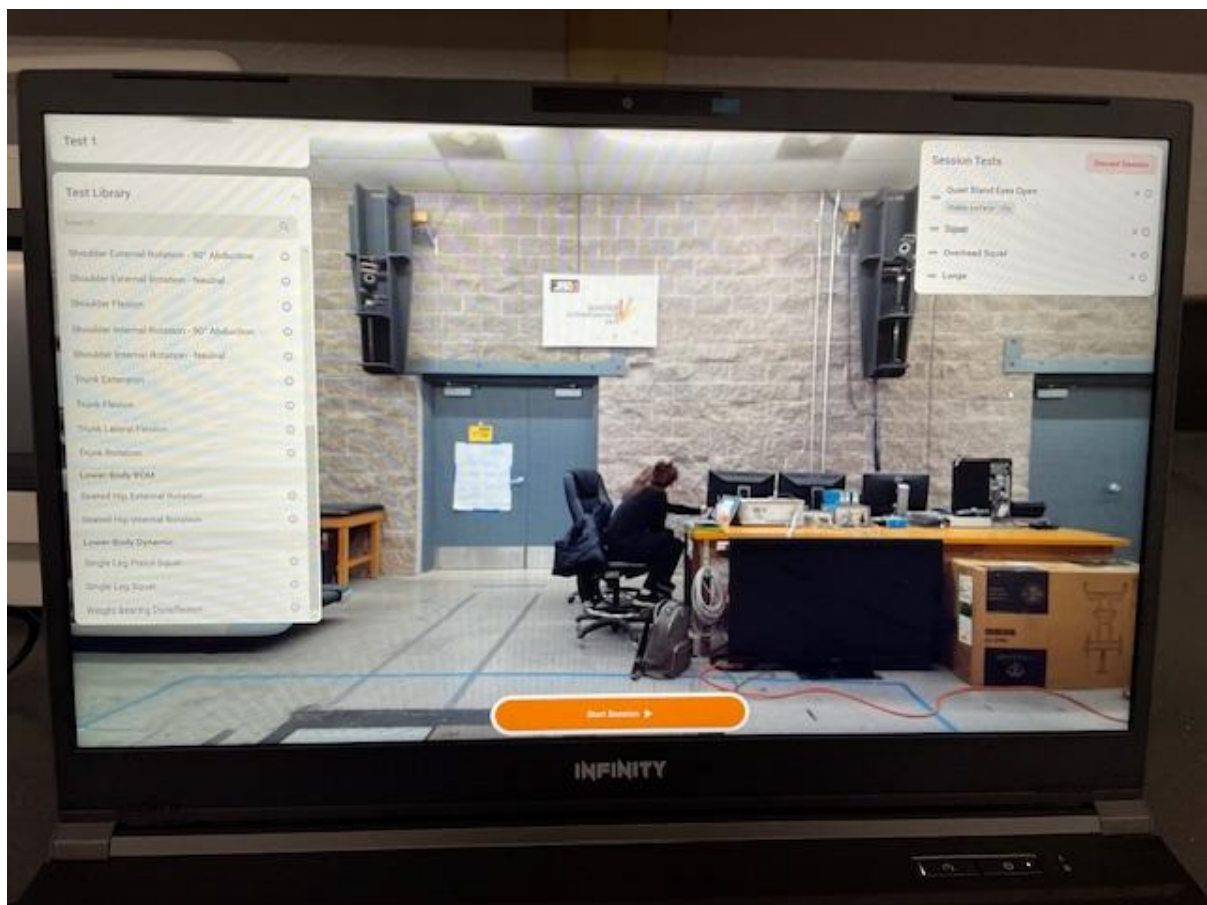




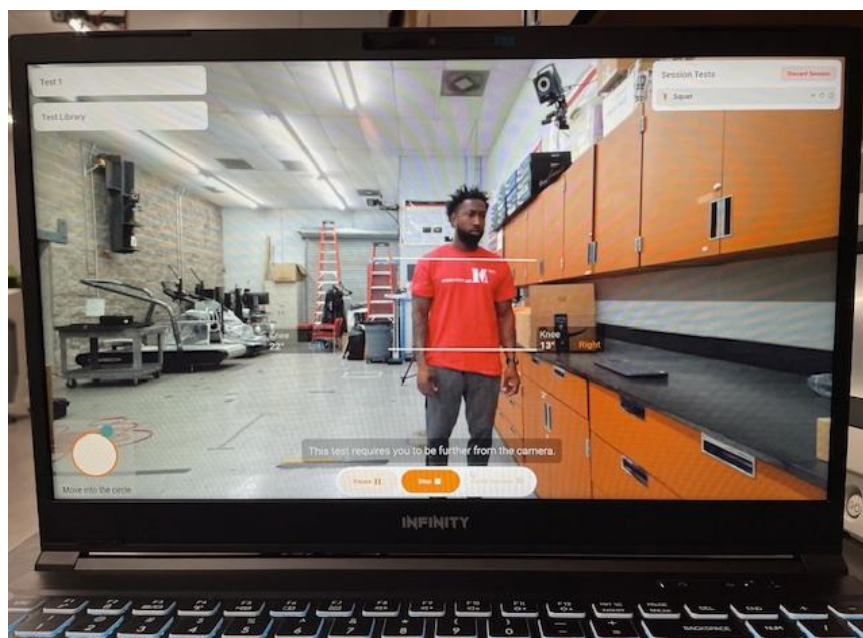
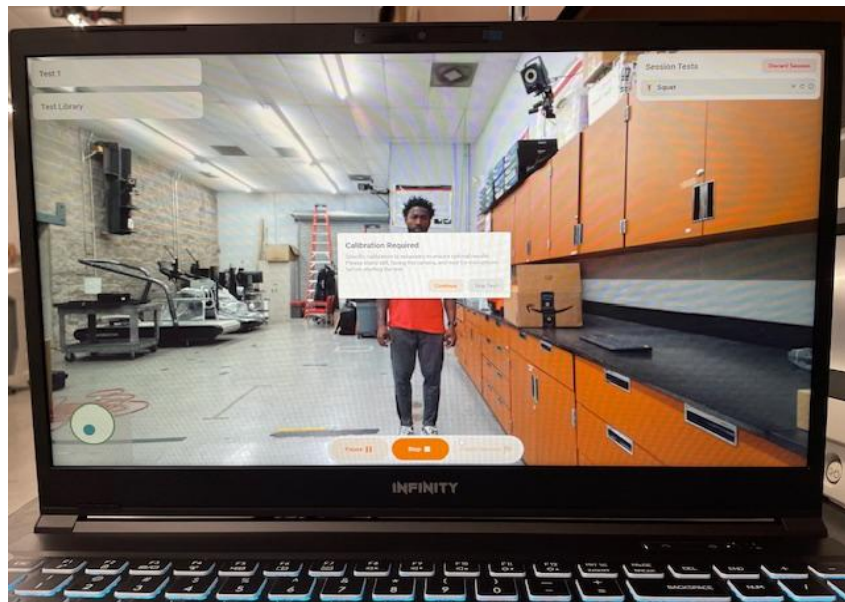
Step 4. Next you will be directed to the testing session screen, and you will see the screen loading up. It will ask you to stand square with the camera to begin, but it is not detrimental to the data collection if you do or don't. We hypothesize that is to help expedite the calibration process, but if the system needs to calibrate it will tell you. Also, if you need to return to the home screen, just select "Discard Session" at the top right corner.



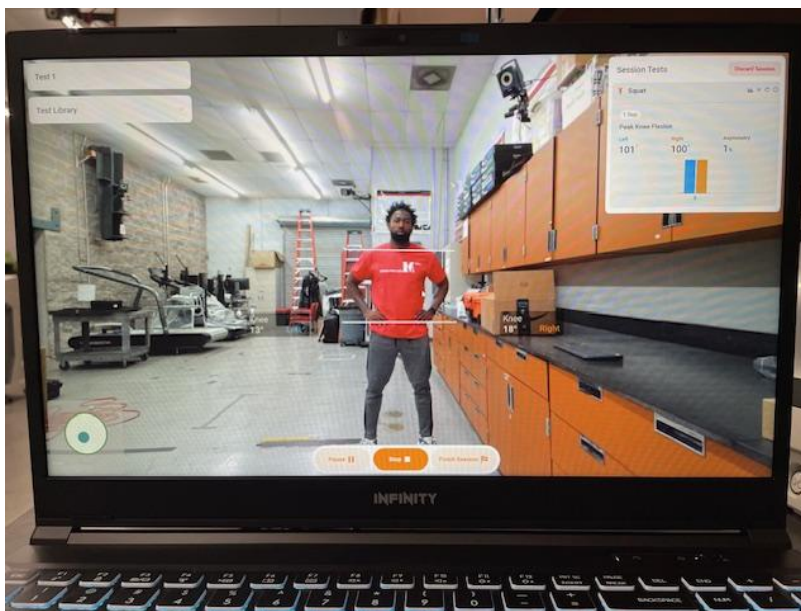
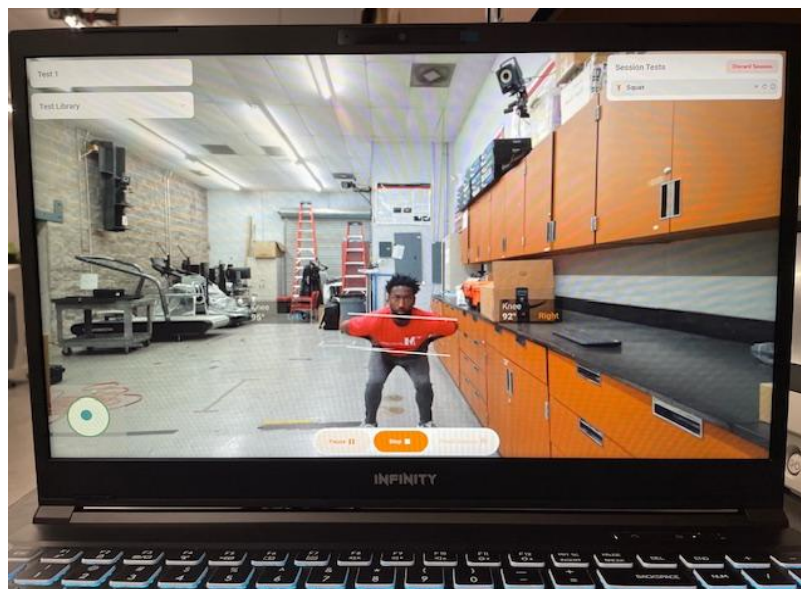
Step 5. After loading is completed, the laptop screen should display live real time video of what the camera capturing. On the left side of the screen, you will see a list titled "Test Library". In there are listed all the test HumanTrak has to offer. By scrolling through and double clicking on desired test, they will be loaded in the box labelled "Session Tests" located in the top right corner. There you can see the tests that you have selected as part of your testing battery. The first one in the box should always be the test you selected on the home screen. If you do not wish to a test in your testing session you can click the x beside the name of the test and it will remove the test from the testing session. For this example, we only kept Squat and removed the other test. Once you have the test selected for your session, click "Start Session".



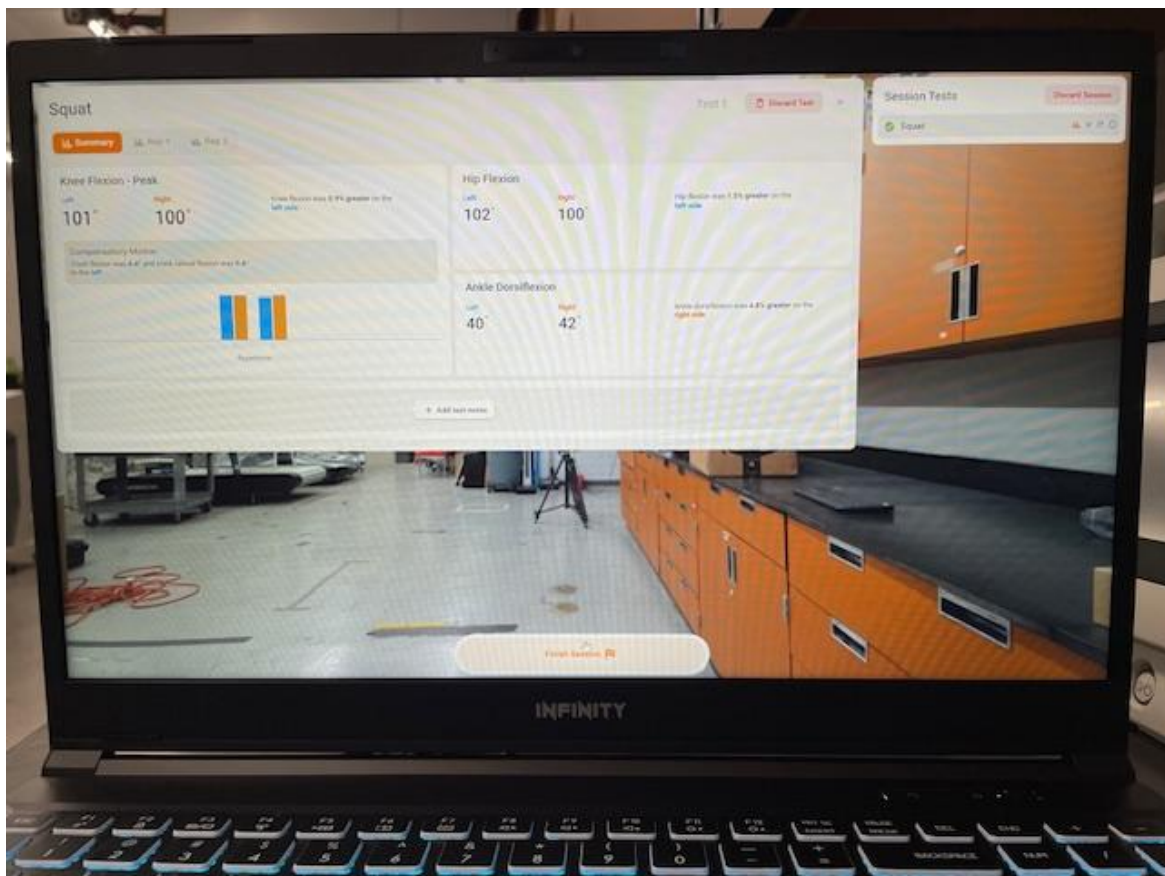
Step 6. On the next screen the system may ask you for a calibration to continue. If so, have the athlete within range in front of the camera standing straight up with their arms straight by their side. When athlete is in ideal position select "continue". To know if you are in range pay attention to the dot and circle in the bottom left-hand corner. If you are in range the green dot will be inside the circle and the circle will be green. If you are out of range the green dot will be outside the circle and the circle will be orange. The screen will normally instruct you to move closer or further away.



Step 7. Now the athlete can perform the test that is selected. For the Squat, have the coach the athlete to the desired technique and have them perform the motion. If you look on the screen you can see the real time feedback of the knee angle for both legs. When a rep is complete you will see results of peak knee flexion displayed in the top right corner. Once you have collected the desired amount of reps you can click "Stop" or "Finish Session". If stop is selected it will stop that session and move on to the next session. If Finish Session is selected it will finish the session completely regardless of the other test you have completed or not.

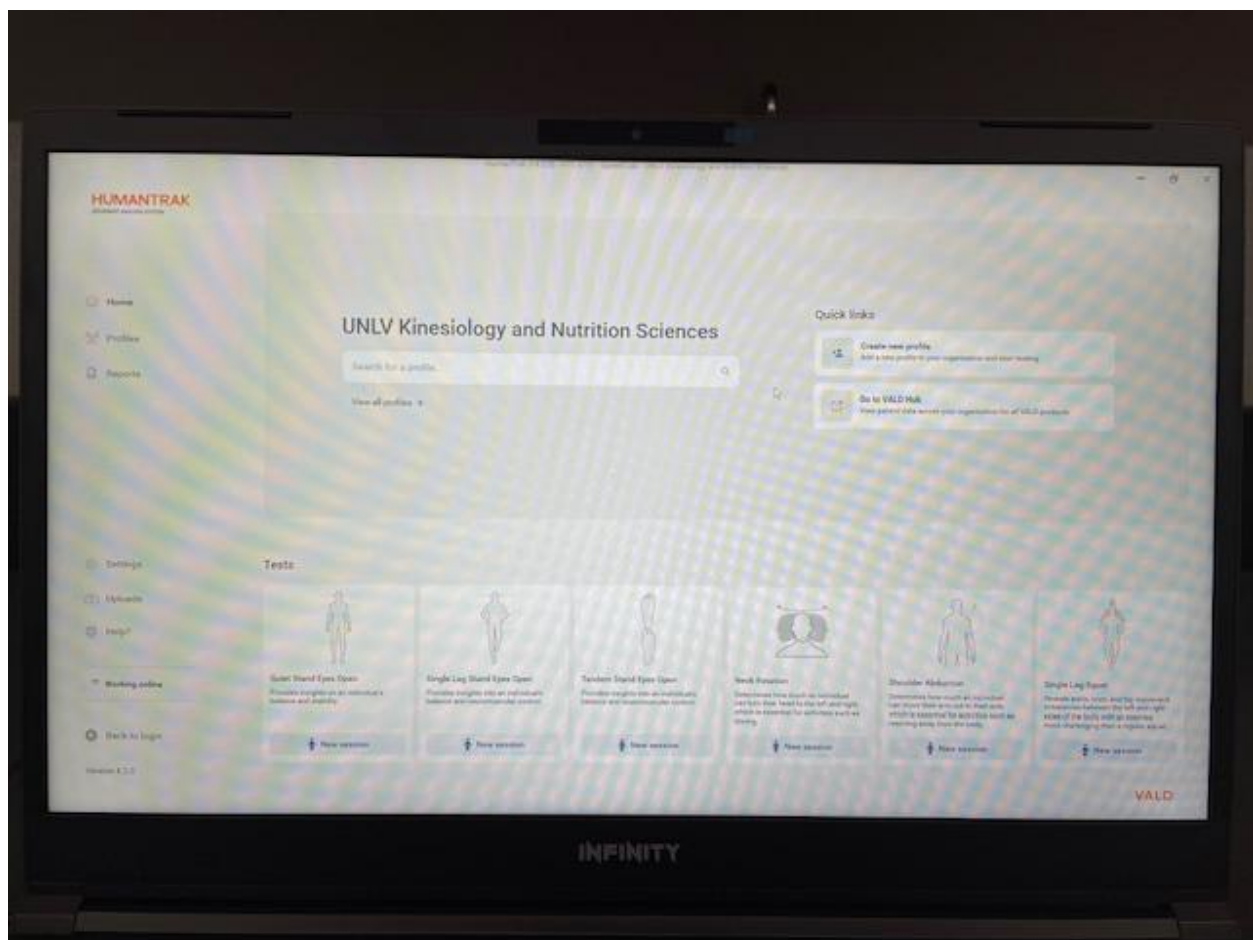


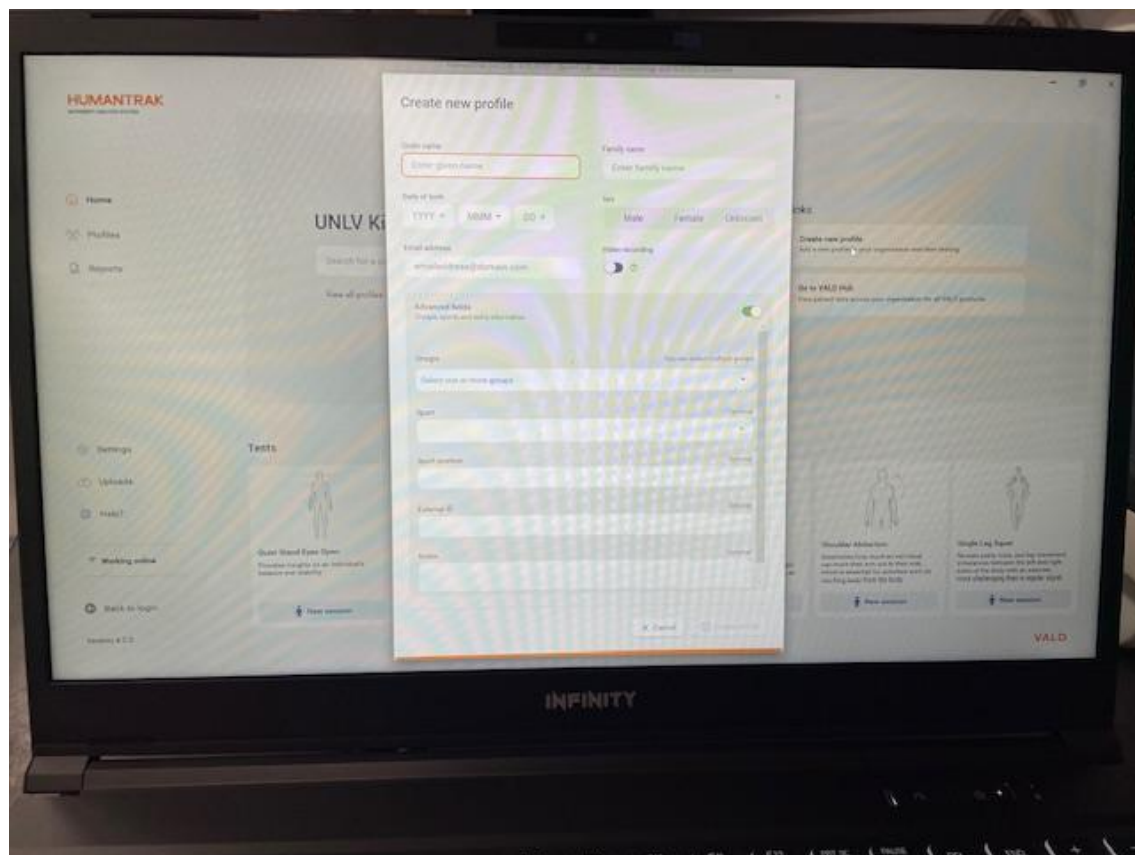
Step 8. After you click Stop, the results for the test will appear. In the top left you will see you can toggle through a summary (average) of the reps and each rep individually. Peak knee, hip, and ankle flexion are displayed for Squat. If you wish to keep the results, select Finish Session and save the results to the profile of the athlete. Or if you do not want to save the results, select "Discard Test".



CREATE PROFILE

Step 1. To create a profile, on the home screen, under the subcategory "Quick links" select the option "Create new profile". A new window will popup and you will fill it out with the necessary information needed. The first name goes in "Given name", last name in "Family name", select the date of birth, sex, and the group they are in if they belong to one. The rest of the information is voluntary, but once required information is inputted select "Save details". The new profile for the athlete should be created and saved to the database.





EDIT PROFILE

Step 1. To edit a profile, from the home screen click on the “Profiles” tab that is on the left side of the screen under the word “Home”. You will be directed to the profile page and from there you can search for and select the profile you wish to edit by double clicking it. A window will popup with the athlete information and from there you make necessary changes needed. Once finished, select “Save details” and the athlete profile will be updated with the new changes.

