

iPhoby Software Instructions

Resources to Download

For the purpose of backups and more reference materials you might need to have, here are the available links you can download them.

1. Android Platform Tools (<https://dl.google.com/android/repository/platform-tools-latest-windows.zip>)
2. Oculus ADB Driver (<https://developer.oculus.com/downloads/package/oculus-adb-drivers/#>)
3. iPhoby Software **for Backups In case you haven't downloaded** (<https://isongs.blob.core.windows.net/songs/iPhoby.zip>)

Getting Started

Welcome to iPhoby Software instructions section. I will take you through the whole parts you need to know to get started!

In this section, you will learn:

- (i) iPhoby Virtual Reality Installation and instructions procedures.
- (ii) iPhoby Live Installation and instructions procedures.
- (iii) Syncing between iPhoby VR and iPhoby Live procedures.
- (iv) Using iPhoby System.

(i) iPhoby Virtual Reality Installation and Instructions Procedures

Currently, we are optimizing and supporting iPhoby to run on Windows Mixed Reality Headset. iPhoby supports Windows Mixed Realities environment but for the purpose of device availability from our side, we will use Oculus Go virtual reality device that runs the application at a frame rate of 72 Hertz which almost renders the application the same as Windows Mixed Reality Headsets. We tested our application with Oculus device and runs well at an optimized frames rate.

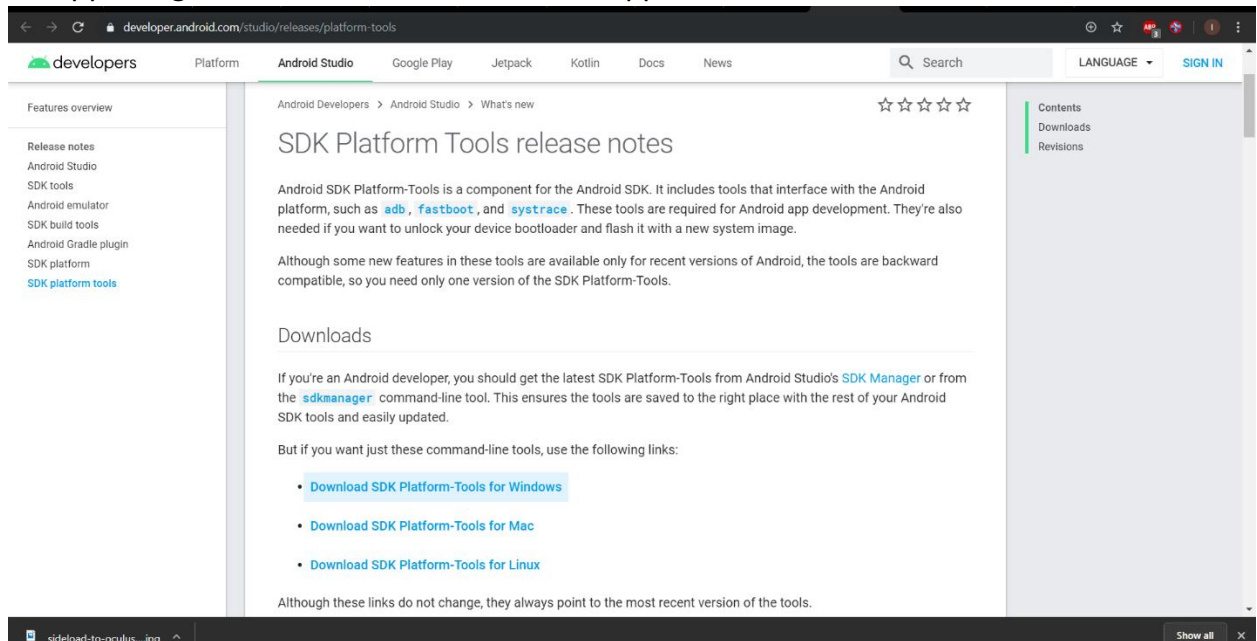
Requirements

1. Oculus Go
2. Android Smart Phone with Oculus App installed

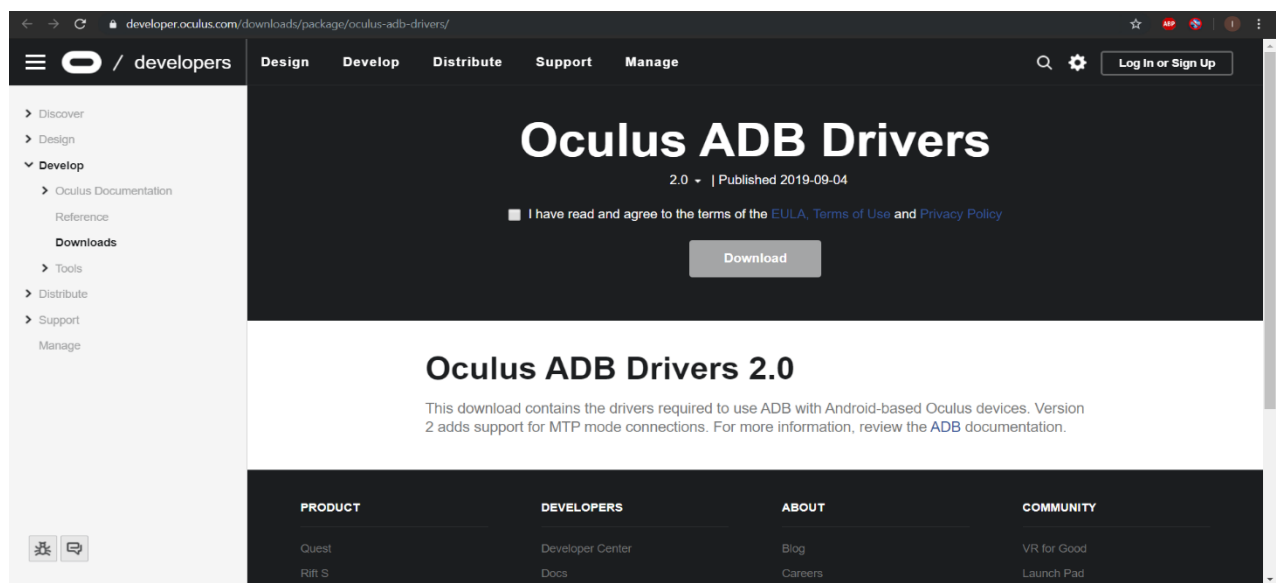
3. Internet Connection
4. Android Platform Tool on your Windows PC
5. Oculus ADB Driver

Instructions

1. Download Android Platform Tools [here](#) and install it in your windows pc. This helps in supporting the tools needed to install the app.

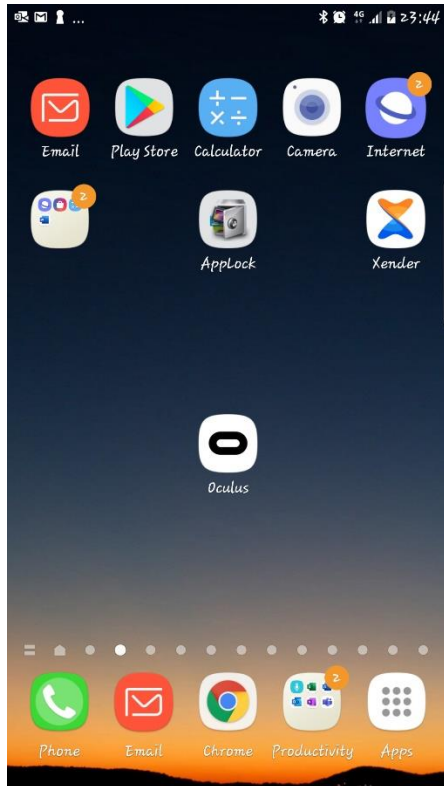


2. Next, Download and install Oculus ADB Drivers. This helps us to install iPhoby apk VR app in our Oculus GO Device.

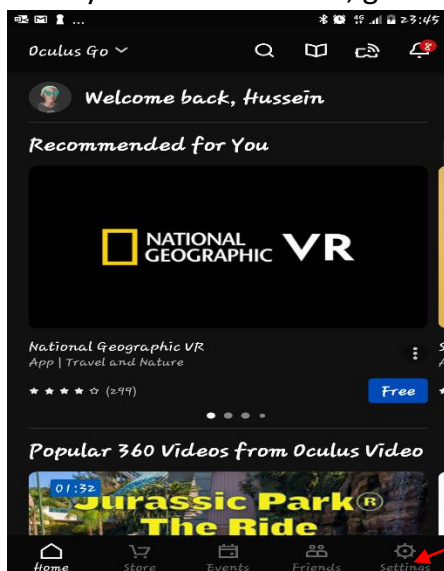


3. In your android phone, download and install Oculus app from playstore. Oculus app will help us install iPhoby in VR by enabling the developer mode.

Important: iPhoby isn't yet available in Oculus store. That's why, we are using Mobile Oculus app by enabling the developer mode for us to install the application. The application is in release mode, ready to be used by all users!

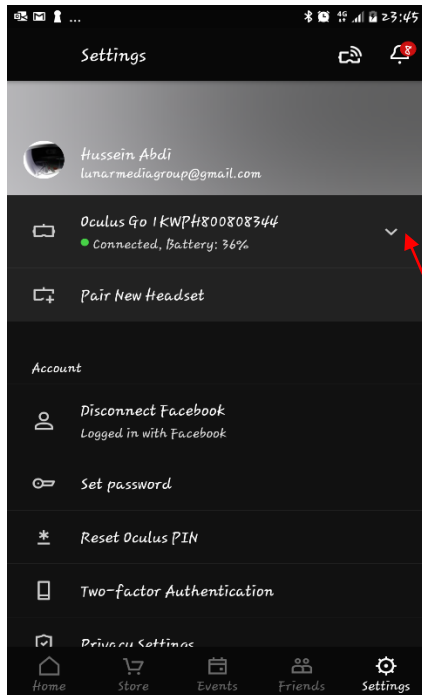


4. Open Oculus app, create your own account if you don't have. Do the same by using the same account of your mobile oculus app in your Oculus VR Device to sign in. Once you have done that, go to settings in your oculus mobile app.

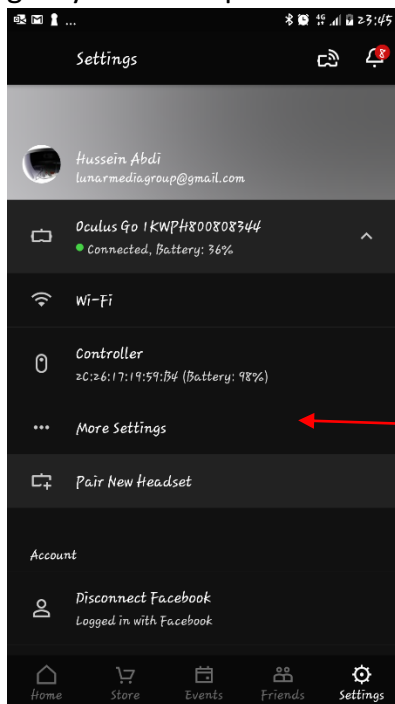


Go to settings here.

5. In the settings page, pair your oculus go with your mobile oculus. This will require **Bluetooth** connection and **Location** access.

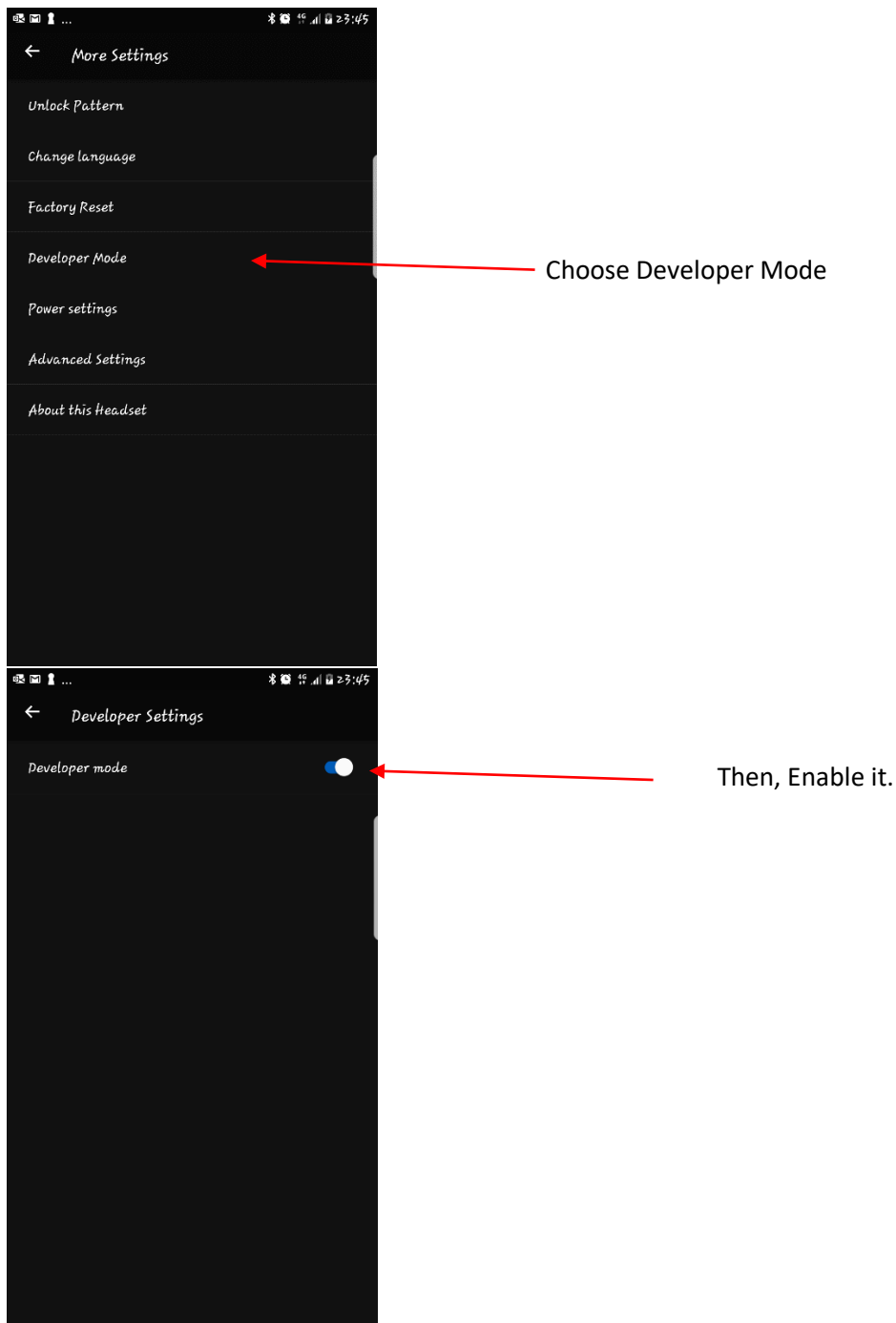


6. Once you have paired with VR Device, Click on that paired device. It will expand and give you more options.

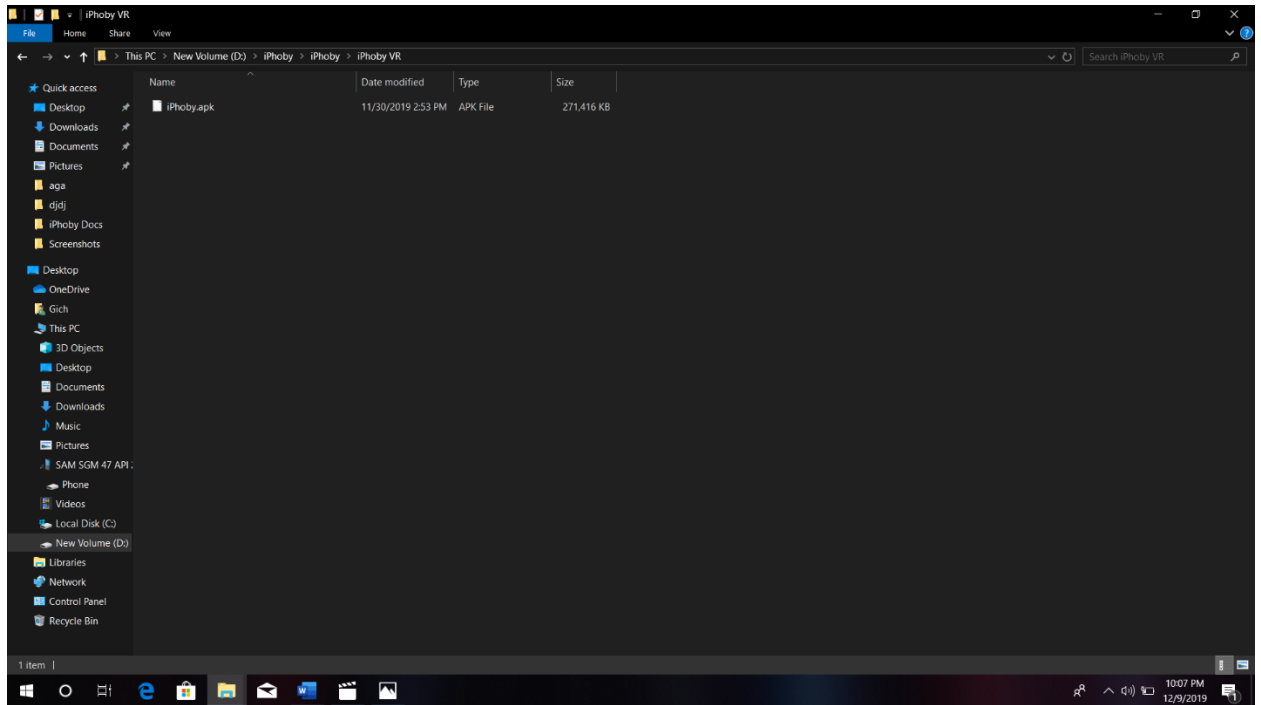


Tap More Settings.

Now, go to More settings. Choose Developer Mode and enable it.

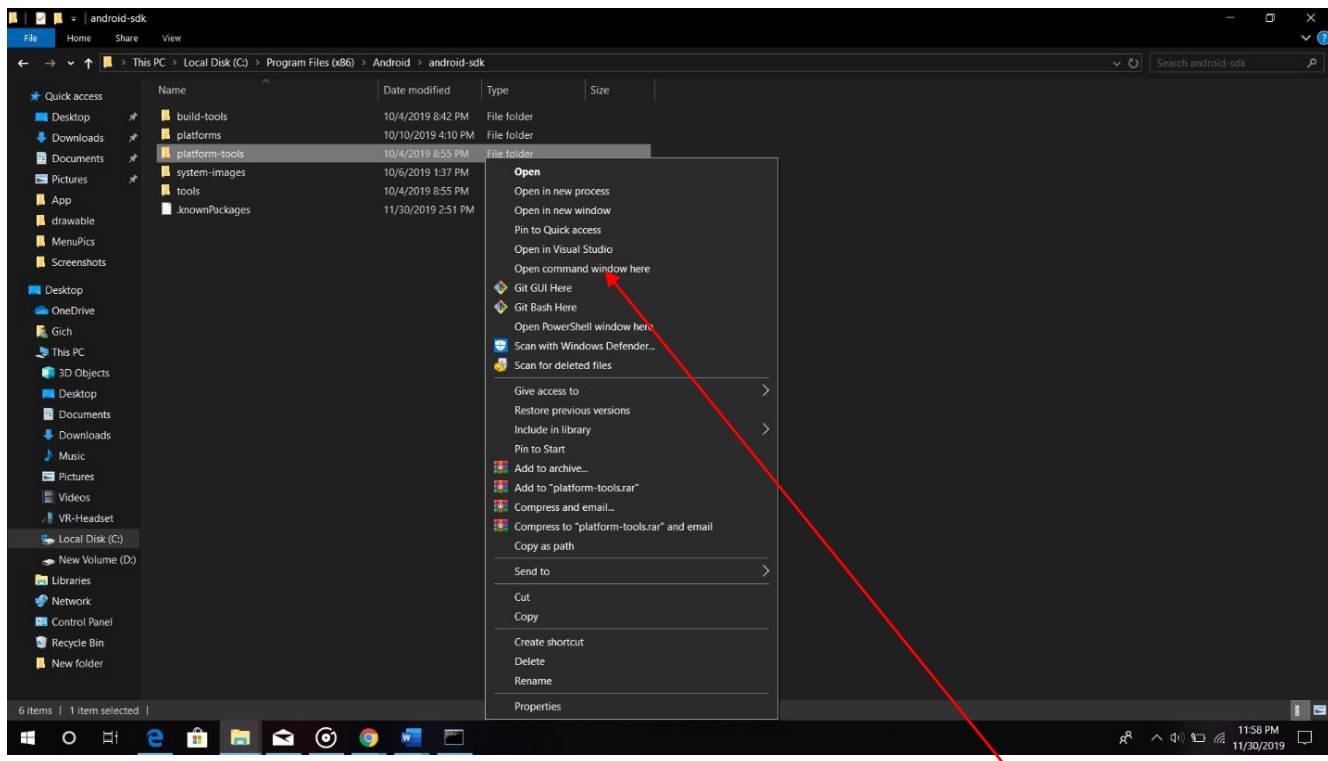


7. Now, we have done with the step of environment set ups. We can now comfortably install iPhoby VR application in our Oculus Device! 😊
8. Next, download and unzip iPhoby application. In your unzipped iPhoby folder, go to iPhoby VR folder. You will find an apk file named "iPhoby.apk"

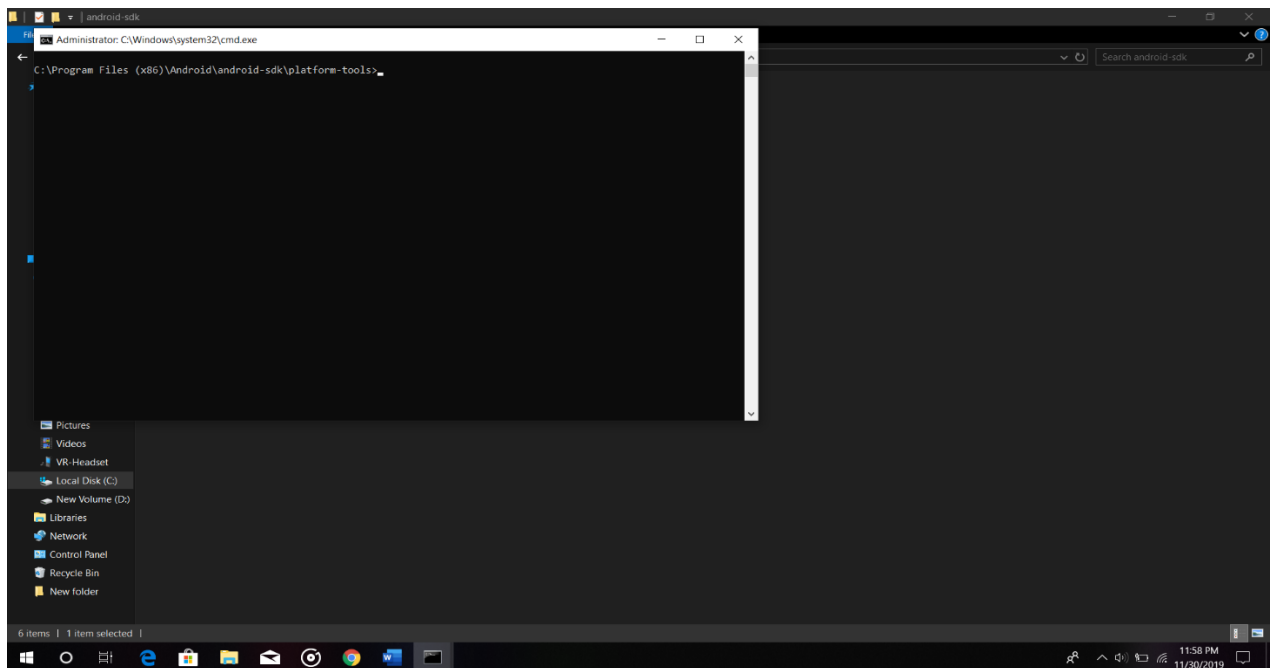


- Next, go to your android sdk folder, open it and right click the platform tools. Then open the cmd on that folder. Android SDK can be found here in your pc (C:\Program Files (x86)\Android\android-sdk) if you have installed android platform tools as I described on the requirement section.

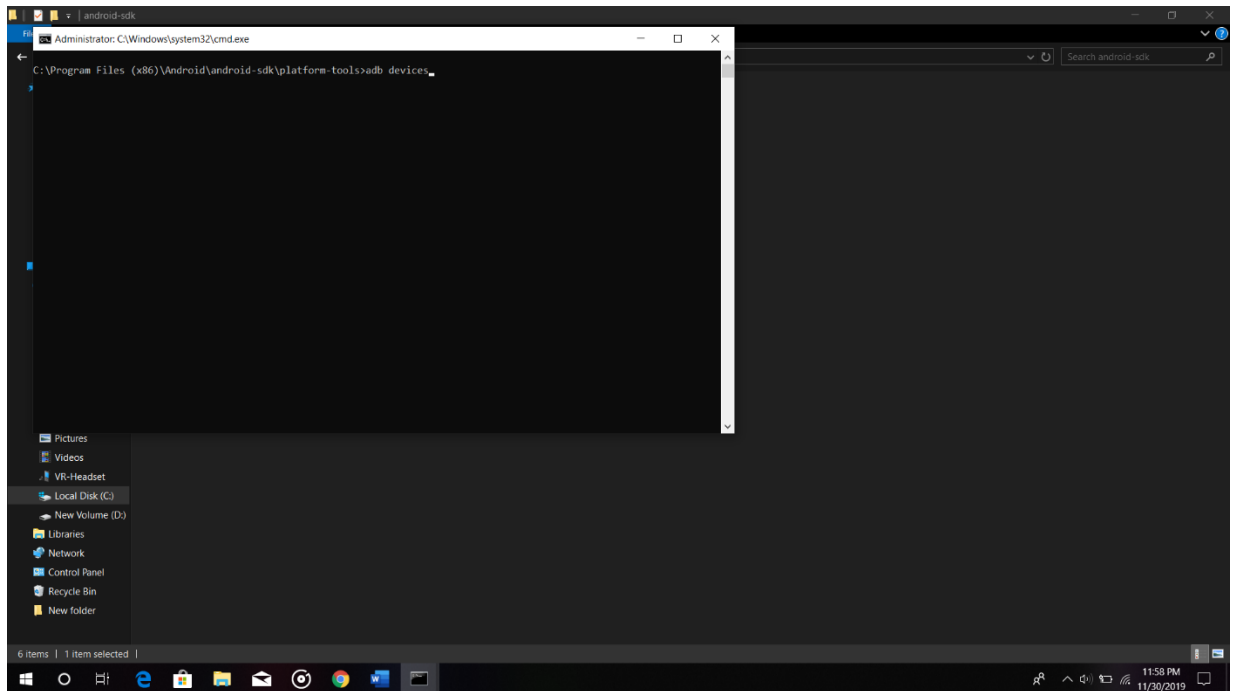
Important! Connect your Oculus Device with your PC. There should be no any other USB device connections in your PC apart from Oculus VR Device. This will help the system to install iPhoby VR by adb commands directly to the Oculus VR Device.



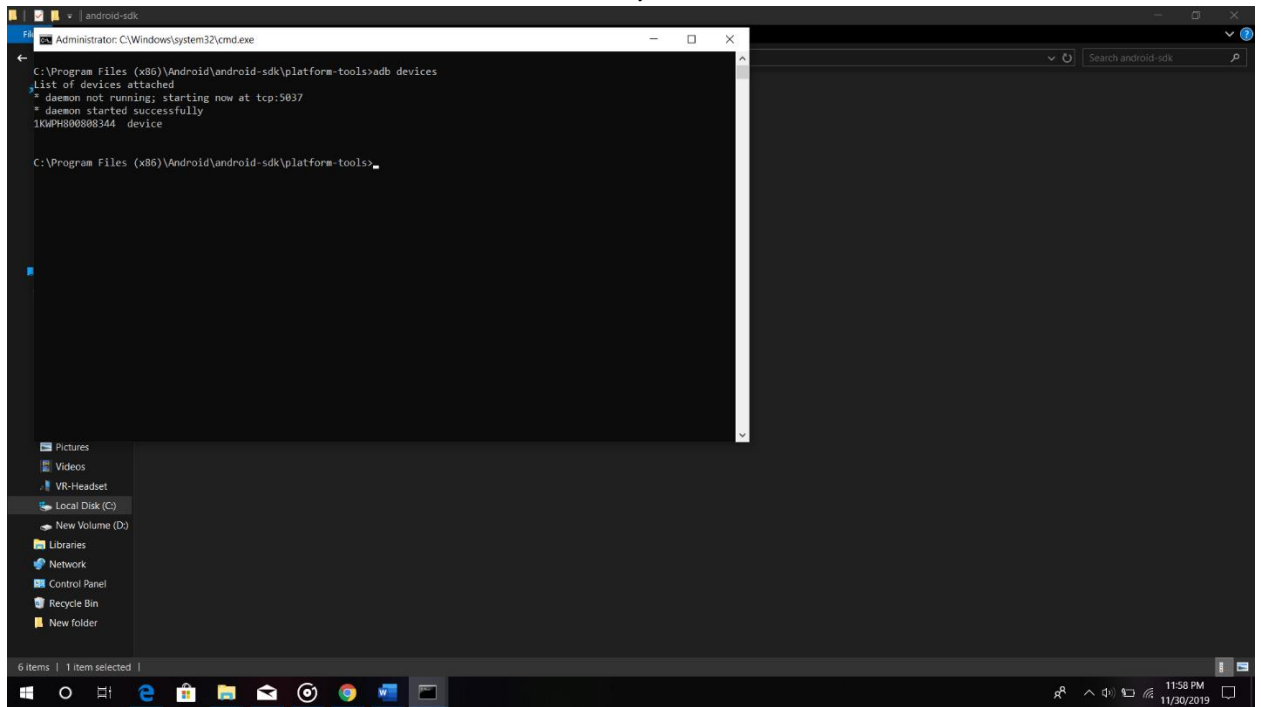
10. Select platform tools and open the Command Prompt (CMD) in that folder.



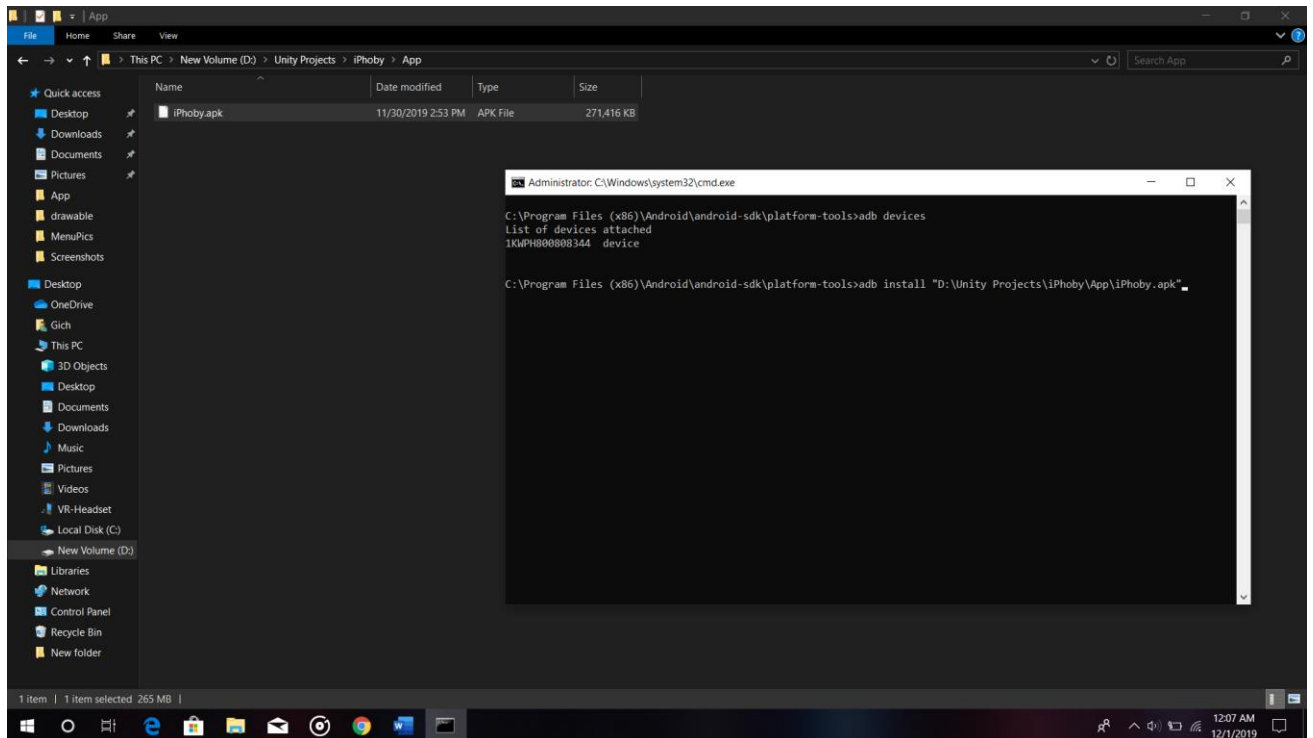
11. Next, once you have opened the command prompt in that platform tools folder, type **adb devices** then enter.



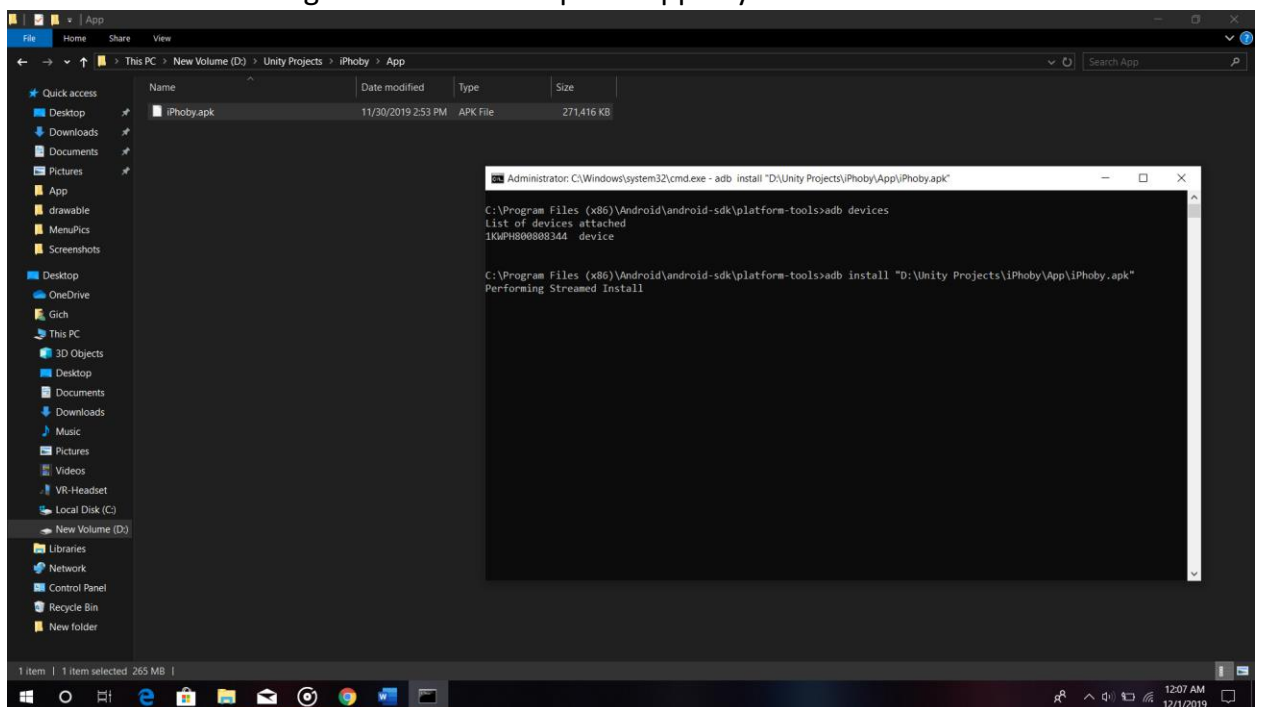
12. You will see the list of devices connected with your PC as shown below.



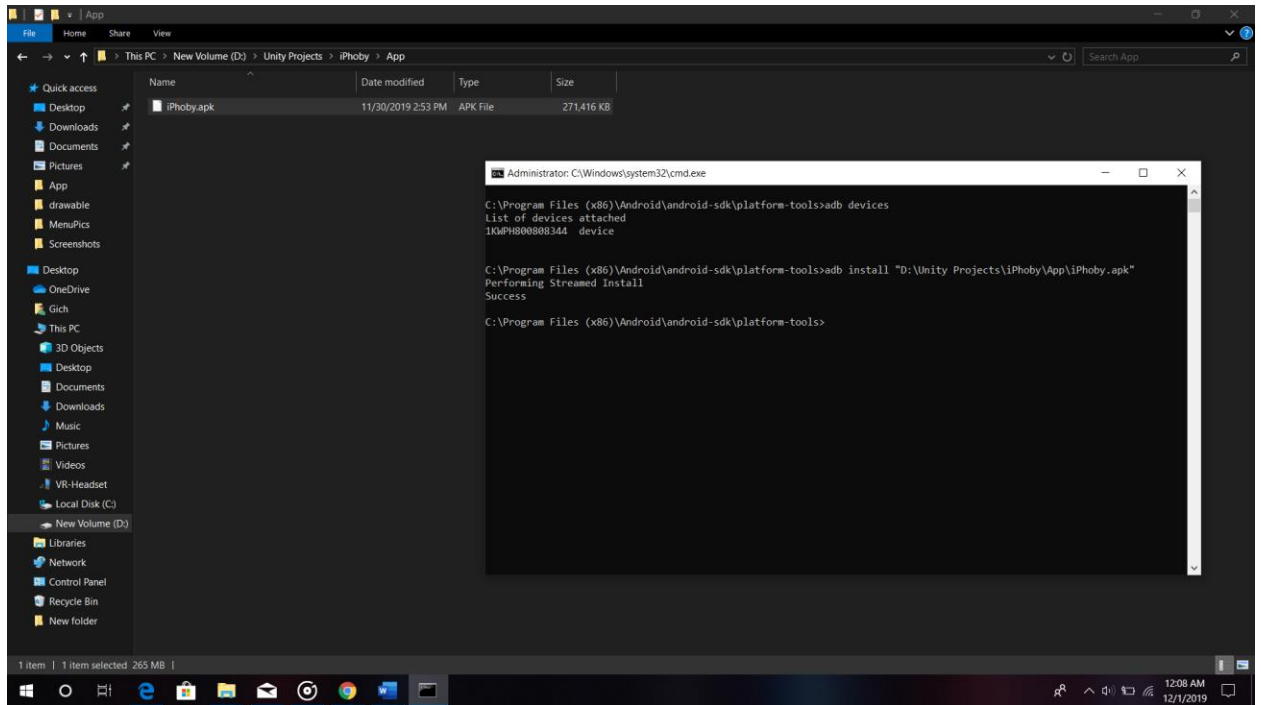
13. Next, type **adb install** and before executing this, go to your iPhoby Unzipped folder, Open iPhoby VR folder, then drag and drop the iPhoby apk file to the CMD just after the **adb install** command. It will look like this as shown below.



Then the command looks like this ***adb install "<Your Path to apk file>"***.
Then hit Enter. It will go and install the apk VR app in your Oculus Device.



Once you have installed, it will give you a message written Success. You are now
read to use iPhoby VR application. Amazing! 😊



Important Tip: Make sure you have connected your Oculus VR Device with the Internet Connection!

14. Now, put on your Oculus Go Headset Device and open it! In your home page, down below, you will see the bottom bar. Select Library and on your Left Side, go to Unknown Sources.

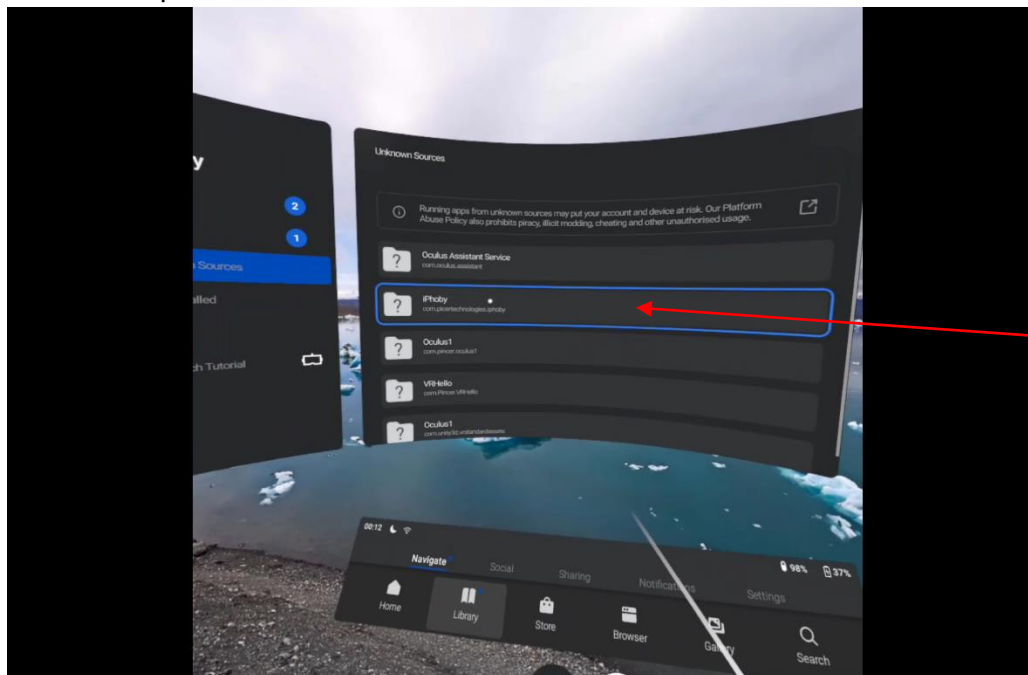


Choose Library



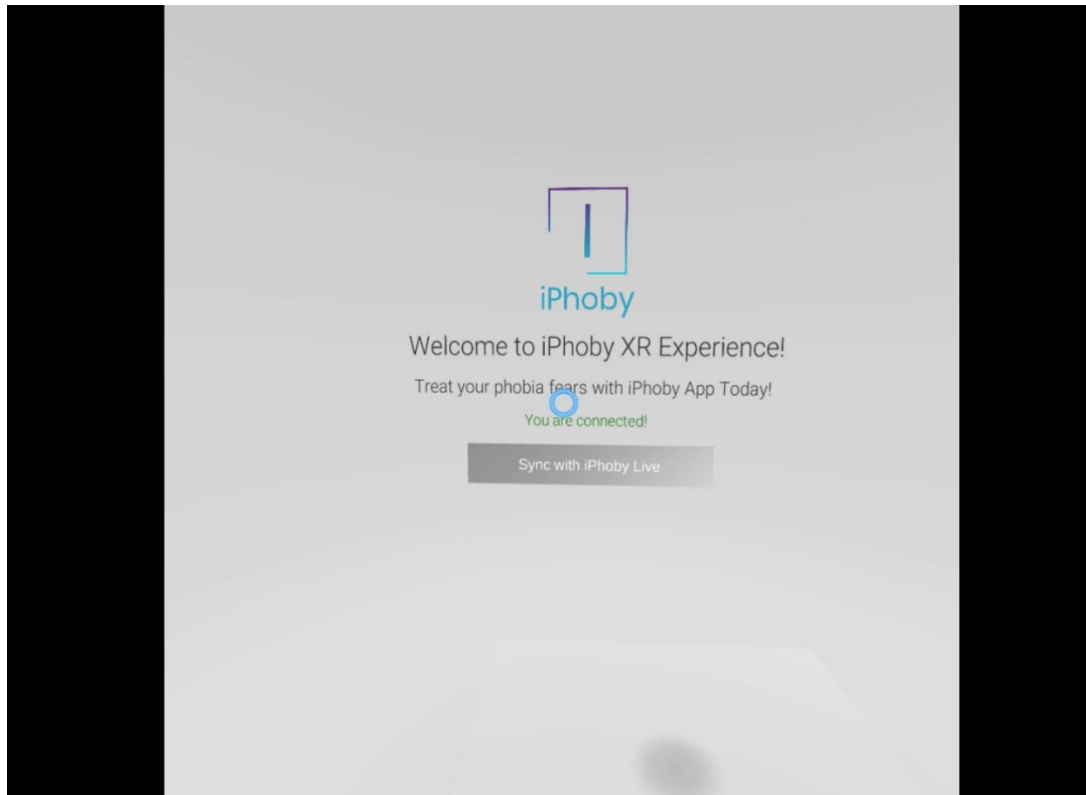
Unknown Source

15. Once you select Unknown Sources option, you will see iPhoby app there already installed. Open it.



iPhoby app

Once you have opened, you will be taken to the iPhoby home scene as shown below. The home scene is where iPhoby detects the internet connection. Once you are connected with the internet, it will give you the next simple step of syncing with your Mobile iPhoby Android app.



Alright! Now, we have installed and opened our iPhoby VR application in our Oculus Device. Next, we will go and install iPhoby Live application in the Android Mobile Device.

iPhoby Live is the center of Real time Data Capture, Data Processing, Analytics and ML Algorithms.

We will use iPhoby Live to communicate with our iPhoby VR by starting the training session, real time capture and data recordings.

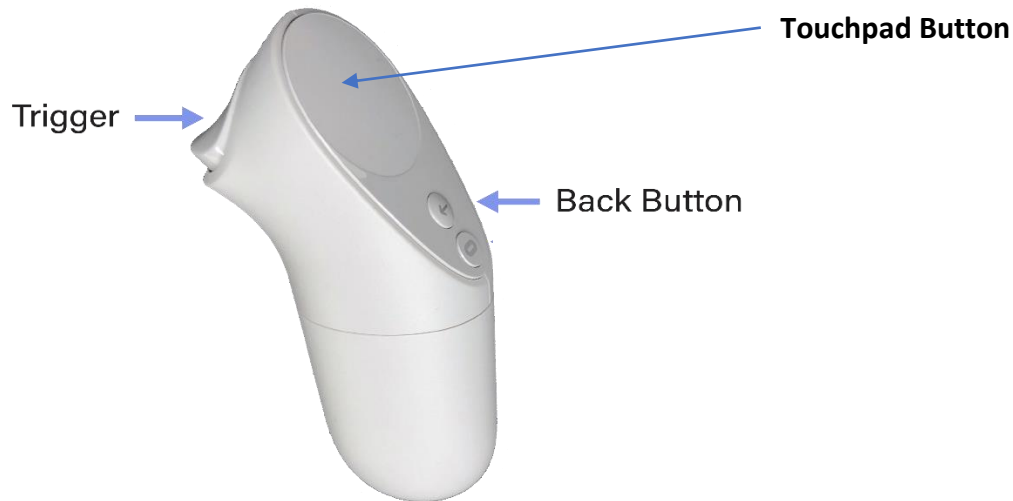
Important: iPhoby Live Communicates with iPhoby VR via Azure API using iPhoby Accounts. iPhoby Live Runs on Microsoft Azure Cloud.

However, we have created a default account for you that you will use to log in the iPhoby Live.

How to use VR Controller to use iPhoby application

You need to understand first on how to use the Controller. iPhoby will be using some buttons on the controller during runtime operation.

Please keep in mind that we will be using these buttons shown below and I will name them so that as you continue reading the documentation instructions, you will be using them once I mention a button to press during the instructions procedure.



(ii) iPhoby Live Installation and Instructions Procedures

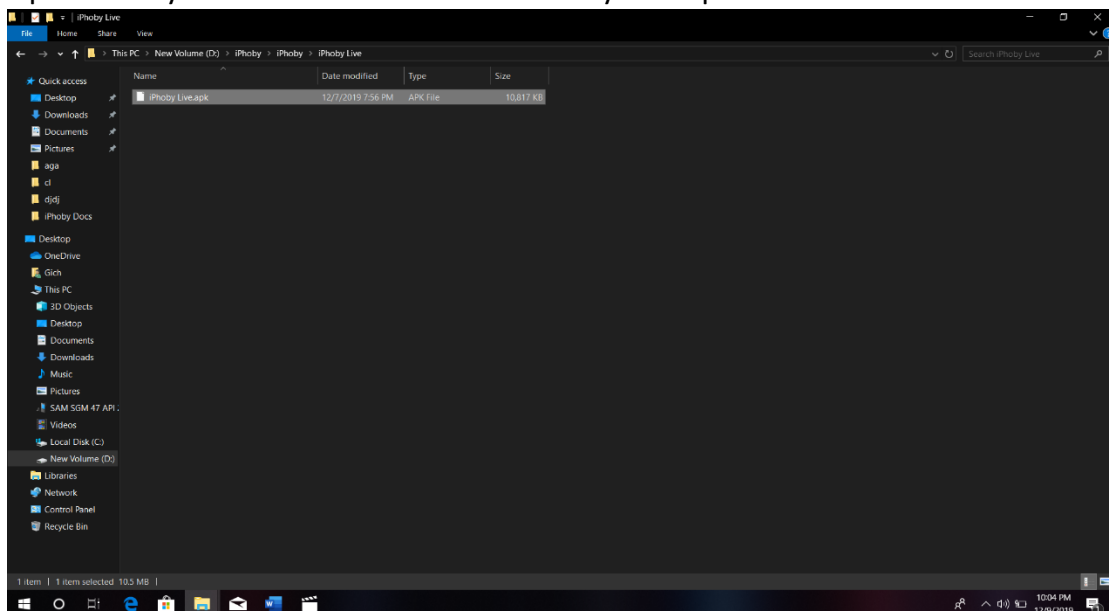
In this section, I will take you through iPhoby Live installation. iPhoby Live is a version that is running on the Android Mobile Device.

Requirements

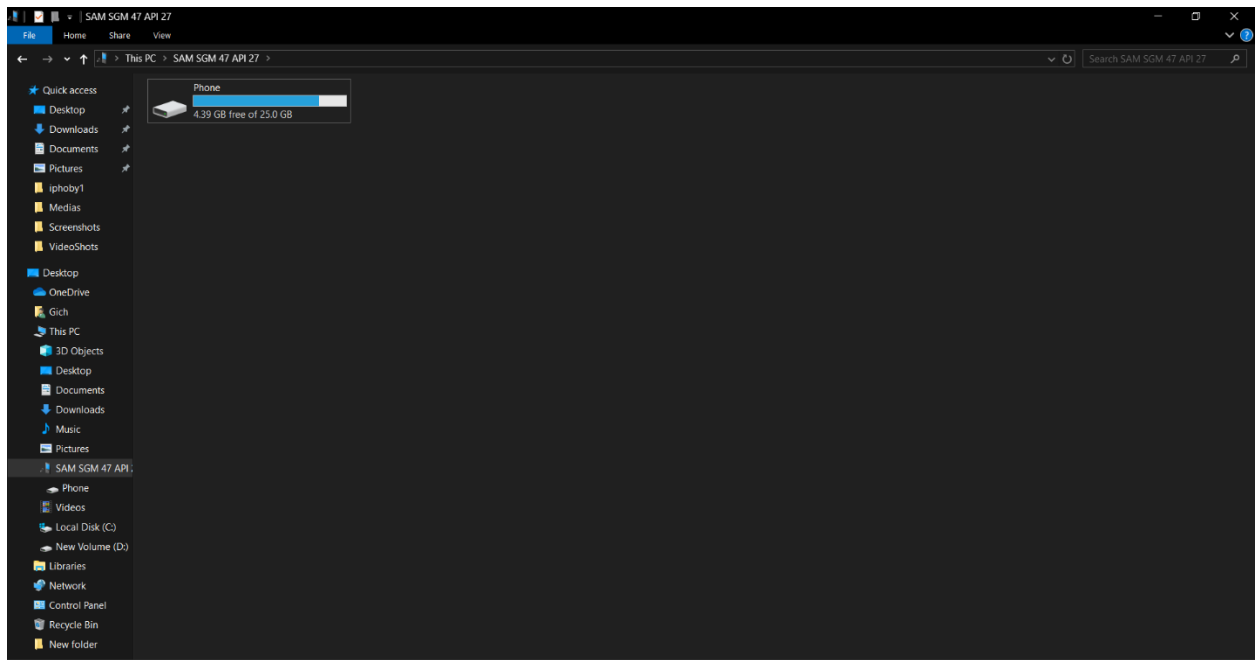
1. Internet Connection
2. Android Device with Camera and Flashlight at the back.
3. Developer Options Enabled in Android Device.
4. At least you have latest/modern android mobile device.

Instructions

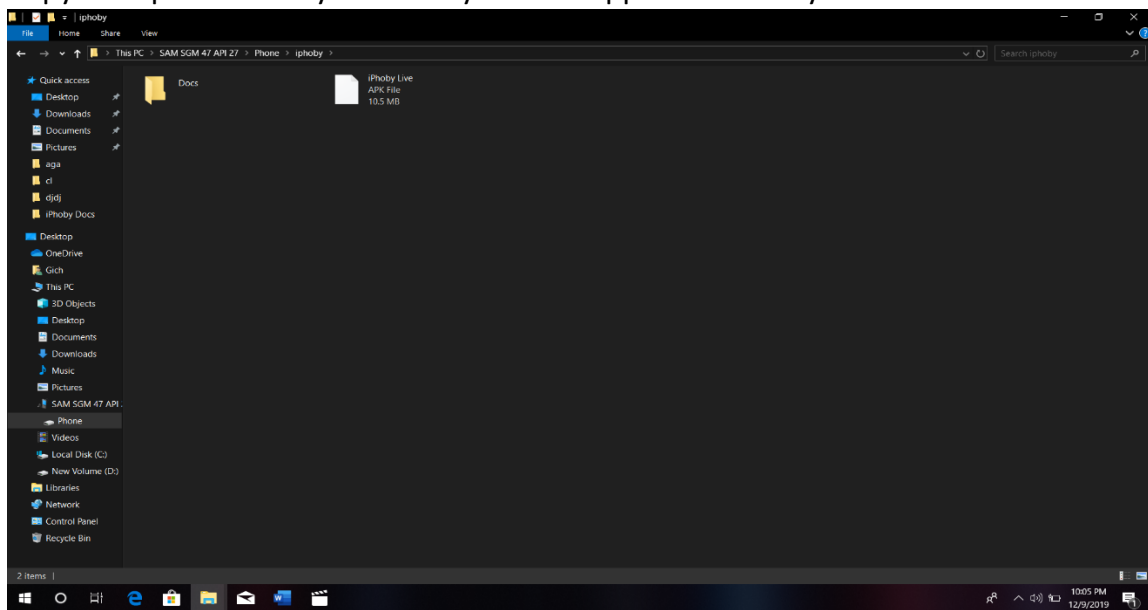
1. Go to the folder you downloaded and unzipped iPhoby.
2. Open iPhoby Live Folder. You will find iPhoby Live apk file.



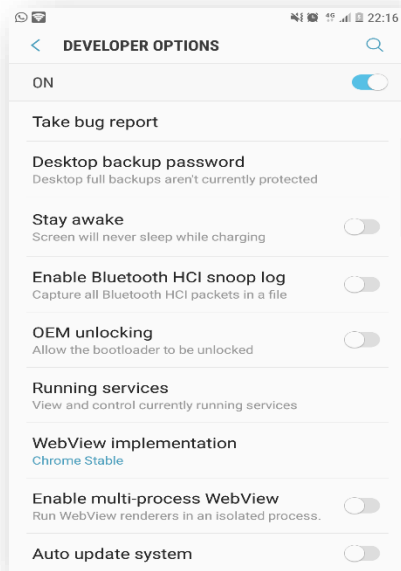
3. Connect your Mobile Device with your PC.
4. Open your mobile device. In your PC, Navigate to My Computer and open your Android Mobile Device.



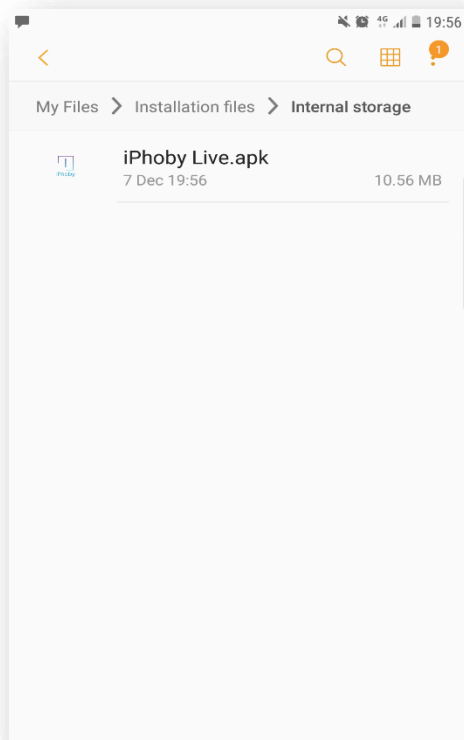
5. Copy the apk file from your iPhoby Live Unzipped folder to your android device.



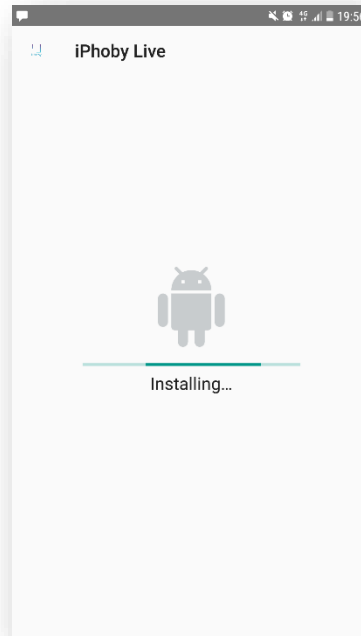
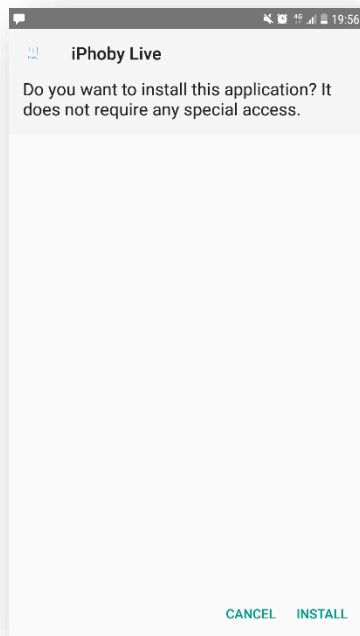
6. Once the file is copied, in your android Device, go to setting and enable developer options.



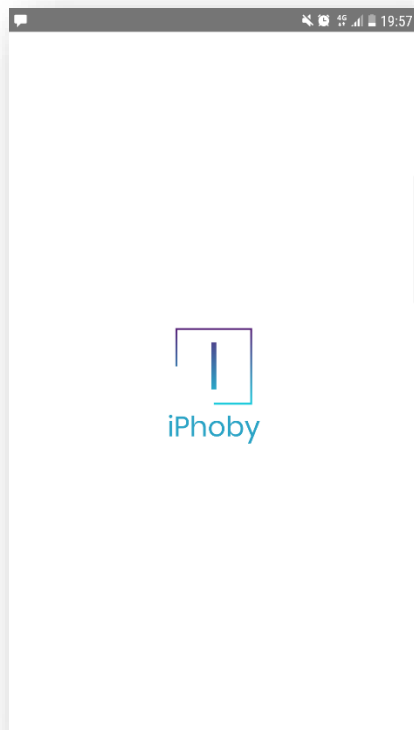
7. Once you have enabled the developer options, go to your folder files in your Android phone. Search for iPhoby Live apk.



8. Once you get it, tap it and install it.



9. Once you have installed it, open iPhoby Live.

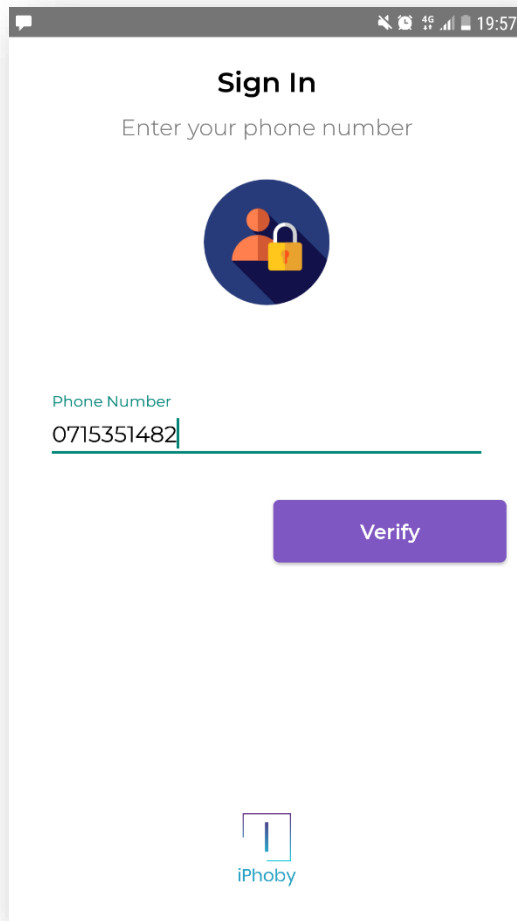


10. You will be taken to the Sign in Screen. It will prompt you to enter Phone Number.

Important: Use a default account we've created for you. Use Phone Number 0715351482 exactly as we give you here. The reason is that we have already paired this phone account with any VR Device to make the work of Syncing process easier for you!

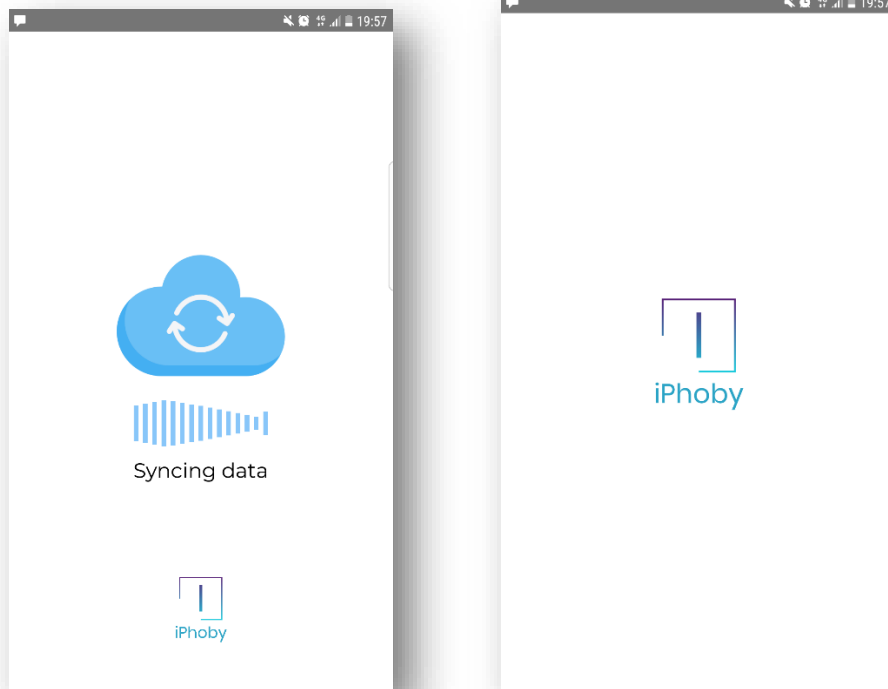
11. Use this phone number to sign in.

Phone Number: **0715351482**



12. Once you have signed in, the app will sync data from Azure to your Client Mobile phone. Please wait for a few second until it is done.

13. Once it is done, it will take you to the home screen.



14. At the home screen, you will see the default dataset that we have prepared for you. We have tested out with some patients and ourselves too!



15. At the home screen page, the following are the phobia we have tested it out and it has worked successfully.

- Acrophobia
- Hydrophobia
- Arachnophobia
- Agoraphobia

Important: These are the most common type of phobia that exists, that's why, we have built it as default phobia that iPhoby is coming with once you installed it.



16. Next, we are going to start using both iPhoby Platforms and see how it works.

Important: By using default account you have signed in with, it will automatically sync your iPhoby Live with the iPhoby VR app in the Oculus Device.

(iii) Syncing and using iPhoby Platforms.

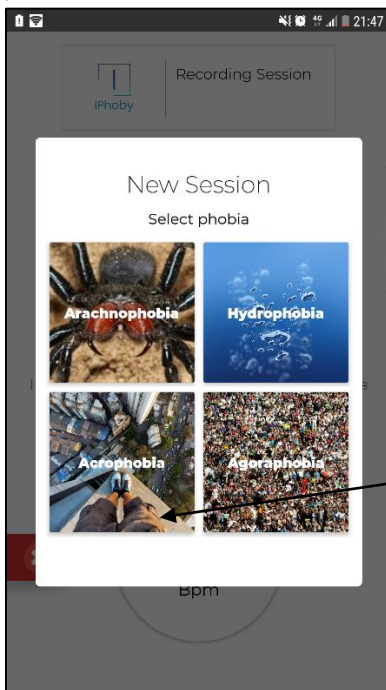
Now that we have installed both iPhoby in Oculus Device and iPhoby on Android Device, lets start using the application.

1. In your iPhoby Live Mobile application, as shown below, tap on the bottom right hand corner button of your mobile screen. (The one having clock icon on it)



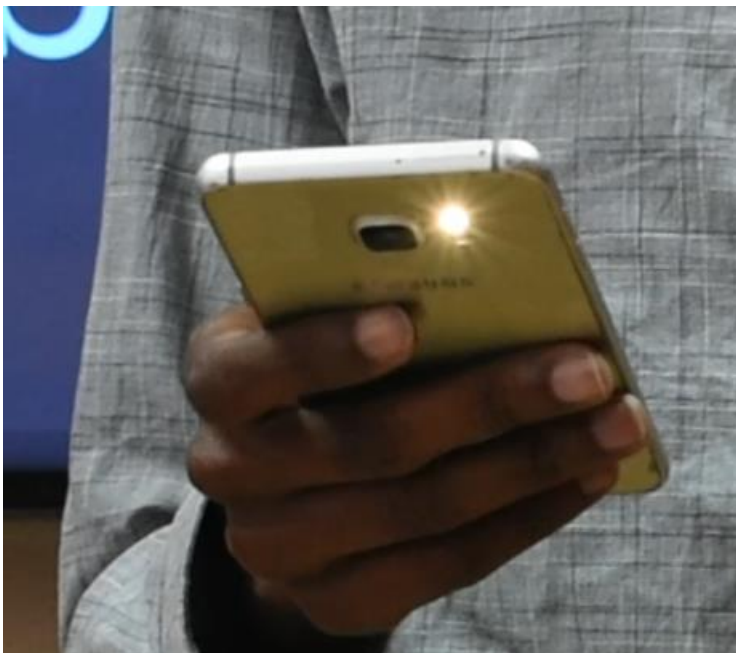
Tap here

2. Next, you will be taken to the new screen. At this screen, you will be presented with phobias to select. Now, let's start with one of them.



Acrophobia

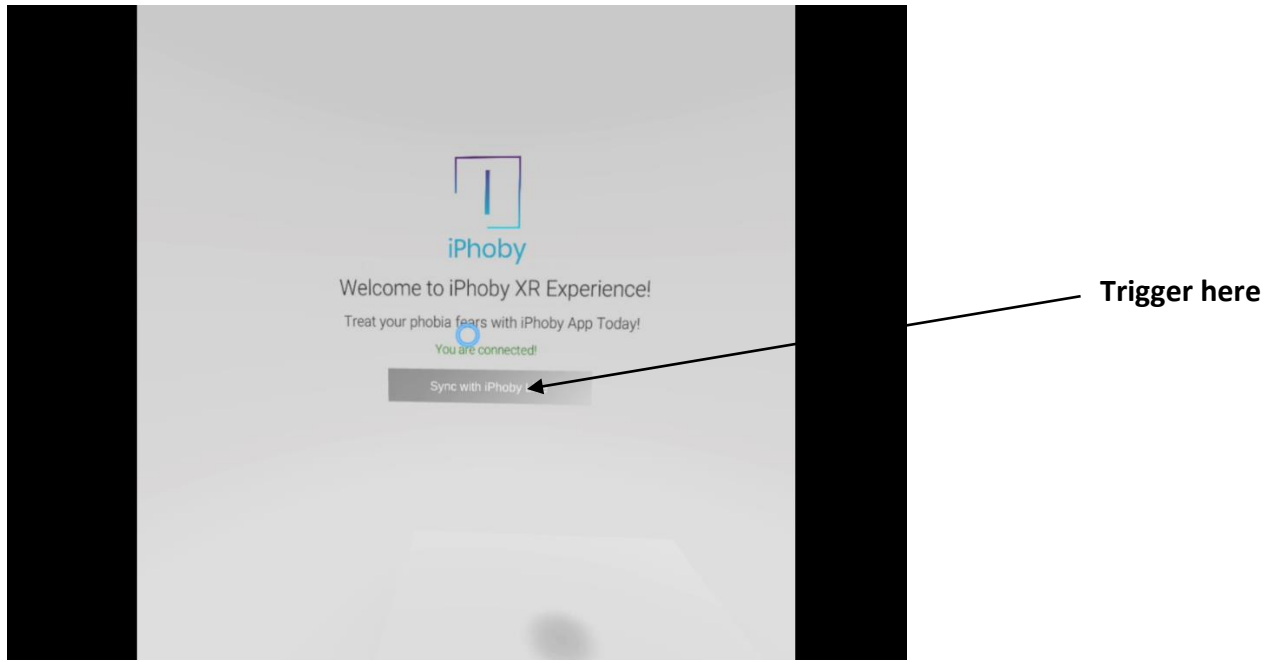
3. Choose **Acrophobia**. Your Mobile Camera Flashlight will open



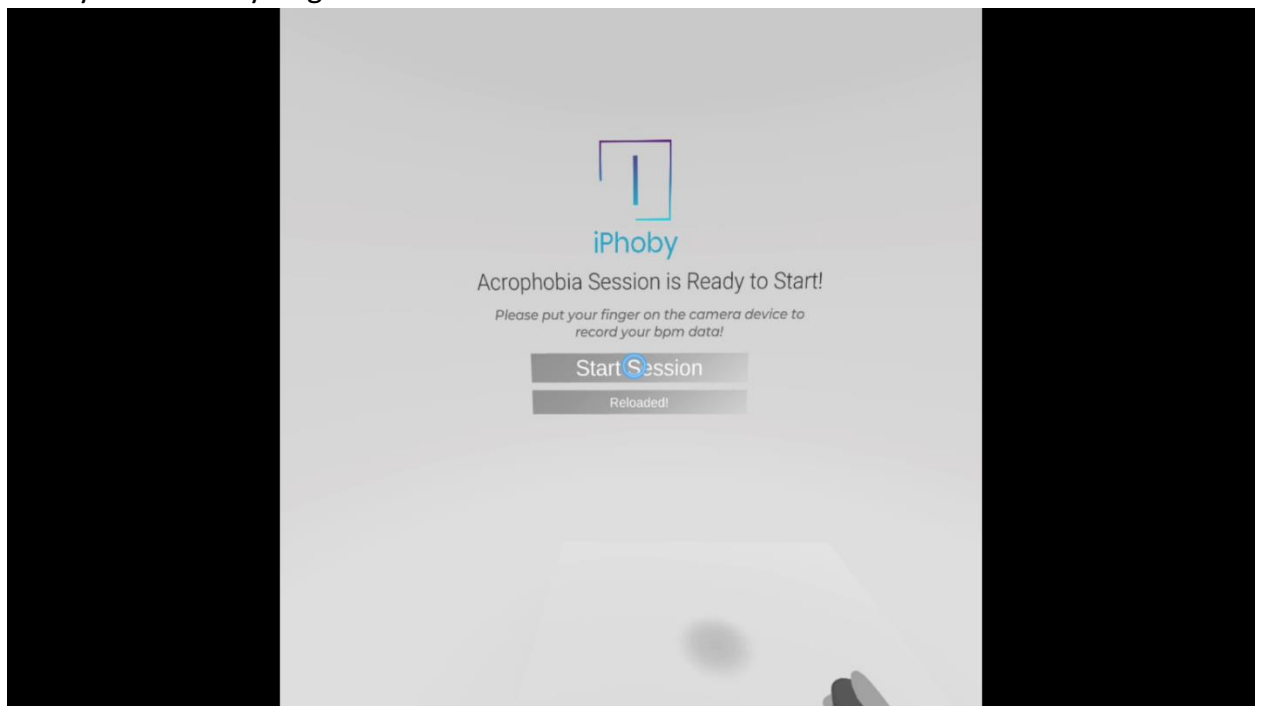
4. Now, put on your head set device.



5. At the home screen, you will see a button prompting you to click and sync your session with iPhoby Live. Put your eyes gaze pointer on it and on your Controller device, click on trigger button. (As I mentioned above earlier on how to use VR Controller.)



6. Next, iPhoby VR app will automatically sync and will show you the session you chose on your mobile app.
7. Now you are ready to go!



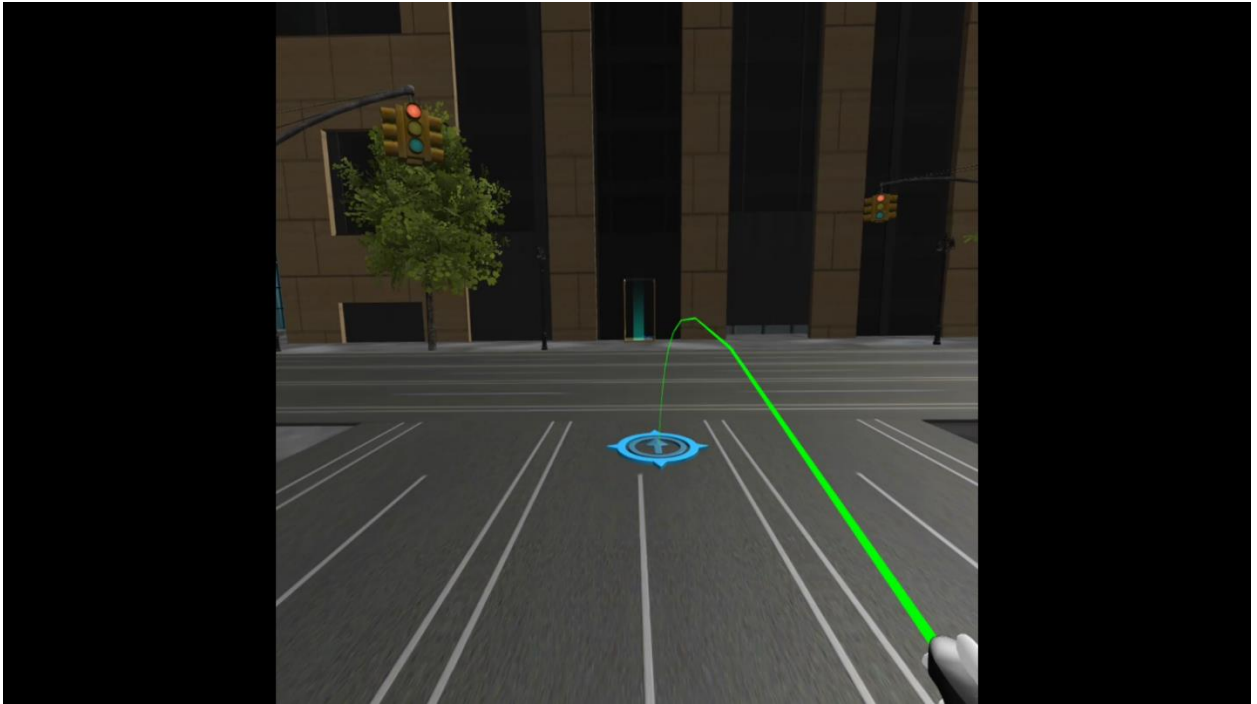
8. At this time, you need to do things at the same time.
9. First, in your VR, it will tell you “**Acrophobia Session is ready to start!**”. Using your eyes gaze cursor on VR, trigger the button with your VR controller that says “Start Session”. Hold your phone normally with the other hand and put your finger on top of the back camera once you have started the session on VR.



10. Next, you will be taken in the Acrophobia Scene!

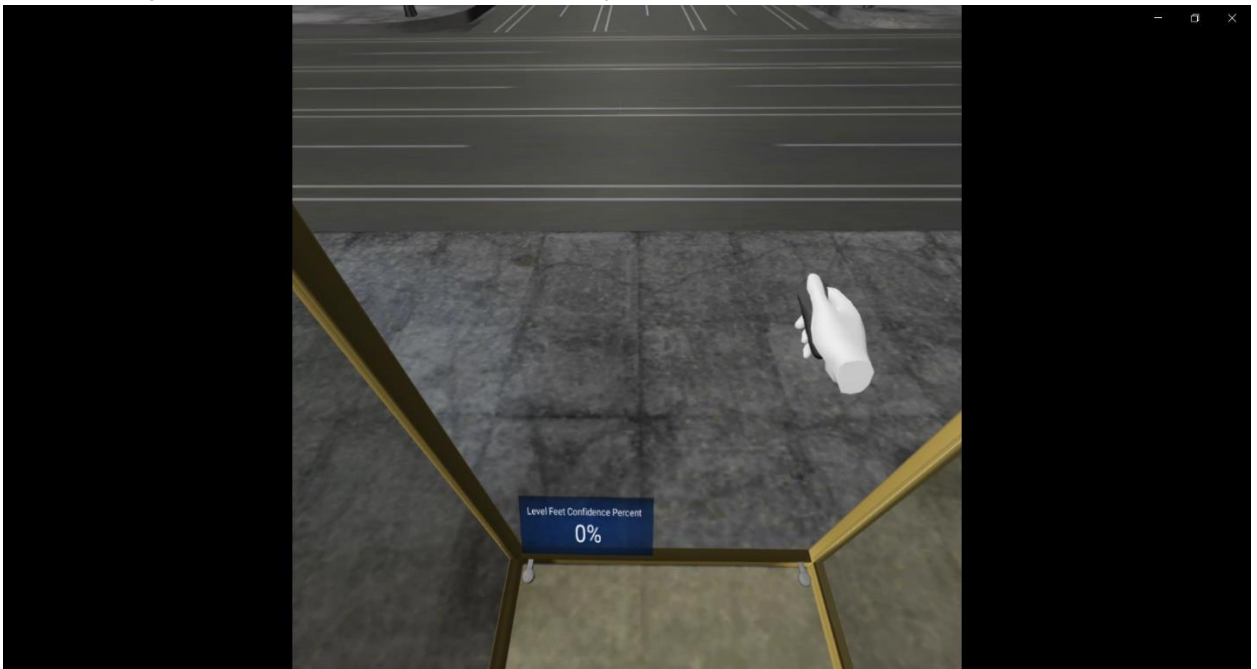


11. At these Scene, you will find yourself in a busy city street. There is an escalator just in front of you.
12. To go to the lift escalator, we will use **Teleportation** technique.
13. With the controller you have, it will be loaded as an avatar controller in your VR in real time.
14. Now, hold down the trigger button without releasing it. You will see the **Teleportation Map**. Now, map in front of you and release the trigger button. You will be teleported.



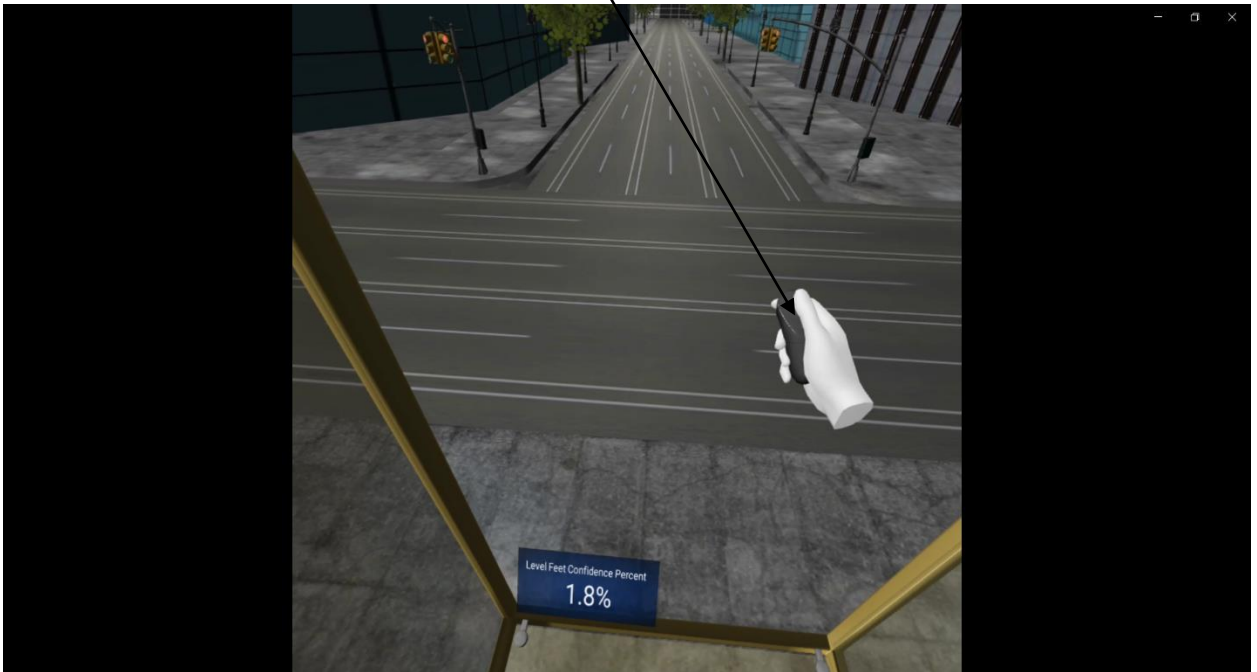
15. Continue doing so until you enter the lift.

16. Now **Turn yourself Back** and remain in that position.

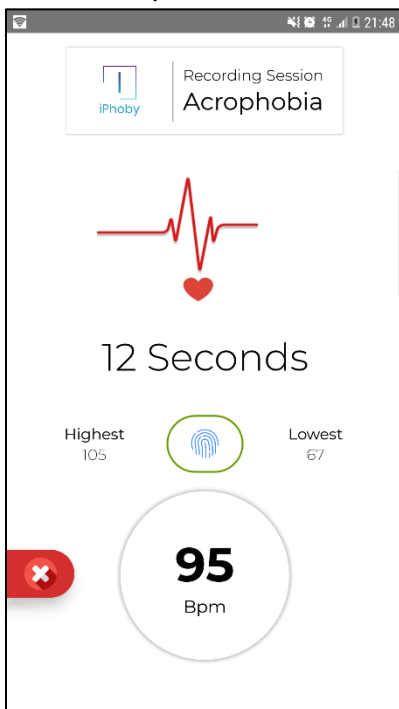


17. Next, press the touch pad button on your controller.

Press Touch pad once to go up.

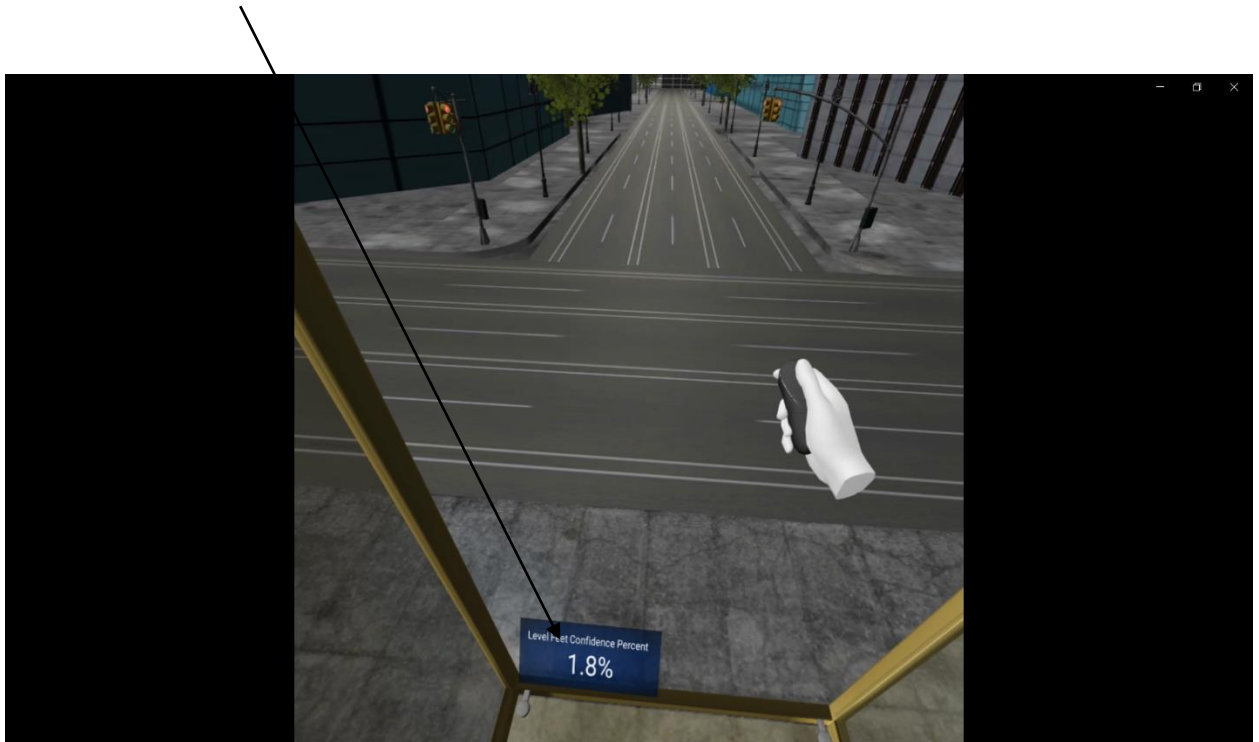


18. You will now experience that the lift is going up slowly.
19. At the same time, iPhoby Live will be capturing your real time BPM data of your heart beat pulses.

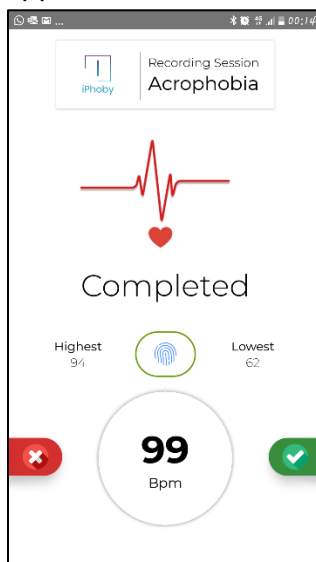


20. On the escalator, down below on the left, it will show you the percentage of the distance you're going up relative to the floor we set the escalator to stop. (That is, almost on top of the building)

Distance Covered by Patient.



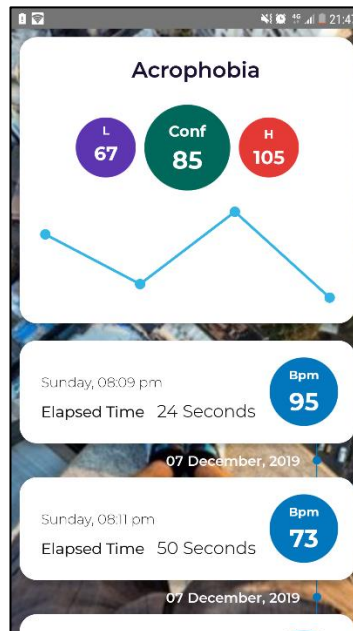
21. You can double tap the touch pad button to exit the scene if that is enough for you for today to treat your height phobia or you can just allow yourself to experience this practical training session until the lift is up.
22. iPhoby Live will be stopped automatically if you exit the scene. This is possible because we have already synced iPhoby VR to communicate with iPhoby Live Mobile app.



23. If you haven't exited, the lift will go up until it reaches 100%.
24. Now, press the back button of your controller. (As we described on how to use VR Controller and button names).
25. You will see an almost transparent screen in front of you. Point your eyes gaze pointer on **Go Down** Button and press the trigger button.

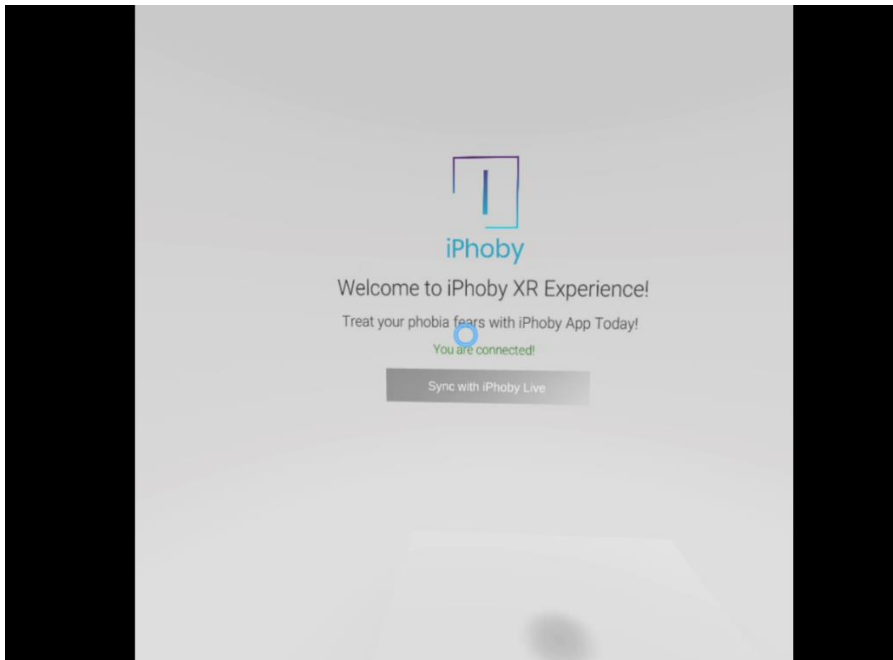


26. The lift will go downwards until it reaches the ground floor.
27. You can exit the scene and view iPhoby Live app on your mobile device. iPhoby live app will give you your performance level. At the background, on Azure app service, it will run an **API Machine Learning Algorithms** to calculate your performance and confidence level based on the BPM data it obtained in real time!

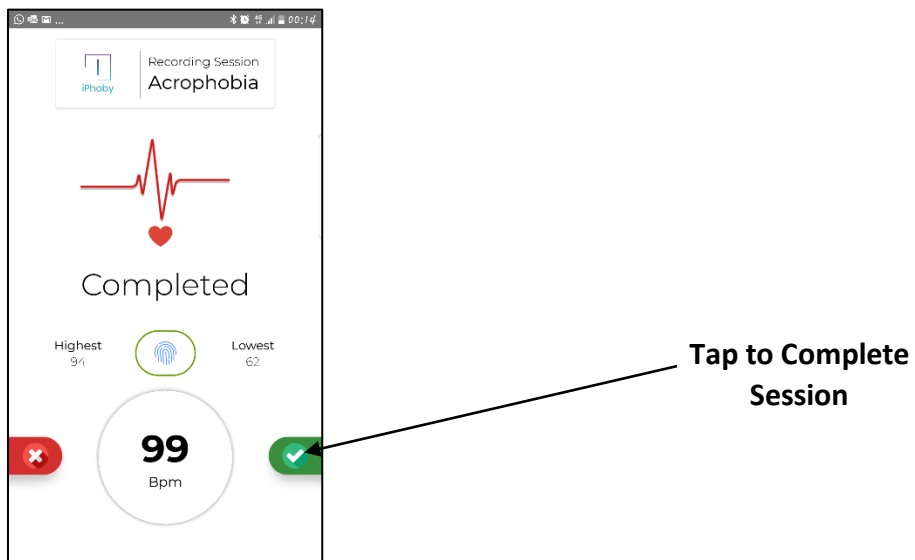


Now, Let's try another Phobia! – Hydrophobia

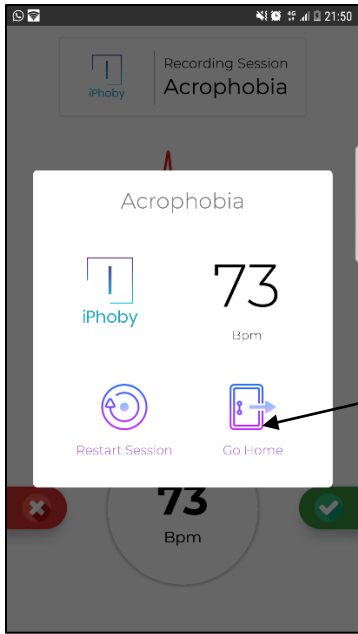
1. Now, once you exited acrophobia, your VR app will take you to the Home Scene. It will prompt you again to sync with iPhoby Live to obtain another session command.



2. Remove your head set. Go to your iPhoby Live app on the Mobile device. Click on the complete green button as shown below.



3. It will pop up and prompt you either to restart the session or go to home. Select **Go to Home**.

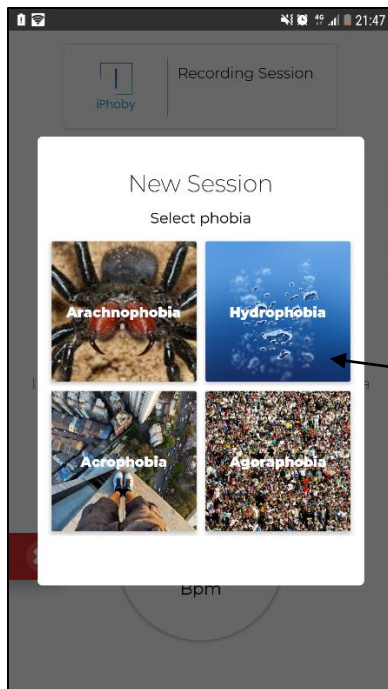


Tap Go Home

4. Again, press the bottom right hand corner button and select Hydrophobia.

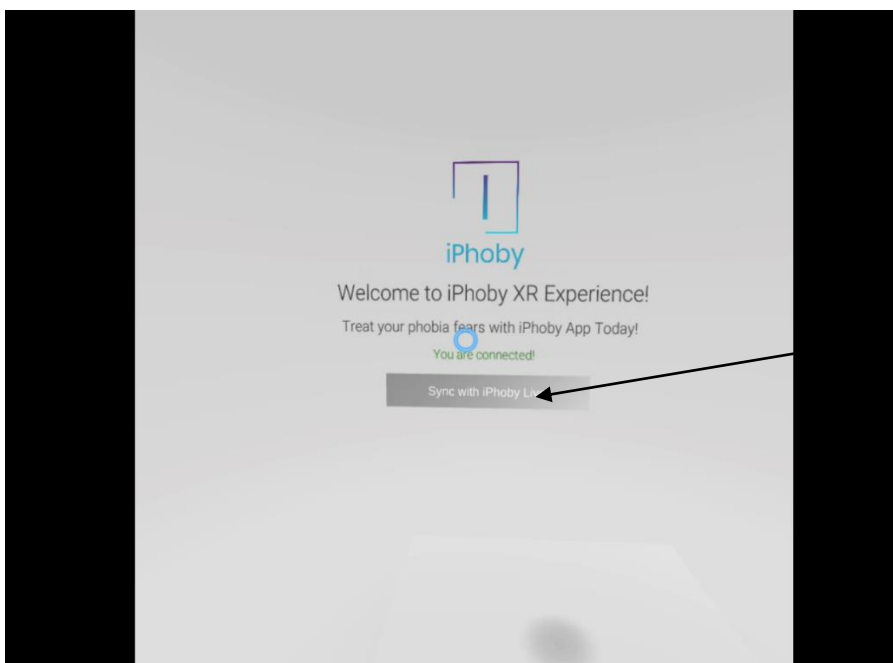


Tap here



Hydrophobia

5. Put on your VR again. With your eyes as gaze cursor, point it on **Sync with iPhoby Live** button.

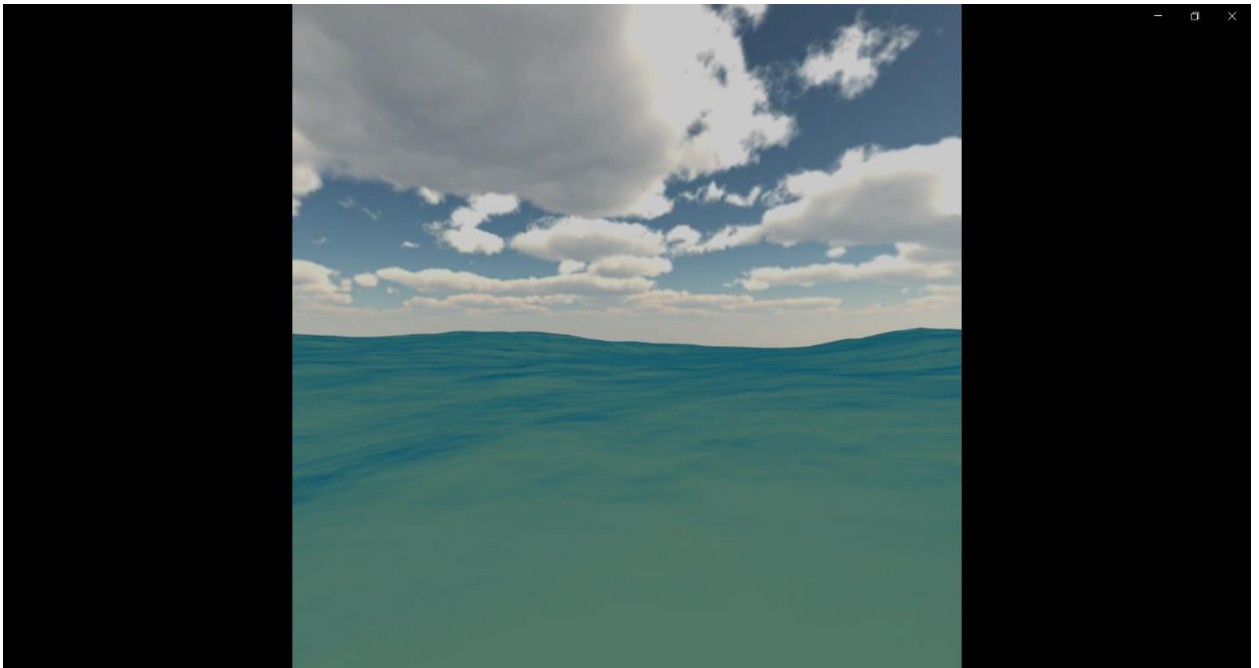


Trigger here

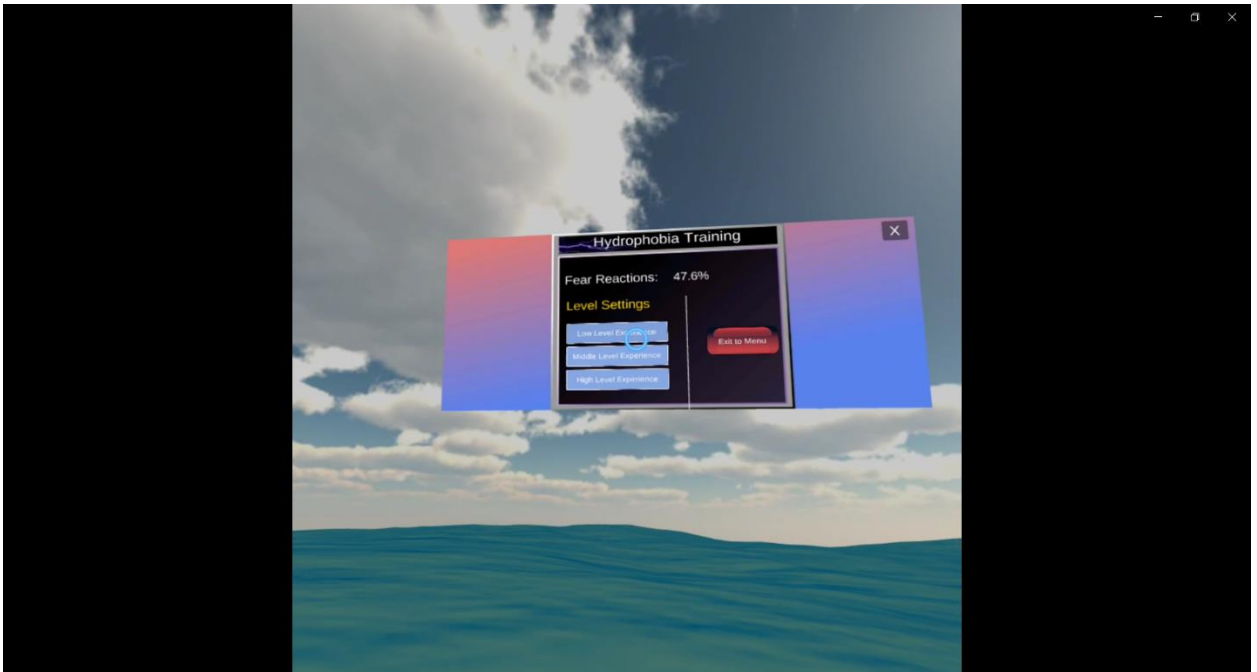
6. Press the trigger button on your controller. Wait for it to Sync and once it is done, it will show you **"Hydrophobia session is ready to start"**.
7. Put your finger of the other hand on top of your back camera of your mobile phone and press trigger the start session.



8. You will be taken in a scene with a massive water body, the Ocean.



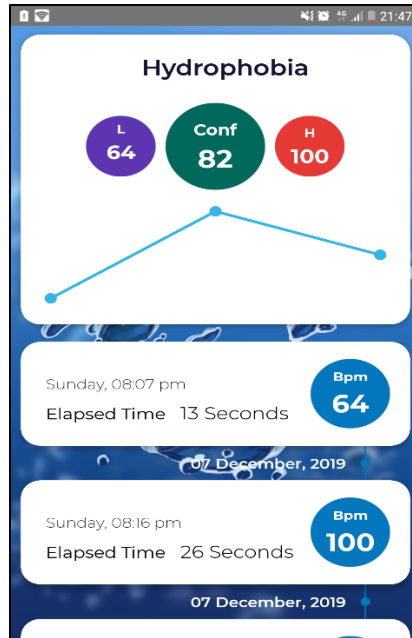
9. The ocean has small waves at the beginning.
10. Next, if you are much comfortable with that, you can press the back button on your controller. You will see a small screen UI giving you options to upgrade your level scene.
- Low level
 - Middle level
 - High level
- Try to interact with them. Try to change from low level to middle level. Or even high level.



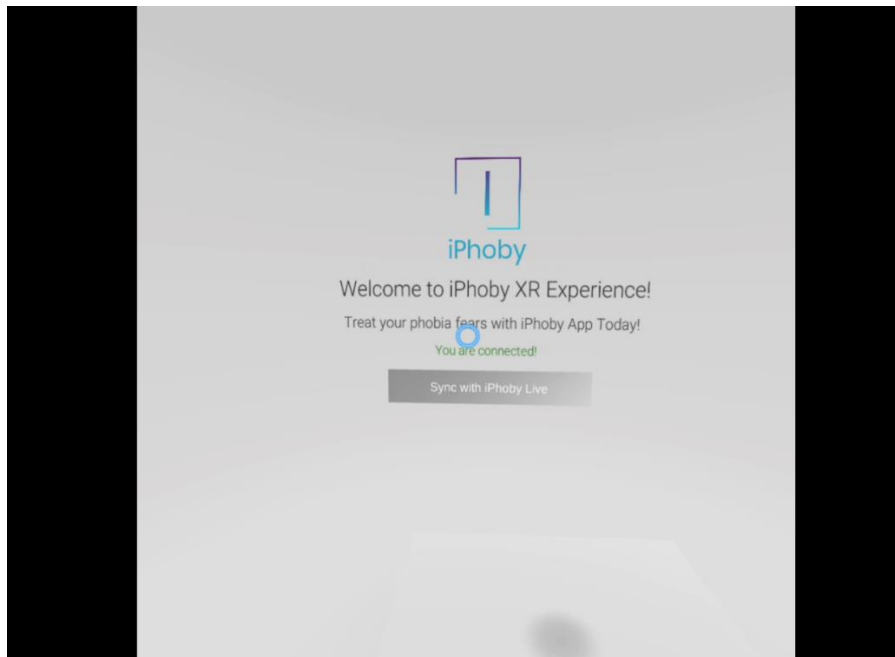
These levels use the **systematic desensitization** techniques exposing user to a scenario and start practicing them as they interact with the environment progressively with time as they gain confidence levels of exposure.



11. Exit the scene by double tapping the touch button on the controller. This process will send the call back request to iPhoby Live and will trigger the live Bpm data capture to stop and send the data to ML API for further processing!

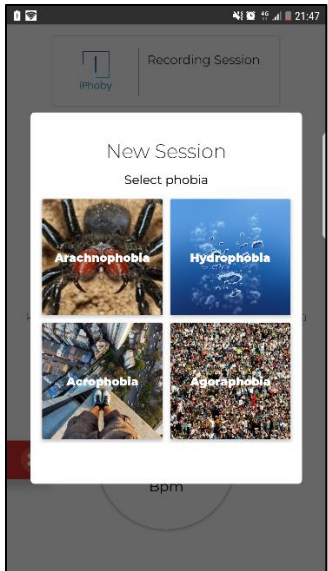


12. Once you exit the Hydrophobia scene, you will be taken back to the Main Home Scene.

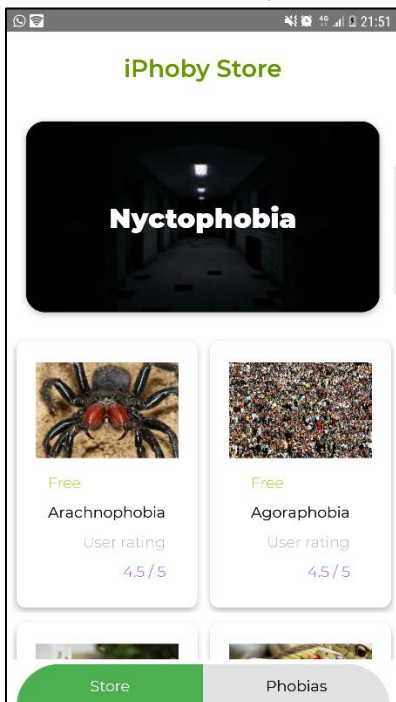


A Summarized step to follow on operating in any other Phobia Scene

On your Mobile iPhoby app, there are other phobias you can treat yourself including **Arachnophobia** and **Agoraphobia**.



There are other phobias scenes that we still have but the most common ones are these ones we are having in our app since the target audience for these phobia (Height, Massive Water Body, Crowd and Arachnids) are many. Other phobias will be release later in our phobia store for purchase.



To Summarize the entire process of using both iPhoby platforms (iPhoby Live and iPhoby VR) the process of testing them **always remains the same**. Here is the summarized step.

- (i) Starting from going to Home page in iPhoby Live, click the start session button at the bottom right hand corner of your screen.

- (ii) Select the phobia you want from the pop-up option.
- (iii) Wear the VR device and click on Sync with iPhoby Live button to pair the latest phobia session command.
- (iv) And then finally you start the session on your VR and put your finger on top of the camera device of your phone for iPhoby Live to get your fears reactions. You can exit the scene by double tapping the touch button on your controller.

These are four generalized steps you have to follow in order to test any other phobia environment and treat your own personal irrational anxieties.

Analysis and Confidence Predictions of the User

Analysis and confidence predictions is really important for the user who is using iPhoby platform. How can the user know how he/she is progressing and performing in terms of fears and performance?

In this section, am going to show you how to read the prediction models brought about by Machine learning data processing happening behind the scene.

In the iPhoby Live dashboard (Home page), you will be presented with various kind of analysis that iPhoby is doing at the background.



Such analysis is performed on **Microsoft Azure** Cloud via Azure API. Then, the application consumes it and present it to the user on a user-friendly interface.

There are also simple meaning and important features of analysis that the app is showing to the user for easier understanding of their performance and confidence levels of predictions. These includes:

- (i). Last Session Performed
- (ii). Frequent Session Performed
- (iii). Lowest Average of all Performed
- (iv). Highest Average of all Performed

And finally, the confidence level predictions that uses the **Predictive Model**.

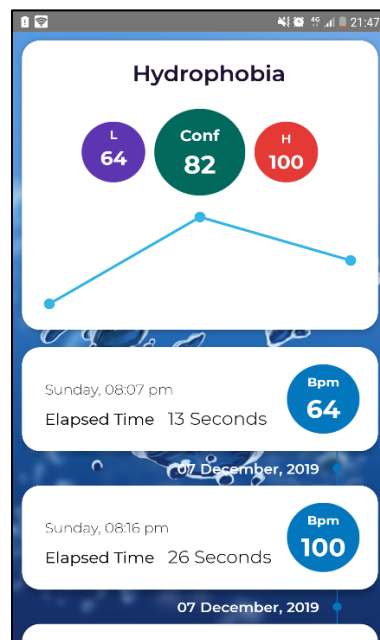


Confidence Level Value



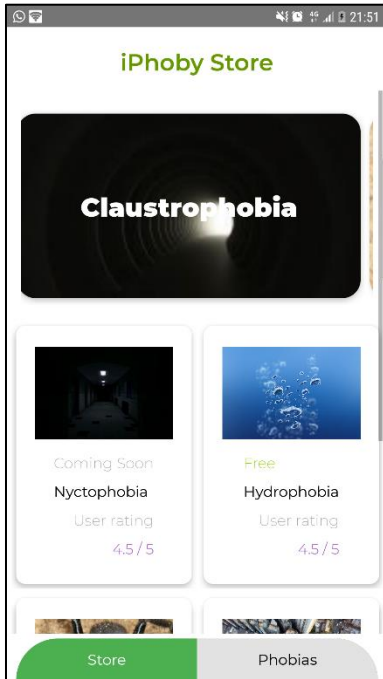
Swipe this card left or right to view other cards with different phobias that you have practiced...

Click on any other cards that shows phobia data predictions. You will be directed to a screen with a lot of structured and organized information presented to the user about the history records and time series progression analysis. Below shows how the screen is with the data analysis and what it entails.



iPhoby Store.

Currently, we are working hard to bring as much phobia as we can to our iPhoby store. iPhoby store will be the center of phobias published, verified and approved.

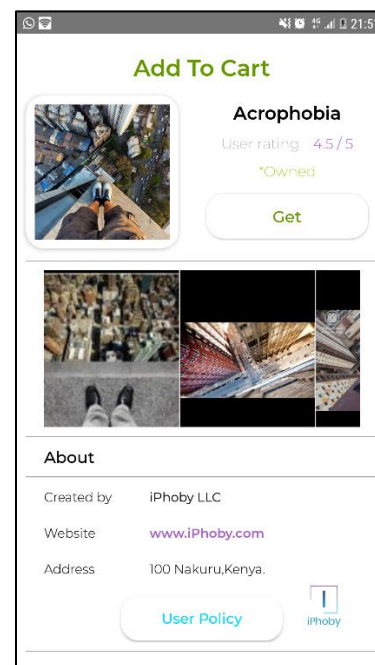
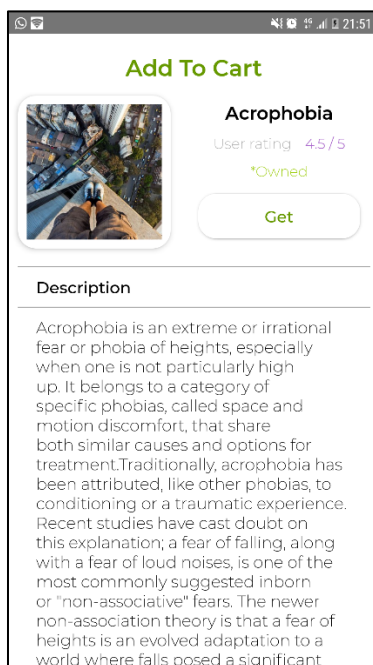
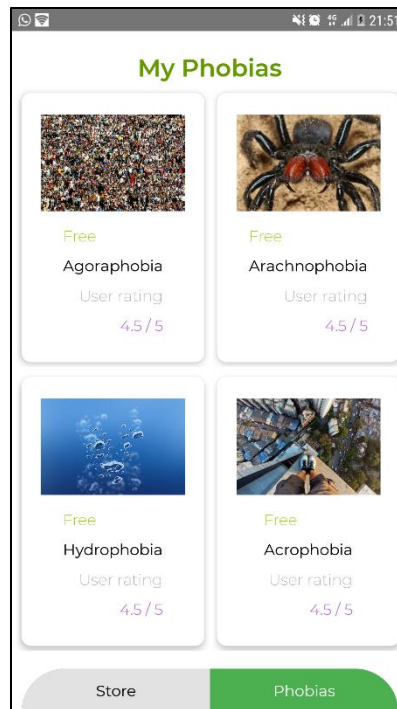


However, at the iPhoby store, user can be able to download phobias scenes packages there and the iPhoby Mobile app will be using encryption algorithm to tell iPhoby VR to download phobia scenes directly from the server.

We are storing most of the remote phobia packages scene on Microsoft Azure Cloud Containers Storage Center.

Below show some screenshots of the iPhoby Store. You can go through some phobias there and learn more.

Some have already been purchased for free for you.



You will also notice that some phobias are indicated coming soon. They are yet to be released to the store where therapies center might choose to buy them or individual users.

