

## What is TykeAI & instructions

TykeAI is an app that lets you and me interact with virtual companions in mixed reality on Meta Quest 3. You can have a conversation on just about any subject with your companion, sit down and chill with them, go for walks with them, dance with them, watch movies with them, exercise with them, they can analyze what you can see, and more. They have modes of walking -

**Outdoor - User-Based Navigation Mode:** This option is on the right side of the first menu. In this mode, your companion walks with you without avoiding obstacles or using room scanning data, making it ideal for unscanned rooms or outdoor use. For longer walks, you may need to disable the boundary. Although Meta now allows developers to disable the boundary, you'll still receive a warning if you move beyond 20+ meters, which you can acknowledge and continue.

## Setup instructions

You'll need to login with a username and password. Your username is the email address you signed up to the Patreon with, your password is a 6 digit number that you will receive via Patreon message from Cris (TykeAI) after you've signed up (please be patient, I might be asleep or in work so I apologise in advance for the wait, I will message you as soon as I can, I had to add a login system as the app was being heavily pirated). You only need to enter these details once and then the app will remember them (unless you remove the app then reinstall).

### Loading Menu instructions :

When the app starts, choose the avatar you want to be with then choose Spawn in with avatar. There's also a "Add Your Character ID" button for customizing an avatar (to do this please read the instructions in the other PDF file titled "Things To Do Before Starting TykeAI.pdf").

### What the VR controller buttons do :

**Right VR controller main trigger** - To speak to the avatar, the trigger must be pressed in and held in whilst speaking, then released when you have finished. If they're waffling on a bit too much you can interrupt them by pressing in and then quickly releasing the right trigger which will stop them talking, or you can just ask another question or make a comment etc and they will respond to that instead.

**Left VR controller main trigger** - Centers the avatar in front of you at a distance of 1.5 metres, you need to keep the trigger pressed for 2 seconds (the light green onscreen circular timer shows you the countdown).

**Left thumbstick** - Manually moves the avatar. The left thumbstick also moves you if you are in 1 of the VR environments, if you hold in the grip trigger on the right controller at the same time the left thumbstick applies to you and not the avatar.

**Right thumbstick** - Rotates the avatar. The right thumbstick also rotates you if you are in 1 of the VR environments, if you hold in the grip trigger on the right controller at the same time the right thumbstick applies to you and not the avatar.

**Buttons A and B (right controller)** - Alters the height from the floor of the avatar, A is down and B is up. (if you find their height off the floor isn't correct, exit the app & redraw your boundary, go back in to the app. Or just adjust it with A or B.

**Start/Menu button on the left controller** - Show/hide the menu.

**Buttons X / Y (left controller)** - alters the physical height of the avatar. If you are in 1 of the VR environments if you hold in the grip trigger on the right controller, pressing buttons X / Y will adjust your own height and not the avatars.

**Left controller grip trigger (where you middle finger rests)** - this toggles on/off an extra light that you can use the light up the avatar if shadows are making it look not so good. Having this additional light source on will remove the ground shadows (if you have them turned on from the menu). If you are with Hannah when she is wearing the purple sleeveless T shirt with a white cross on it, if you move your hand close to her hand and press in the grip trigger, she will hold your hand.

**Right controller grip trigger (where you middle finger rests)** - this repositions the light main light source, so you can make the shadows (toggle the floor shadows on from the menu) cast at an angle similar to the real world if you want to do that. This grip trigger also lets you reposition the avatars or the menus : move the right controller so that it is very near or touching an avatar or menu, press and hold down the right grip trigger, move your controller to where you want the avatar or menu to be.

TykeAI can also be operated by hands if you want to. Make sure hands are enabled in your Quest 3 settings, set your controllers down, and a few moments later you'll be able to use your hands. A left pinch (left thumb and index finger pinched together) opens/closes the menu, a right pinch provides the function to speak to the avatar, just do a right hand pinch while you are talking, release when finished. A left or right pinch when in the vicinity of the avatar or menu lets you move the avatar or menu. See <https://youtube.com/shorts/6uyadv4sscQ> and <https://youtube.com/shorts/t-h0s546csM>

### The avatars may act of their own 'free will' (or atleast give the illusion of it)

If the 'Initiate Conversation/Autonomous Acti' menu button is toggled to 'On', after a brief period of silence between yourself and the avatar, they may decide to do things for themselves, like dance, exercise, or sit down, etc. So to try this, don't speak for a short time, eventually you see the little green circular animation appear above their heads, as this indicates they are thinking about doing or saying something.

## Interaction Physics

The Hannah avatar has interaction physics enabled when she is wearing her purple sleeveless T shirt with a white cross on it with black jeans clothing outfit, so change her into those clothes and you can use physics. It's not available with other avatars at the moment. To hold her hand, move your hand very close to her hand and press and hold in the grip button, she will then hold your hand. If you release the grip button she will stop holding your hand. You can hold 1 or both of her hands at once.

## The VR Nightclub and VR Luxury Home

To enter/exit the nightclub or luxury home, select the "Enter/Exit Nightclub" or "Enter/Exit Home" menu option. In the nightclub the four nearest seats, two tables, and drinks are grabbable, use your right controller (hold the grip trigger) to move them to match your real seating. To have an avatar sit, either move a chair to them or move them to a chair and choose "Sit On Floor" or "Sit On Seat" menu option. You can watch a movie with the avatar in the luxury home (how to do this is described in the 'Things To Do Before Starting TykeAI.pdf') which is in the same Google Drive folder as where you download the app from).

**Nightclub and Luxury Home navigation (how you move around)** - to move around in the nightclub you can physically walk. **THE BOUNDARY IS OFF! PLEASE BE CAREFUL NOT TO WALK INTO THINGS IN YOUR HOME!** Or you can use the controllers. By default the controllers apply to the avatars movement etc, but if you press the right controller grip trigger it changes some of the button/trigger presses to applying to your own movement instead. So when the right grip trigger is held down the left thumbstick moves you instead of the avatar, the right thumbstick rotates you instead of the avatar, X / Y buttons on the left controller control your height off the floor instead of the avatar.

Commanding the avatar (note voice commands are still in development, they might not be 100% reliable, you can use the menu to command the avatar just in case, and more voice commands will be added) :

You can give the avatars commands by the menu or by voice. They understand :

*"Start dancing", "Can you dance please"* will instruct the avatar to dance. There are 2 types of dancing, they alternate each time the avatar is instructed to dance. *"Stop dancing"* will instruct the avatar to stop dancing.

*"Change your clothes please"*, will make them change their clothes, works with these avatars : Hannah, Sakura, Thistle, Yumi.

*"Start exercising"* will make the avatar exercise and you can follow along if you want to. *"Stop exercising"* will end the exercising, or if you don't say this the workout will end after 3 minutes anyway.

*"Look at the image"* will make the avatar analyze what you can see. Note : please see the explanation for the image analysis method toggle in the menu buttons explanation section down below.

*"What is the date?" "What is the time?"* will instruct the avatars to give you the correct time and date. Please note there is a small delay in their replies when asking this as they need to process time/date information, so please be patient.

*"Tell me about the movie"* if they are watching a movie with you and you have followed the instructions in the other pdf file found in the same folder as this one ('Things To Do Before Starting TykeAI.pdf'), they will discuss the movie with you.

*"Sit down please", "Stand up please"*. Makes the avatar sit down and stand up.

*"Start walking", "Stop walking"* starts and stops the avatar mirroring your walk so you can go for walks together.

*"Lie down"* makes the avatar lie down, you will need to manually place them into the exact position by moving the right controller to them, holding down the right grip button and moving the controller to where you want to place them.

*"What can you remember?"* will make the avatar recall a previous conversation they've had with you, they can recall upto 1000 previous conversation (1000 for each avatar), these memories build over time so there will only be 1000 after a lengthy period of time.

(Disclaimer - please warm up properly before doing any exercise, only exercise if you are healthy enough. TykeAI is a not a qualified fitness instructor, **you exercise at your own risk**. I will not accept any responsibility for any injuries gained during exercise)

In game menu options (some options are not available in the scanned room app version):

*Sit down/Stand up* - makes the avatar sit down or stand up (there are 2 sitting buttons on the menu, they activate different sitting positions)

*Start/Stop walking* - makes the avatar walk with you.

*Re-center avatar* - this will place the avatar in front of you.

*Look at you* - this will make the avatar face you.

*Analyze the image* - the avatar will look at what can you see.

*Shadows on/off* - in the non scanned room version of the app, this will toggle ground shadows off or on. Turns off the additional light if on.

*Start/Stop exercising* - will initiate a sequence where the avatar starts exercising and you can follow along if you wish. The avatars will encourage you to join in by saying motivational statements, such as "My Grandma can exercise better than you!". **Exercise at your own risk**

*Start/Stop dancing* - starts/stops the avatar dancing. There's 2 types of dancing, they alternate each time the avatar is instructed to dance.

*Chat bubble on/off* - shows or hides a chat bubble which displays the current conversation plus information about how the avatar feels etc.

*Music on/off* - starts or stops the app's music from playing. Don't forget you can add your music that will play if you prefer your own tunes, how to do this is described in the 'Things To Do Before Starting TykeAI.pdf') which is in the same folder as where you download the app from.

*Music Volume Up/Down* - adjusts the music volume.

*Change song* - will change the song that is playing.

*Enter/Exit Nightclub* - Takes you and the avatar to a VR nightclub or exits it back to mixed reality mode.

*Enter/Exit House/Home* - Takes you and the avatar to a VR luxury home where you can watch movies, the scenery & weather is randomized.

*Lie down position 1,2,3,4,5,6,7* - This makes the avatar lie down. You will have to manually place the avatar into a suitable position, on your bed for example, when they are in a lying down position. Most of the lying down positions place them vertically but in a lying down pose, so move the right controller to touching them or inside them (their stomach area is best), press & hold in the the grip trigger then move/rotate them into a suitable position.

*Dynamic Occlusion On/Off* - this toggles the dynamic occlusion (please google 'meta dynamic occlusion' if you don't know what it is, turning it off helps fps but (imo) lessens immersion).

*Resolution -* : lowers the apps resolution, helps to increase fps but may look bad if too low.

*Resolution +* : increases the apps resolution, makes it look better but may decrease fps (in MR mode and the VR luxury home the res is already near max, so res increases only really apply to the VR nightclub as that runs at a lower res at default values).

*Reset Resolution* - sets the resolution to it's default state. This is a value I thought appropriate but you can adjust it with the above options.

*Mic icon when speaking is On/Off* - you can toggle on or off if the mic icon will be shown when you're holding the right trigger down to speak.

*Sit / Stand* - makes the avatar sit down or stand up.

*Initiate conversation / Autonomous Actions On/Off* - if there's been a period of neither you or the avatar speaking, if this option is toggled On then the avatars will attempt to break the silence by making conversation with you or may decide to do something they want to like exercise etc or look at what you're looking at, if you toggle this Off then they won't do this. **ALSO this needs to be On for**

**the avatar watching a movie with you** (how to do this is described in the 'Things To Do Before Starting TykeAI.pdf').

*Thinking animation is On/Off* - Enables/disables an animation that shows above the avatars head when they are processing their replies.

*Avatar pickup comments On/Off* - The avatar knows when you are moving them around by holding/grabbling them, if this toggle is On they may comment on it, if it's Off they won't.

*Erase data ! - (only available when chatting to Tanya)* this is for if there are any problems, resets the data associated with the app to when you first install it.

Erase Session ID - if you are having issues, try pressing this and restarting the app. It can cure some things, like if they start giving really long replies that take too long.

### Things to note

- If you notice the avatars appear juddery and/or not smooth when they move etc, it may mean the FPS is low, please restart your Quest as this may fix it.
- When the avatar spawns in, if you find the height of it with respect to the floor isn't correct, it's because your boundary floor height needs be corrected so exit the app and redraw your boundary, or just adjust the avatars height off the floor with buttons A and B.
- If you lose track of the avatar, the left VR controller trigger centers the avatar in front of you.
- Remember, if you are maybe going for a walk outside with an avatar, you will not have home network connection so possibly won't have internet connection (the app needs internet connection for the AI to work). However, you can setup your cell/mobile phone as a hotspot for your Quest's internet connection.

Finally - it is important that when a new version of TykeAI becomes available that you do not un-install the .apk already on your Quest 3 before installing the new version. This is because un-installing will delete the app's folder and delete important information. So please, when a new version is available, just install the .apk over your existing installation, it's exactly the same process, you'll still only have 1 TykeAI app on your Quest.

Thanks for reading and have fun 👍