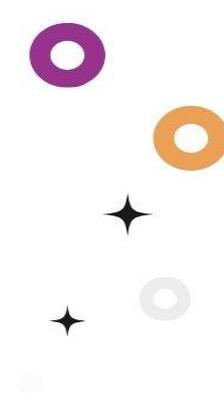




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RECOMMIT

VR Handbook



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Introduction

Welcome to the Recommit VR Experience! This handbook is designed to guide you through the Virtual Reality experience developed to facilitate a journey towards training effective interpersonal communication and successful social reintegration. Each level in the VR experience is structured to provide with the skills and understanding necessary for a positive and sustainable reintegration into society.

Contents Overview:

- Orientation Level – The first step into the VR world! This level is designed to familiarize users with the VR environment and controls. It's a comfortable starting point to ease users into the virtual experience and prepare them for the upcoming levels.
- Intro to Value Systems Level -Explore various societal and personal value systems. Understanding these values is crucial for this journey, forming the foundation of effective communication and social interaction.
- Listening Skills Level - Developing listening skills through active listening, to understand and empathize with others effectively.
- Conflict Management Level - Strategies to manage and resolve conflicts positively.
- Interpersonal Boundaries Level – Understand the importance of boundaries and how to maintain them in social contexts.
- Disclosure Level (separate app) – Designed to understand disclosure strategies and impact during job interviews.

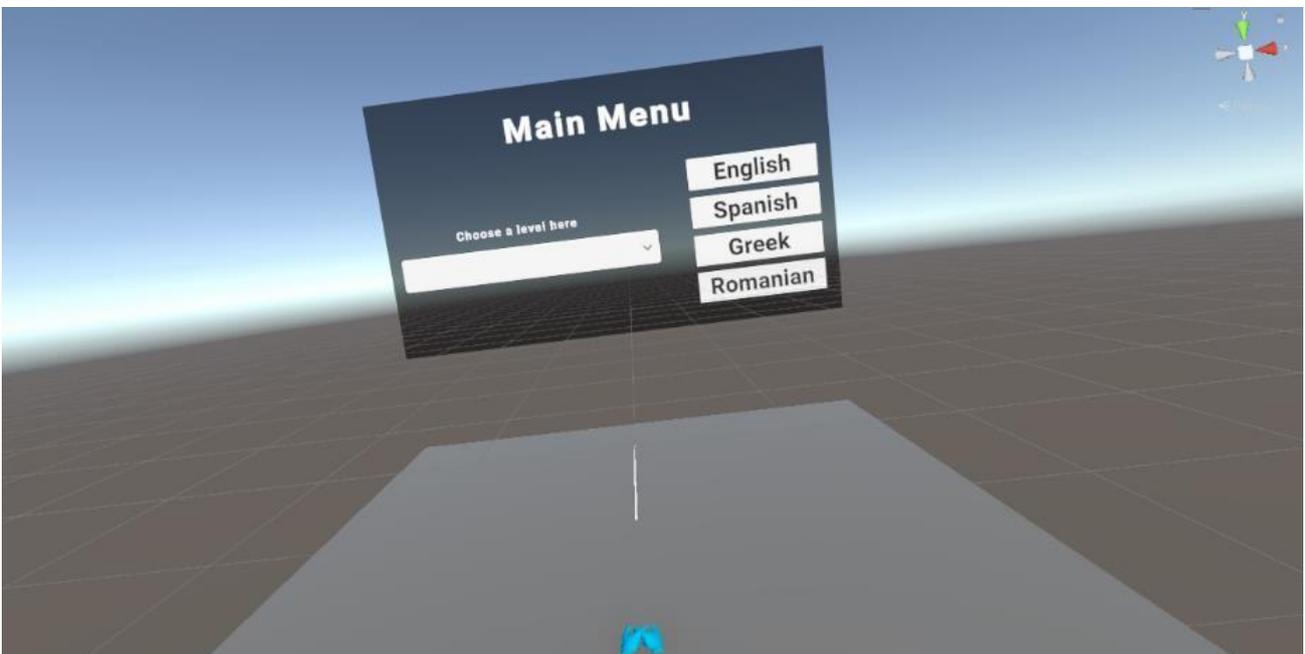
As progressing through each level, the aim is to teach valuable skills and insights that are not only crucial for personal development but for successful reintegration into society.

Main Menu Scene

This is where the user will select a level to play.

1. Select a language to play (the selected language has green text)
2. Click the menu dropdown and select the desired level (press the trigger the whole way)

Image 1.



Orientation level

This level is for the users to get familiar with the controls and functionalities of the game.

1. The user needs to complete scattered tasks to get keys (colored cubes) for the completion of the level.
2. The user needs to place a card in the video player to watch the video and gain one key.
3. The user will open a sliding door by clicking (press trigger) a button and then answer a questionnaire (again press trigger to select the correct answer)
4. Next the user will see tables with slots and different colored cards. They need to place the cards on the table with the corresponding color.
5. The user needs to answer a 2nd questionnaire.
6. The user will play a “guess the picture” game. According to what is asked they need to select (press trigger) on the correct picture.
7. When all tasks are complete, all keys are present on the middle table. The user needs to place them in the correct colored slot, and when done correctly press the now green button and the level is complete.
8. When the level is complete, press the menu button on the left-hand wrist canvas for a canvas to appear in-front of them. Then press “main menu” to head back to the menu screen.

Notes:

To hold an item the trigger button needs to be hold down (upon release the item will fall from the users’ hands)

A video card is a black rectangle (can have more colors in other levels), and a video slot looks like an old radio (brown square with a smaller black square on its from side).

Image 2.



Intro to Value Systems level

This level provides information on different values, features different rooms for each value. There is also an agent moving from one completed room to the next, presenting the room and available tasks.

1. Room 1: After the agent finishes his introducing a room, the tasks will appear. The user needs to touch three pictures in this room and the person sitting on the couch to complete the first part. The player then needs to “pet” a cat and then answer a questionnaire that appears. When these tasks are completed, the agent will move to the next room
2. Room 2: After the agent presents the room, the tasks will appear. The user first needs to place a green card into a video slot and watch the clip until the end. A water bottle will then appear. The user needs to grab it and water the 4 plants, so they grow after they get watered. The user then needs to throw the bottle into the trash can. The following task requires the user to “help” the person trying to lift a box (press on the ‘help’ button). A questionnaire will then appear.
3. Room 3: After the agent presents the room, the tasks will appear. The user should watch a video by placing the card in the video player. The user will then be given two music cards to place in the music slot to listen. After the player listens to at least one full song, a questionnaire will appear.
4. Room 4: After the agent presents the room, the tasks will appear. The user will see 2 cards on the counter next to a video slot. After watching at least one full video a task will appear. The user needs to press the buttons on the wall under each picture to rank the activities based on their opinion. When the task is completed, they can move to the final room
5. Room 5: Here the user will find cards scattered around in the room, indicating the name of the values they learned before. After placing them in the slots on the table (in ranked order) the button will become green so they can press and finish the level.

When the level is complete, press the menu button on the left-hand wrist canvas, for a canvas to appear in-front the user. Then press “main menu” to head back to the menu screen.

Notes:

- The users will see a blue lit waypoint that signifies where they need to go.
- To trigger the agent to speak in each room the user needs to get close to him.
- The level is large so try to keep the users in the active room and not get distracted.

Image 3.



Image 4.



Listening Skills level

This level prompts the user to watch videos and answer relevant questions.

1. The user will need to place the card into the video slot to watch the video.
2. After the video is completed, a questionnaire will appear (if the user gets a wrong answer, they can press restart to try again)
3. Repeat this process again once, and if the user answers correctly the level is complete.
4. When the level is complete, press the menu button on the left-hand wrist canvas for a canvas to appear in-front of them. Then press “main menu” to head back to the menu screen.

Image 5.



Conflict Management level

This level starts with videos and questionnaires regarding the first room and then proceeds to more interactive activities.

1. The user will need to place the card into the video slot to watch the video.
2. After the video is done a questionnaire will appear (if the user gets a wrong answer, they can press restart to try again)
3. Repeat this process another 3 times (when all are done correctly the door to the next room will open)
4. First the user needs to place the present cards with numbers on them in the correct tables, showing the order of the steps on how to solve a conflict.
5. After the user will press the start button on the next activity and choose the correct face according to the prompt given. When all faces were chosen correctly the level is completed.
6. When the level is complete, press the menu button on the left-hand wrist canvas for a canvas to appear in-front of them. Then press “main menu” to head back to the menu screen.

Image 6.



Interpersonal Boundaries level

This level has two activities.

1. First the user needs to complete the 'hexagon on the wall' by placing the correct triangles in the present slots (if all done correctly the hexagon will turn green)
2. The user then needs to throw balls into colored slots for a question to appear.
3. If the user answers a question correctly, they are given an extra ball. If the user gets more than 2 questions right the level is complete.
4. When the level is complete, press the menu button on the left-hand wrist canvas for a canvas to appear in-front of them. Then press "main menu" to head back to the menu screen.

Image 7.



Disclosure Experience

Separate Application: Note that the Disclosure Level is a separate application that needs to be installed and launched independently from the main VR program.

1. Language Selection: Upon starting the level, users will be prompted to select preferred language.
2. The user should select from the available options and listen to scenario example conversation.
3. The user should answer questions in between using the “trigger” button.

Image 8.



Part B – Headset Instructions

Charging and Operating the Headsets

To charge the Meta Quest 2, connect the USB-C cable to the headset and to a power source. A light on the side of the headset will indicate that the device is charging. Charge until the light turns green (full charge).

- **Avoiding Overheating:**
 - Use in a well-ventilated area and do not cover.
 - In warm climates, better to be in an airconditioned room – this will also contribute to user comfort.
- Avoid exposure of the headset in direct sunlight and high temperatures.
- Take breaks to let the headset cool down.
- Do not cover any of the vents on the headset.

- **Charging Time:** Typically, it takes around 2.5 to 3 hours to charge from 0% to 100%.
 - Avoid leaving the headset plugged in for an extended period after it's fully charged.

- **Handling and Care:** Always handle the headset gently, especially when connecting or disconnecting the charger and the Link cable. The USB-C port is very delicate and is not only needed for charging but also for connecting the headset to the PC.

Cleaning the Headsets

- **Regular Cleaning:** Clean the headset after its use.
- **Lens Cleaning:**
 - Use a dry optical lens microfiber cloth to clean your headset lenses. Don't use liquid, alcohol-based or chemical cleansers.
 - Starting from the center of the lens, gently wipe the lens in a circular motion moving outwards.

Note: Alcohol wipes should not be used on lenses as they can damage them. Alcohol wipes should only be used on other headset components. Use with caution.



Source: <https://business.oculus.com/support/665720147270975/>

➤ **Disinfecting the Headset:**

- Use dedicated wipes for disinfecting. Ensure they are safe for use on electronic devices.
- Carefully wipe down the exterior surfaces of the headset, including the straps and areas around the lenses. Important to avoid any contact with the lens surfaces.

➤ **Exterior Cleaning:**

- Use anti-bacterial wipes.
- Avoid getting moisture in any openings.

➤ **Handling the Headset:**

- Always wash your hands before and after using the headset.
- Use the silicone hygiene cover.

➤ **Personal Hygiene:** Encourage users to maintain personal hygiene, including clean hands and faces, before using the headset.

Important Notes

- The headset is designed for indoor use only.
- Ensure that the area space of operation is clear of obstructions.
- Set a guardian boundary appropriately.
- For the Recommit VR applications, seated mode is preferred.

- If at any point a user develops any sickness symptoms, i.e. feels disoriented, dizzy etc, ask them to stop and remove the headset immediately.

Installing the Recommit Applications

To install the 2x VR applications on a Meta Quest 2 headset device, you need to install specific software on your PC to let you “sideload” and install the apps.

- Install SideQuest on your computer.
 - Visit the official SideQuest website (sidequestvr.com).
 - Download the SideQuest installer for your operating system (Windows, Mac, or Linux).
 - Run the installer and follow the on-screen instructions to install SideQuest.
- Enable Developer Mode on Meta Quest 2
 - Create a Developer Account: Visit developer.oculus.com.
 - Sign in with your Oculus account.
 - Create an 'Organization'. This is a required step by Oculus to enable developer mode.
- Enable Developer Mode via the Meta Quest App:
 - Make sure that both your smartphone and Meta Quest Headset are on the same Wifi network, and your phone’s Bluetooth are enabled.
 - Download the Meta Quest app on your smartphone – search Meta Quest on the app store or use the links below.
 - ◆ Google Play Store
 - ◆ App Store
- Open the Meta Quest app and choose to “Pair” your headset.

Follow the instructions on the app and the headset to pair the device.

 - Go to 'Settings' and select your Meta Quest 2 headset.
 - Tap on 'More Settings' and then 'Developer Mode'.
 - Toggle on 'Developer Mode'.

- Connect Your Meta Quest 2 to your Computer
 - Use a high-quality USB-C cable to connect your headset to the computer.
 - Put on your headset and accept any permissions that pop up regarding data access.

- Installing Applications Using SideQuest
 - Open SideQuest on Your Computer
 - Launch the SideQuest application.
 - Connect the Headset
 - Once connected, SideQuest should recognize your headset. You'll see the status at the top of the SideQuest window.
 - Choose the install icon as seen in the fig, choose the .apk file and proceed to Install the Application

Launching the Recommit Applications

- To install RECOMMIT VR on Meta Quest 2, download the APK file to your computer:
<https://drive.google.com/drive/folders/1aDRNzmvbNjFnv-wqlRtYPpliwpqORqyu>
- Connect your headset to your PC, open SideQuest, allow data access, then install the APK.
- On your Meta Quest 2 main menu panel, navigate to:
 - Home
 - Library
 - Unknown Sources
 - Choose the app

Technical Evaluation Questionnaire

- Before experiencing the VR World!: <http://tinyurl.com/recommitprevr>
- Immediately after the experience with the VR World:
<http://tinyurl.com/recommitpostvr>
- At the end of the Training: <http://tinyurl.com/recommitpostexperiment>

RECOMMIT VR Requirements

For the needs of the RECOMMIT project, we suggesting the use of the Meta Quest 2 VR headset. This is a standalone All-in-One VR headset, meaning that it does not require a PC or console to operate. It has built-in speakers and microphone, and it also supports Bluetooth for external audio devices. It features a high-resolution display and uses motion tracking technology for both the headset and its wireless controllers allowing users to move around and interact with their virtual environment with precision and accuracy. Additionally, it is lightweight and comfortable to wear for extended periods. Furthermore, it is the most commonly used VR headset, and it is quite affordable for its quality (price range around 500-600 Euros – See Meta Quest 2 128GB – Amazon Link)

However, it is important to note that VR has some associated issues that must be considered. Virtual Reality is NOT suitable for individuals with epilepsy, migraine sufferers or people susceptible to motion sickness and participants who are suffering from such conditions should be excluded. Some users may also develop such symptoms during the use of VR, and they should stop using it immediately. It is common for users with sight-correction glasses to use VR, however if the glasses are of awkward size, this can be proven difficult to use.

Regarding technical requirements that could be challenging in a prison setting:

VR headsets may pose a security risk if they are not adequately monitored. It could be argued that inmates may use the VR headset to access restricted content or communicate with the outside world, therefore we should monitor the VR headsets closely. No access to the internet will be provided, and the devices will not have any other application installed beside the Recommit app. Also, should ensure that there is no misuse of the equipment. It would be important to be able to see what the users are seeing while in VR, so we will need to screenshare their view on a computer, so some technical adjustments need to be considered to do this. Some hygiene concerns should also be considered, due to the fact that using the headsets requires close contact with the face, which may pose a hygiene risk where infectious diseases can quickly spread. Regular cleaning and sanitizing of the VR headset should be done to prevent the spread of germs.

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