

VR/AR Technology Setup and Implementation

1. Supported Headsets

Meta Quest 2 and Meta Quest 3 are supported VR headsets.

2. Creating a Meta Account

To use a Meta Quest headset, you need a Meta (formerly Facebook) account. Depending on your needs, you can create either a personal Facebook account or a generic account (for business/organisation purposes).

3. Steps to Create a Personal Facebook Account:

- <u>Visit Facebook</u>: Go to the Facebook website or download the Facebook app.
- Sign Up: Click on "Create New Account."
- Enter Personal Details: Provide your name, mobile number or email, password, date of birth, and gender.
- **Verification**: Facebook will send a verification code to your email or phone. Enter the code to confirm.
- **Set Up Profile**: Add a profile picture and cover photo and complete your profile with additional information.
- Start Connecting: Add friends, join groups, and follow pages.

4. Setting Up the Meta Horizon App on Your Phone

The Meta Horizon app is essential for managing your VR experience. Here's how to set it up:

- Download and open the Meta Horizon app on your phone.
- Log in with your Meta account (personal or business).
- Pair your Meta Quest headset by following the on-screen prompts.
- Use the app to configure settings, download content, and manage your device.

5. Requirements

- Mobile Device: Ensure you have a smartphone ready for the Meta Horizon App and setup process.
- **PC:** A computer that can be used to interact with the headset and upload the APK.
- Oculus Quest Headset: The Oculus device you want to install the app on.
- USB Data Cable (USB-A to USB-C): This will connect the Oculus headset to your PC for transferring the APK.

5.1 Software:

- **Meta Horizon App :** You need to install the Meta Horizon App on your mobile device to manage the Oculus headset. This app will assist with the initial setup and managing developer permissions.
- Meta Horizon App Download and Setup: https://www.meta.com/quest/setup/
- SideQuest: Download and install SideQuest on your PC. SideQuest allows you to sideload APKs (Android apps) onto your Oculus Quest device.
- SideQuest Setup Guide: https://sidequestvr.com/setup-howto
- **APK File:** Ensure the APK file of the app you want to upload is downloaded and unzipped on your PC.

5.2 Permissions:

• **Meta Developer Organization:** You need to create a Meta developer organization by signing up at Meta's Developer Dashboard to enable developer mode on your headset. Make sure your organization is confirmed.

- Meta Developer Dashboard: https://developer.oculus.com/manage/organizations/
- **Oculus Headset Admin Rights:** You must be the admin of the Oculus headset to manage its permissions. Learn more about this in Meta's Developer Mode guide.

Meta Quest Developer Mode Setup:

https://developer.oculus.com/documentation/quest/latest/concepts/mobile-device-setup/

• Admin Member of Developer Organization: The admin of the Oculus headset must be a member of the Meta developer organization created earlier. Ensure you add the admin as a member in the Developer Dashboard using the link provided above.

• **Oculus Headset PIN Code:** Set up the PIN code for your Oculus headset by following instructions on Meta's support page.

- Meta Oculus Headset PIN Setup: https://support.meta.com/279555412449097/?locale=en_US
- Mobile Device Access Code: Ensure your mobile device has an active passcode or biometric setup.

6. Setting Up the Meta Quest Headset

To set up your Meta Quest headset:

- **Charge** the headset before first use.
- **Adjust** the head strap to fit comfortably.
- **Power on** the device with the power button.
- Follow the Setup Instructions: Wear the headset and follow the on-screen guide.
- **Connect to Wi-Fi**: Select your network and enter the password when prompted.
- Set Up Guardian Boundary: Define a safe play area to prevent accidents while using the headset.

Further reading: https://www.meta.com/en-gb/help/quest/articles/getting-started/getting-

7. Using Hand Tracking and Gestures in Meta Quest

Meta Quest supports hand tracking, allowing you to interact with the VR environment without controllers. To use this feature:

- Enable Hand Tracking in the headset's settings.
- Learn and Practise Gestures: Start with basic gestures like pinching, grabbing, and pointing to interact with VR applications.
- **Test in Apps**: Use apps designed for hand tracking to become comfortable with controller-free interaction.
- Hand Gestures guide