

**\*Originally created as part the BBC Young Reporter's BBC STEM outreach activity within the UK**

## GUIDEBOOK: SOCIAL VR WITH MOZILLA HUBS

**- WITH A LAPTOP OR A DESKTOP**

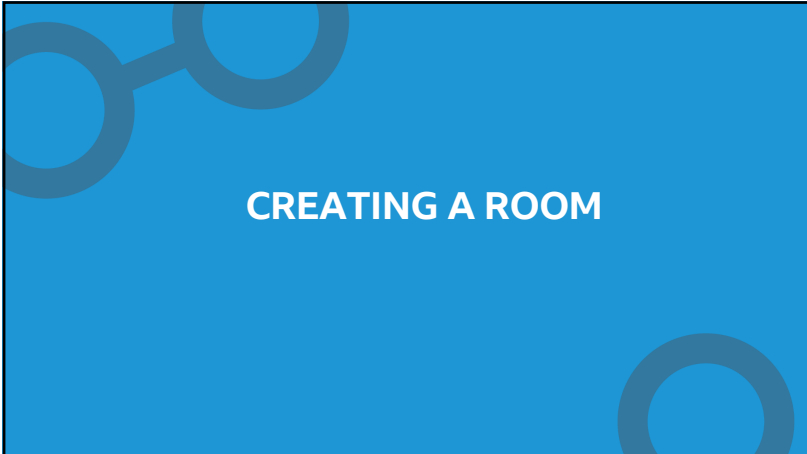
1

## Tools you need

Use Chrome or Firefox on a decent laptop/PC  
AND  
An email address you have access to

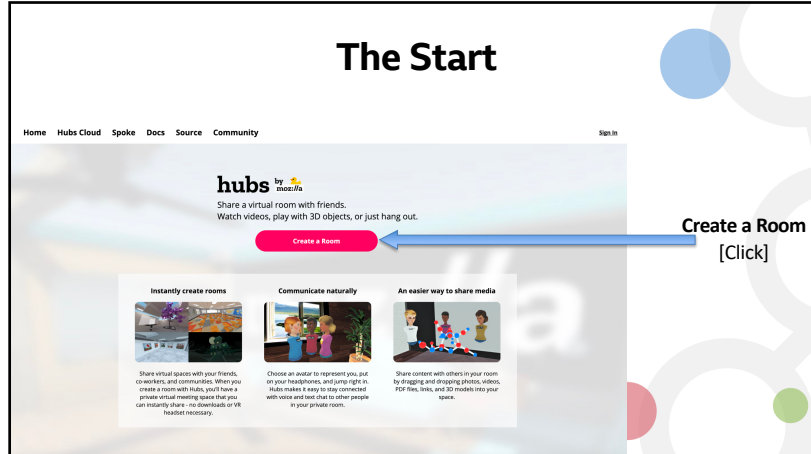
- Mozilla Hubs: <https://hubs.mozilla.com/>
- It's a webpage so if anything doesn't look right, reload/refresh to see if that fixes it.
- If that doesn't work, try another browser.
  - If you were using Chrome, switch to Firefox and vice versa.
- Mozilla's official documentation: <https://hubs.mozilla.com/docs/welcome.html>
- You can also use a browser on a relatively good Smart Phone to access, use and play in Mozilla Hubs but
- This guide assumes you have access to a laptop/PC (a desktop machine)

2



## CREATING A ROOM

3



## The Start

Home Hubs Cloud Spoke Docs Source Community Sign In

**hubs** by mozilla  
Share a virtual room with friends.  
Watch videos, play with 3D objects, or just hang out.

**Create a Room**  
[Click]

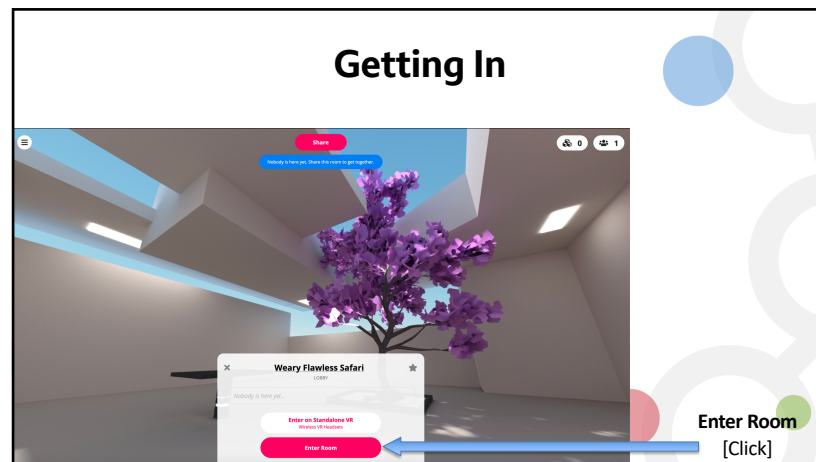
**Instantly create rooms**  
Share virtual spaces with your friends, co-workers, and communities. When you create a room with Hubs, you'll have a private virtual meeting space that you can instantly share - no downloads or VR headset necessary.

**Communicate naturally**  
Choose an avatar to represent you, put on your headphones, and jump right in. Hubs makes it easy to stay connected with voice and text chat to other people in your private room.

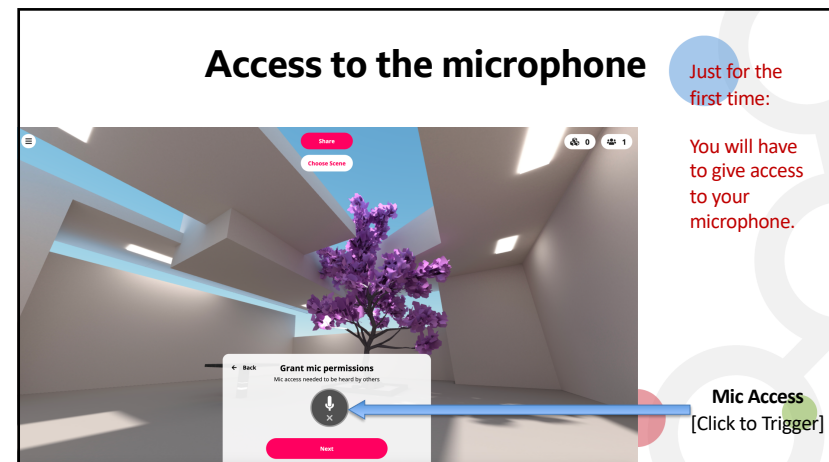
**An easier way to share media**  
Share content with others in your room by dragging and dropping photos, videos, PDF files, links, and 3D models into your space.

[How a room works](#)

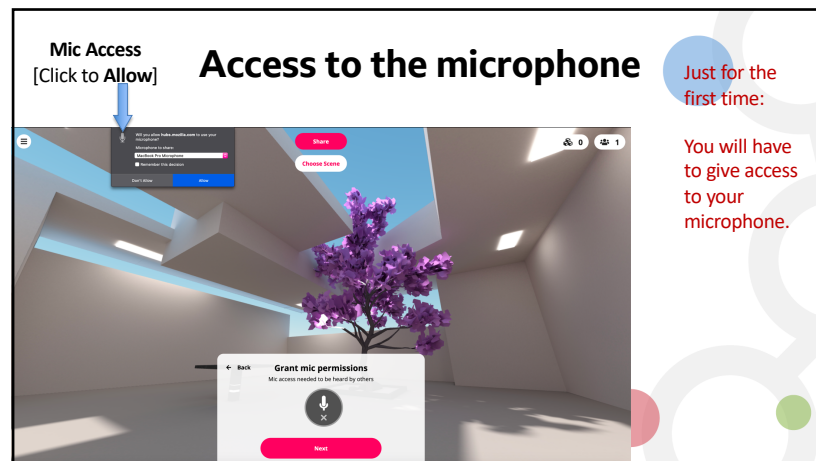
4



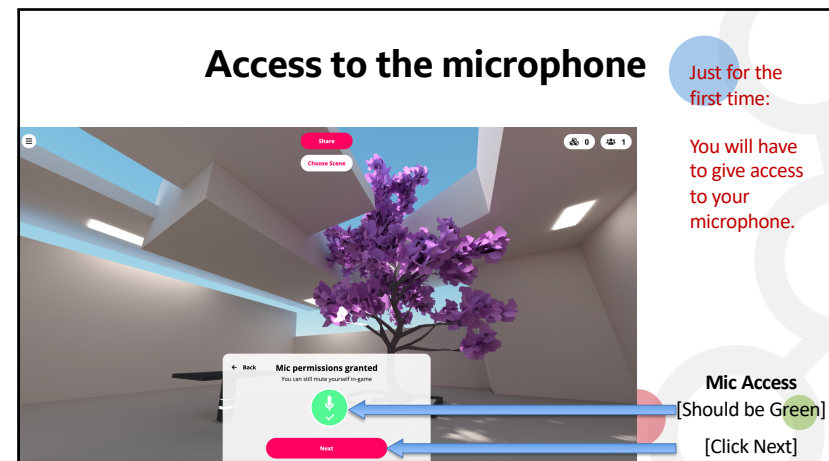
5



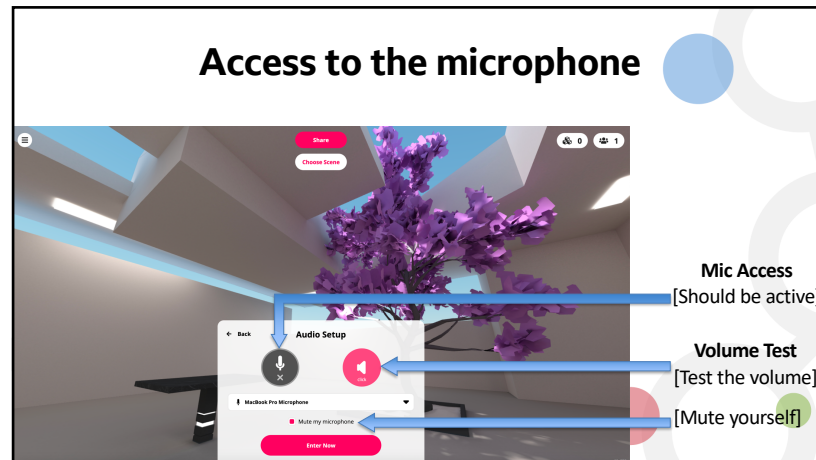
6



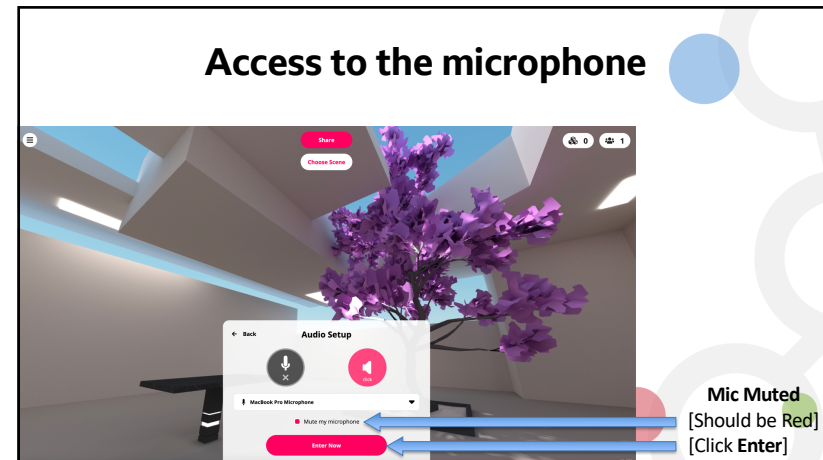
7



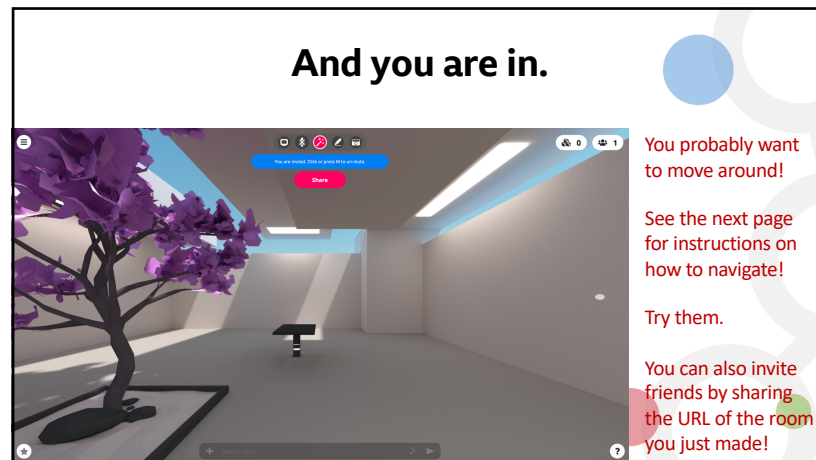
8



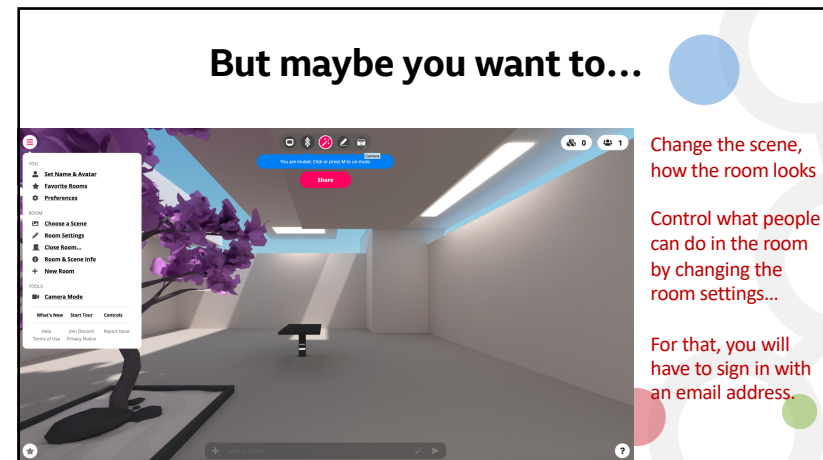
9



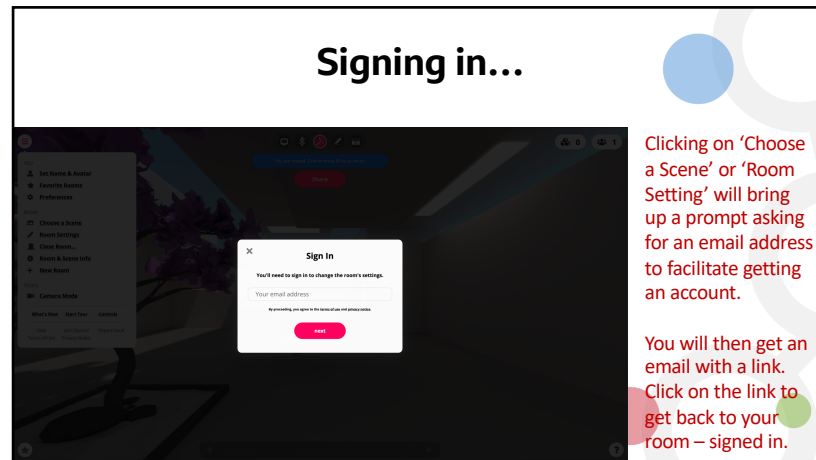
10



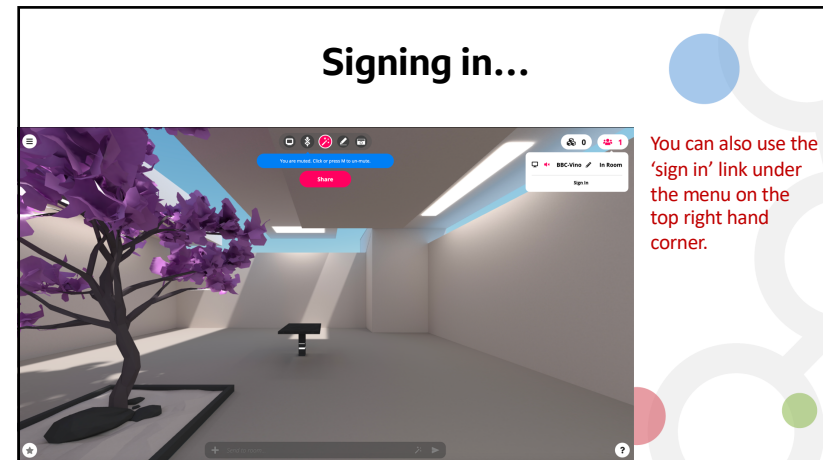
11



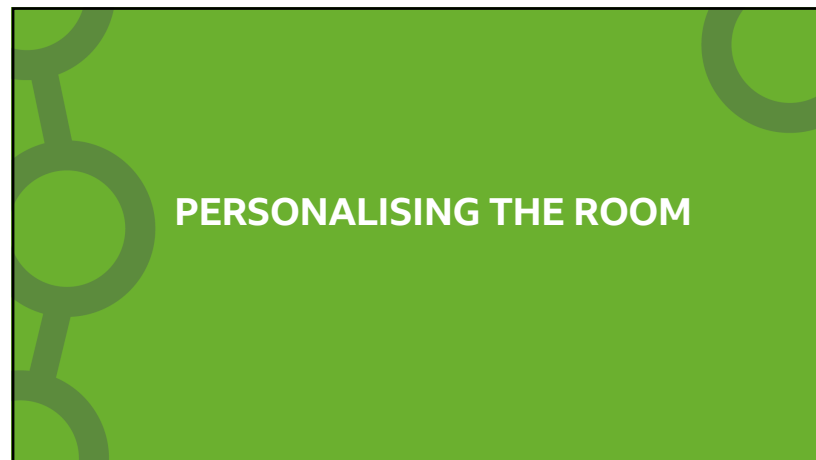
12



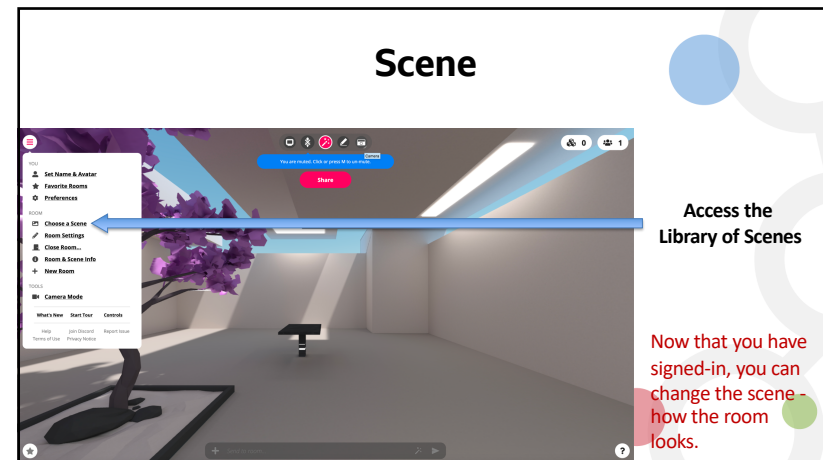
13



14

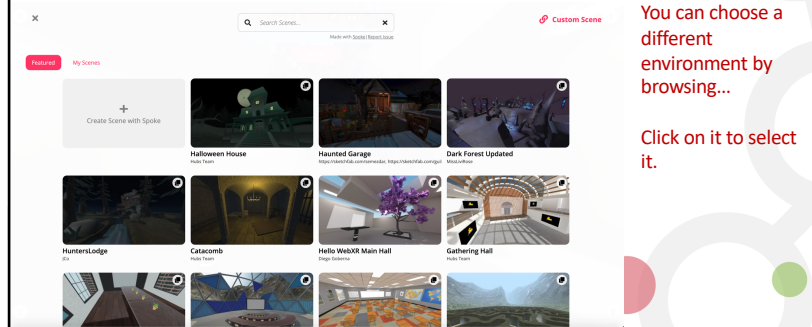


15



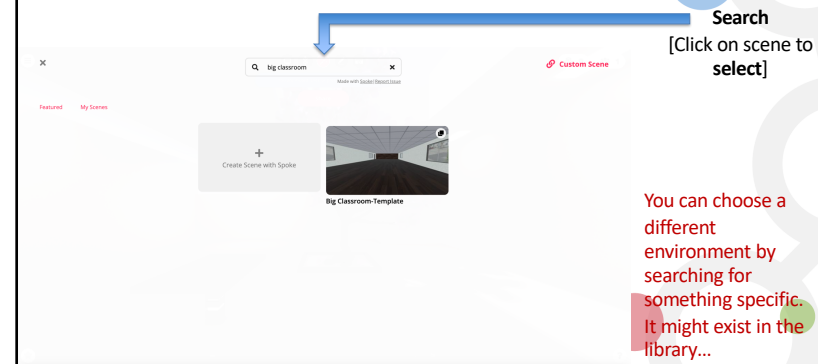
16

## Changing the Scene



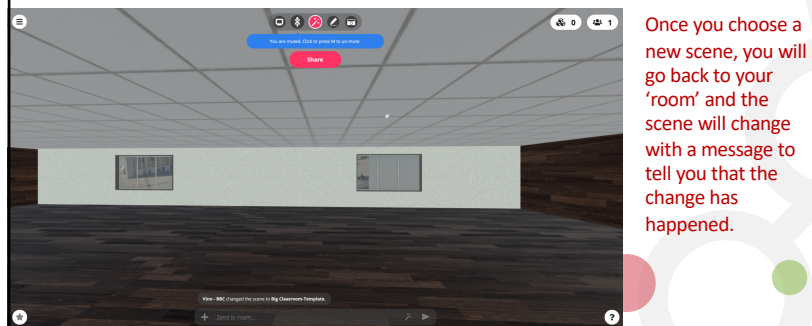
17

## Changing the Scene



18

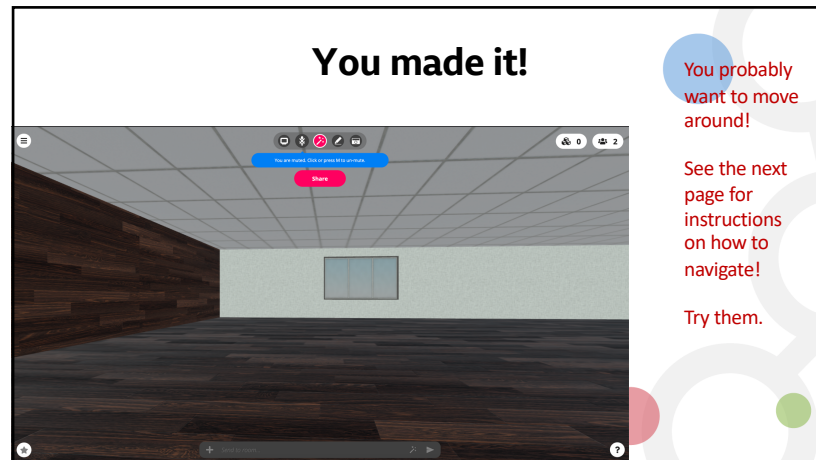
## Scene Changed!



19

## NAVIGATING

20



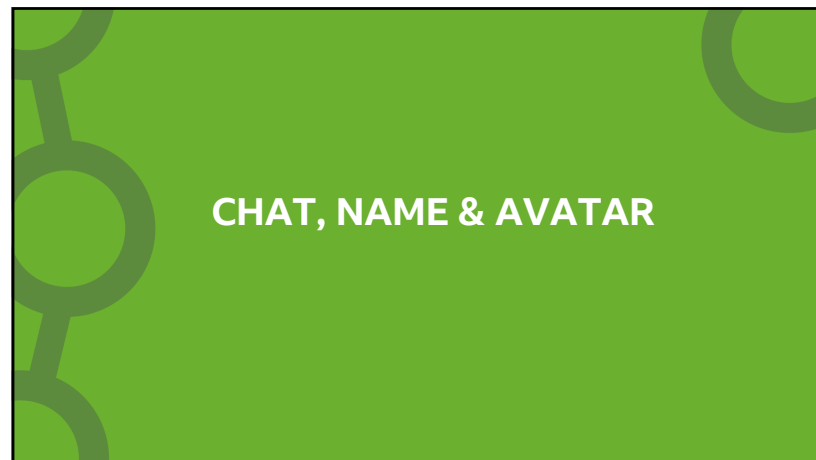
21

## Frequently used Controls

- If audio volume is low, **Turn spatial audio off**: type `/audiomode` in the chat box and press **Enter**.
  - Incidentally, you can type messages in the chat box and then press 'enter' to send the message to everyone in the space.
  - Use it to get the attention of the moderators
- Look Around**: Click **left** mouse button and **drag**
- Teleportation**: Click **right** mouse button
- Move**: Use **W, A, S, D** keys to move.
  - Hold shift to move faster.
- Turn**: Use **Q** and **E** keys to turn but
  - You can look around (turn) using your mouse button.
- Fly mode**: Press **G** key. Then 'look/turn' to where you want to go and then use the 'Move' buttons.
  - You probably want to leave flying for later

Controls in other devices, please check here:  
<https://hubs.mozilla.com/docs/hubs-controls.html>

22



23

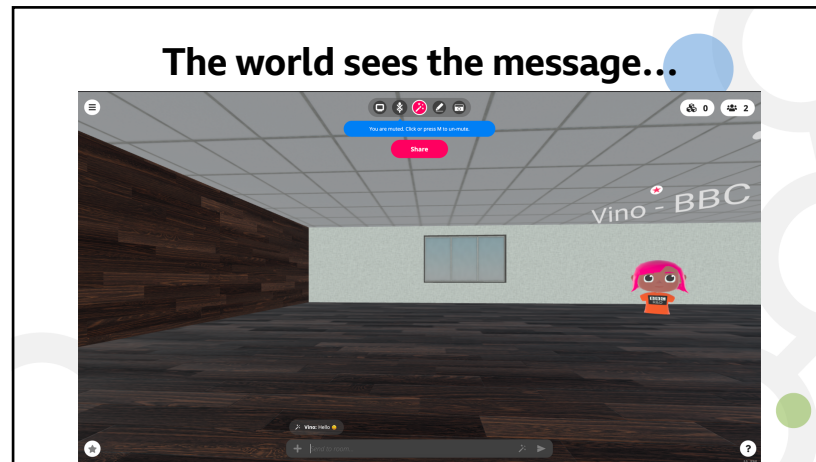
## Hello World!

You can chat to others. Everyone will see the message.

Want Help? Say Hi!

The screenshot shows a first-person view of a virtual room with a wooden floor and walls. A blue bar at the top contains icons for chat, settings, and a 'Share' button. A red 'Share' button is also visible below the bar. A small avatar with pink hair is visible in the distance. A blue arrow points from the 'Chatbox' label to the chat input area at the bottom.

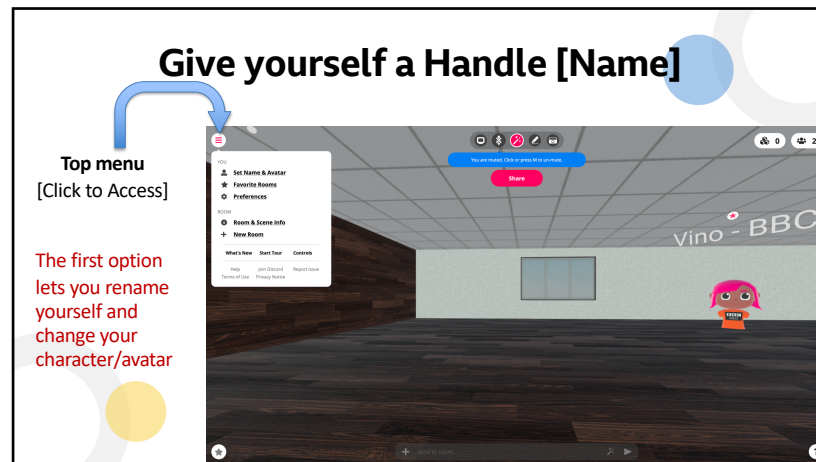
24



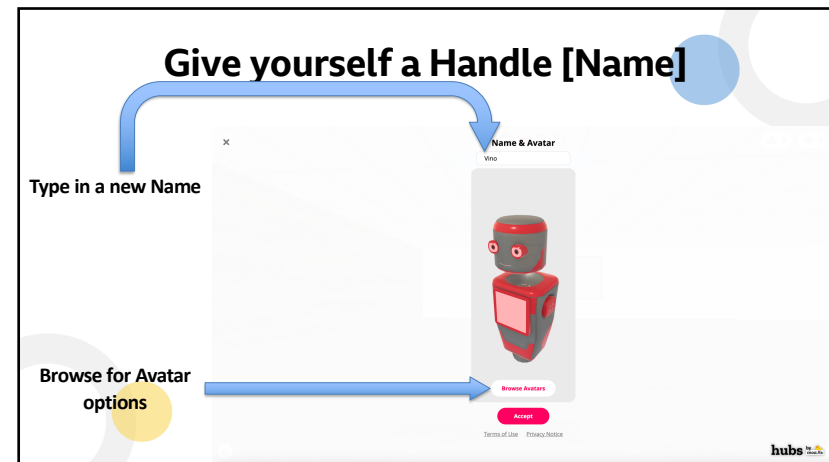
25



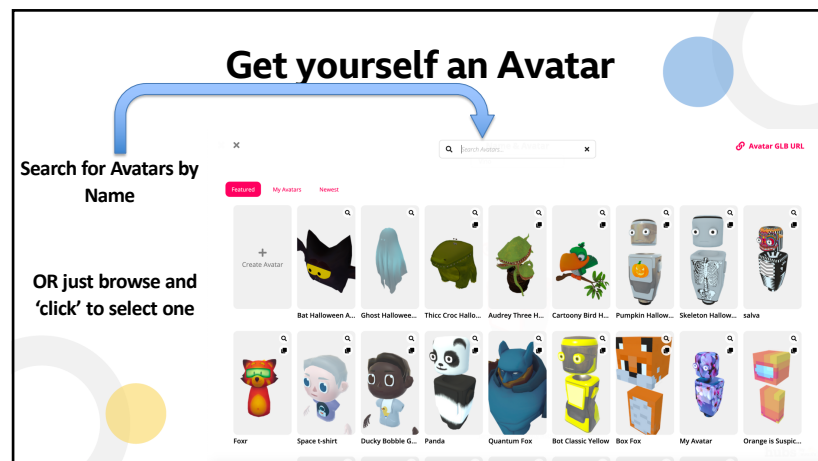
26



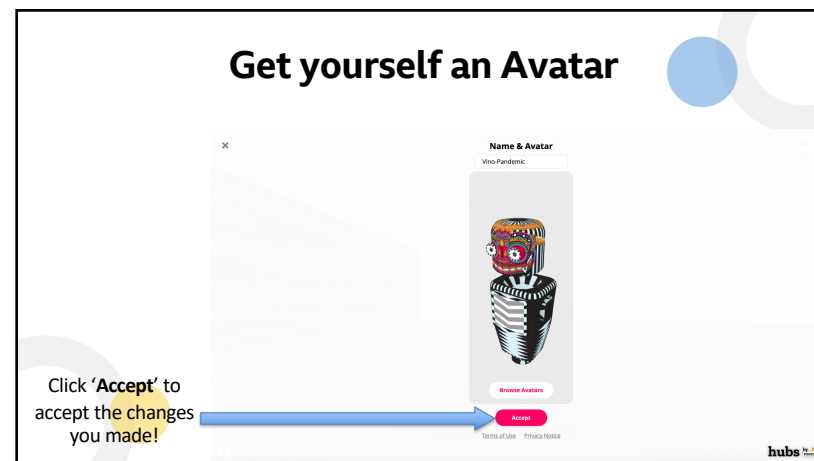
27



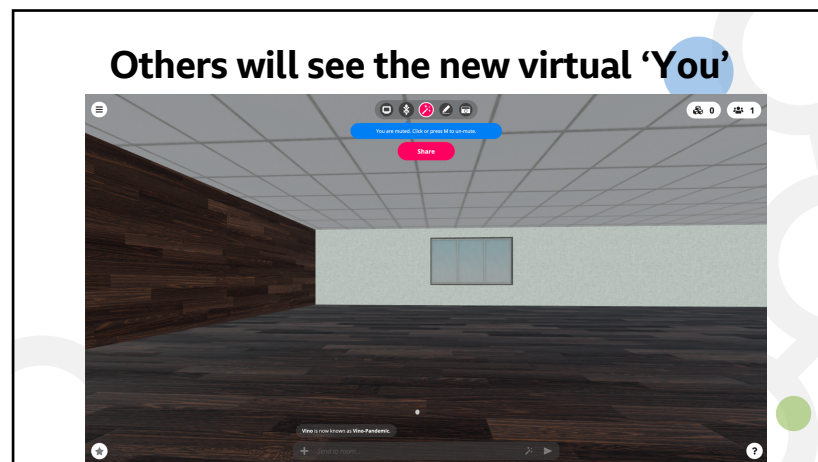
28



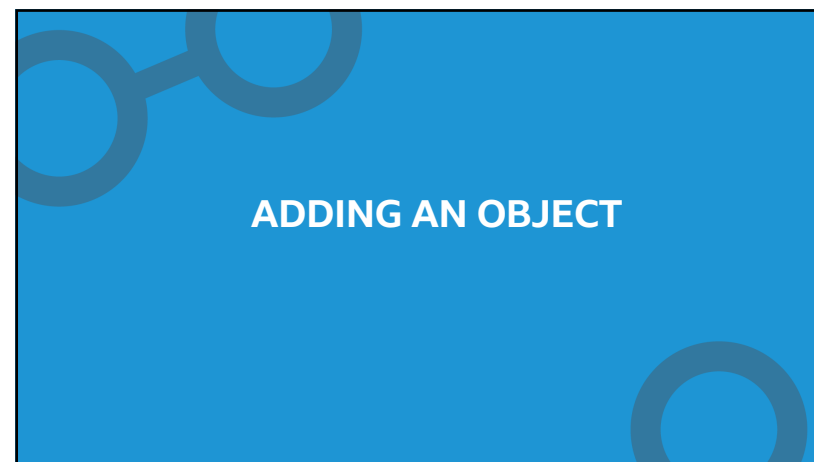
29



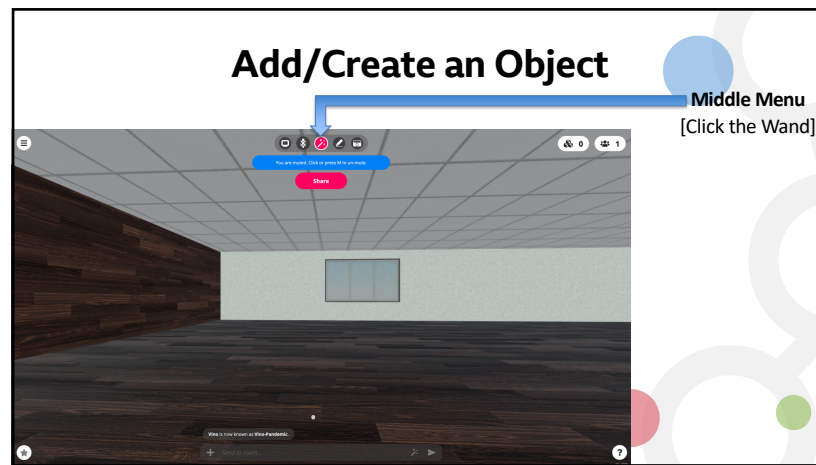
30



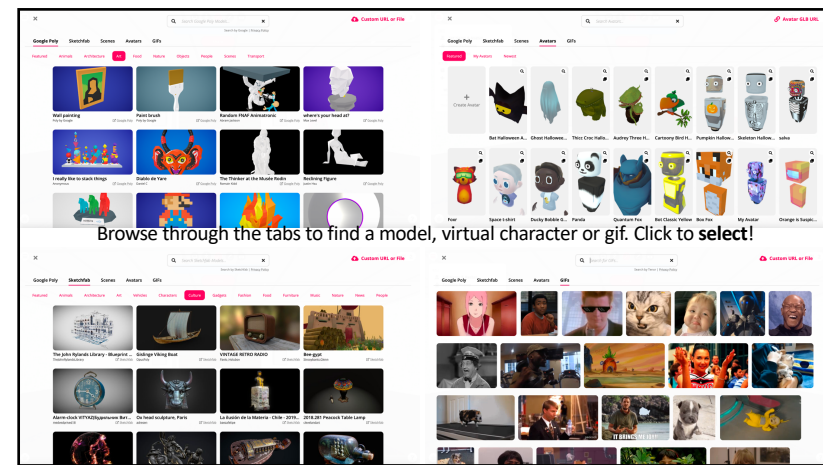
31



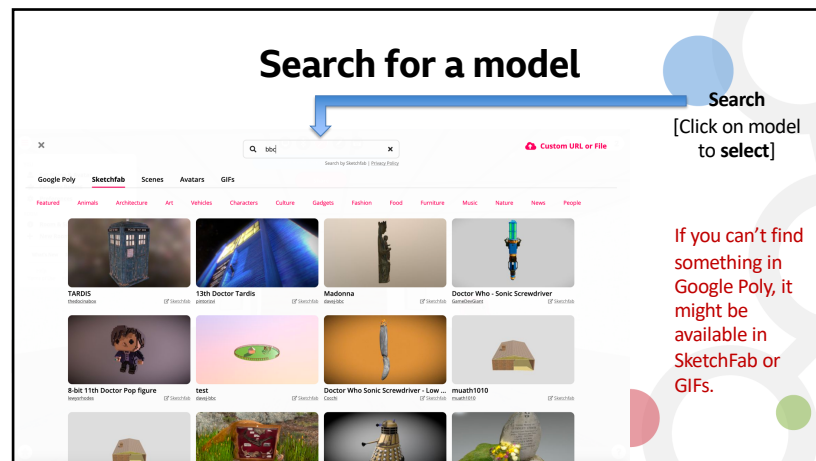
32



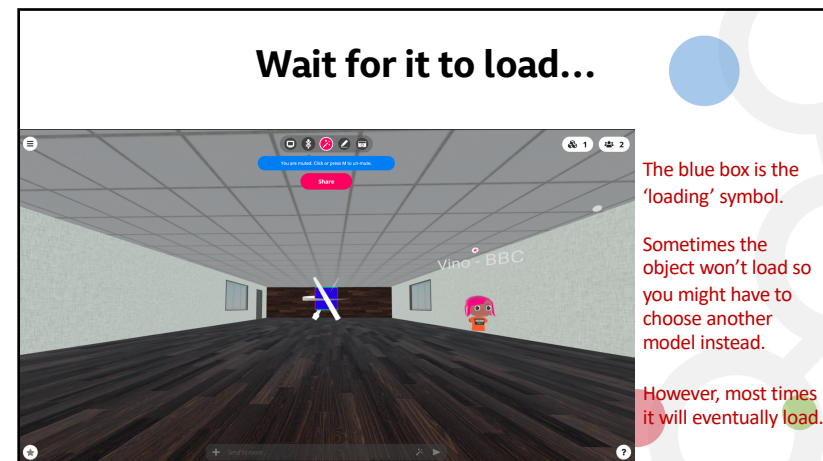
33



34

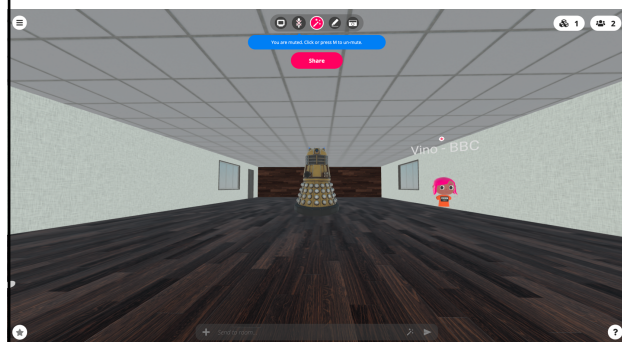


35



36

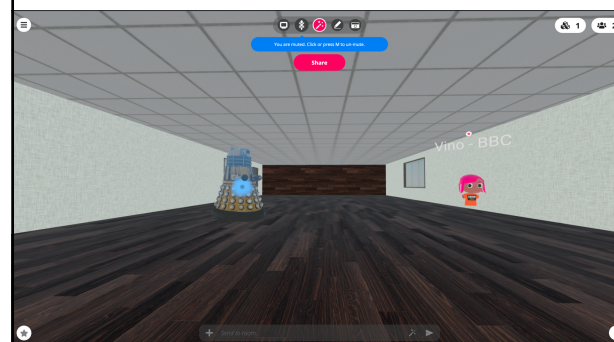
## The Object & Moving it!



You can use your **left mouse button** to click and drag the object around to move it within the room.

37

## Accessing the Object Menu



In addition to moving your object, you can also 'manipulate' your object in other ways.

Use your mouse to 'Hover' over the object

Then press the 'Spacebar' on your keyboard to get the menu options for the object.

38

## The Object Menu



We will use the 'scale', 'rotate', and 'delete' options.

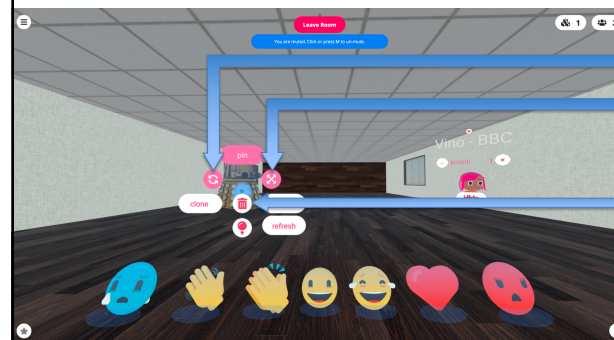
Scale – to change the size of the object.

Rotate – to change the rotation of the object.

Delete – to get rid of your object!

39

## Object Menu labels



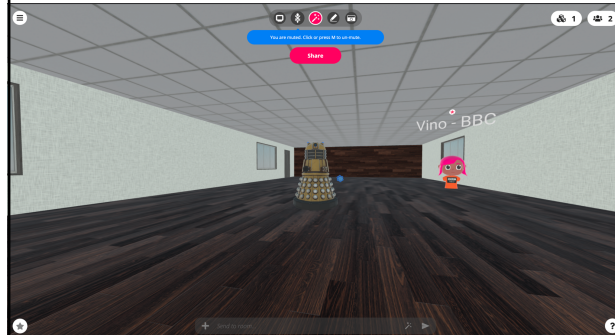
Rotate

Scale

Delete

40

## Scale



Once you select the 'scale' option in the Object Menu, you will notice the cursor changes from a small blue circle to a bigger blue 'atomic' circle.

Move the cursor to make it bigger or smaller.

41

## Scale



Once the object is big/small enough, click the left mouse button to deactivate the 'scale' function.

42

## Rotate



Once you select the 'rotate' option in the Object Menu, move the cursor to rotate the object...

Again, once the object is rotated, click the left mouse button to deactivate the 'rotate' function.

43

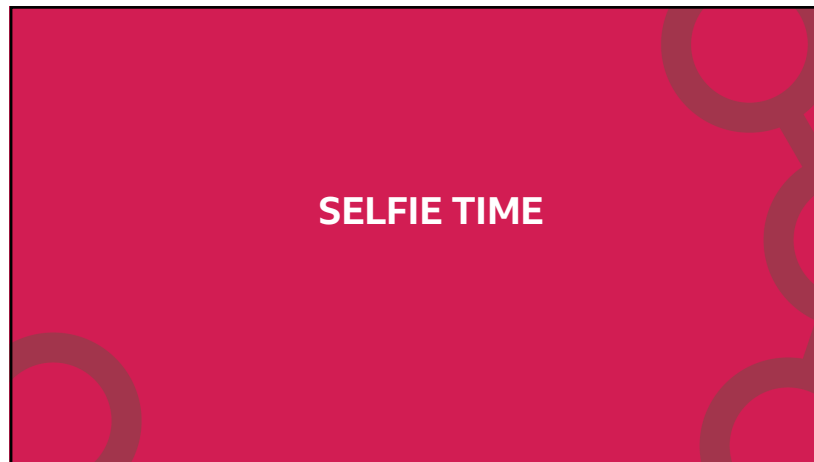
## Delete



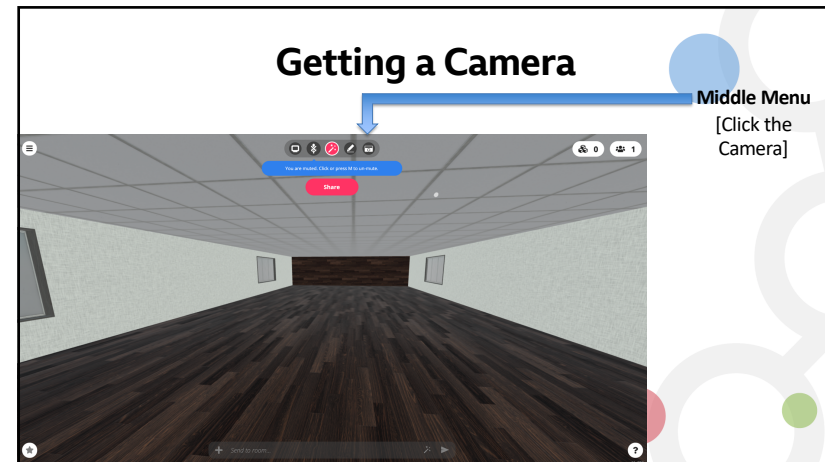
If you select the 'delete' option (the trash can) in the Object Menu, the object will disappear.

Useful: If you want to start again or made a mistake you want to fix.

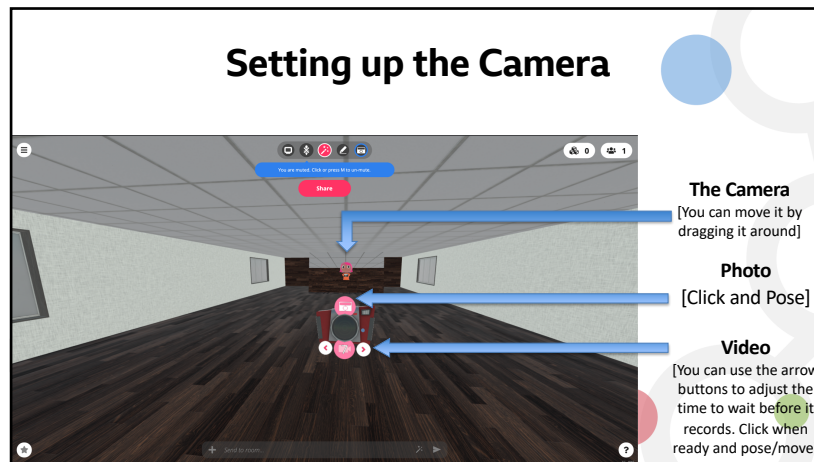
44



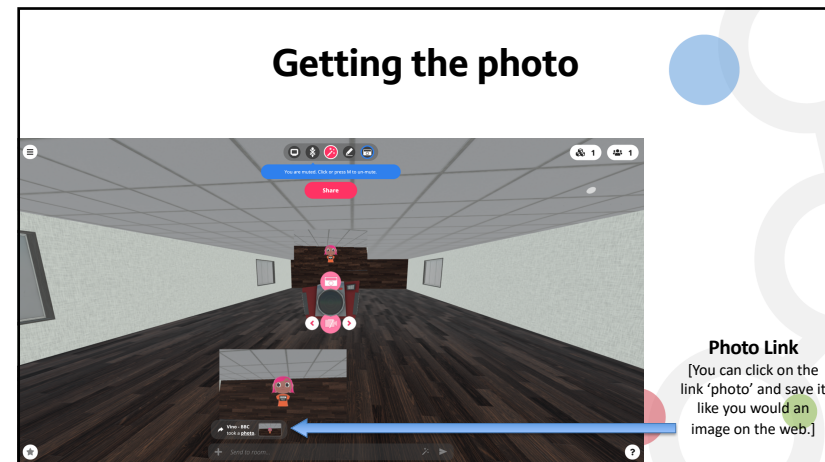
45



46

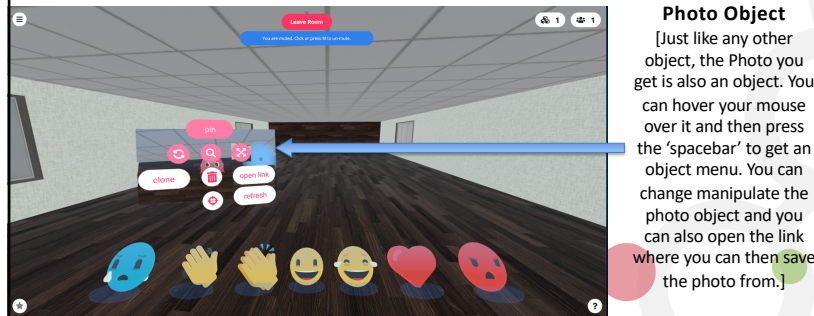


47



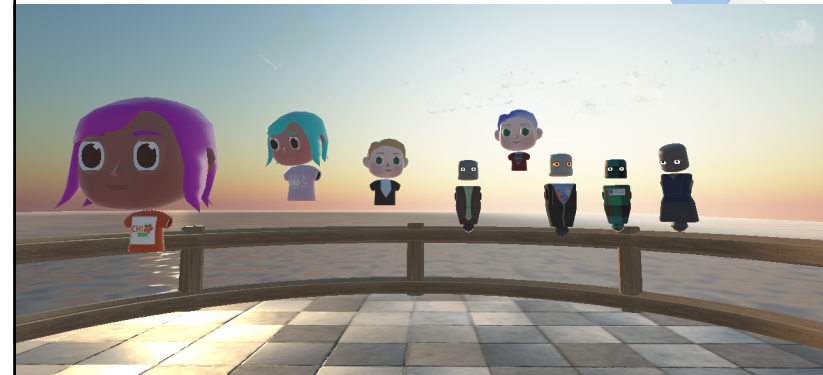
48

## Getting the photo



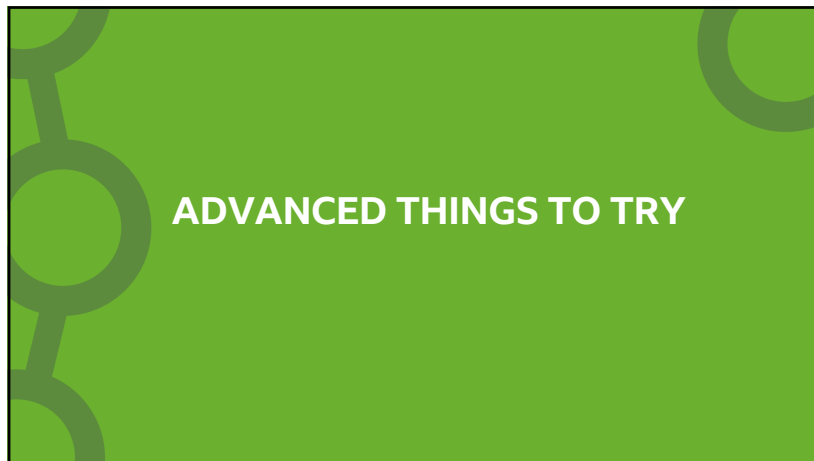
49

## Group Selfies are fun to take.



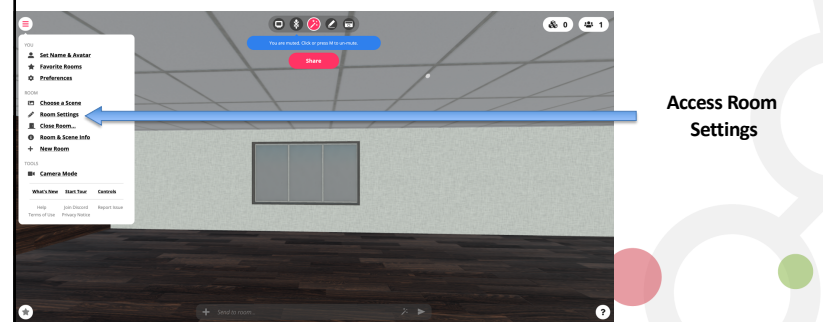
50

## ADVANCED THINGS TO TRY



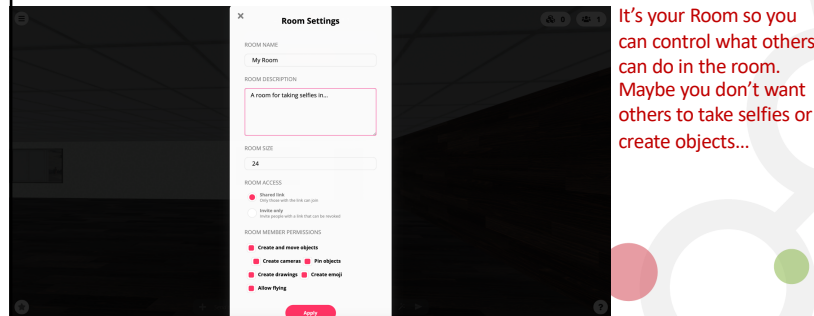
51

## Room Settings in Hubs



52

## Controlling what others can do in the Room



It's your Room so you can control what others can do in the room. Maybe you don't want others to take selfies or create objects...

53

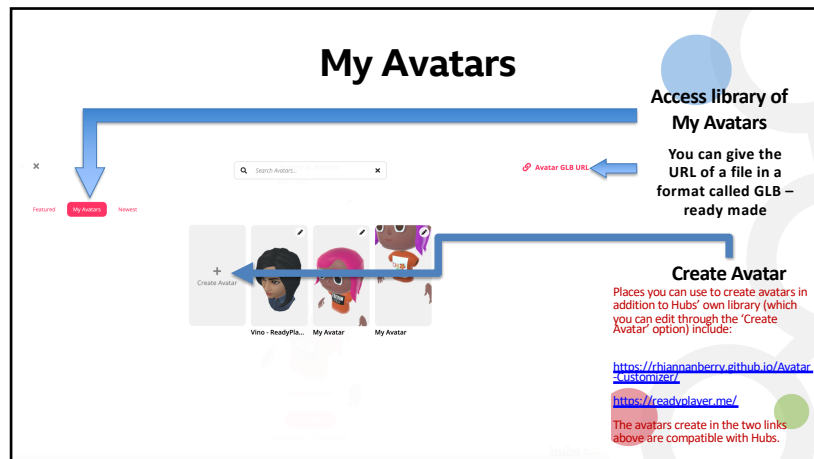
## Better skins for your avatars...



Access library of Avatars

54

## My Avatars



Access library of My Avatars

You can give the URL of a file in a format called GLB – ready made

### Create Avatar

Places you can use to create avatars in addition to Hubs' own library (which you can edit through the 'Create Avatar' option) include:

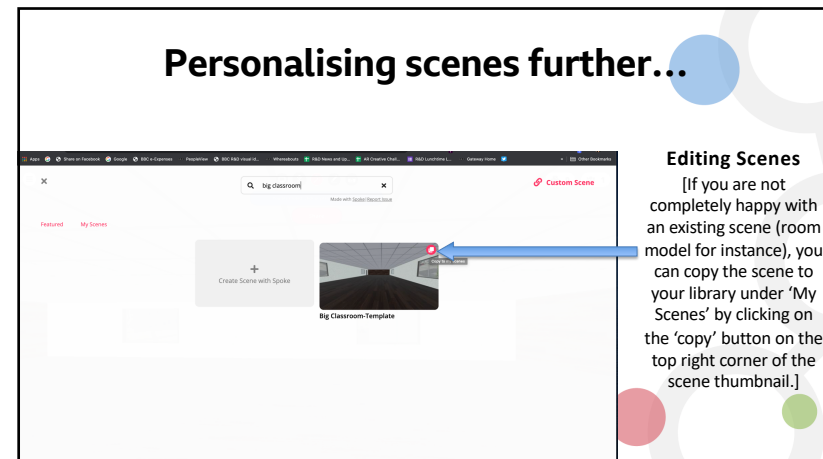
<https://chiannanberry.eithub.io/Avatar-Customizer/>

<https://readyplayer.me/>

The avatars create in the two links above are compatible with Hubs.

55

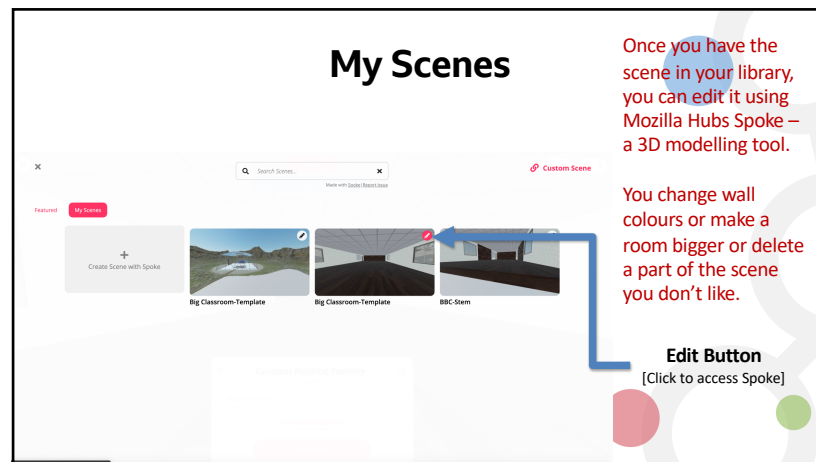
## Personalising scenes further...



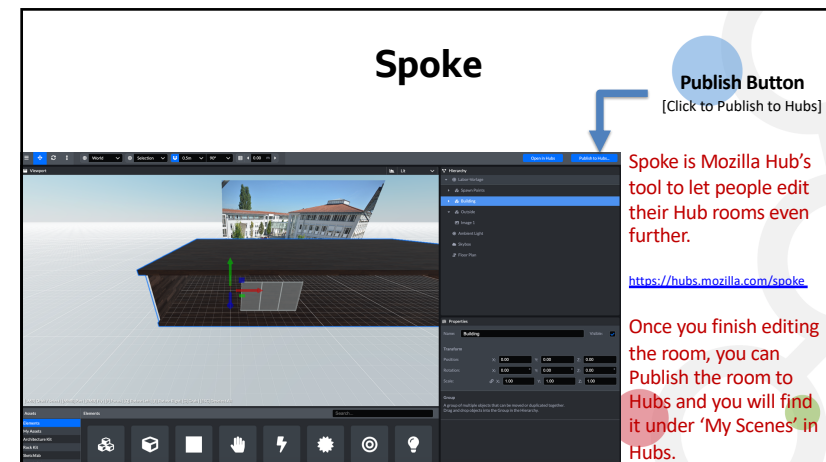
### Editing Scenes

[If you are not completely happy with an existing scene (room model for instance), you can copy the scene to your library under 'My Scenes' by clicking on the 'copy' button on the top right corner of the scene thumbnail.]

56



57



58



59