

***MOZILLA HUBS***  
***CHRAK LAB FOLIGNO 4D***  
***WARSAW, 30/11/2022***  
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# WHAT IS MOZILLA HUBS?

- **Mozilla Hubs** is a social Virtual Reality (VR) platform created by *Mozilla's Mixed Reality Team*.
- It is a tool for **communicating** and **collaborating** privately and allows you to **connect with people** and use resources available on the Internet for your virtual meetings and events.
- Mozilla Hubs works on:
  - **Most Modern Browsers;**
  - **Mobile;**
  - **Desktop;**
  - **VR Devices.**

# hubs

by   
moz://a



# MOZILLA HUBS ROOMS

In **Mozilla Hubs** you can **create your own virtual room** or **enter an existing one** to host workshops, meetings or exhibitions.

## HOW TO CREATE A ROOM:

- Go to <https://hubs.mozilla.com/>;
- Click on "CREATE A ROOM" button;
- Enter your Name and Select your Avatar.

## HOW TO ENTER A ROOM:

- Click on the link your friend/colleague sent you.
- After entering the room, you will have access to a **large number of features** that allow you to collaborate and communicate freely.



# HOW TO MOVE AROUND IN THE ROOM

hubs  
moz://a

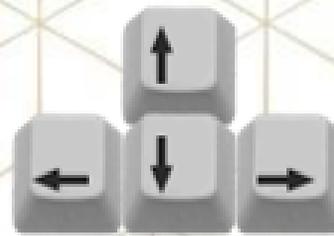


WASD: Move  
G Key: Fly Mode

SPACE: Show Menus  
TAB: Toggle Menus

Forward

Turn  
left



Turn  
right

Reverse

Left Mouse Button:  
Turn

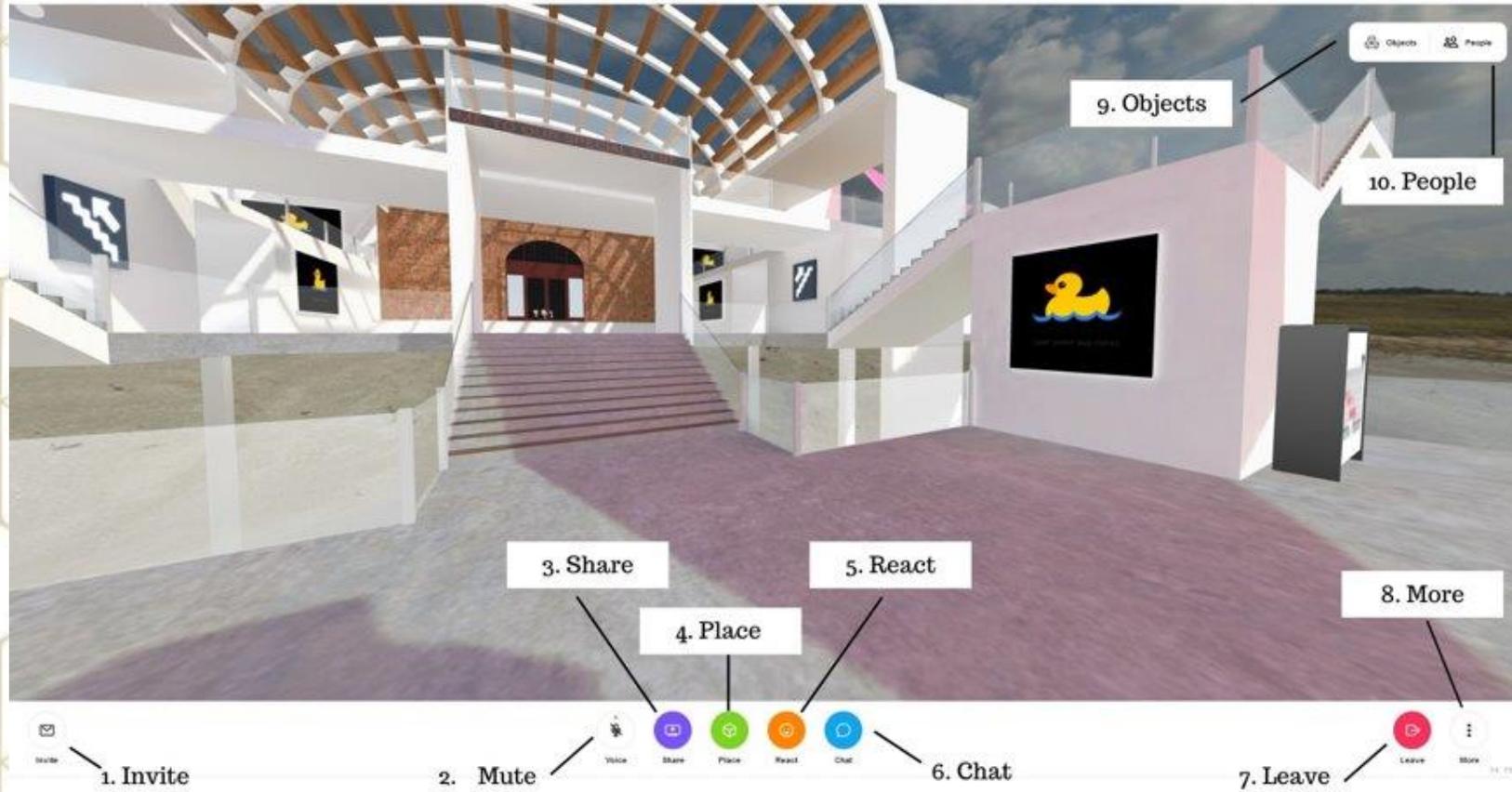


Right Mouse Button:  
Teleport

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# ROOM FEATURES



# ROOM FEATURES

- **1. INVITE:** opens a window which allows you to invite your friends/colleagues copying the room link or the embedded code.
- **2. VOICE:** allows to mute/unmute your microphone.
- **3. SHARE:** allows to share your screen or camera with room members.
- **4. PLACE:** opens a menu with different options
  - *Pen:* use the mouse cursor as if it was a pen;
  - *Camera:* places a camera to take pictures inside the room;
  - *Gif/3D Model/Avatar:* places a Gif/3D Model/Avatar inside the room;
  - *Scene:* places the link to another room;
  - *Upload:* allows to upload everything through URL.



# ***ROOM FEATURES***

- **5. REACT:** opens a menu where you can choose among 6 emojis to react.
- **6. CHAT:** opens the chat tab with other room members.
- **7. LEAVE:** allows you to leave the room.
- **8. MORE:** opens a window where you can see additional commands available.
- **9. OBJECTS:** shows the objects placed inside the room.
- **10. PEOPLE:** shows names and avatars of people inside the room.



# ***WHY IS MOZILLA HUBS A USEFUL TOOL FOR DIDACTICAL PURPOSE?***

- It works on all devices
- It's totally free
- It's easy to use and personalize
- It doesn't track users behaviour

Here's an example: <https://hubs.mozilla.com/Muh4q8C>



***LET'S EXPLORE TOGETHER!***

**<https://hubs.mozilla.com/SonD2co>**



# ***BUILDING SCENES WITH SPOKE***

**spoke** by   
**moz://a**  
make your space

Create 3D social scenes for Hubs



# ***BUILDING SCENES WITH SPOKE***

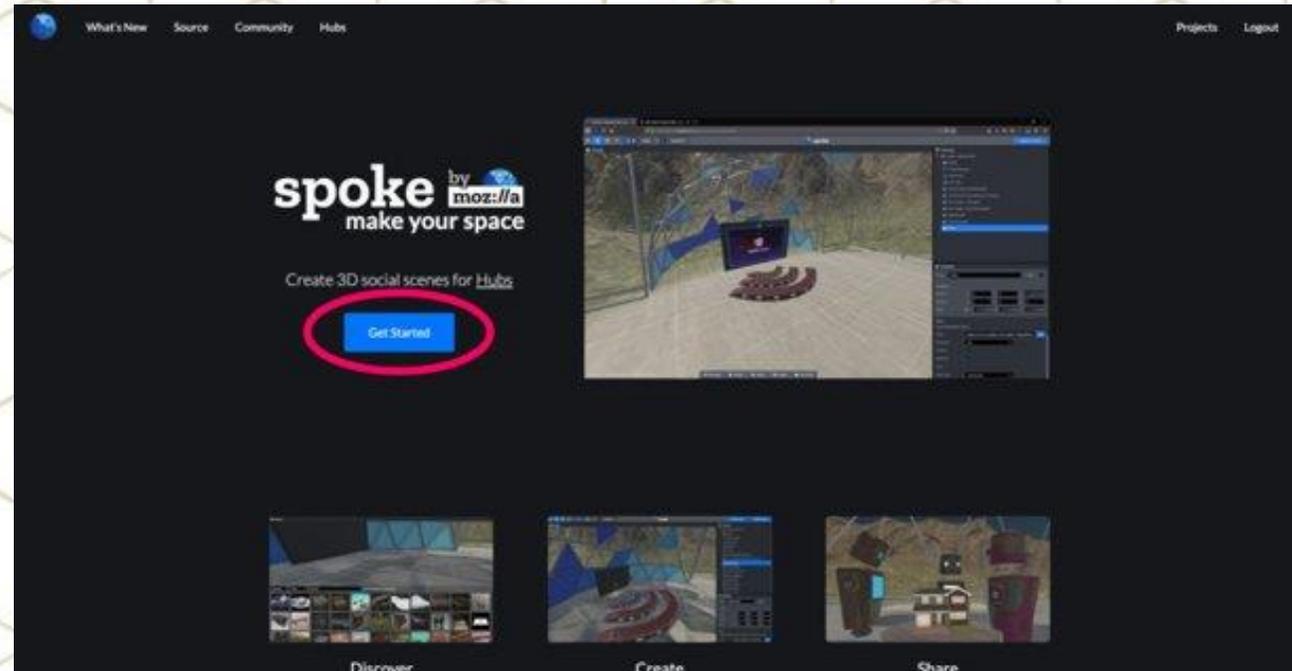
- **Spoke** (<https://hubs.mozilla.com/spoke>) is an **online 3D scene editor** developed by Mozilla's Mixed Reality Team.
- With **Spoke**, you can **build environments** using 3D models, architecture kit pieces, lights, images, videos, and more.
- Once your scene is ready, you can **publish it to Hubs**, or export it as a 3D model.

**spoke** by  **moz://a**



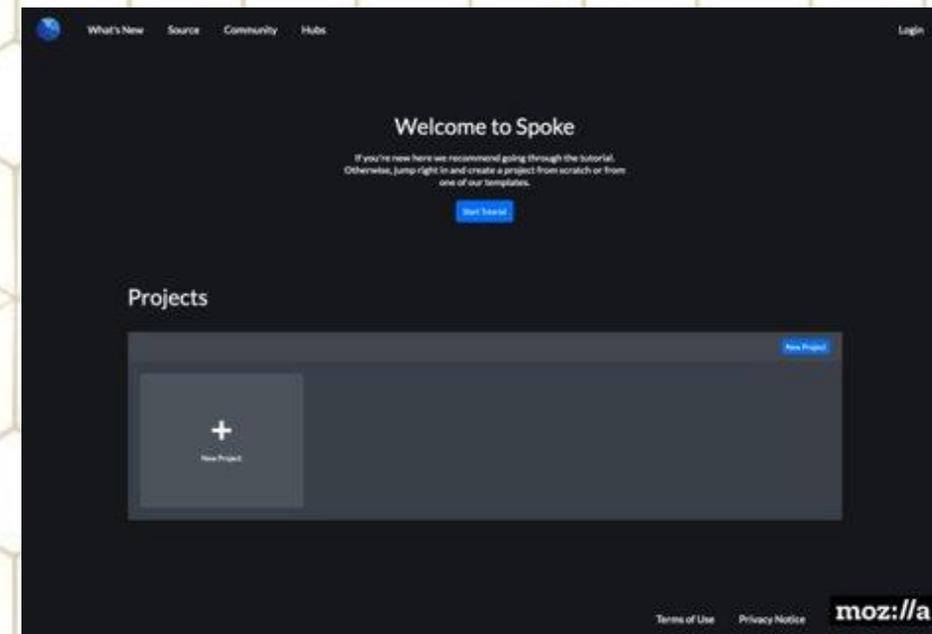
# START A NEW PROJECT

- To create a new Spoke project, head to [hubs.mozilla.com/spoke](https://hubs.mozilla.com/spoke) and click 'Get Started'.



# START A NEW PROJECT

- If it's your first time, you will have the option to follow a tutorial to get familiar with the features.
- If you've created scenes in Spoke before and are signed in, you will see your previous projects listed here.
- Select "**New Project**".



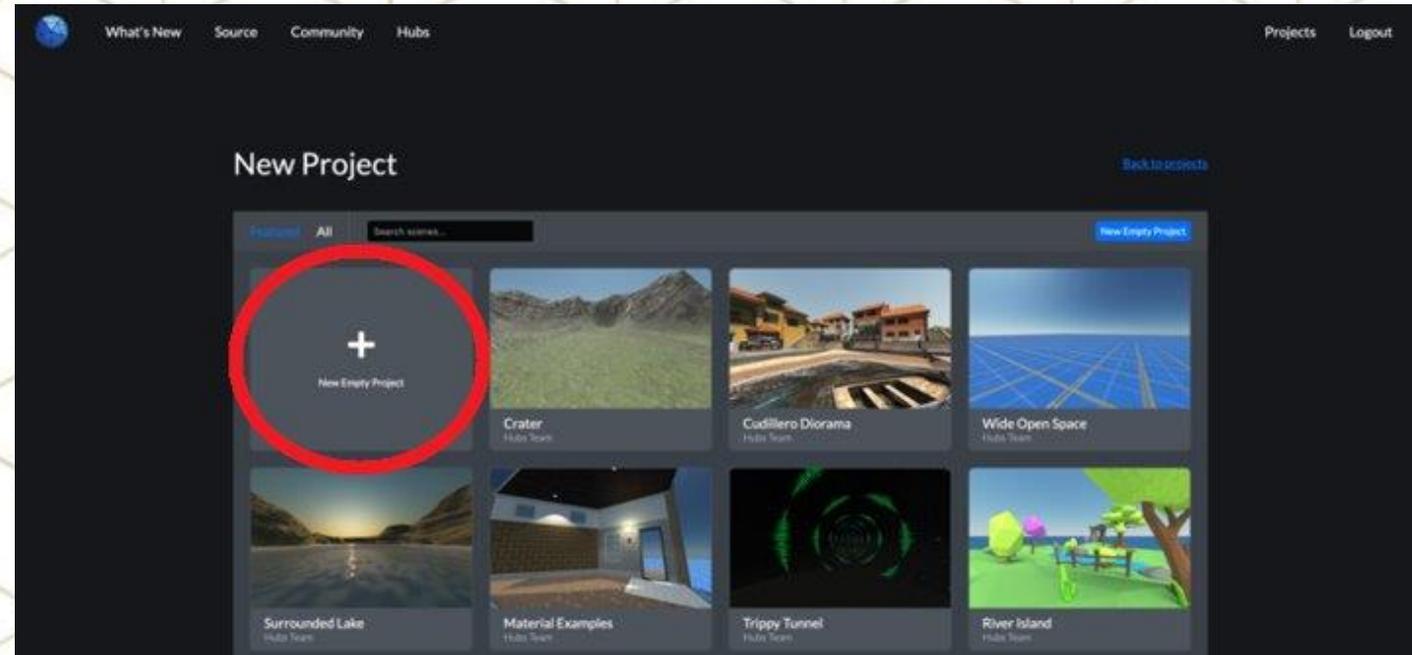
# ***CREATE PROJECT***

- In Spoke, you can:
  - 1. Create a new project from scratch;**
  - 2. Remix an existing scene;**
  - 3. Import a Spoke project someone sent you.**



# 1. CREATE A NEW PROJECT FROM SCRATCH

- Select "New Empty Project".



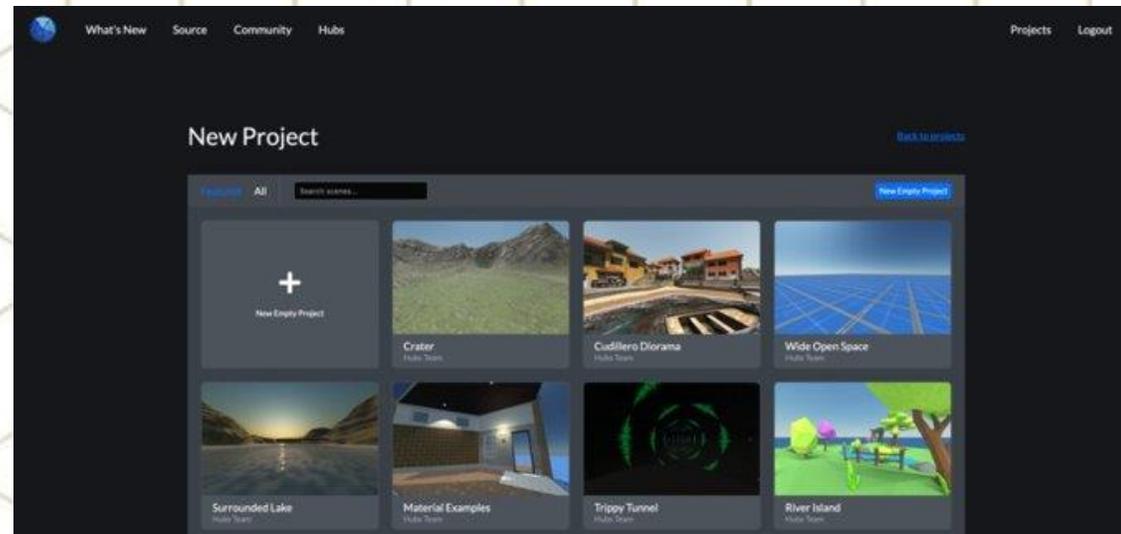
# 1. CREATE A NEW PROJECT FROM SCRATCH

- From here you can **customize your scene** entirely to your liking!
- Try adding content to your scene, or building a house with Spoke architecture kit.



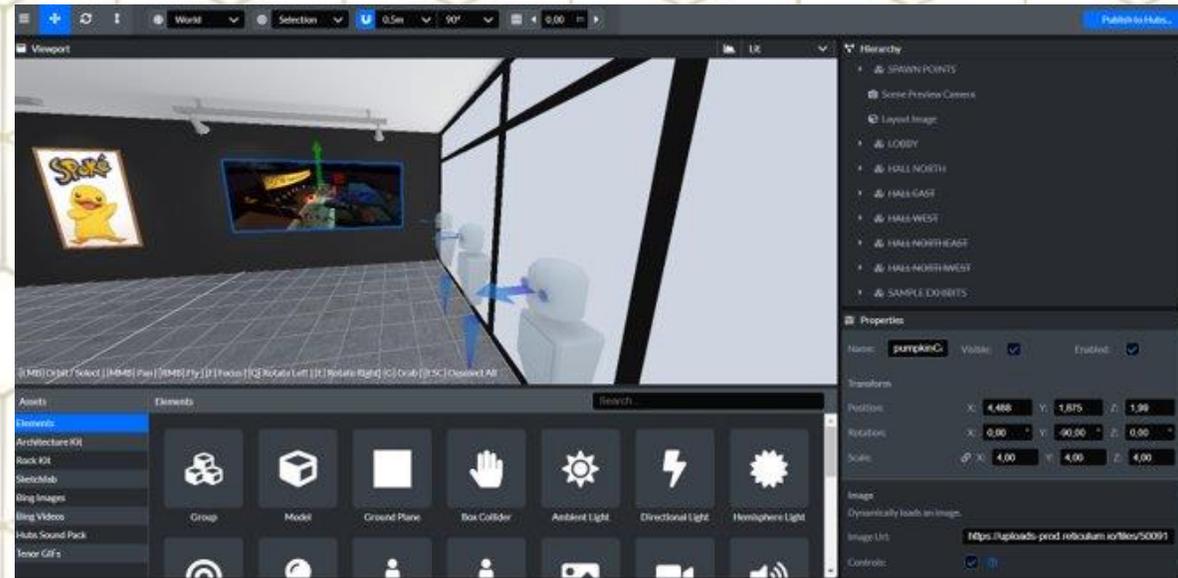
## 2. REMIX AN EXISTING SCENE

- Browse through the page and choose the existing scene which better suits your project.
- You can type keywords in the search bar to narrow the research.



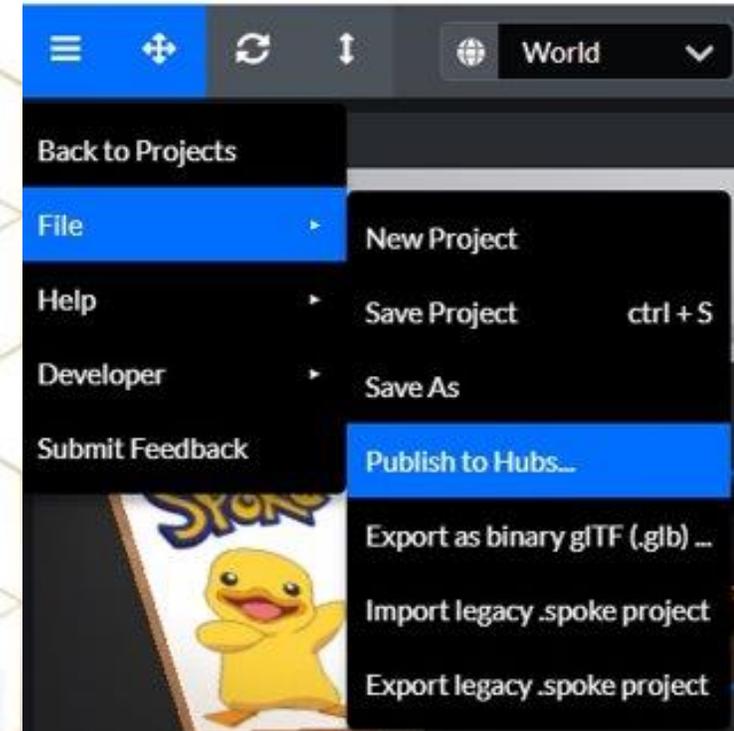
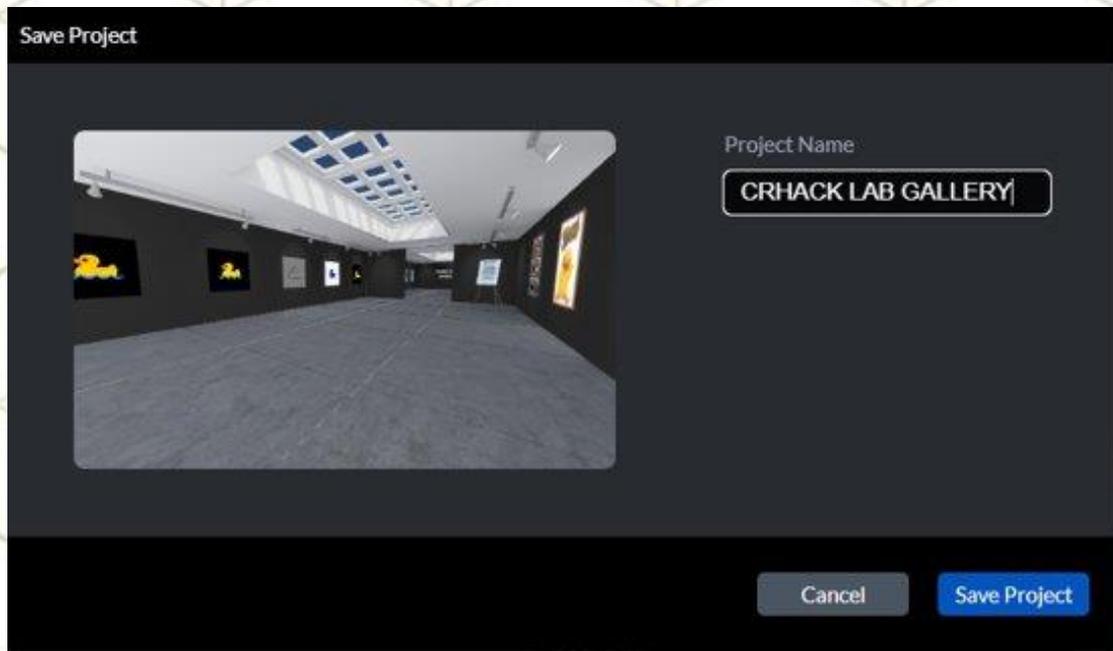
## 2. REMIX AN EXISTING SCENE

- Once you chose the scene, you can **customize it as you prefer**: deleting what you don't need and adding your photos, documents, links etc.



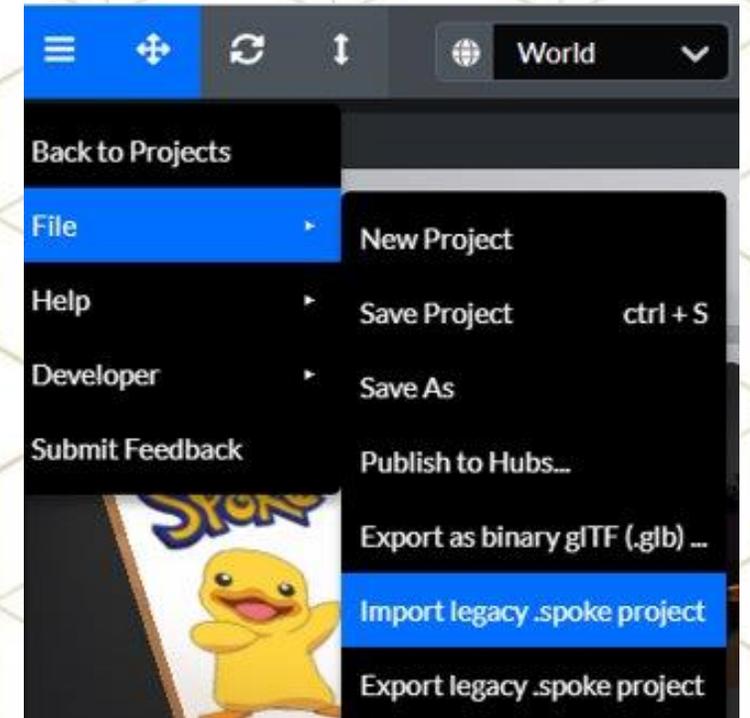
## 2. REMIX AN EXISTING SCENE

- Once your scene is complete, you can name it and publish it to Mozilla Hubs.

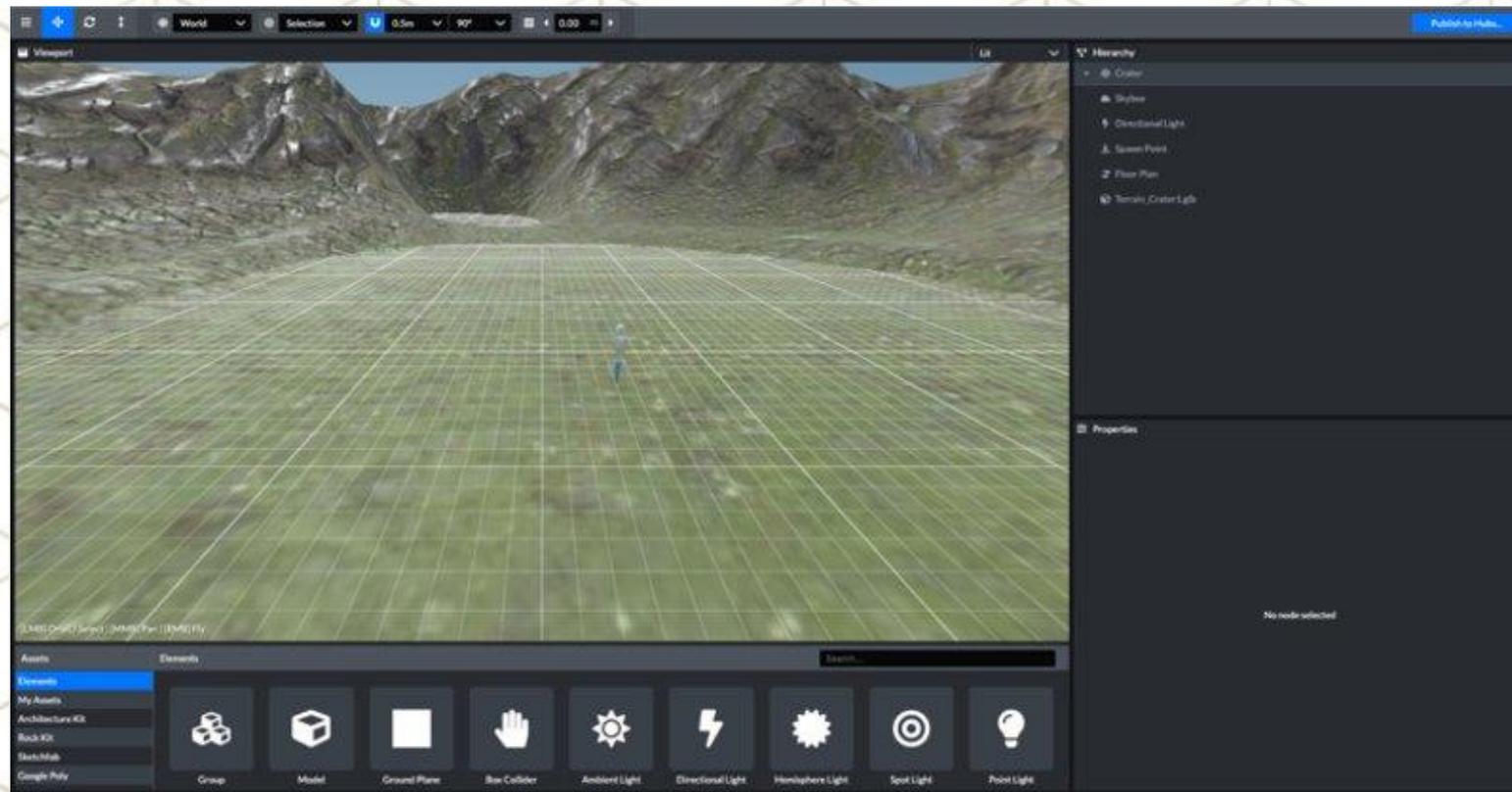


# 3. *IMPORT A SPOKE PROJECT SOMEONE SENDS YOU*

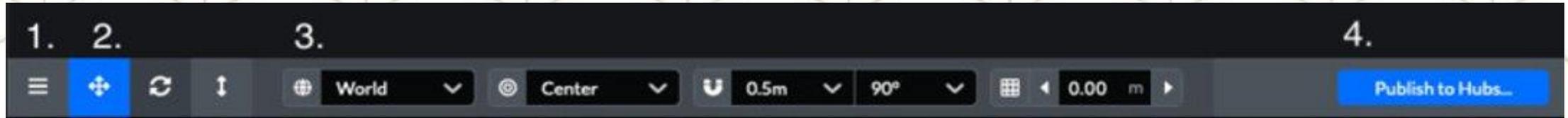
- If someone wants to share their **Spoke scene** with you without publishing it to Hubs, they can **export it as a .spoke file**.
- It is also a useful methodology to cooperate on the same scene.



# USER INTERFACE



# TOOLBAR

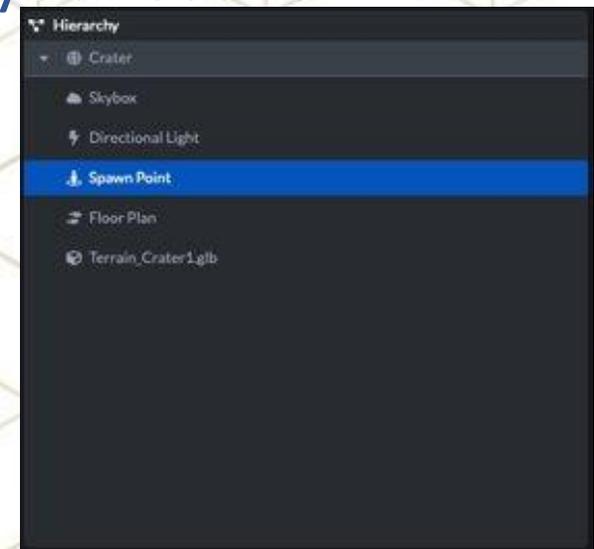


- 1. Dropdown Menu:** options to *save*, *save as*, *export your file*, as well as find *help* on how to use Spoke.
- 2. Transformation Tools:** *move*, *rotate* and *scale* the object you select.
- 3. Grid Tools:** determines *how precisely* your transformation tools are applied
- 4. Publish To Hubs:** open the publish window where you can edit your scene's information before publishing it to *Hubs*.

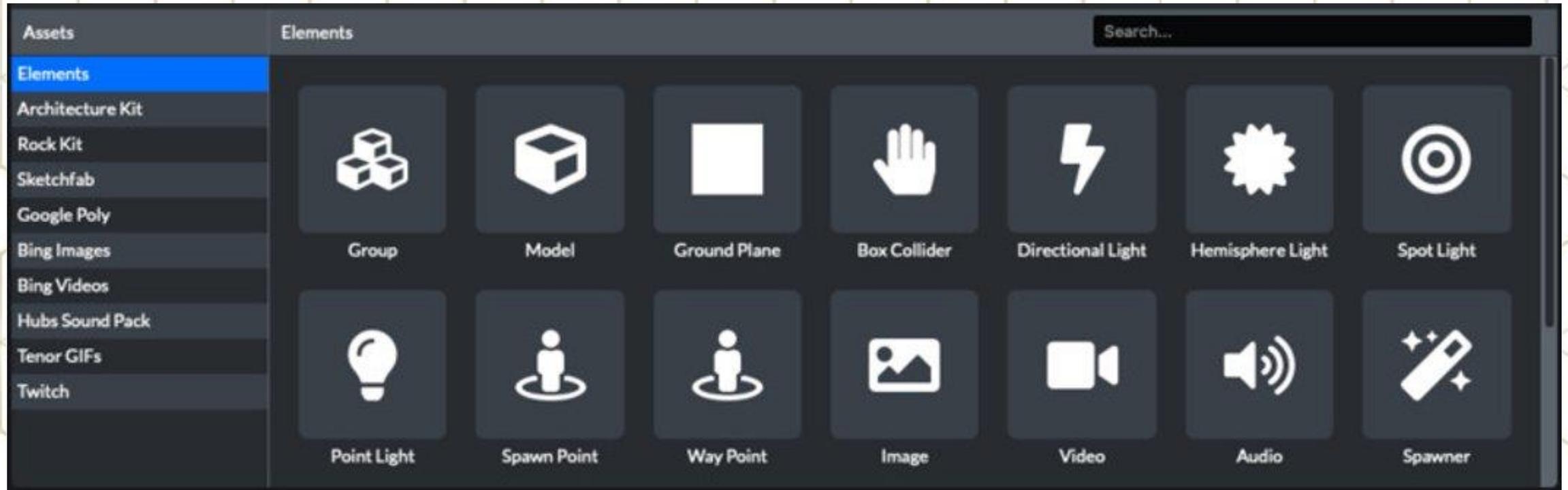


# ***HIERARCHY PANEL***

- Objects you add to the scene show up in the hierarchy panel.
- Double click the object focus it in the viewport.
- You can drag objects inside the hierarchy panel to reorder or reparent them.
- You can also drag drop items from the assets panel and files from your computer into the hierarchy panel to add them to your scene.



# ASSETS PANEL



# ASSETS PANEL

- **1. Elements:** Elements are the basic building blocks in Spoke. You'll find lights, media, spawn points, and every other type of object here.
- **2. My Assets:** Upload and search your own 3D models, images, videos, and audio.
- **3. Architecture Kit:** The Architecture Kit contains pieces that can be put together to construct a wide variety of structures. This kit contains floors, walls, stairs, and more.
- **4. Rock Kit:** The Rock Kit contains a collection of realistic rock models that can be used to add detail to terrain, construct platforms, or anything else you might need a rock for.
- **5. Sketchfab:** Sketchfab is an online marketplace for 3D models. It contains a wide variety of high quality models to help you fill out your scene.



# ***ASSETS PANEL***

- **6. Google Poly:** Google Poly is another source for 3D models. Most models are in a flat low poly style.
- **7. Bing Images:** Search Bing for images from around the web.
- **8. Bing Videos:** Search Bing for videos from around the web.
- **9. Hubs Sound Pack:** Add Sounds to your scene with a vast choice for each place.
- **10. Tenor Gifs:** Find animated gifs to add to your scene on Tenor.

