



# CLO-SET Virtual Showroom Guide



# List of Content

This guideline explains different workflows of making the virtual showroom via CLO-SET

## Fundamentals

[CLO-SET Virtual Showroom Workflow](#)

## Method 1

[By taking the pictures of your real showroom](#)

## Method 2

[By using the VS background preset provided by CLO-SET](#)

## Method 3

[By building the virtual showroom in CLO and export it to CLO-SET](#)

## Method 4

[By building the virtual showroom from 3rd party software and export it to CLOSET](#)



# Fundamentals

## CLO-SET Virtual Showroom Workflow



# Fundamentals

## CLO-SET Virtual Showroom Workflow

1. In CLO-SET virtual showroom, you will be able to create 2 types of the background environment. Please well prepare the 2D or 3D images accordingly



### 2D Image

image ratio : 16:9

Resolution: up to 8192px \* 4096px, 100mb

File format: png, svg, jpg, jpeg, webp

the image can be taken by smart phone & professional camera



### 3D Panoramic Image

image ratio : 16:9

Resolution: up to 8192px \* 4096px, 100mb

File format: png, svg, jpg, jpeg, webp, HDR1

the image can be taken by smart phone, professional camera,  
& the camera with panoramic features

# Fundamentals

## CLO-SET Virtual Showroom Workflow

2. Please also prepare the contents which will be showcased in the virtual showroom in advanced



### 3D Files

Supported File format:  
CLO default format e.g. zprj, zpac, zfab etc.  
Common 3D format, e.g. glb, obj, fbx etc.

Please read this manual for details [HERE](#)



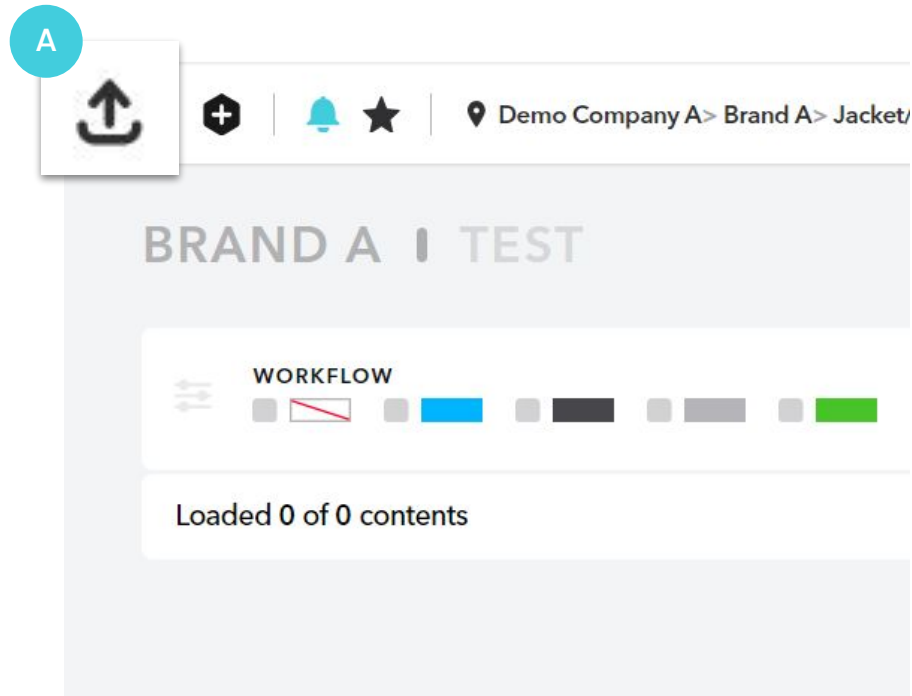
### 2D Files

Supported File format:  
jpg, png, jpeg, gif

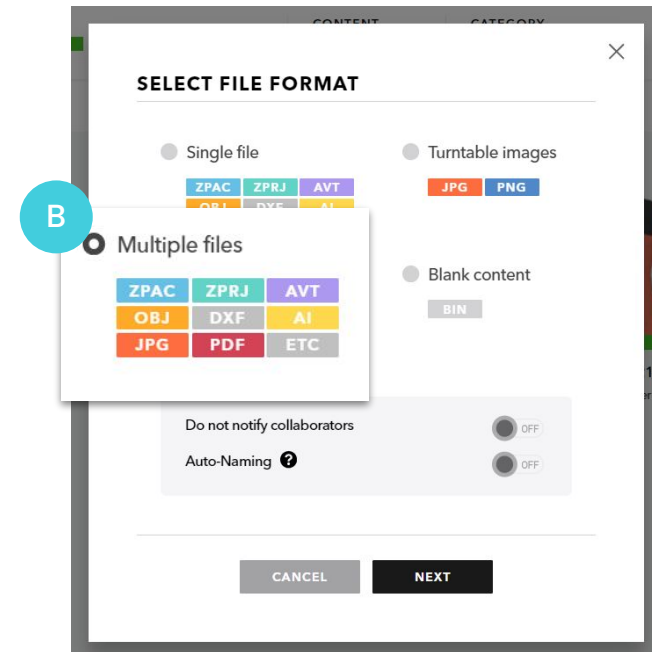
# Fundamentals

## CLO-SET Virtual Showroom Workflow

### 3. Upload all 3D files to the workroom in CLO-SET



- Click the upload button on the upper left of workroom

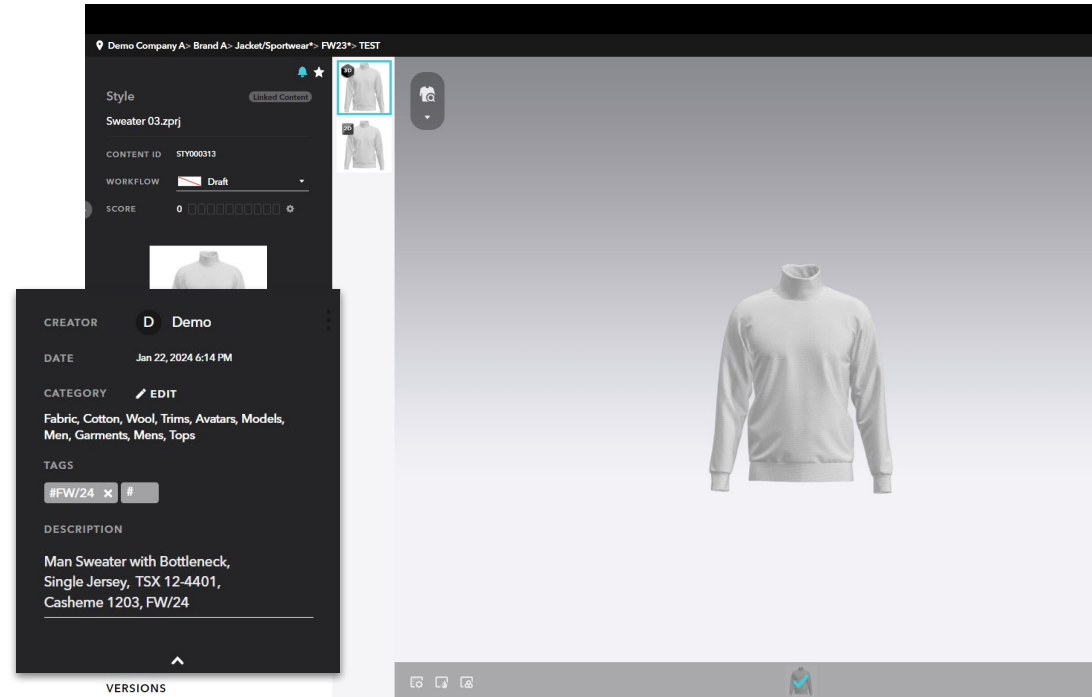
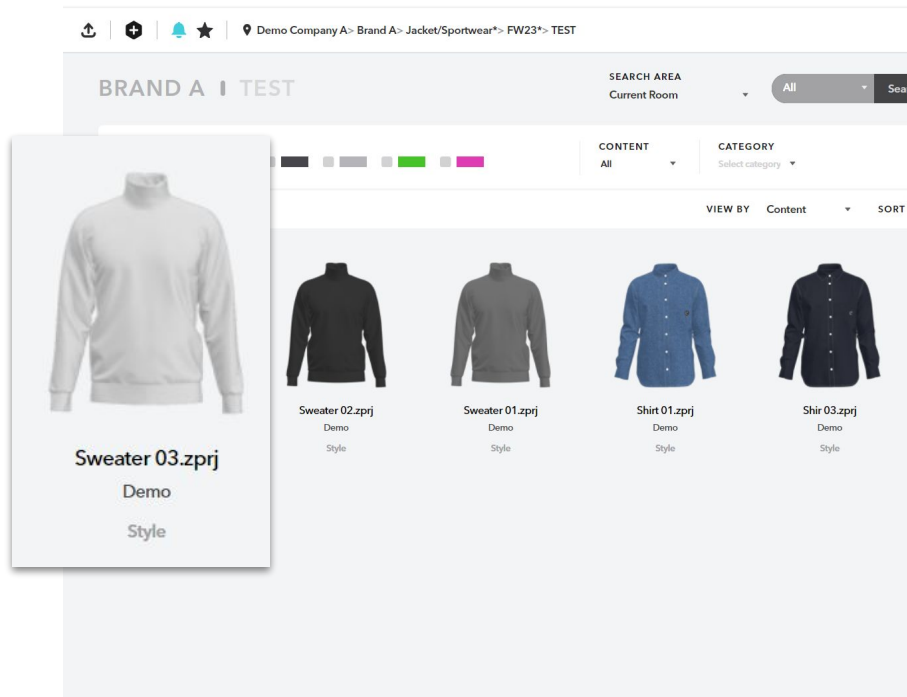


- select to upload single or multiple files
- attach the file from your computer

# Fundamentals

## CLO-SET Virtual Showroom Workflow

### 3. Upload all 3D files to the workroom in CLO-SET

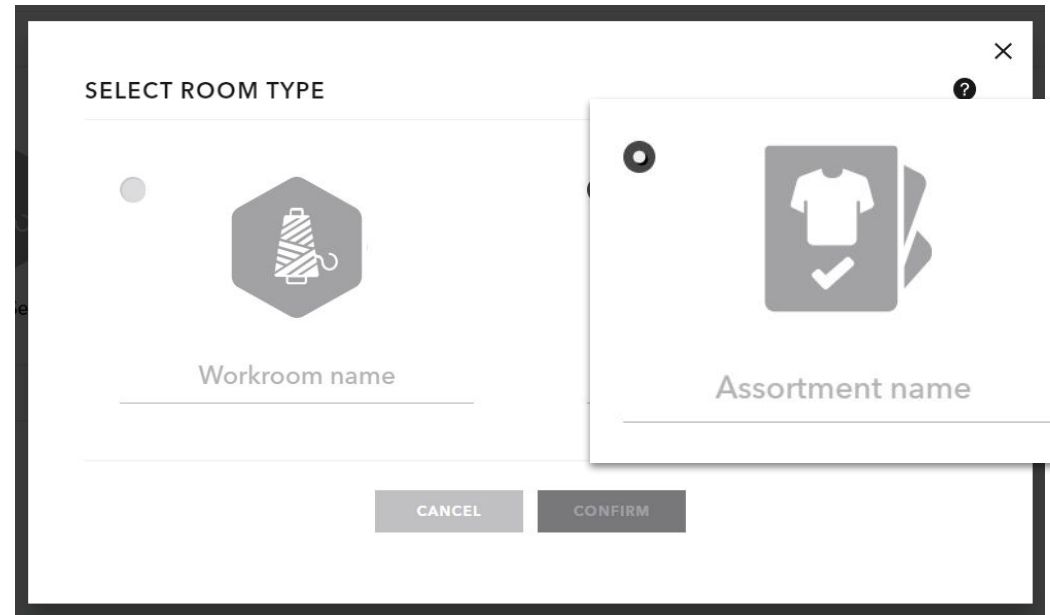
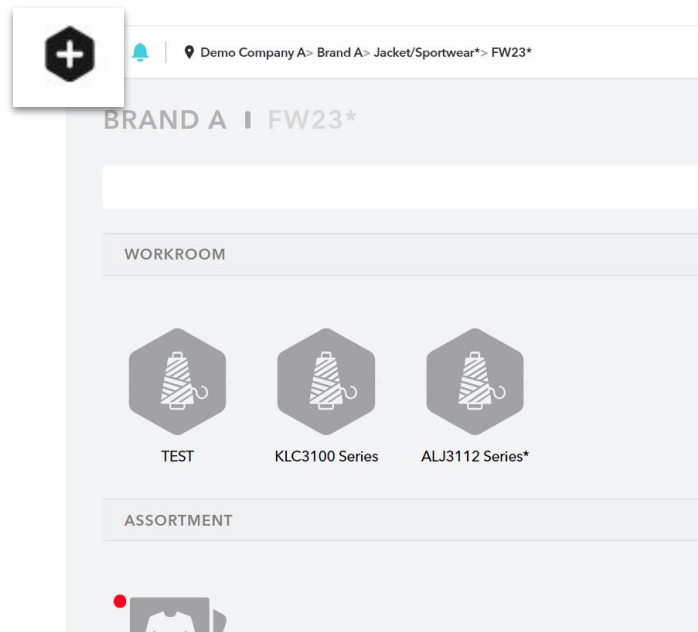


- d. Once the styles are uploaded, go to it's content page and edit it's description & all basic info at the left hand corner. the info will be displayed in the virtual showroom lastly

# Fundamentals

## CLO-SET Virtual Showroom Workflow

- create a new assortment, and put all uploaded 3D file to the assortment



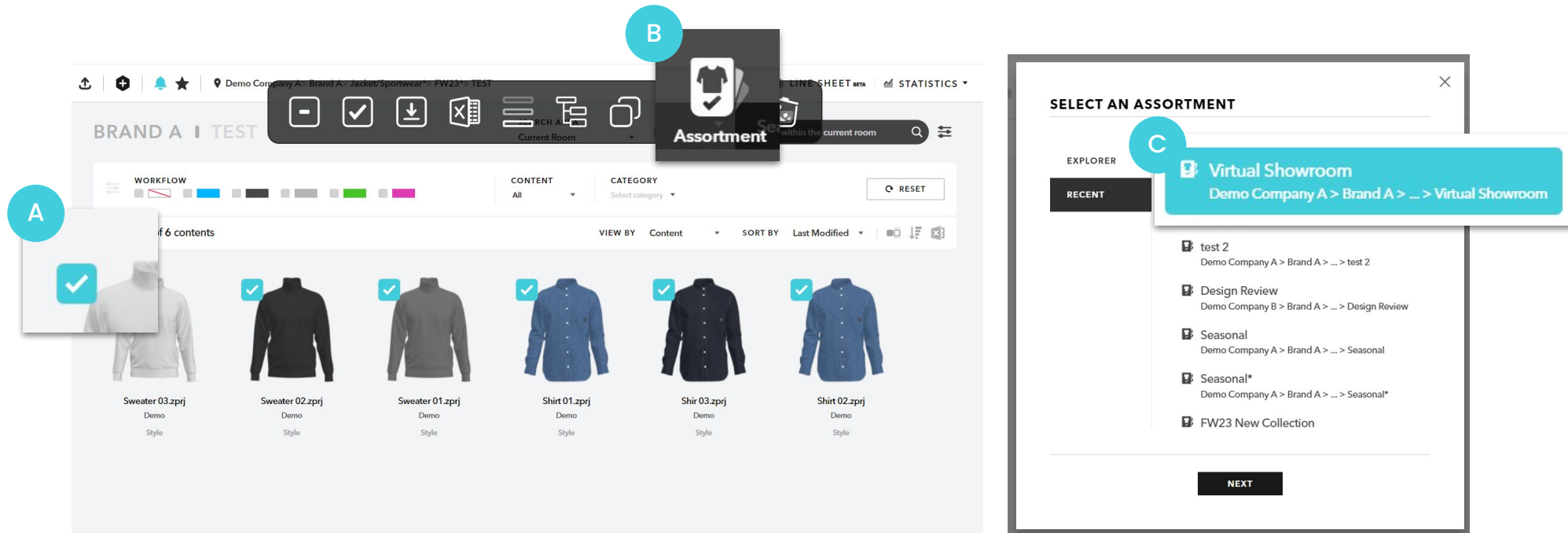
- Click 'create assortment' on the top left of workroom level
- A new assortment will be created



# Fundamentals

## CLO-SET Virtual Showroom Workflow

- create a new assortment, and put all the uploaded 3D file to the assortment

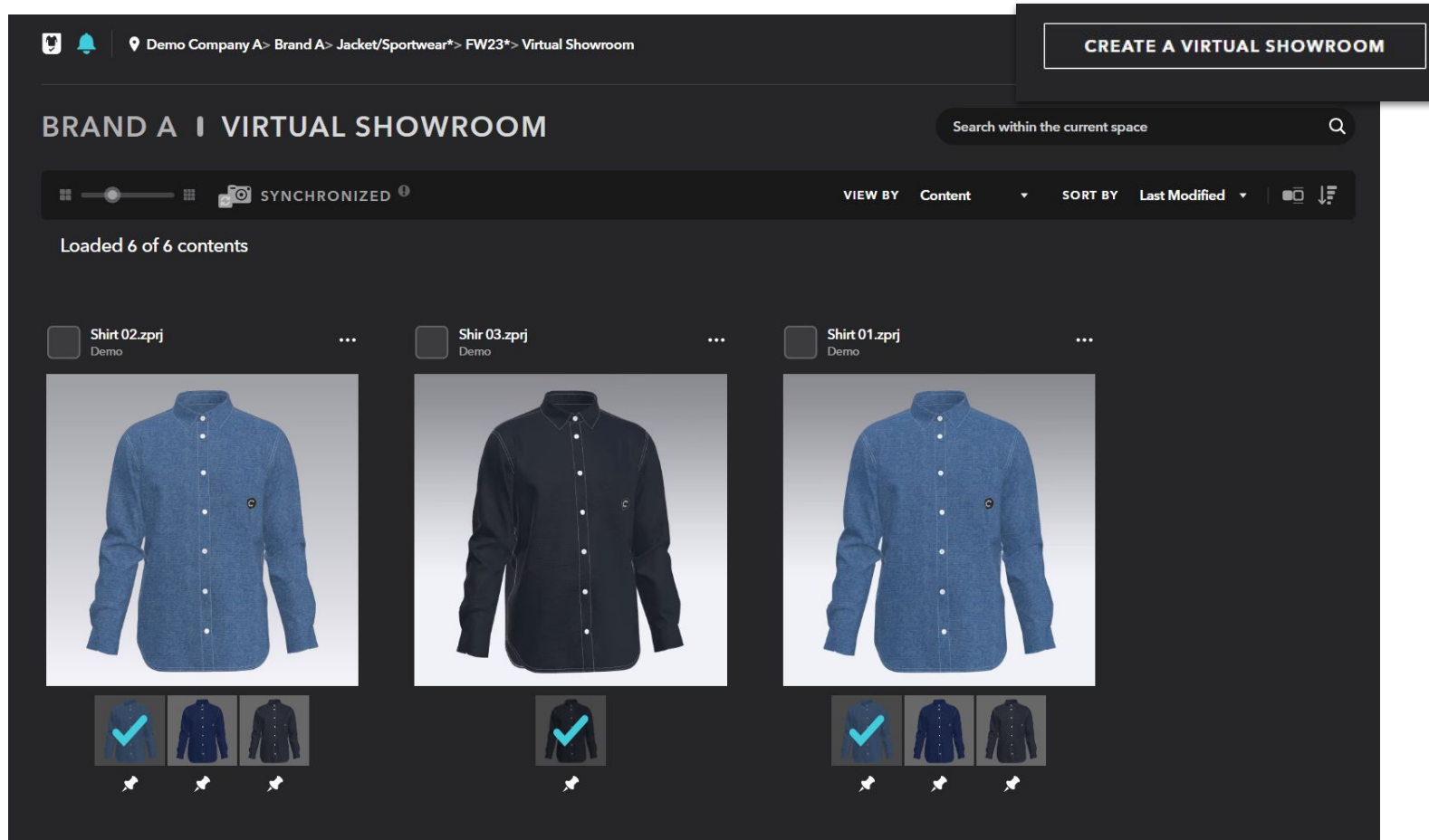


- Go back to the workroom and select all 3D files
- click 'assortment' in the toggle bar
- select the assortment you have newly created
- all 3D files will be linked to the assortment

# Fundamentals

## CLO-SET Virtual Showroom Workflow

5. In the assortment, click 'Create Virtual Showroom' on the top right to start the setup



# Fundamentals

## CLO-SET Virtual Showroom Workflow

### 6. Firstly, please complete the basic information and Environment

- Name
- Environment
  - the background of the showroom
  - can be either 2D or 3D images
  - when you click select, you can attach multiple images from your desktop
- Custom Logo

Click 'create' when it is completed

The screenshot displays the 'CREATE A VIRTUAL SHOWROOM' interface. The main form has a dark background and includes the following sections:

- NAME\***: A text input field with the placeholder 'Enter Your Showroom's Name'.
- ENVIRONMENT**:
  - SPACE TYPE\***: A section with the instruction 'Please select the background image type of the showroom. The selected type cannot be changed.' and two radio buttons: '360°Image' (selected) and '2D Image'.
  - SPACE IMAGE\***: A section with the instruction 'Please upload your offline showroom in a 360° image. You may utilize a preset Space Image provided for testing.' Below this are four image thumbnails, each with a 'SELECT' button.
  - CUSTOM LOGO**: A section with a single image thumbnail and a 'SELECT' button.
- CANCEL** and **CREATE** buttons at the bottom.

A modal window titled 'SELECT A 360° IMAGE' is overlaid on the right side. It features a 'DOWNLOAD PRESET IMAGE' link at the top right. The main area contains a 'Drag and drop your files' instruction, a cloud icon with an upward arrow, and a 'CHOOSE FILE' button. Below this, there are two rows of image thumbnails labeled 'BACKGROUND PRESET1' and 'BACKGROUND PRESET2'. At the bottom of the modal are 'CANCEL' and 'OK' buttons. Small text at the bottom of the modal provides file specifications: '\* Optimized image ratio : 16:9', '\* Files must be less than 8192px \* 4096px, 100mb', and '\* file format must be 'png', 'svg', 'jpg', 'jpeg', 'webp', 'hdr'. It also notes 'It may take some time if the file size is too large.'

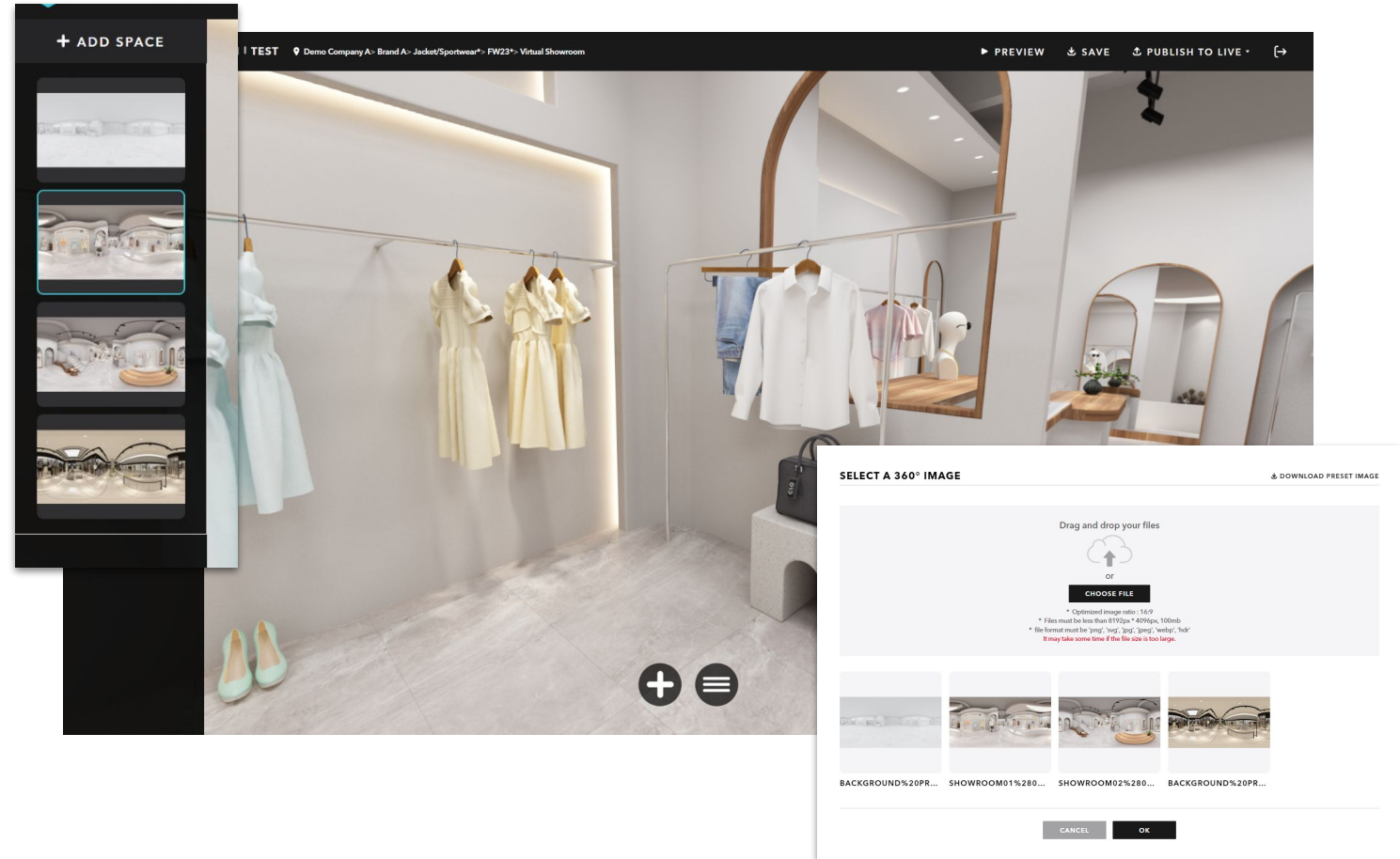
# Fundamentals

## CLO-SET Virtual Showroom Workflow

### 7. Secondly, please complete the virtual showroom in the preview page

#### add & edit environment

- by clicking on each background thumbnail, you can switch to other environment
- by clicking 'add space' on the top, you can attach additional 2D/3D images as the background



# Fundamentals

## CLO-SET Virtual Showroom Workflow

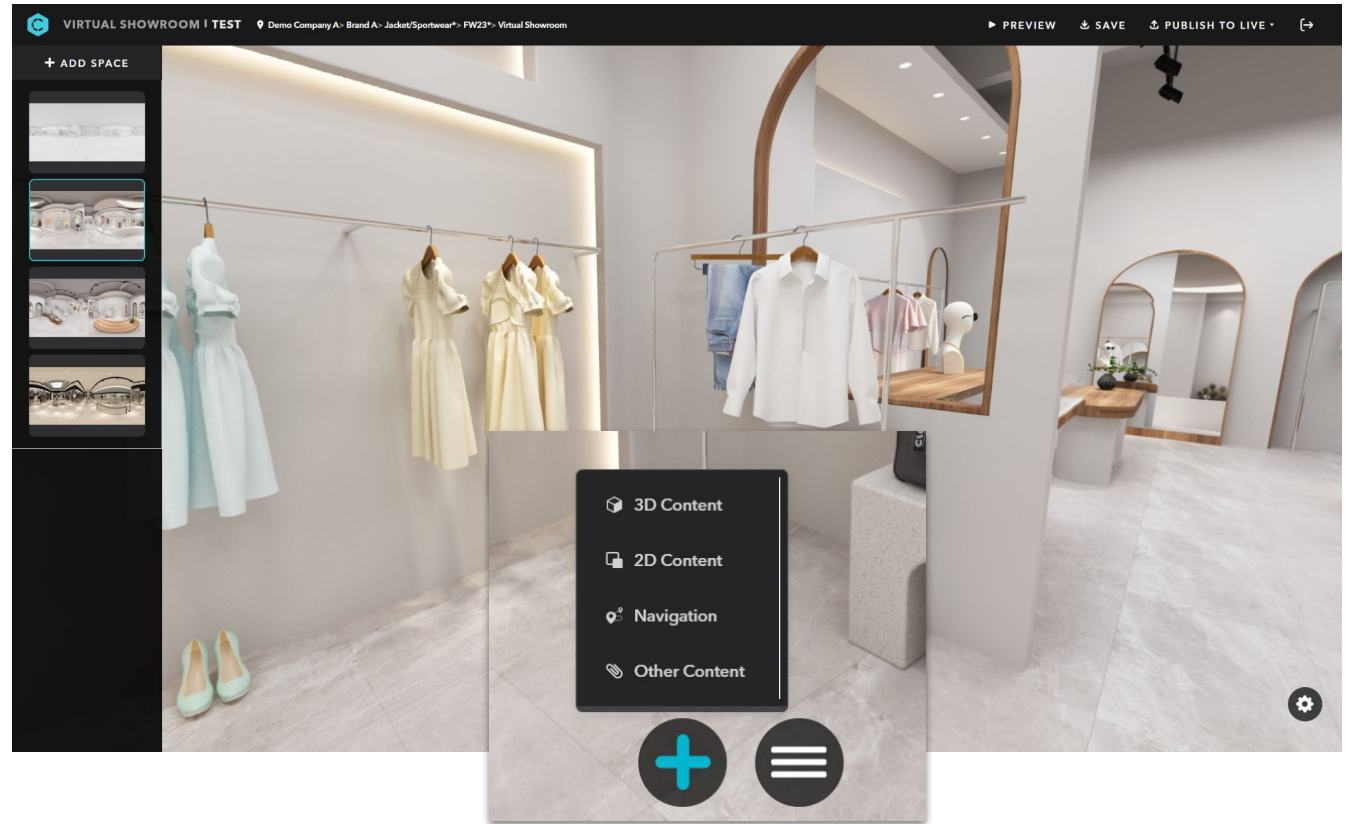
### 7. Secondly, please complete the virtual showroom in the preview page

#### 3D environment viewer

- you are able to view the environment in 3D at the middle, if you have attached panoramic images
- the navigation would be same as 3D content live viewer
  - Left/ Right button: rotation
  - Wheel : Zoom in or out

#### Add content

- by clicking the cross icon, you can add 3D & 2D contents in the environment



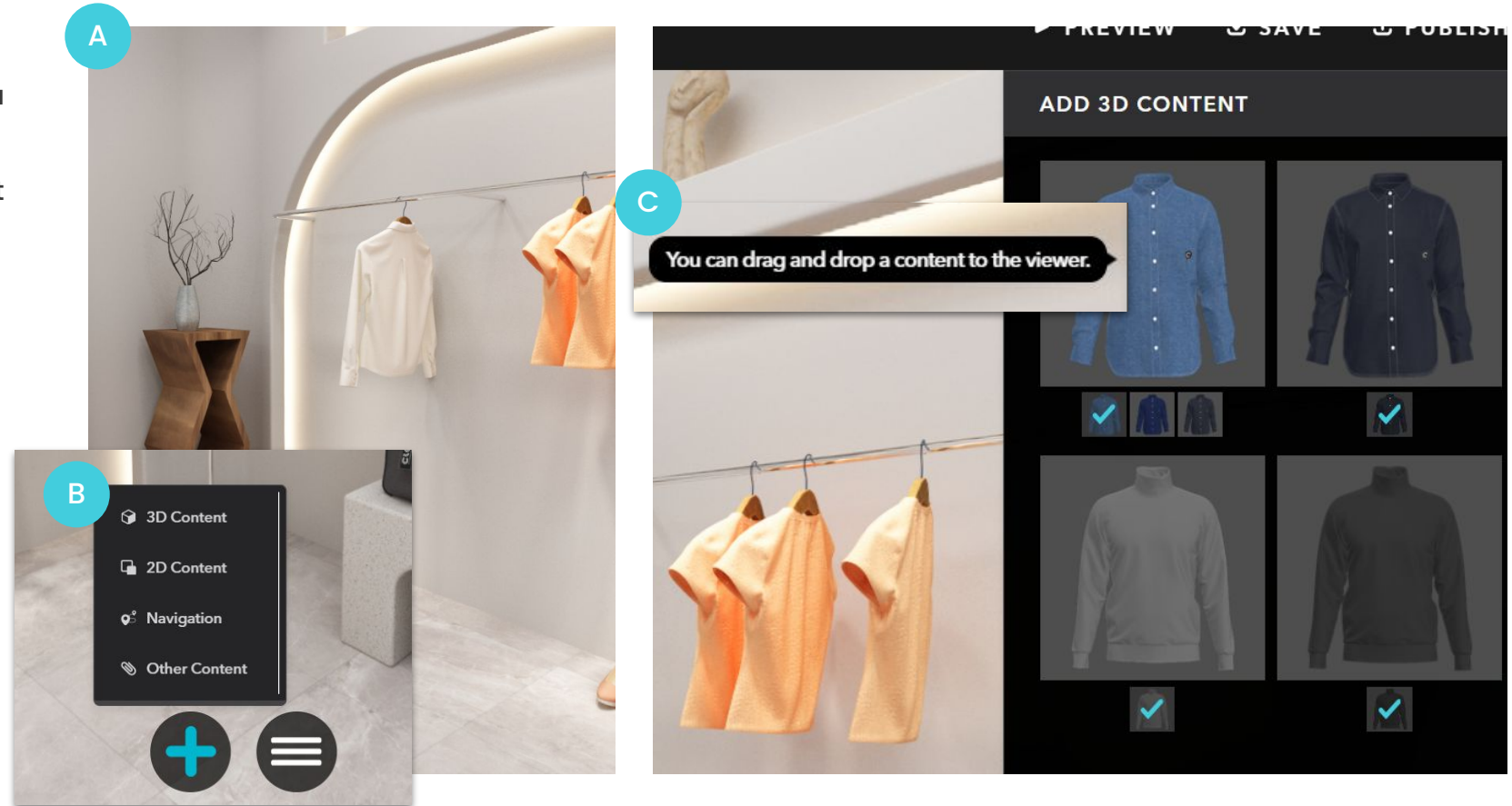
# Fundamentals

## CLO-SET Virtual Showroom Workflow

### 7. Secondly, please complete the virtual showroom in the preview page

For adding 3D content,

- rotate your view point to the specific area
- click '3D content' of the 'cross' icon
- drag one of the 3D file to the environment



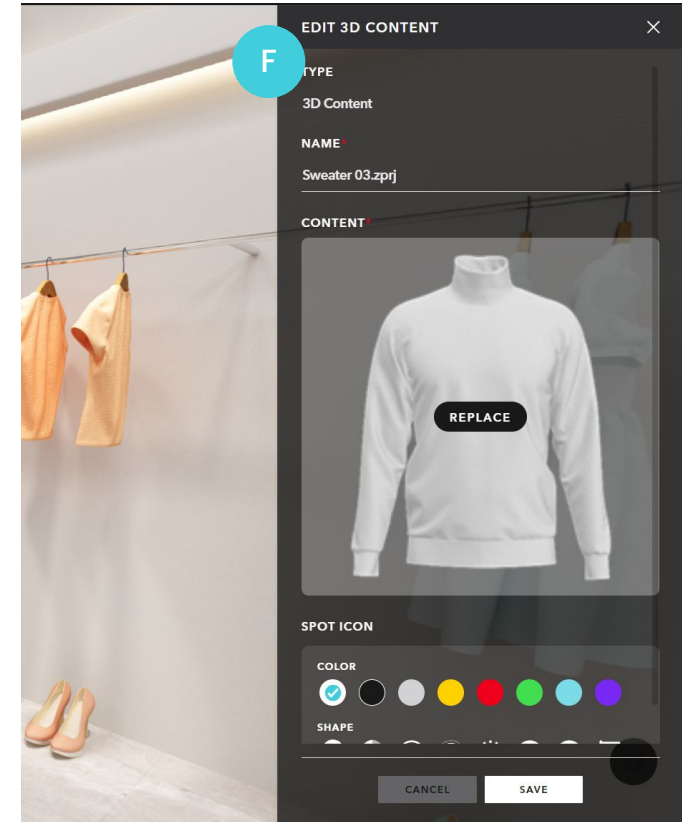
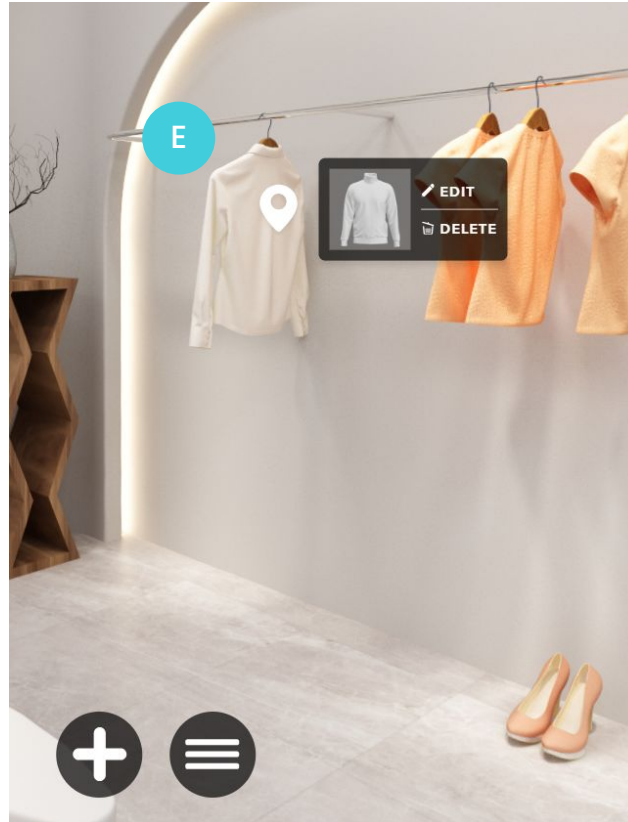
# Fundamentals

## CLO-SET Virtual Showroom Workflow

### 7. Secondly, please complete the virtual showroom in the preview page

For adding 3D content,

- D. the new tag is added on the environment, you can drag and match it to the garment in the environment
- E. click 'edit' to adjust the content
  - a. the display name
  - b. to replace it as another content if needed
  - c. the sport icon color and shape
- F. click 'save' to complete the edit



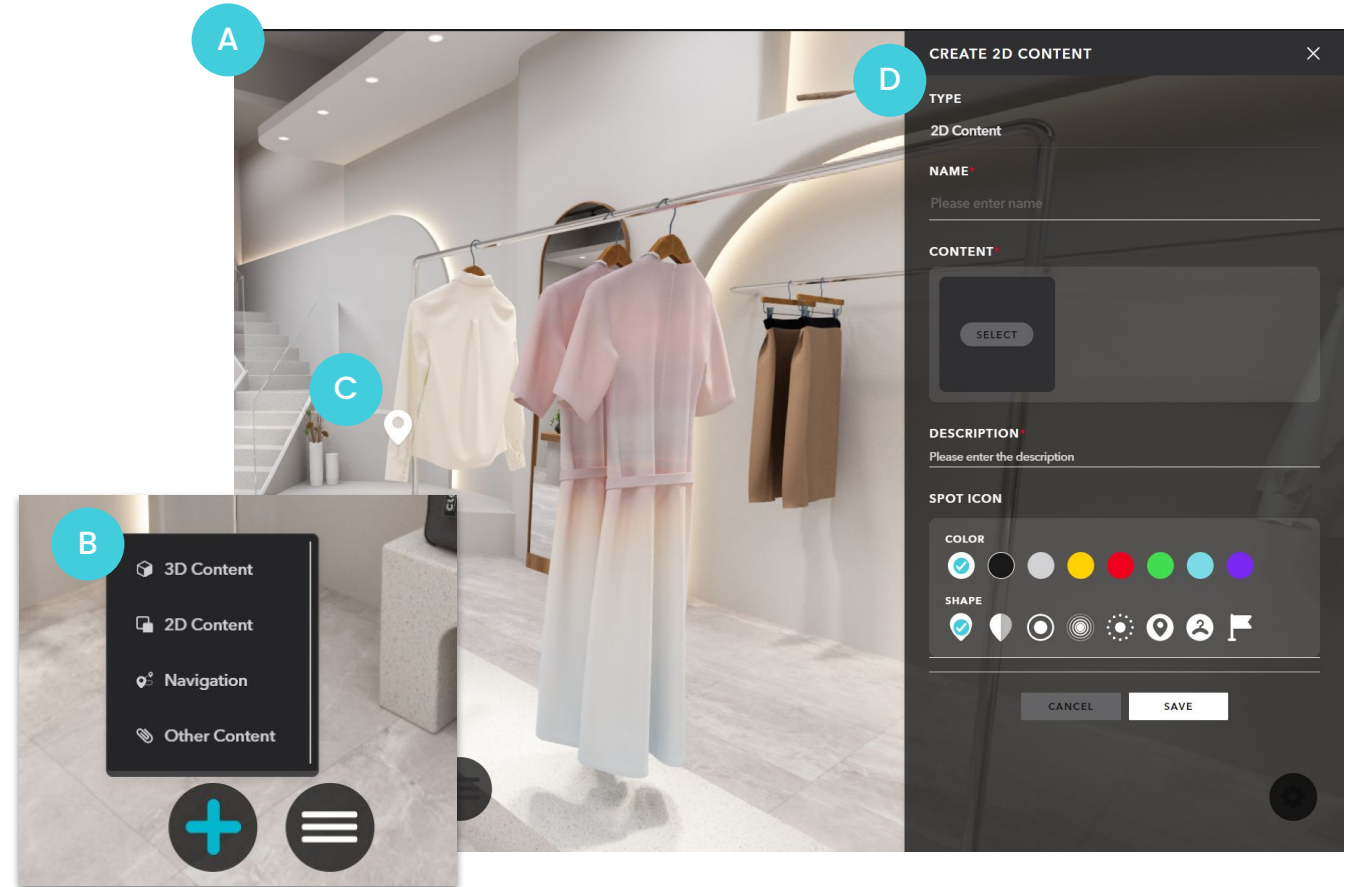
# Fundamentals

## CLO-SET Virtual Showroom Workflow

### 7. Secondly, please complete the virtual showroom in the preview page

For adding 2D content,

- A. rotate your view point to the specific angle
- B. click '2D content' of the 'cross' icon
- C. the tag of the 2D content is added in the environment, you can drag and match it to the specific garment
- D. you edit the content at the right hand column
  - a. displayed name
  - b. attach the 2D content from your desktop
  - c. description of the content
  - d. spot icon color & shape
- E. click 'save' to complete the edit





# Fundamentals

## CLO-SET Virtual Showroom Workflow

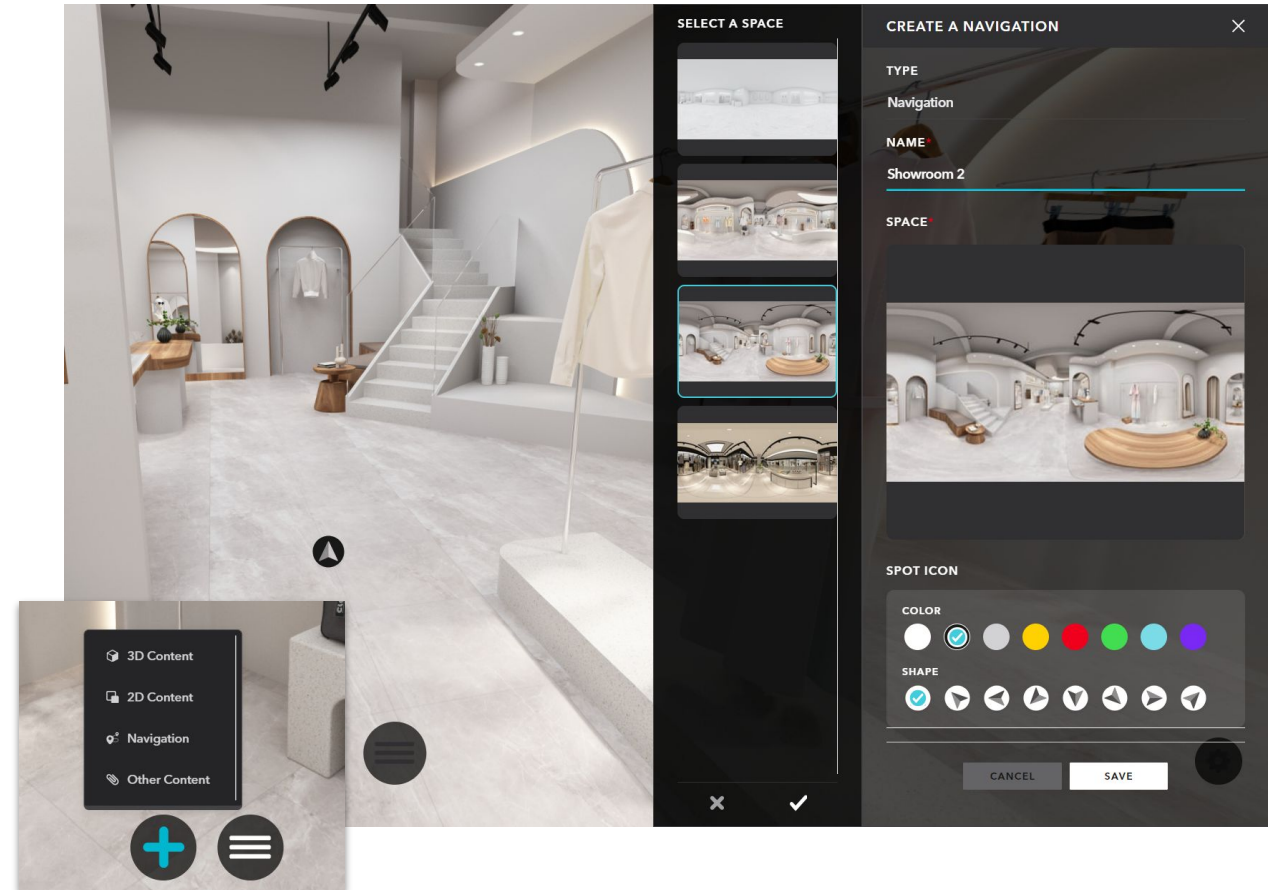
### 7. Secondly, please complete the virtual showroom in the preview page

For adding Navigation,

- a new tag will be added in the environment
- when the virtual showroom is published, visitor can click this tag to access to another environment/another showroom

For adding other content,

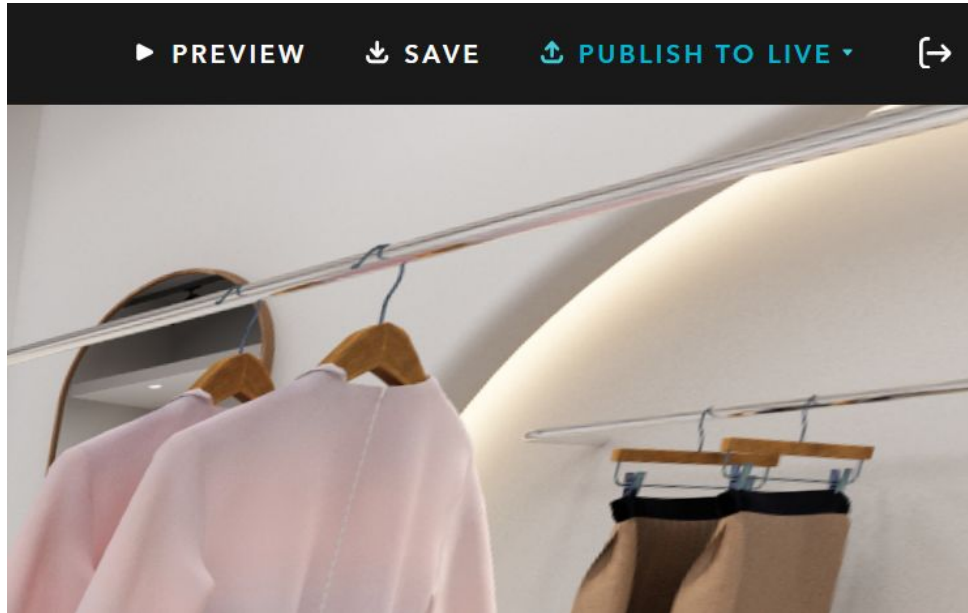
- a new tag will be added in the environment, which will redirect the visitor to another hyperlink (URL)



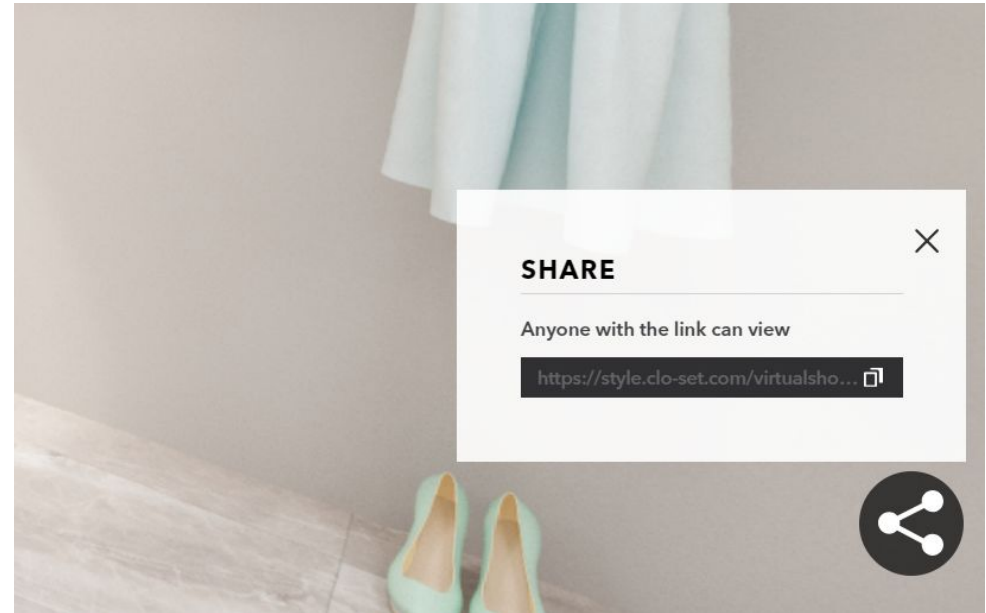
# Fundamentals

## CLO-SET Virtual Showroom Workflow

8. Finally, you can publish the completed virtual showroom to live, and share it to other people



- a. Click 'publish to live' on the upper right corner

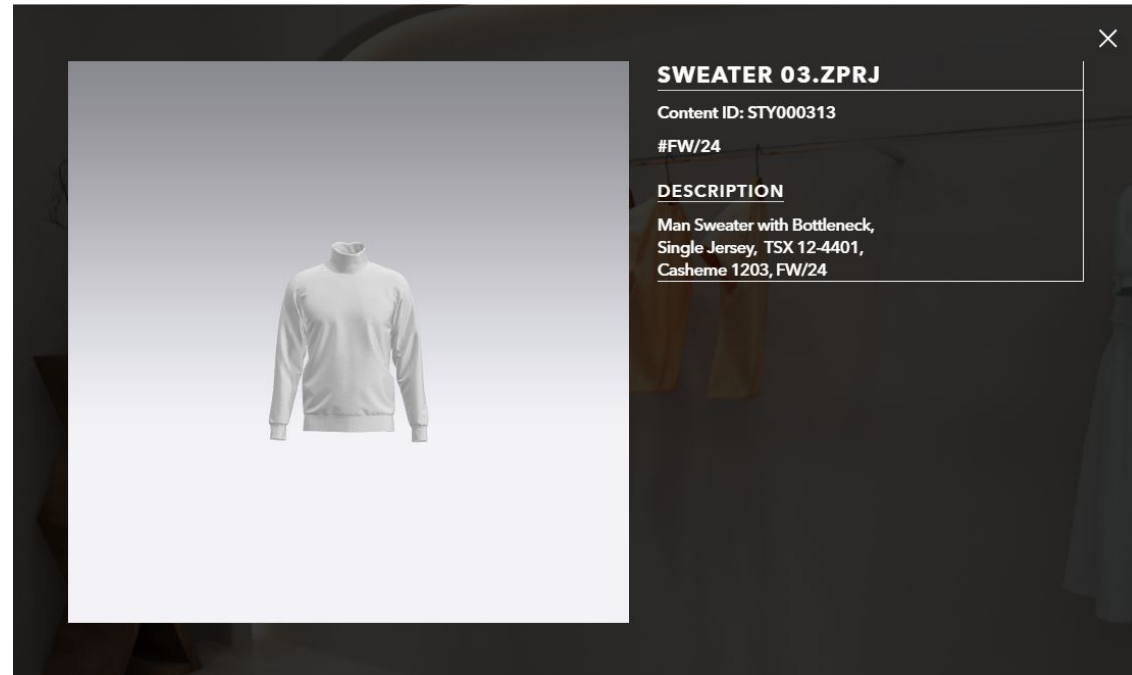


- b. the published virtual showroom can be shared by hyperlink at the right bottom corner

# Fundamentals

## CLO-SET Virtual Showroom Workflow

8. Finally, you can publish the completed virtual showroom to live, and share it to other people



By clicking each tag, the 3D content will be showcased in the 3D live viewer with description

# Fundamentals

## CLO-SET Virtual Showroom Workflow

For further demonstration, please check our tutorial video in our Youtube channel.





# Method 1



By taking the pictures of your real showroom

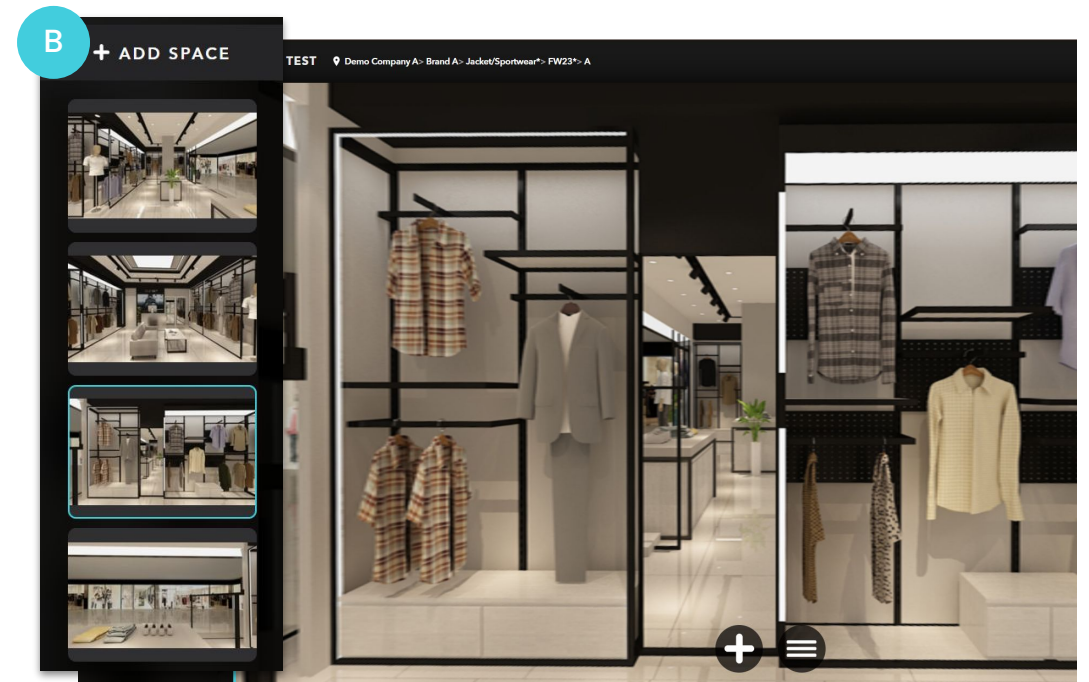
# Method 1

By taking the pictures of your showroom in reality

Please well prepared either the 2D or 3D panoramic images as the background of the showroom.

For 2D images,

- A. you may take the images of the actual showroom in different angles and locations. Please read the requirement of the photo in [slide 4](#)
- B. then, you may directly import all the images to CLOSET when you setup the virtual showroom



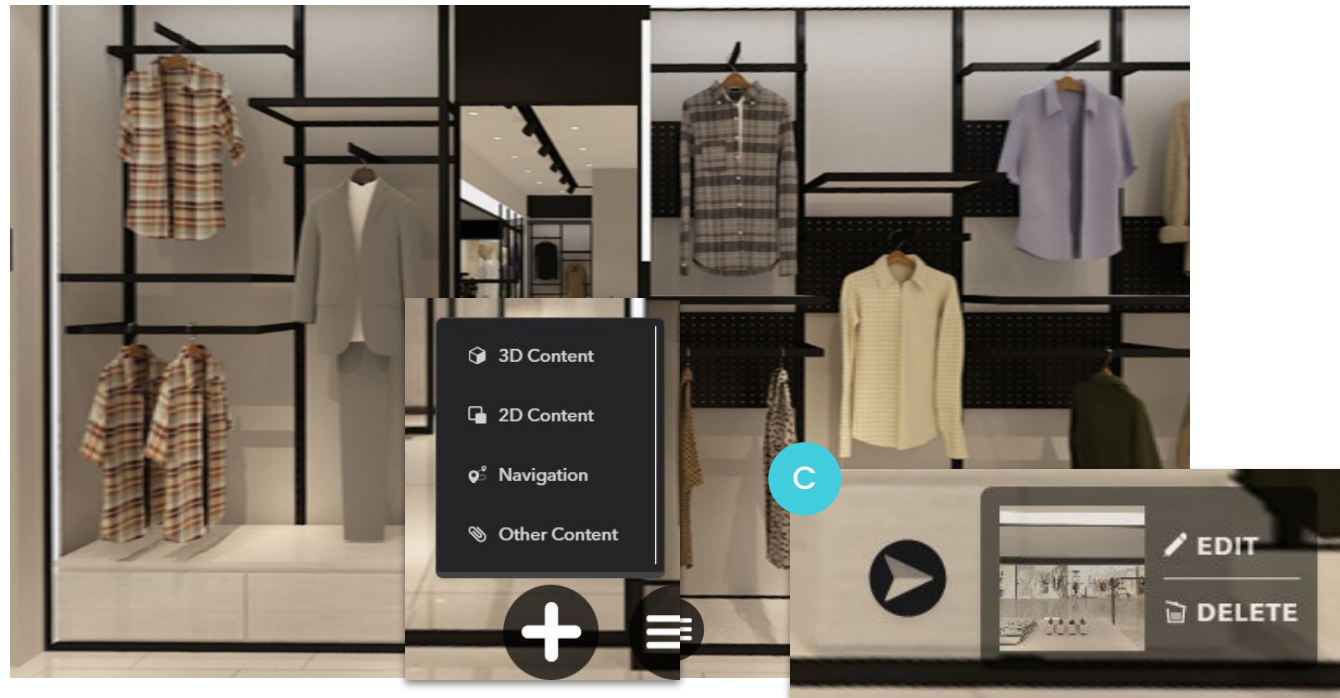
# Method 1

By taking the pictures of your showroom in reality

Please well prepared either the 2D or 3D panoramic images as the background of the showroom.

For 2D images,

- C. In the virtual showroom preview page, you can add the navigation tag to redirect the visitor to the other imported images
- D. and you may follow the later workflow in the Fundamentals to complete the showroom

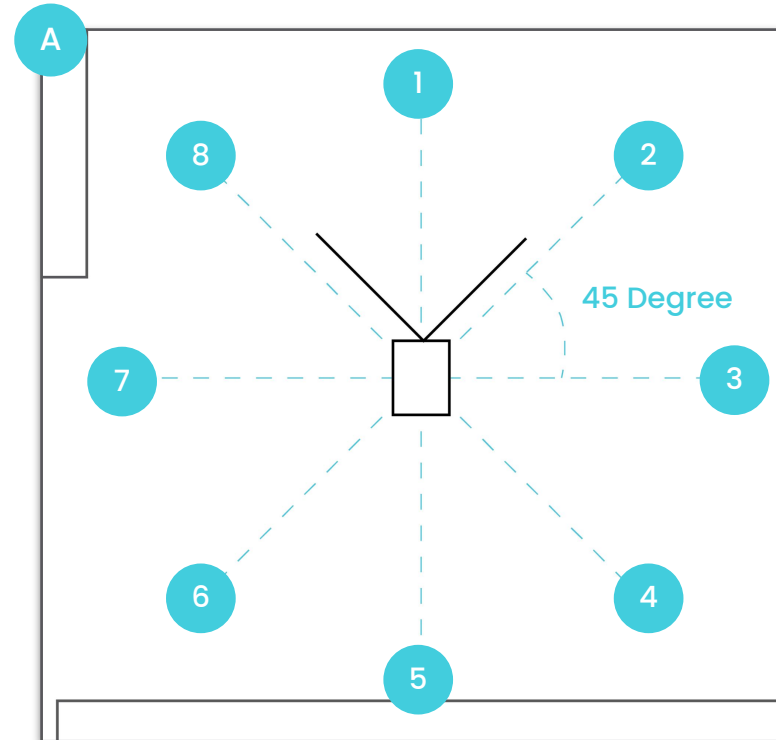


# Method 1

By taking the pictures of your showroom in reality

For 3D panoramic images, it can be auto generated by the camera with panoramic features.  
Or it can be created by using Photoshop, here is the steps:

- A. Set your camera/cell phone at the center of the actual showroom.
- B. then, by rotating the camera in each 45 degrees, taking 8 images to capture the whole environment of the showroom, here is the suggested spec for the images:
  - a. vertical image
  - b. 1920 x 1080 or upper
  - c. Field of View - 13mm or lower
  - d. take the images with camera stands to ensure all images are in same view level
  - e. for each images, please make sure that there are some overlapped part





# Method 1

By taking the pictures of your showroom in reality

For 3D panoramic images, it can be auto generated by the camera with panoramic features.  
Or it can be created by using Photoshop, here is the steps:

- A. Set your camera/cell phone at the center of the actual showroom.
- B. then, by rotating the camera in each 45 degrees, taking 8 images to capture the whole environment of the showroom, here is the suggested spec for the images:
  - a. vertical image
  - b. 1920 x 1080 or upper
  - c. Field of View - 13mm or lower
  - d. take the images with camera stands to ensure all images are in same view level
  - e. for each images, please make sure that can be overlapped part

IMAGE 1

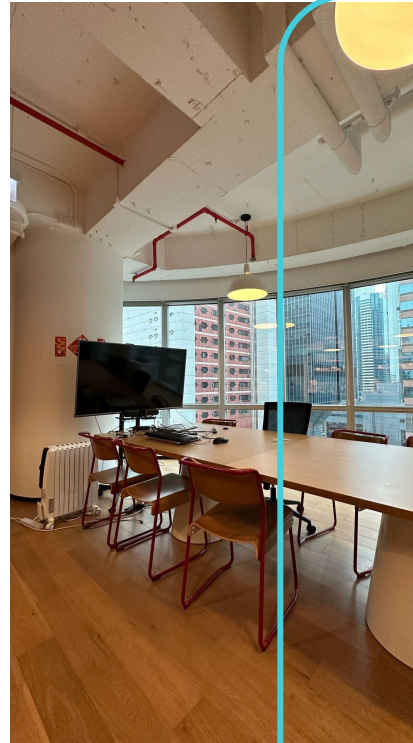
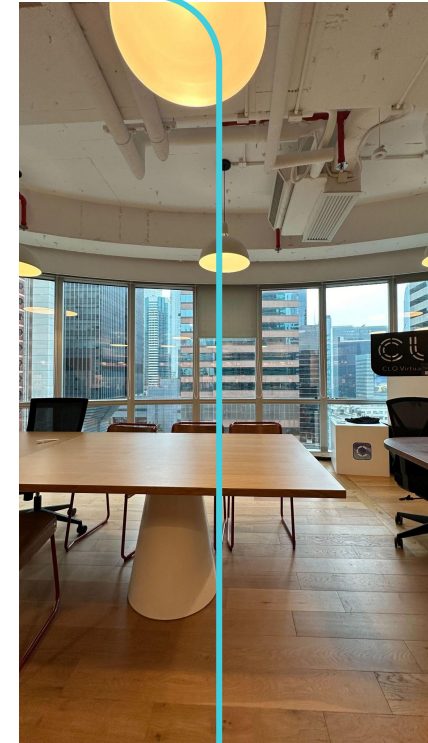


IMAGE 2



can be overlapped



# Method 1

By taking the pictures of your showroom in reality

For 3D panoramic images, it can be auto generated by the camera with panoramic features.  
Or it can be created by using Photoshop, here is the steps:

- A. Set your camera/cell phone at the center of the actual showroom.
- B. then, by rotating the camera in each 45 degrees, taking 8 images to capture the whole environment of the showroom, here is the suggested spec for the images:
  - a. vertical image
  - b. 1920 x 1080 or upper
  - c. Field of View - 13mm or lower
  - d. take the images with camera stands to ensure all images are in same view level
  - e. for each images, please make sure that can be overlapped part

IMAGE 1

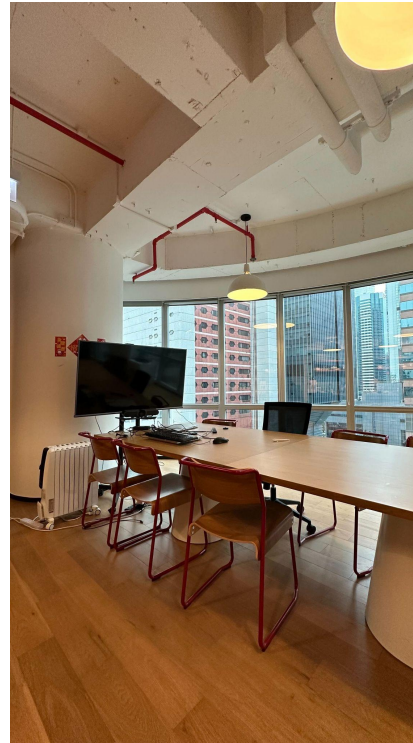
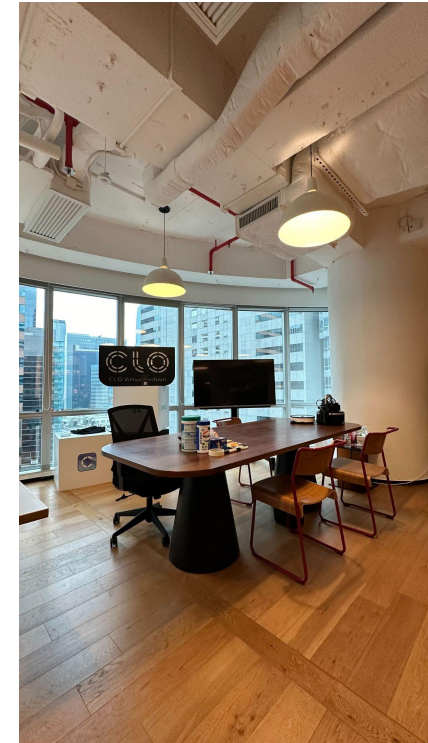


IMAGE 2

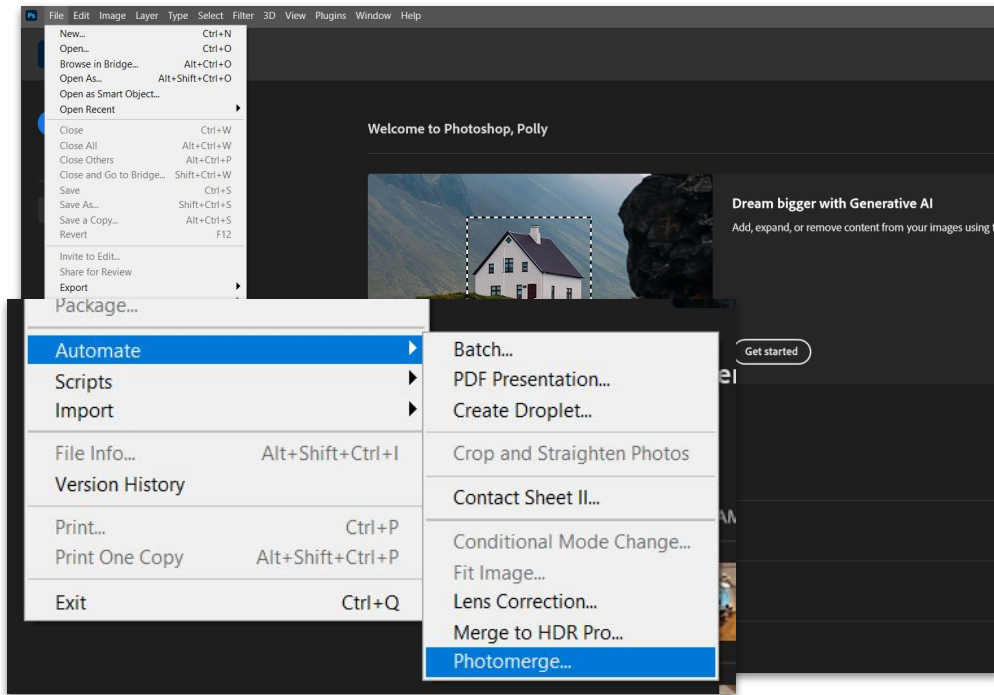


no overlapped area

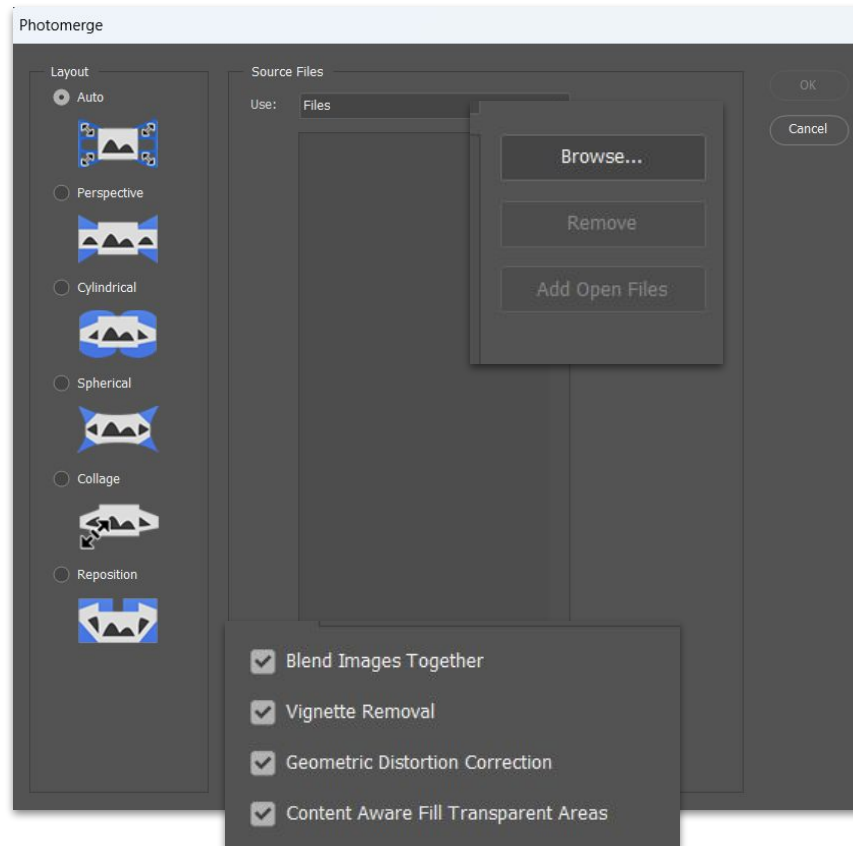
# Method 1

By taking the pictures of your showroom in reality

For 3D panoramic images, it can be auto generated by the camera with panoramic features.  
Or it can be created by using Photoshop, here is the steps:



C. When all images are ready, open photoshop and click  
File > Automate > Photomerge



D. the photomerge window will  
be popped up

- click 'browse' to attach all images
- tick all the options at the bottom
- click okay and photoshop will generate the panoramic image in a seconds

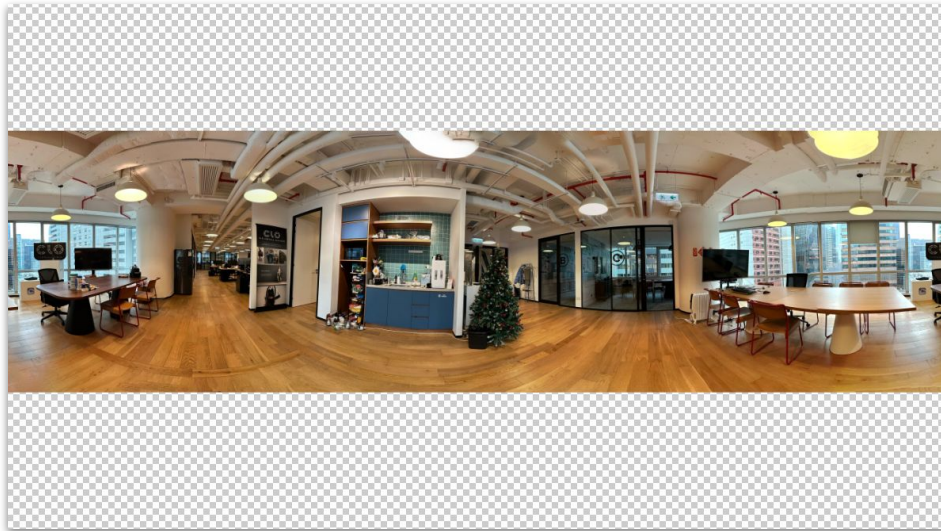
# Method 1

By taking the pictures of your showroom in reality

For 3D panoramic images, it can be auto generated by the camera with panoramic features.

Or it can be created by using Photoshop, here is the steps:

- E. when the image is generated, change the canvas size to 16:9
- F. there will be some empty spaces after the canvas dimension is changed. by using different tools, extend the ceiling and floor to cover the empty space (e.g. generative fill, distort transform etc.) **Remark: don't distort middle area where the garment is displayed**



Before



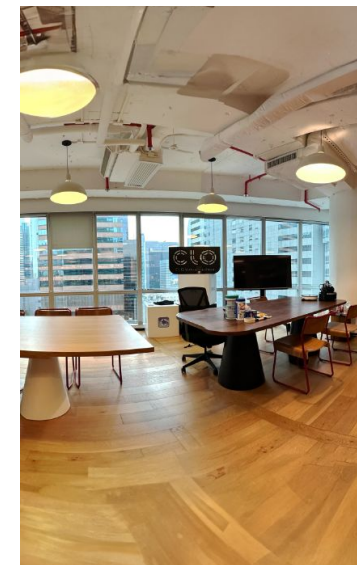
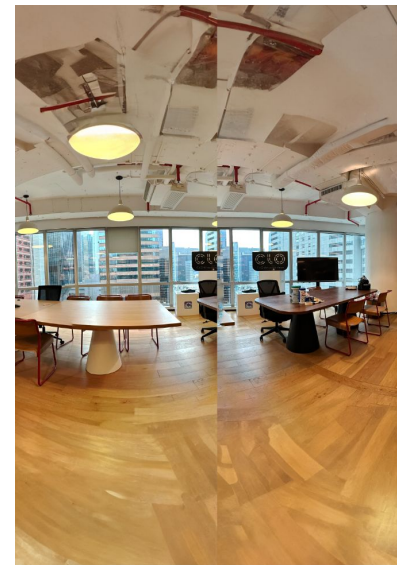
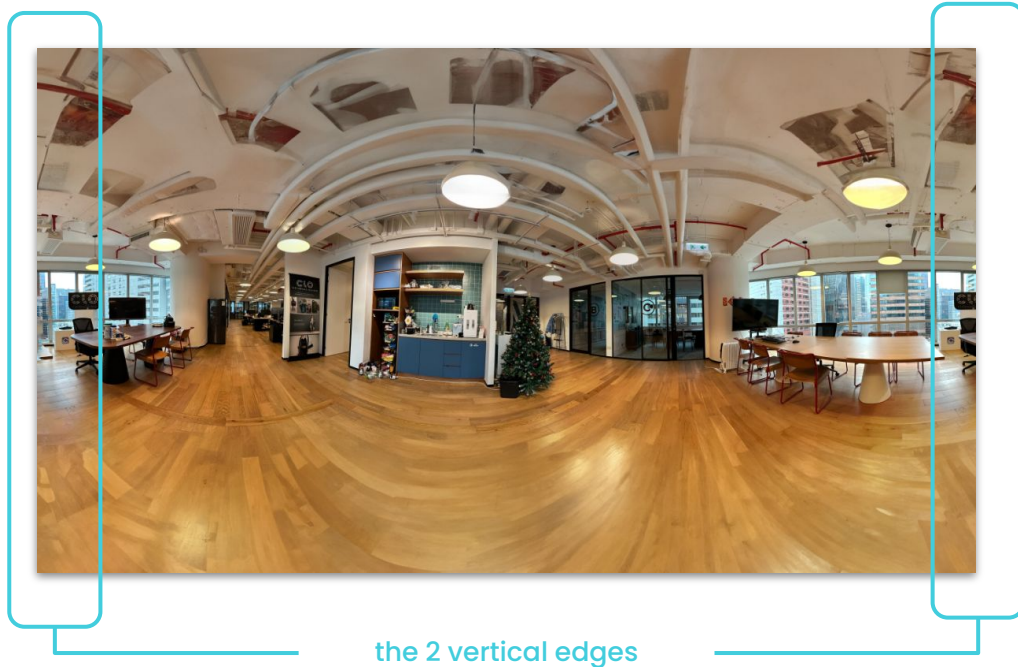
After

# Method 1

By taking the pictures of your showroom in reality

For 3D panoramic images, it can be auto generated by the camera with panoramic features.  
Or it can be created by using Photoshop, here is the steps:

- G. please make sure that the vertical edge is seamless when it is tiled in 3D. You can use the photo editing tools to further adjust it



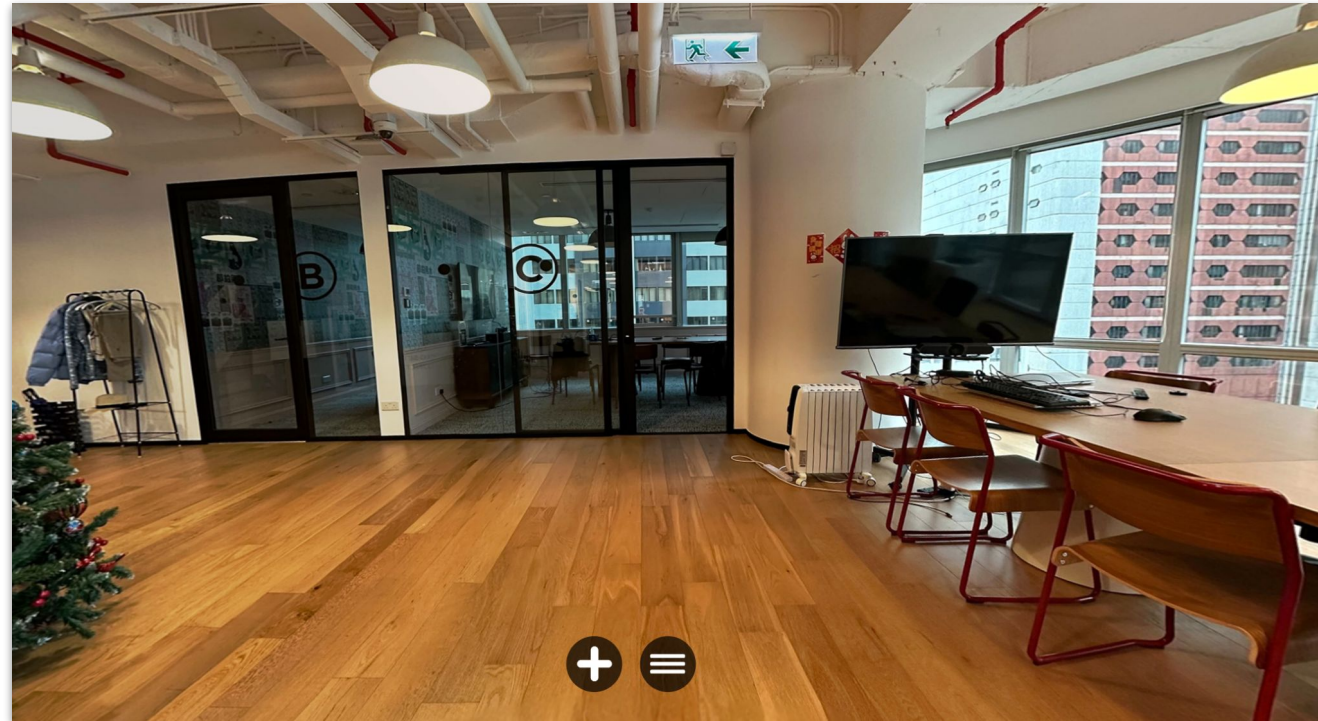
it should be seamless when tiling

# Method 1

By taking the pictures of your showroom in reality

For 3D panoramic images, it can be auto generated by the camera with panoramic features.  
Or it can be created by using Photoshop, here is the steps:

- H. when the image is completed, it can be exported based on the requirement in [slide 4](#)  
**Remark: please make sure that the image scale is in 16:9, otherwise the environment will be distorted when it is displayed in 3D**
- I. follow the later workflow in the Fundamentals to complete the showroom





# Method 2

By using the VS background preset  
provided by CLO-SET



# Method 2

By using the VS background preset provided by CLO-SET

1. To use the background preset provided by CLO-SET, please download the preset panoramic images from CLO-SET Website first [HERE](#) (at the bottom)

## 4)Download Preset Image

You may download the preset 360° background image by following the link.

<https://drive.google.com/file/d/1-iIQIPSk-kJwNumnAMSyu-IUtEkivPr8/view?usp=sharing>

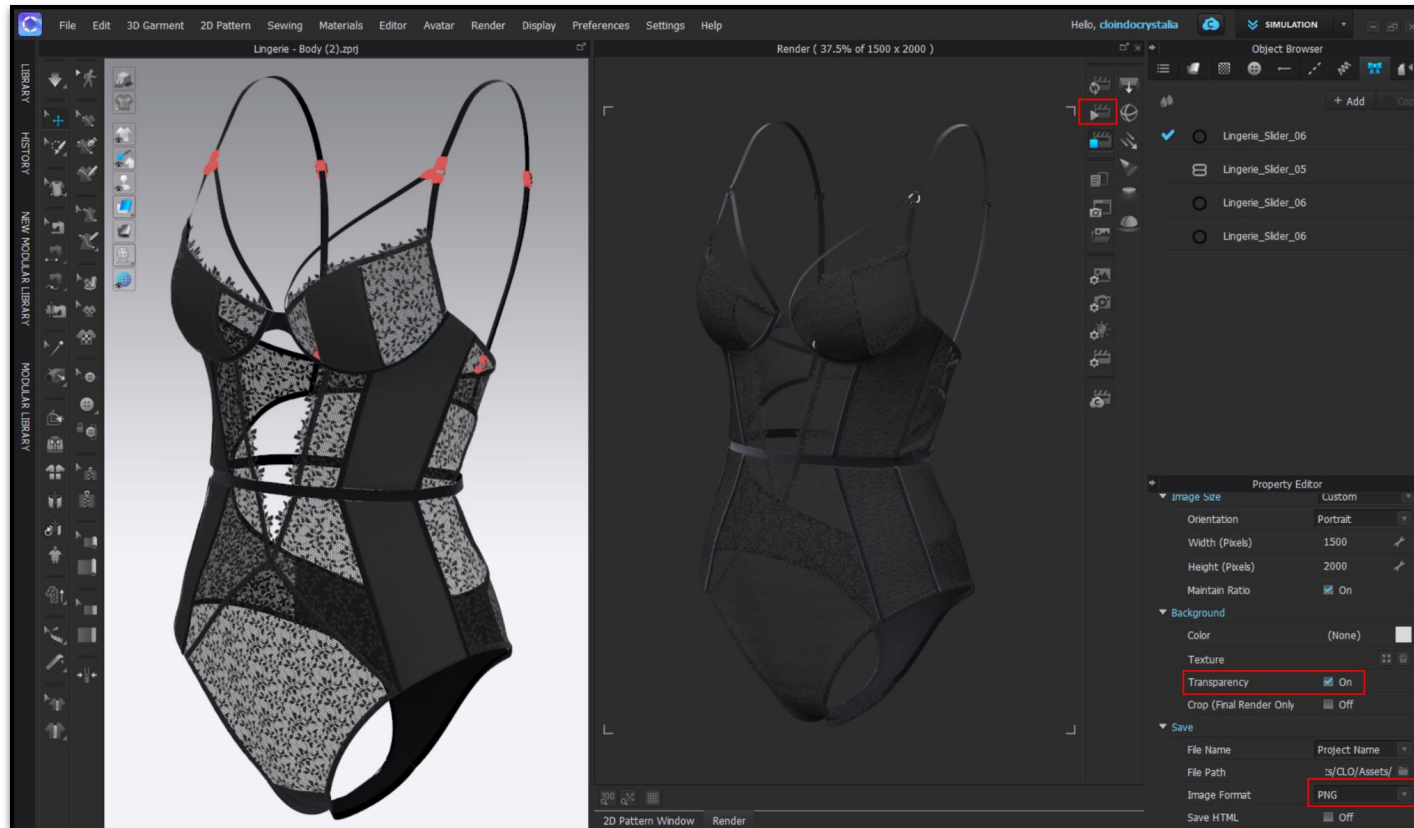




# Method 2

By using the VS background preset provided by CLO-SET

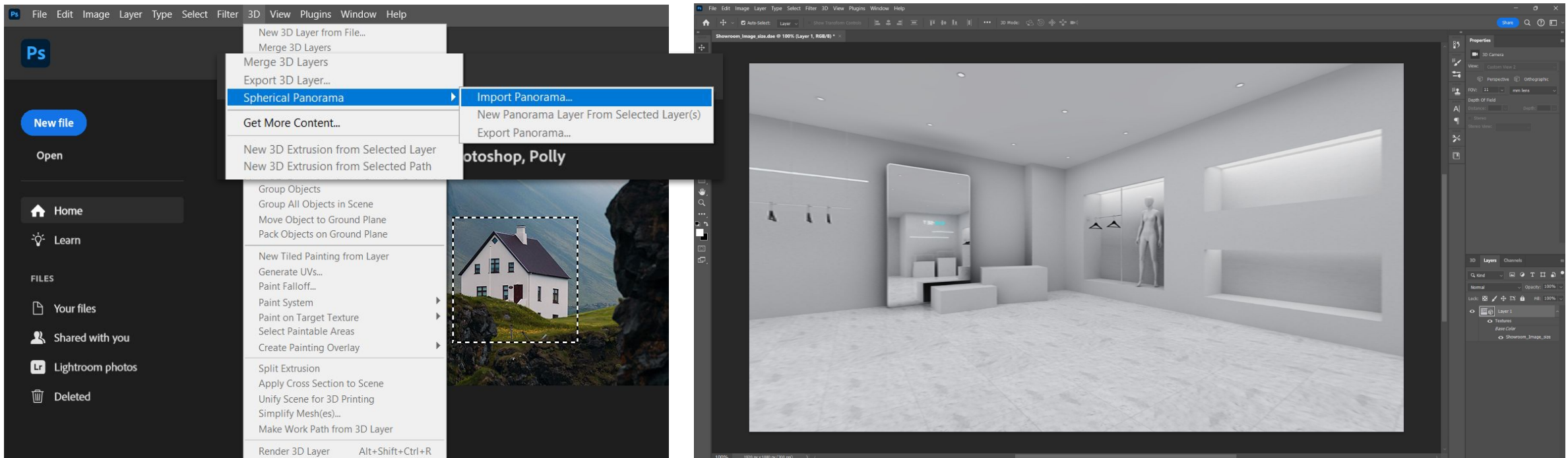
2. At the same time, please render your 3D contents in PNG format respectively  
As we need to use photoshop to put the rendered images in the showroom. please render it in specific angles



# Method 2

By using the VS background preset provided by CLO-SET

3. Go to photoshop and click 3D > Spherical Panorama > Import Panorama
4. Import the background preset from CLO-SET
5. The background will be displayed in 3D. you can navigate it by the gizmo tool to start the editing
6. Put the rendered content images in the background to complete the virtual showroom.
7. Export the completed showroom images and continue the workflow



# Method 3

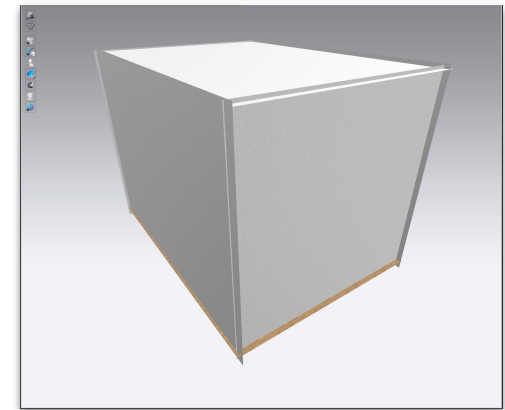
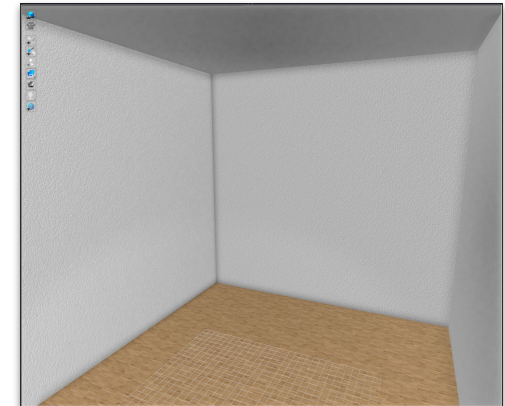
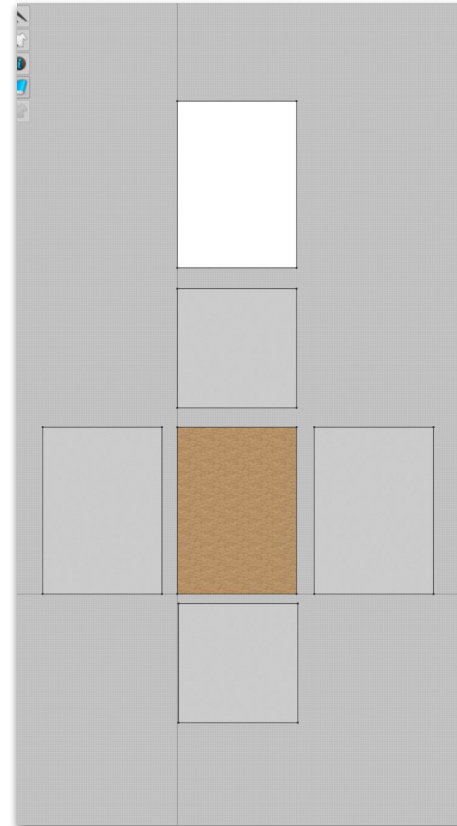
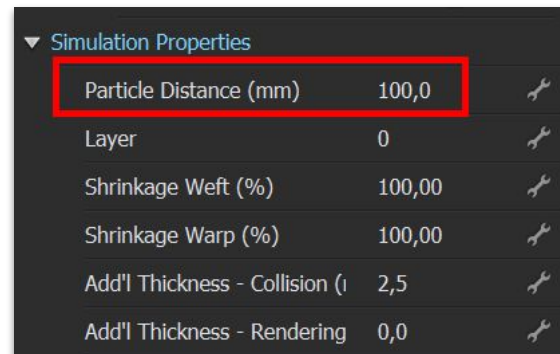
By building the virtual showroom in CLO and  
export it to CLO-SET

# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

- A. create the backdrop by pattern pieces
  - a. it should be an closed space
  - b. **Tips: You can set these 'wall' patterns to be low-res as we will not going to simulate it. It is fine to have higher Particle Distance**
  - c. save the project file (zprj) first

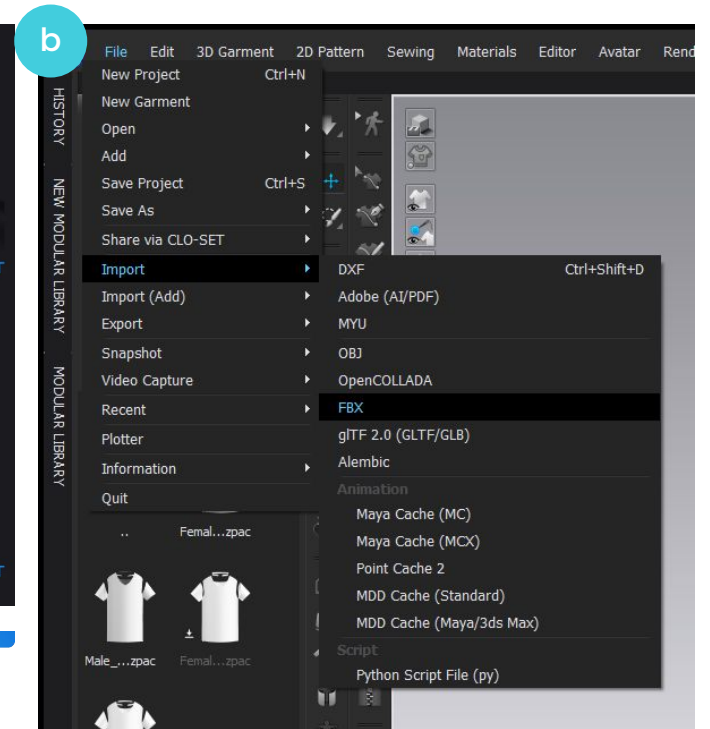
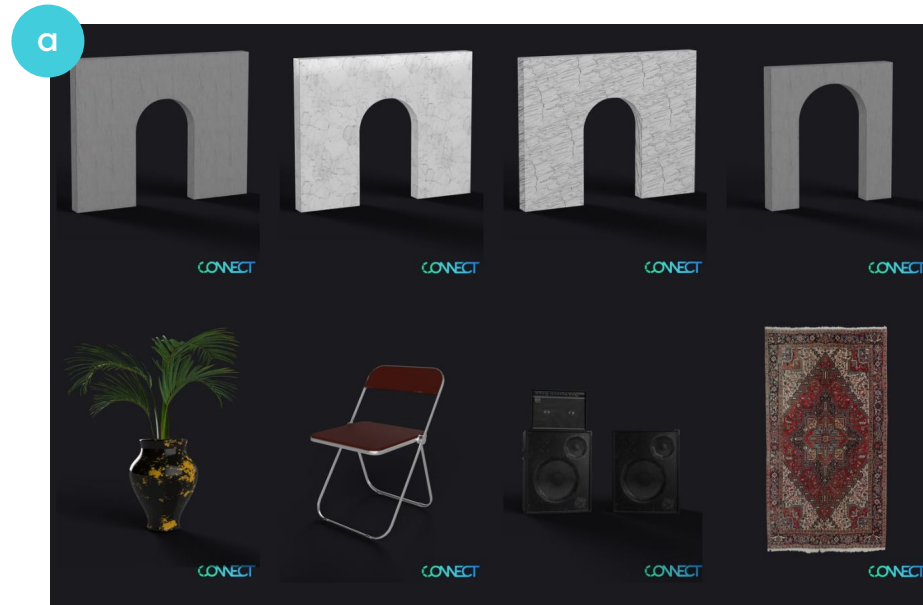


# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

- B. add the props & furniture in the current showroom file, e.g. sofa, rack etc.
  - a. the props can be created by other 3D modelling software (e.g. blender), or browsed from [Connect Store](#)
  - b. in CLO, click File > import to add the props in the 3D environment one by one
  - c. Compatible formats: obj, fbx, glb, OpenCollada, Alembic etc.



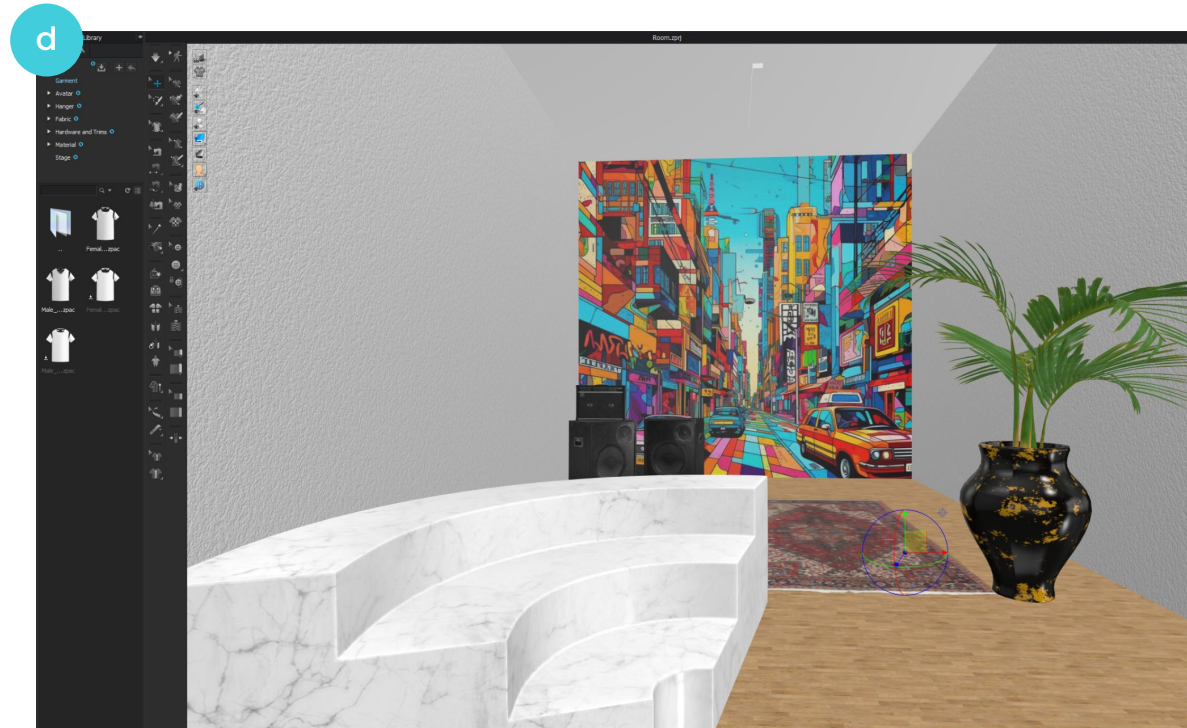
CONNECT

# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

- B. add the props & furniture in the current showroom file, e.g. sofa, rack etc.
  - a. the props can be created by other 3D modelling software (e.g. blender), or browsed from [Connect Store](#)
  - b. in CLO, click File > import to add the props in the project file one by one
  - c. Compatible formats: obj, fbx, glb, OpenCollada, Alembic etc.
  - d. position the props one by one

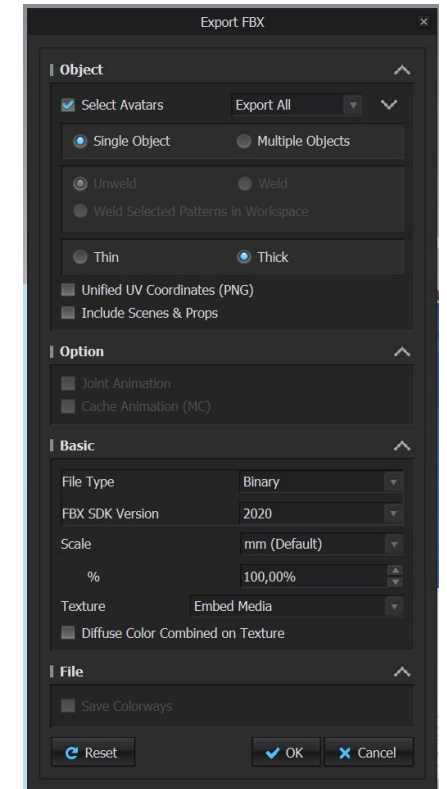
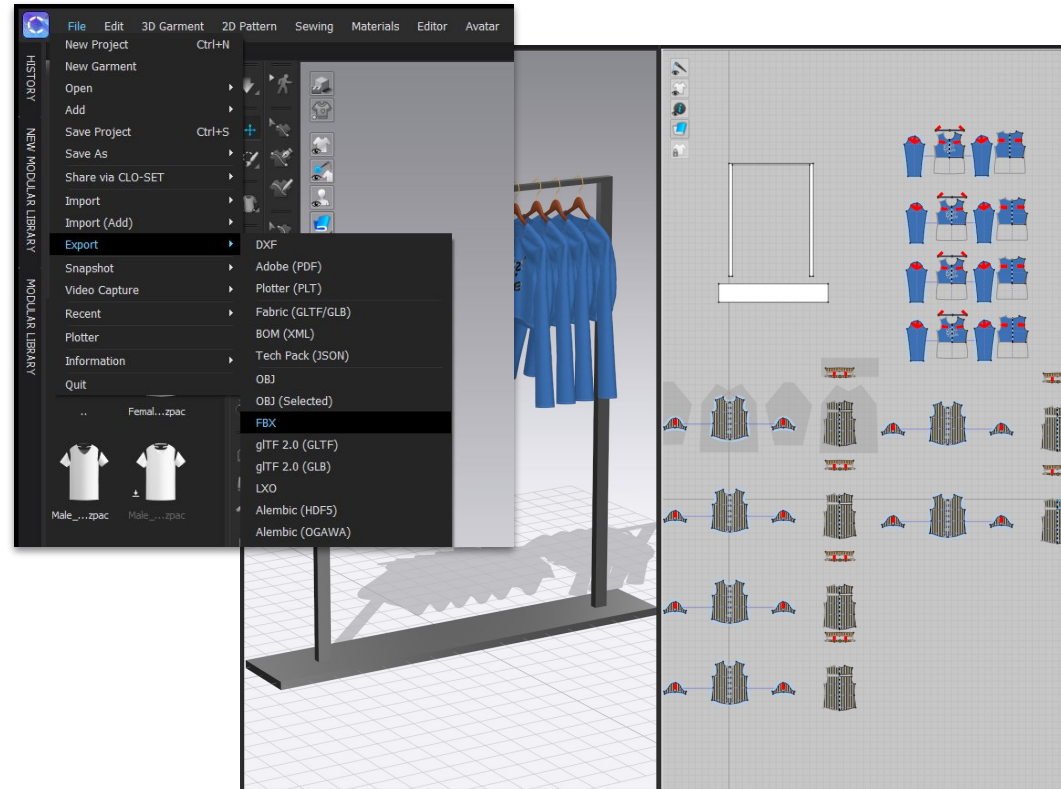


# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

- C. add the 3D garment in the current showroom file
  - a. the 3D garment can be displayed in different forms, e.g. folded garment, garment hanged on rack, garment on mannequin etc. well prepared the 3D file(zprj.) separately first.
  - b. when each 3D file(zprj.) is completed, export the 3D garment as fbx/glb by clicking file > export

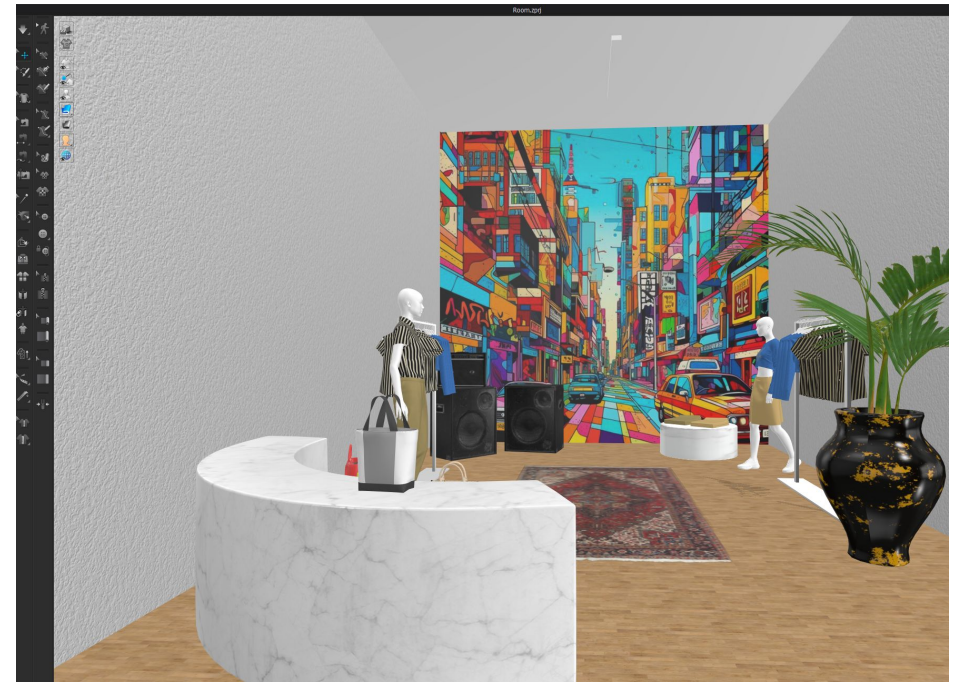
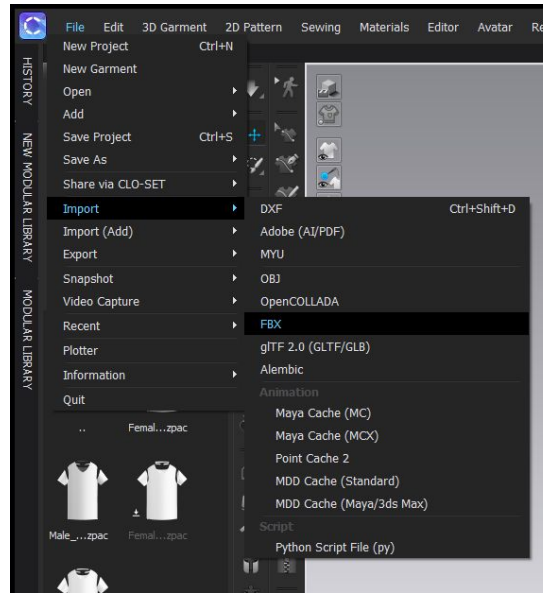


# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

- C. add the 3D garment in the current showroom file
  - c. once the 3D garments are all exported as fbx/glb, go back to the virtual showroom file
  - d. add the fbx/glb file to the current showroom file by clicking file > import
  - e. position the 3D garment in the showroom one by one



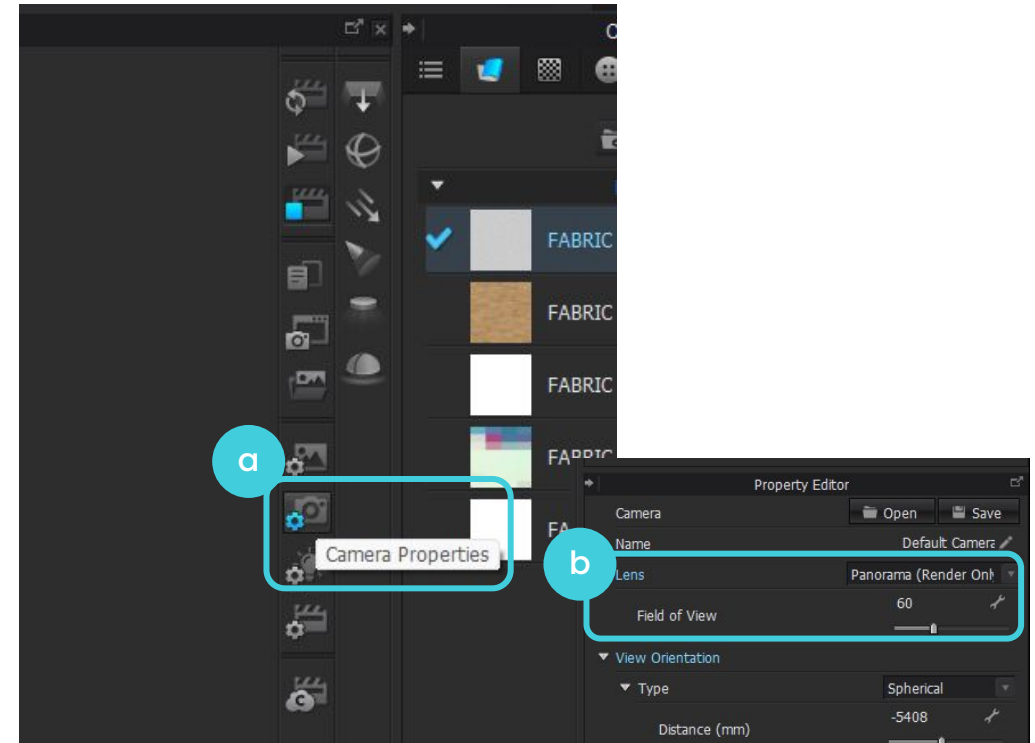
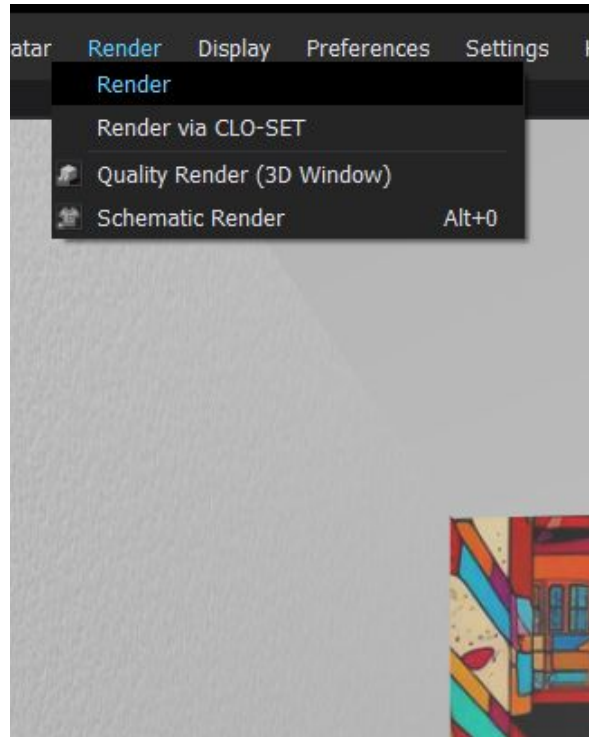


# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

- D. Adjust the positions and layout of all items inside the showroom
- E. If it is ready, go to 'render > render' to generate the panoramic image
  - a. Open 'Camera Properties' settings, and set the 'Lens' type as 'Panorama'
  - b. keep the field of view as default as 60 (recommended value to make sure the showroom environment will not be distorted when it is displayed in 360 degree)

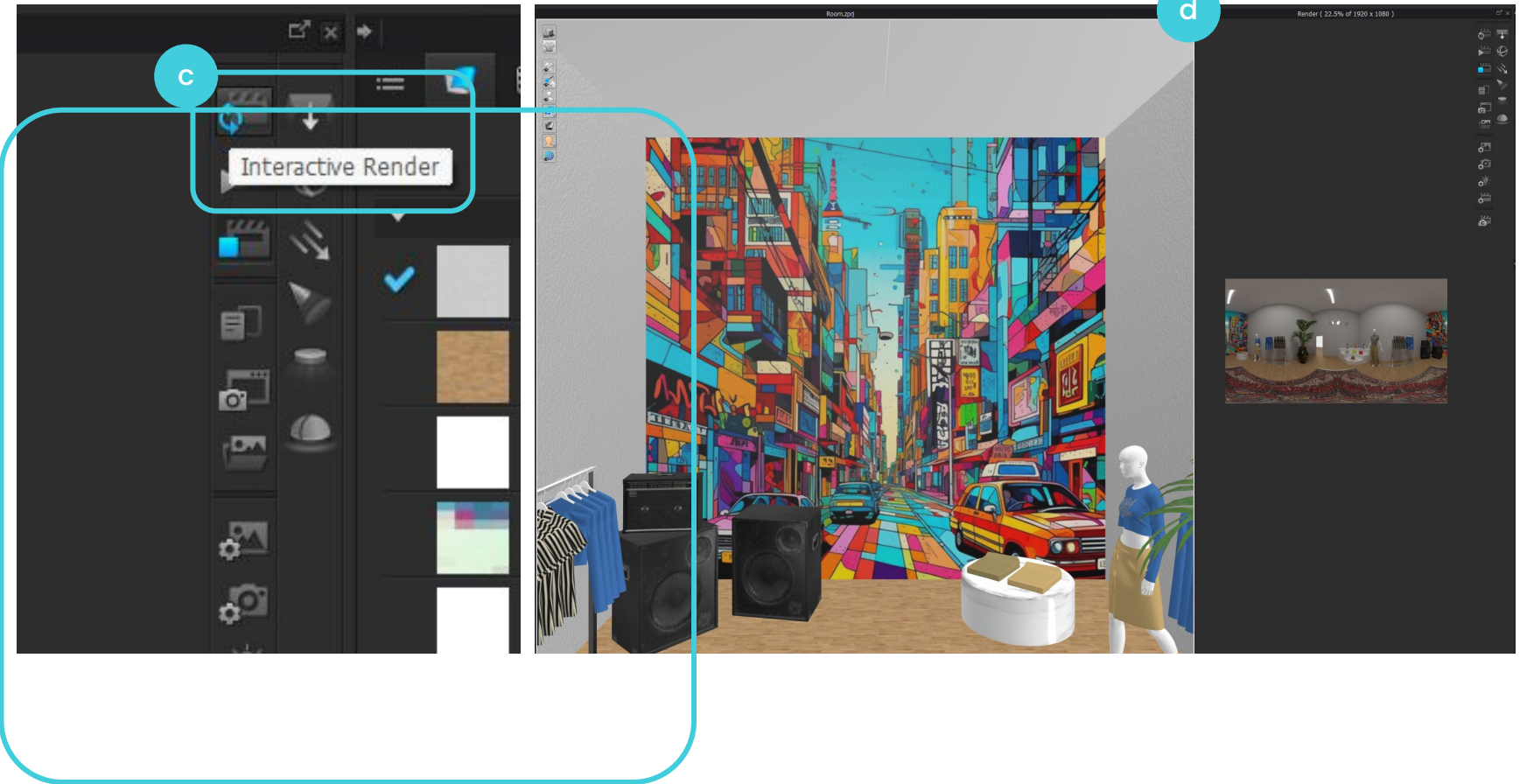


# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

- D. If it is ready, go to 'render > render' to generate the panoramic image
  - c. preview the render result by clicking 'interactive render'
  - d. adjust your view in the 3D window to determine the position of the camera



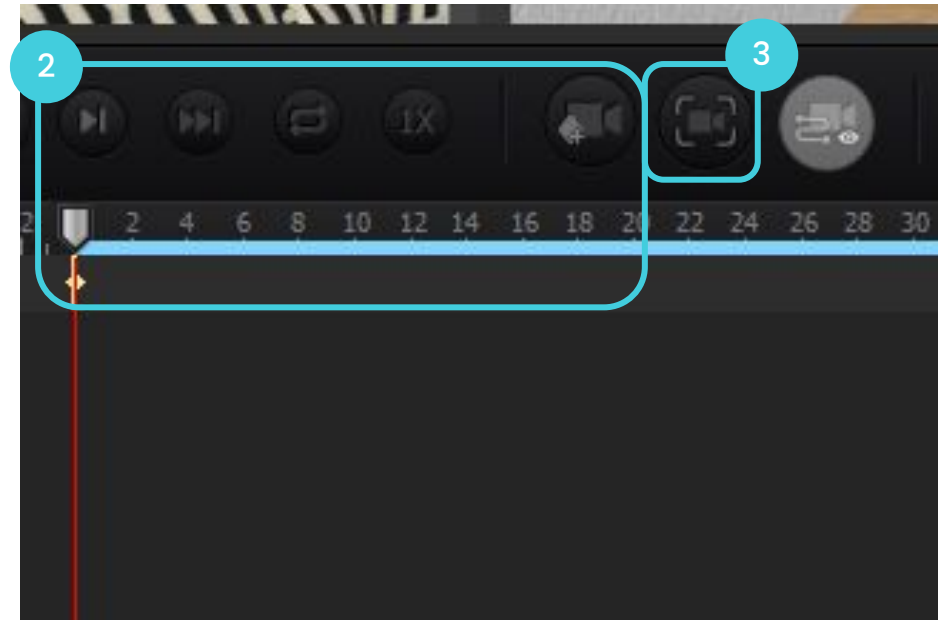
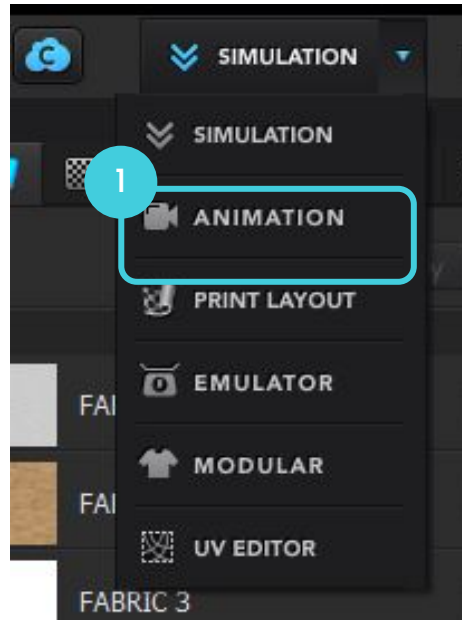
# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

Tips: to adjust the camera position accurately, you can do it in animation mode. add a new keyframe, turn on camera viewfinder, change the camera position by the gizmo

1. Go to animation mode
2. add a new keyframe
3. click 'camera viewfinder'



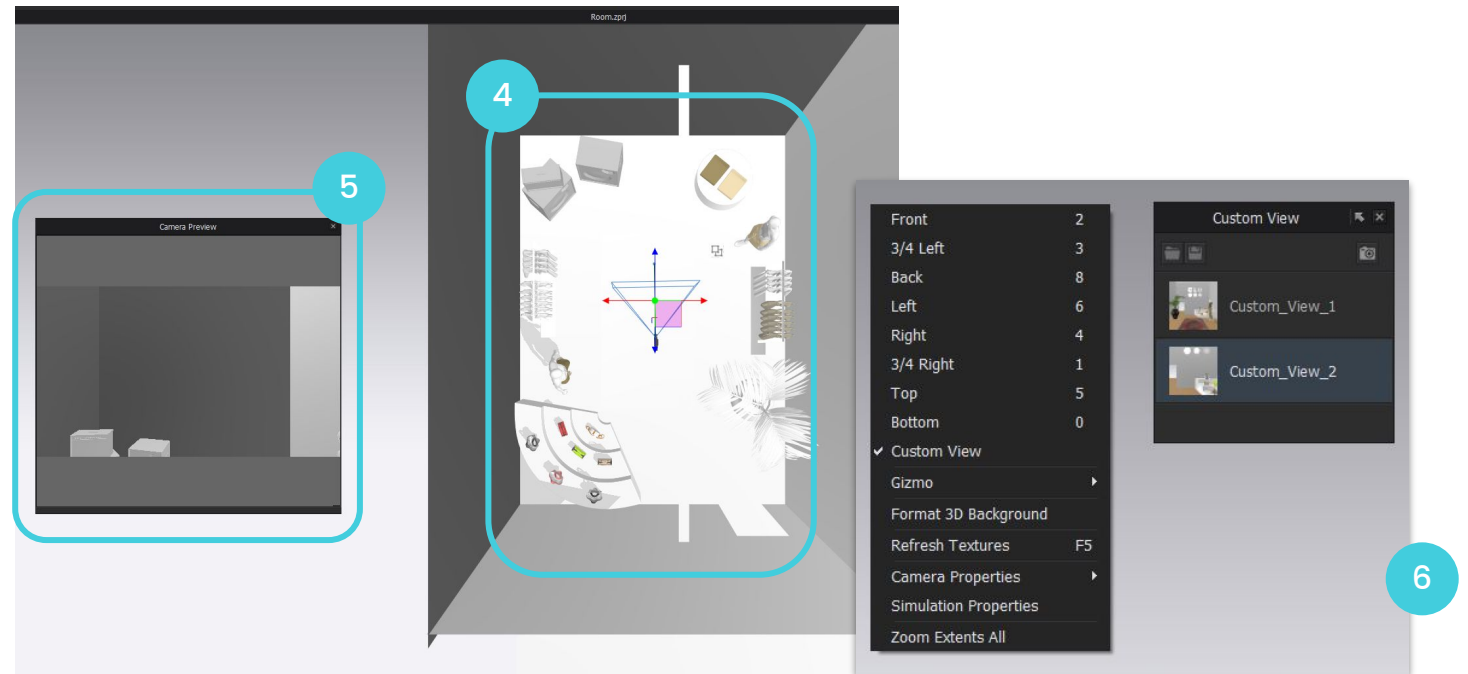
# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

Tips: to adjust the camera position accurately, you can do it in animation mode. add a new keyframe, turn on camera viewfinder, change the camera position by the gizmo

4. zooming out in your 3D window and you will be able to view the 'camera' in the 3D window; by using it's gizmo tool, you can set the position of the gizmo accurately
5. you can preview the view of the camera from the 'camera preview' window
6. if needed, right click the 3D window and choose 'custom view', and click the 'camera' icon to save the camera position



# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

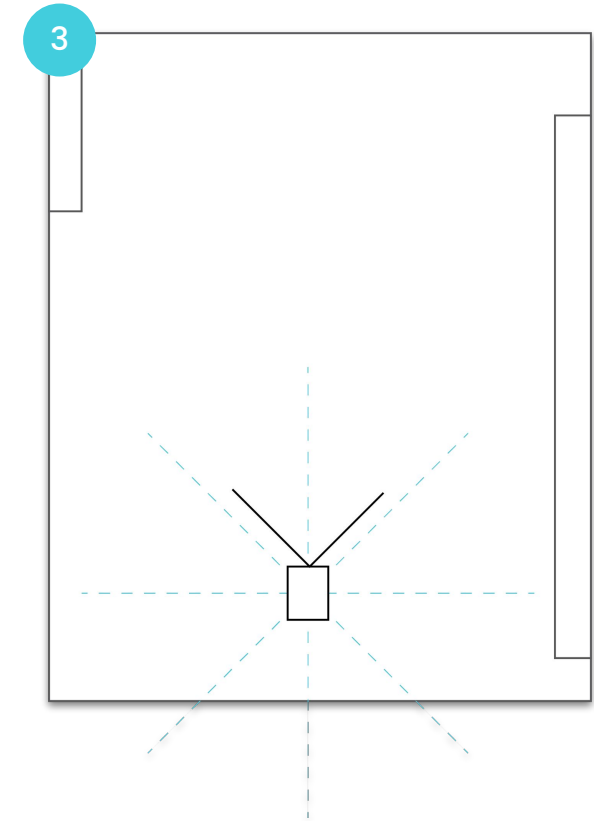
For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

Tips: difference when the camera position is set in different location

## Example 1

1. The view in 3D window
2. The rendered panorama image
3. the position of the camera

Even though render result is different in the panorama image, it will not affect the final result when it is displayed in 360 degree in virtual showroom



# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

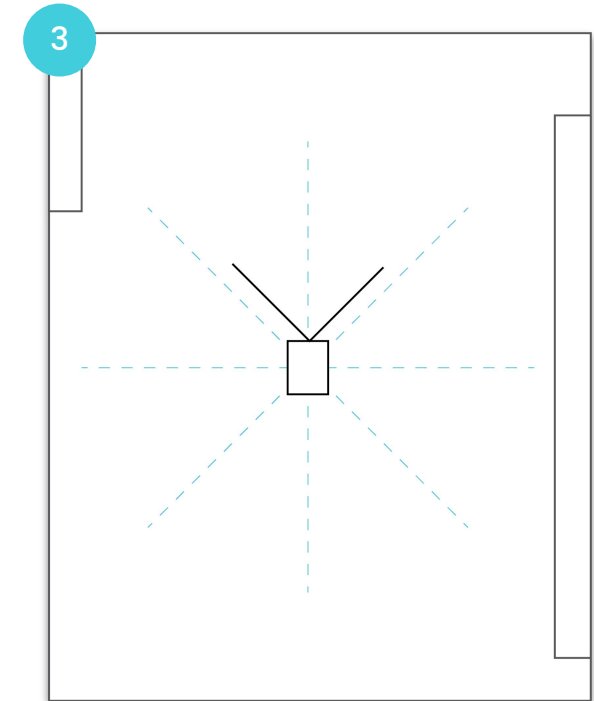
For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

Tips: difference when the camera position is set in different location

Example 2

1. The view in 3D window
2. The rendered panorama image
3. the position of the camera

Even though render result is different in the panorama image, it will not affect the final result when it is displayed in 360 degree in virtual showroom

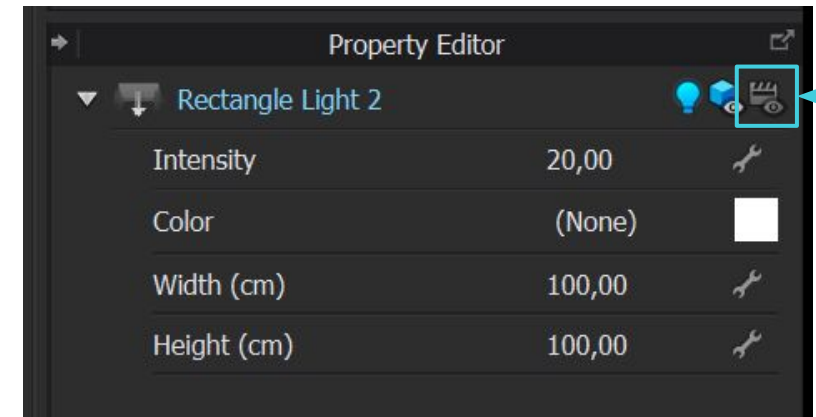
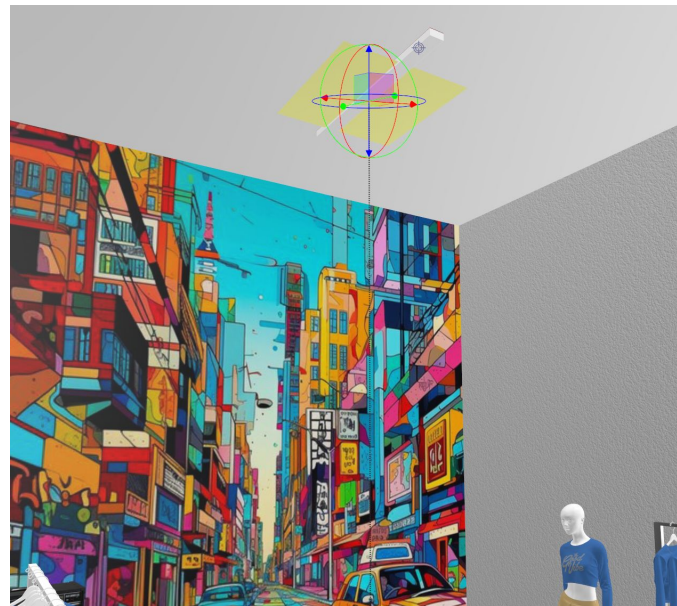
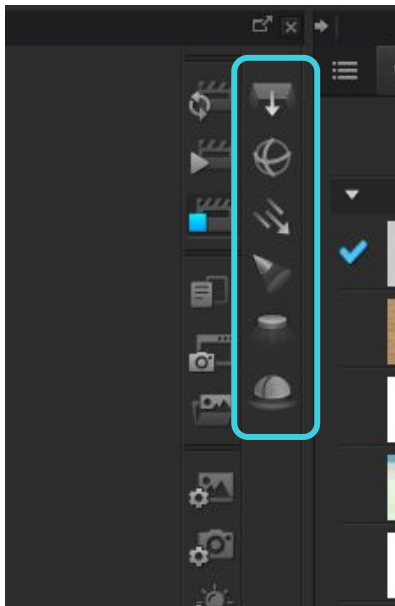


# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

- D. If it is ready, go to 'render > render' to generate the panoramic image
  - f. Don't forget to set up the lighting through the render window. The lighting must be added inside the room, otherwise the room will be dark.



Tips: Add lighting manually from the render window, and set the position from the 3D window.

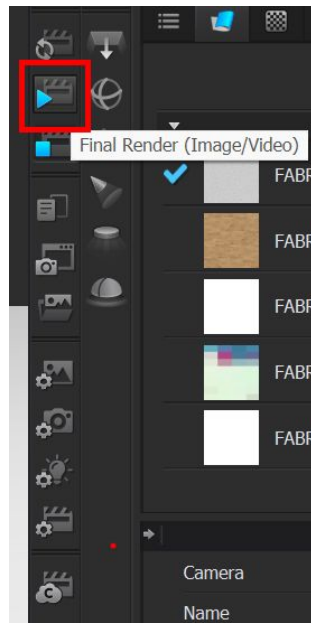
Note: Deactivate the Show (Render) so the lighting mesh doesn't show in the final render.

# Method 3

By building the virtual showroom in CLO and export it to CLO-SET

For this method, you might need to build up the backdrop and the virtual showroom fully in CLO first and render the result as panoramic images. Here is the suggested steps:

- D. If it is ready, go to 'render > render' to generate the panoramic image
  - g. when everything is finalised, click 'Final render(image view)'
- E. follow the later workflow in the Fundamentals to complete the showroom in CLO-SET





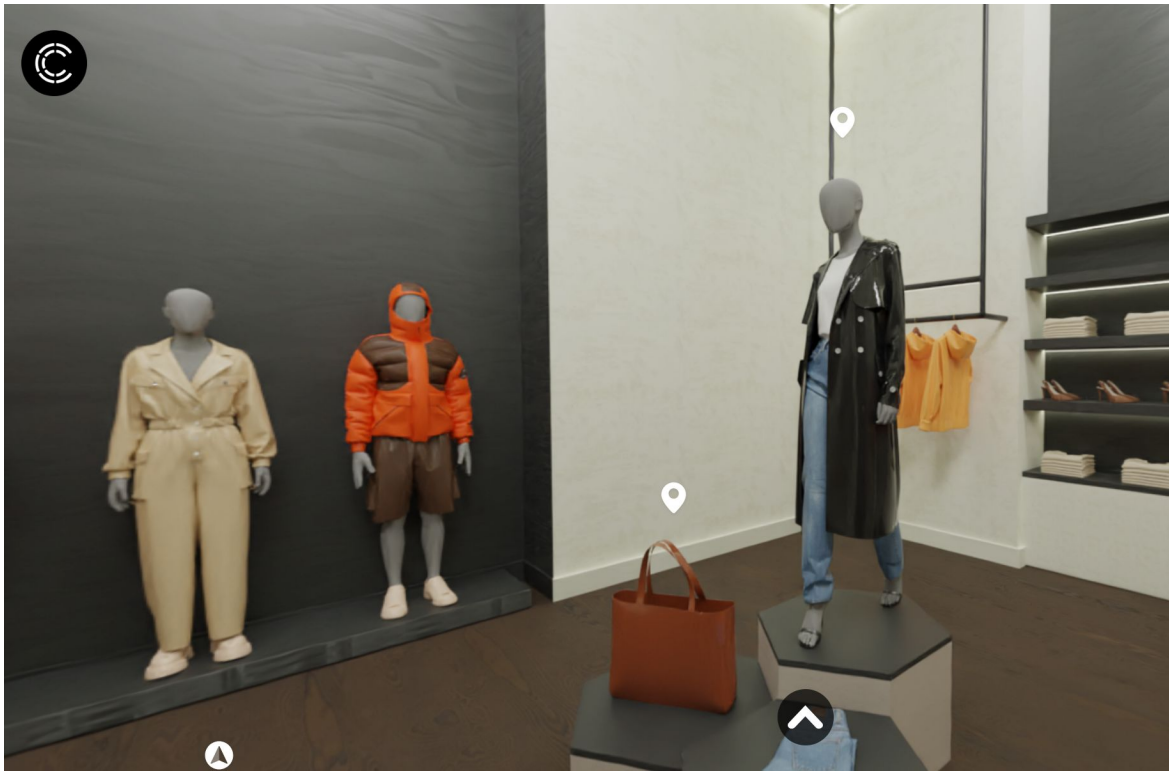
# Method 4

By building the virtual showroom from  
other 3D modelling software and  
export it to CLO-SET

# Method 4

By building the virtual showroom from other 3D modelling software and export it to CLO-SET

This method guides users on creating their own 360-degree backgrounds: setting up a showroom within the CLO3D software and transferring it to another 3D software for rendering 360-degree images. Blender is one of the software options.



[Example A](#)

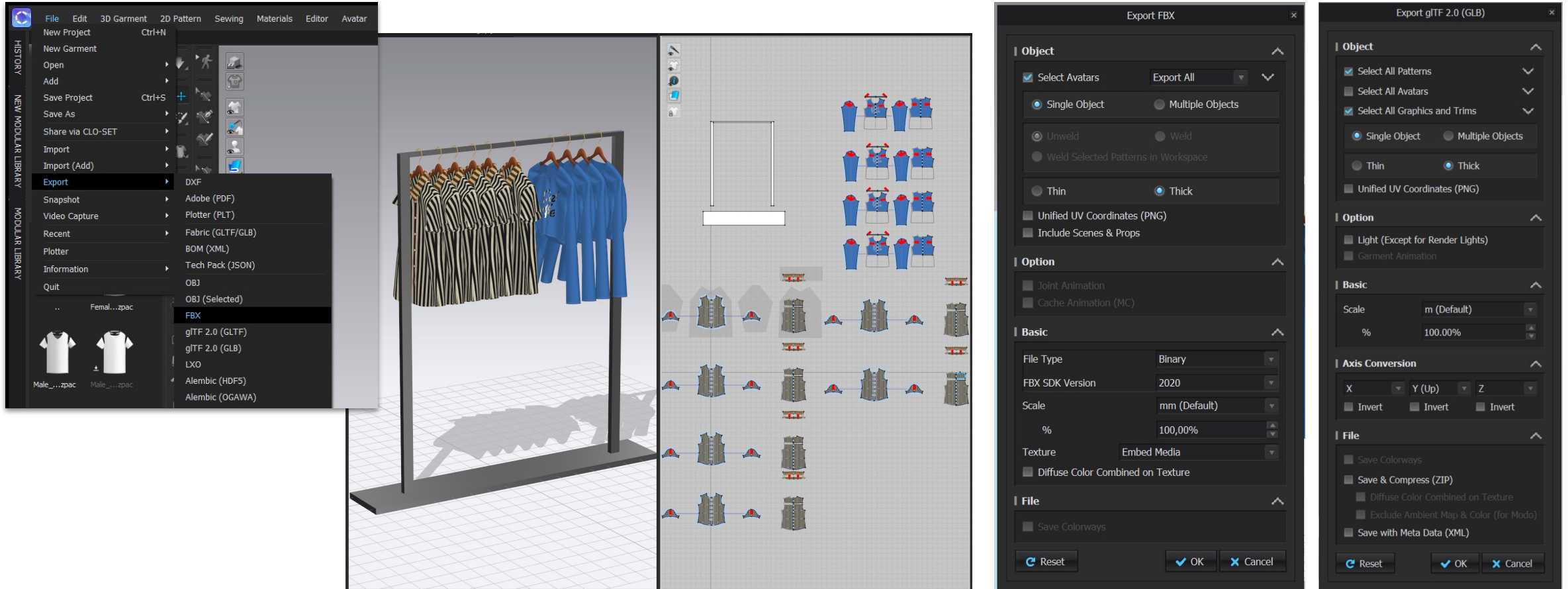


[Example B](#)

# Method 4

By building the virtual showroom from other 3D modelling software and export it to CLO-SET

1. Well prepared all the 3D project files and export it as glb or fbx format one by one

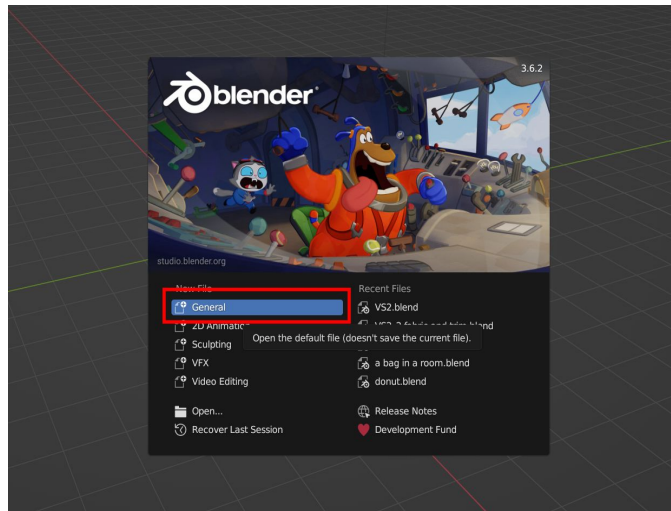


# Method 4

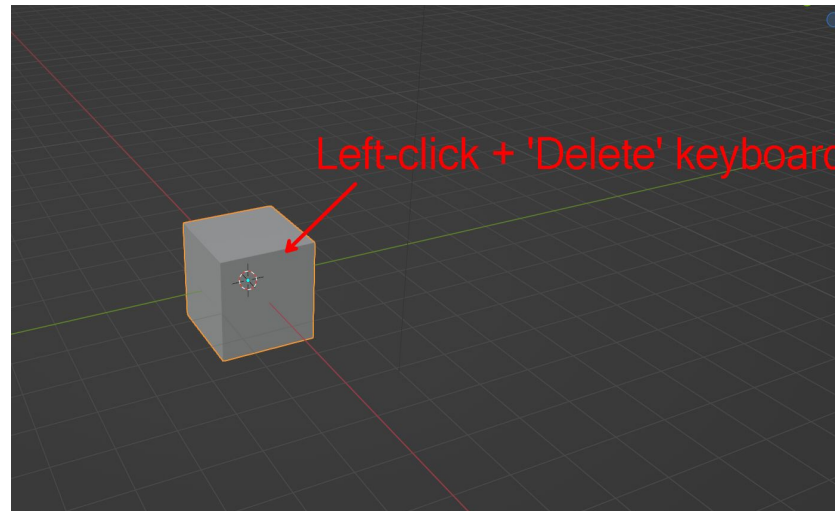
By building the virtual showroom from other 3D modelling software and export it to CLO-SET

## 2. import the glb files to blender:

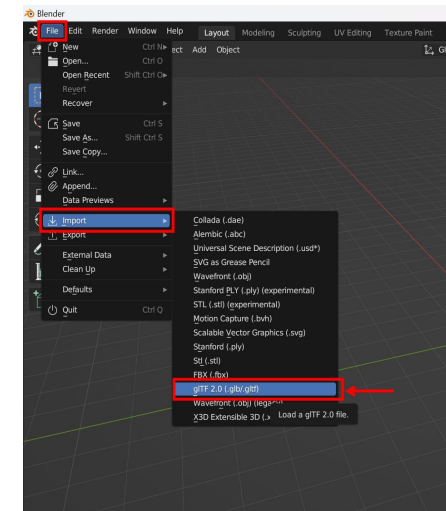
- a. Open Blender > Select 'General' environment > Delete the cube placed in the center of the window > File > Import > GLTF/GLB



1. Open Blender > Select 'General' environment



2. Delete the cube placed in the center of the window



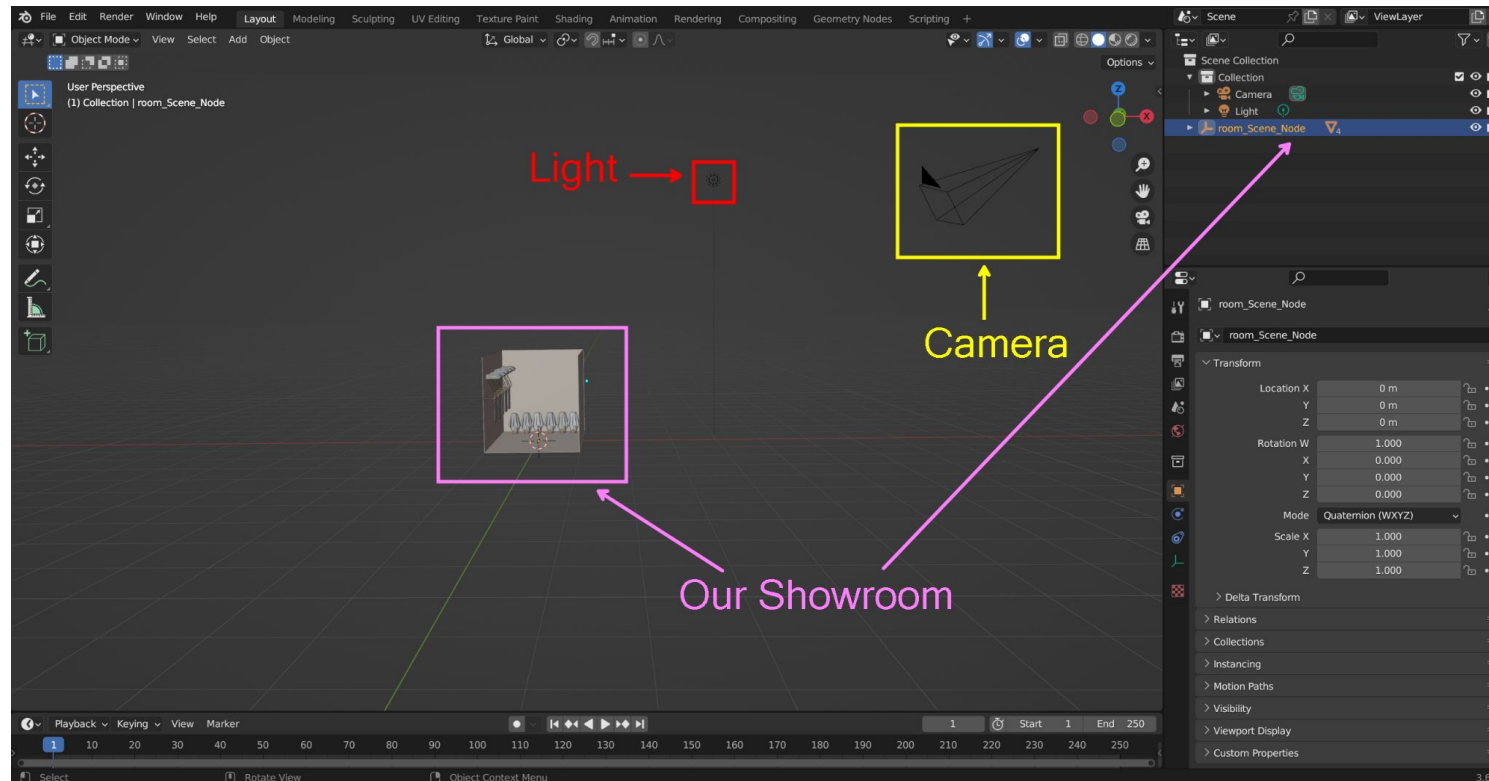
3. File > Import > GLTF/GLB

# Method 4

By building the virtual showroom from other 3D modelling software and export it to CLO-SET

## 3. Build up your 3D showroom in blender

- Similar to CLO, we will have 3D window where contains our showroom, lights, camera, etc. on the LHS. On the Top-RHS, it is similar to CLO Object Browser, where contains a list of things inside the current project, and when we click on any of them, we can find its data and we can adjust them in the Bottom-RHS window (eg. increase the scale of the showroom to have a wider showroom).

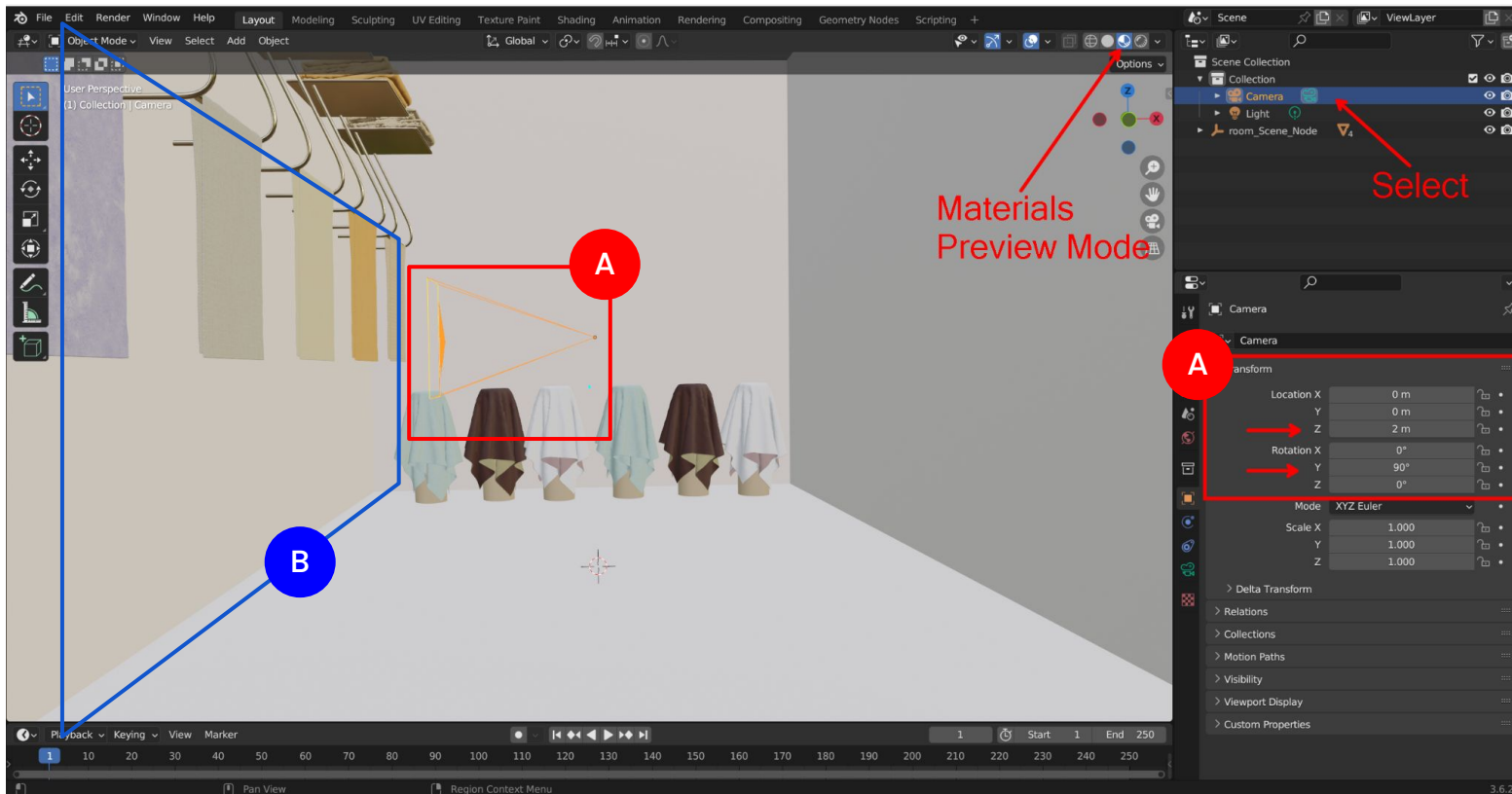


# Method 4

By building the virtual showroom from other 3D modelling software and export it to CLO-SET

## 4. Re-locate the camera to the center of the showroom:

- a. Select the Camera in Object Browser > adjust the Location and Rotation. It should be placed inside the showroom, and you can imagine that the position of the camera is the placement that you are standing in the space.



- A. Suggest that the camera should be placed 90 degrees perpendicular to the ground, so that when rendering 360 degrees, the camera will rotate 360 degrees around the y axis.

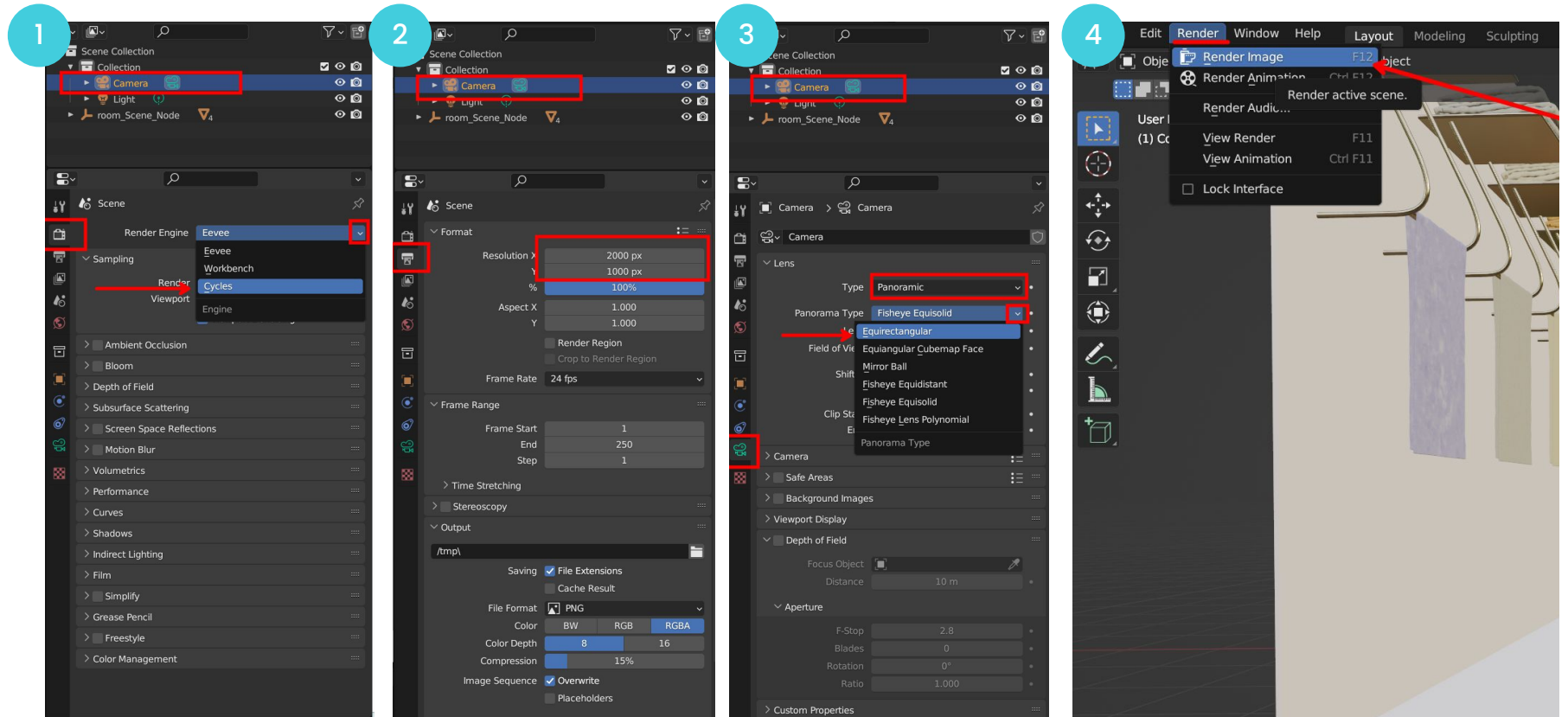
- B. The view/scene that the camera is determined to point at in the 1st frame will be the main face of the Virtual Showroom. This means that when we open the showroom on CLOSET, we will see that scene first

# Method 4

By building the virtual showroom from other 3D modelling software and export it to CLO-SET

5. Render the 3D showroom as panorama image
  - a. You can refer on the tutorial here to render in Blender: [LINK](#)
  - b. Adjust/Set up some recommended setting for the camera and then you can start rendering:

1. Change Render Engine to Cycles (Default is Eevee)
2. Change Render Image Resolution. Should keep the ratio is 2:1
3. Change the Camera Lens Type to Panoramic & Panorama Type to Equirectangular
4. Start Rendering out: Go to Render > Render Image





**Thank you**

