Manual Hotel Room with Augmented Reality (AR)

In this document, you will find how you can create a hotel room with AR. The document will guide you in downloading 3D objects, putting them into operation on the Fectar Platform, and adding elements to our room.

What is a 3D Object?

A 3D object is a three-dimensional digital image that appears to have depth. These objects can be viewed from different angles, creating the illusion of perspective, and making them appear to be solid. 3D objects can be created using modeling software and visualization tools, and they can be used in a variety of applications. 3D Objects have different types of 3D object files. We will work with GLTF objects (.glb).

What is a Fectar?

Fectar is a platform that allows you to manage, execute and use virtual content in AR or Virtual Reality (VR).

Intended outcomes/aims:

- Use 3D objects.
- Create interactions in augmented reality
- Positioning a 3D object

Preparation time:

Brainstorming/Planning: 1 ~ 2 hours

Decision Tree/Step Plan: 1 hour
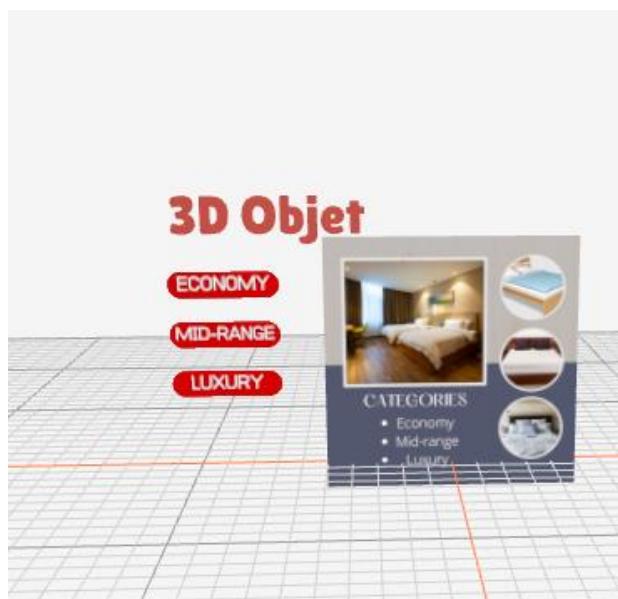
Filming and editing: 2 hours

Total time: 4 ~ 5 hours

Level of Complexity: 4

Service Scenario: **Augmented Reality**

Ingredients:

- 3D beds (.glb)
- Buttons (.jpg/.png)
- Software: Fectar (Free trial)

Instructions:

Step 1: Download

Download the 3D objects. In our example of a Hotelroom you can download the content to our drive: https://bit.ly/3SVtjpA However, you can find many more 3D objects at: https://sketchfab.com/ Remember that the format we are going to use is .glb

Step 2: Register

We register at https://fectar.com/ and enter the FECTAR studio https://studio.fectar.com/ here we will upload our files.

Step 3: Files

Click on the file manager, in the My files part in the right box you have to right click to create a new folder
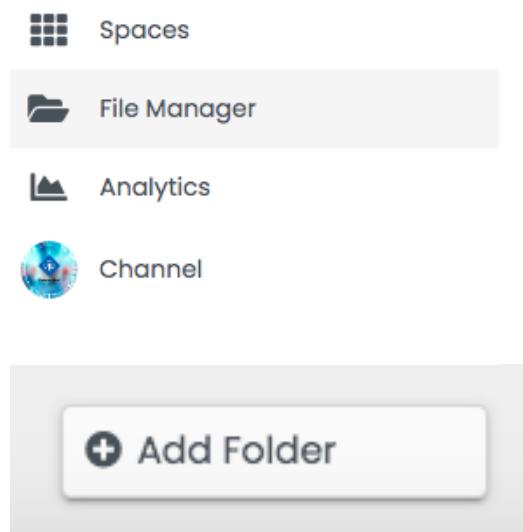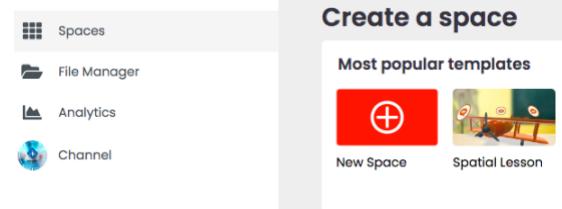

Click on the file manager, in the My files part in the right box you have to right click to create a new folder, we will call it "HotelBed", we enter and click on upload, we select our files and we accept.
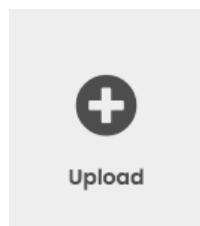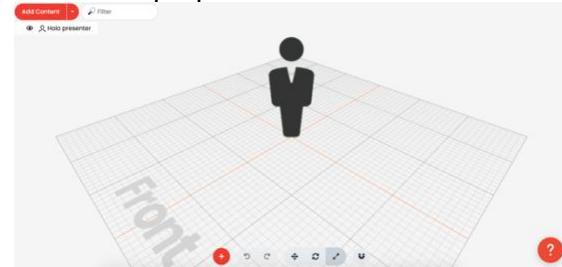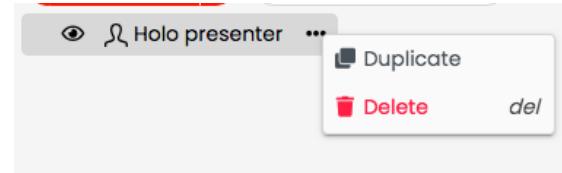

Step 4: Spaces

Create our Space, for this we click on spaces and then on new space.

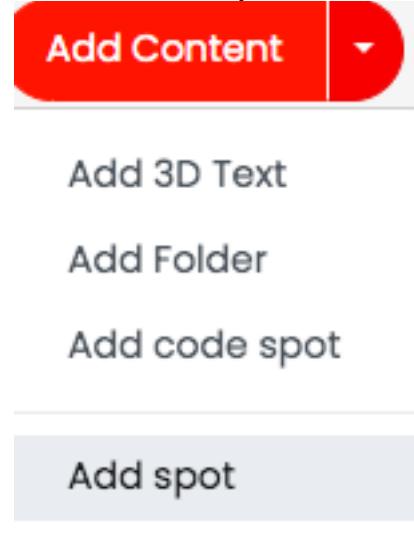This will open up our work environment, it's time to prepare it.
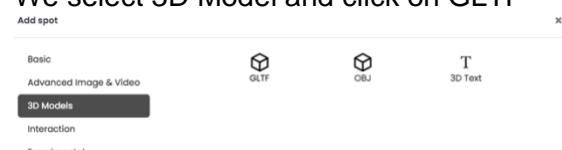

we delete the content.

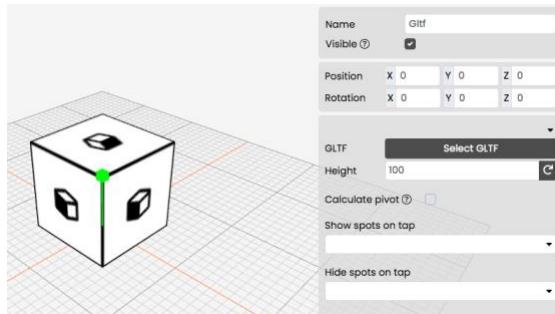

Step 5: Adding our objects
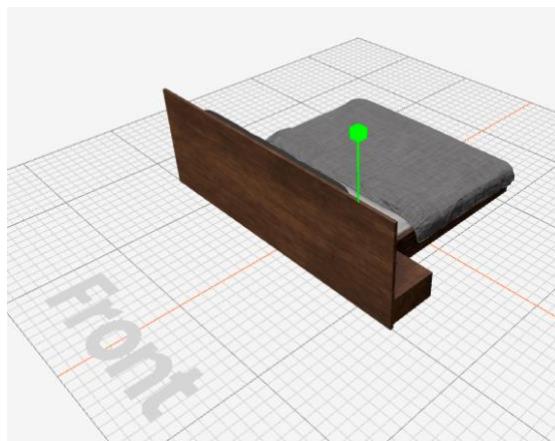
We are now ready to add our objects.

We click on the arrow on the right side and them in Add Content.
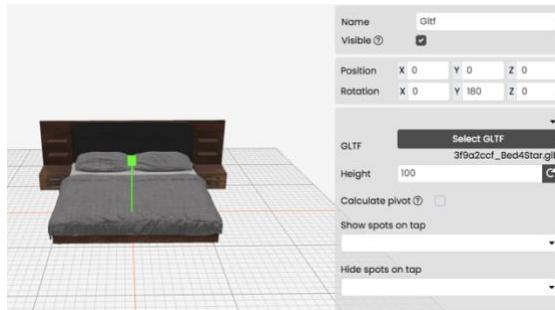We select 3D Model and click on GLTF

We will be loaded with a cube by default. We click on "Select GLTF" and select our bed that has the name MidRange.

This bed is in the opposite direction, to position it correctly we must edit its rotation on the Y axis
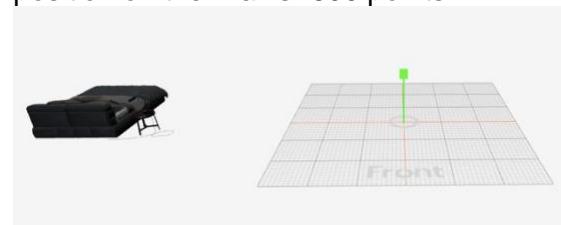

Rotation Y:180

then we hide this bed and we repeat the process for our second bed (LuxuryRange).
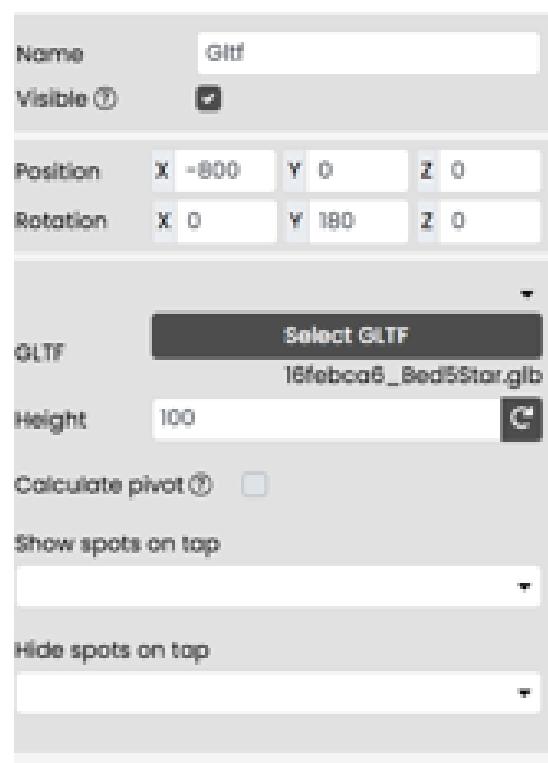

This bed has the center of rotation moved, when rotating 180 degrees our bed is not
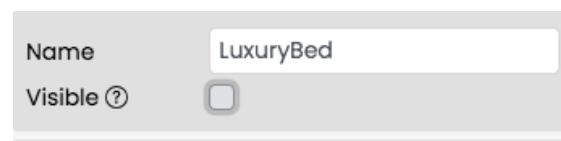
in the center, we must also move its position on the X axis -800 points
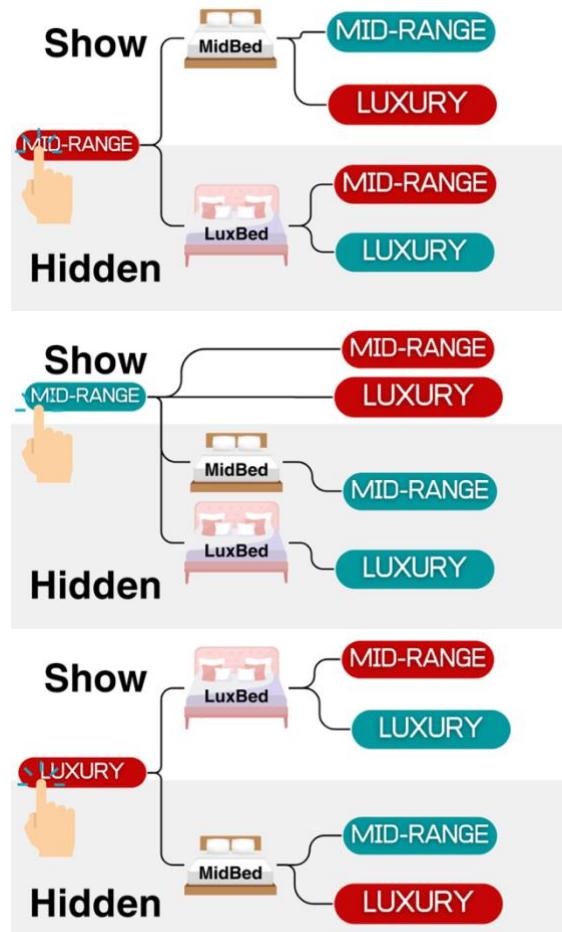

Position: X -800
Rotation Y: 180

We can also give it a name "LuxuryBed" and disable visibility.

Step 6: decision tree

We are going to create the interaction, for this, we need our decision tree.
In this case, you must think: What if?
Suppose we have button "A" and user presses it, then we show some things and remove others.
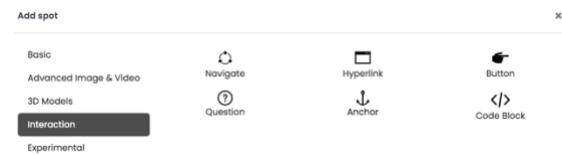

Below you will find the decision trees for 3 states, one is missing, so create it as you think it would be.

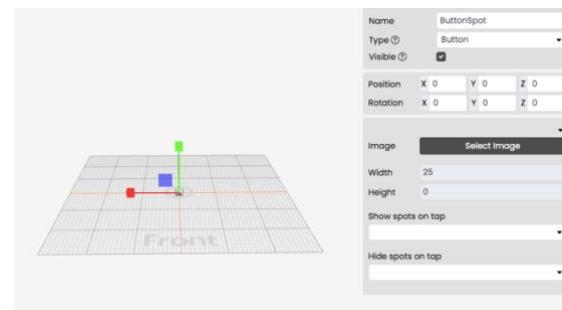## Step 7: Adding our objects

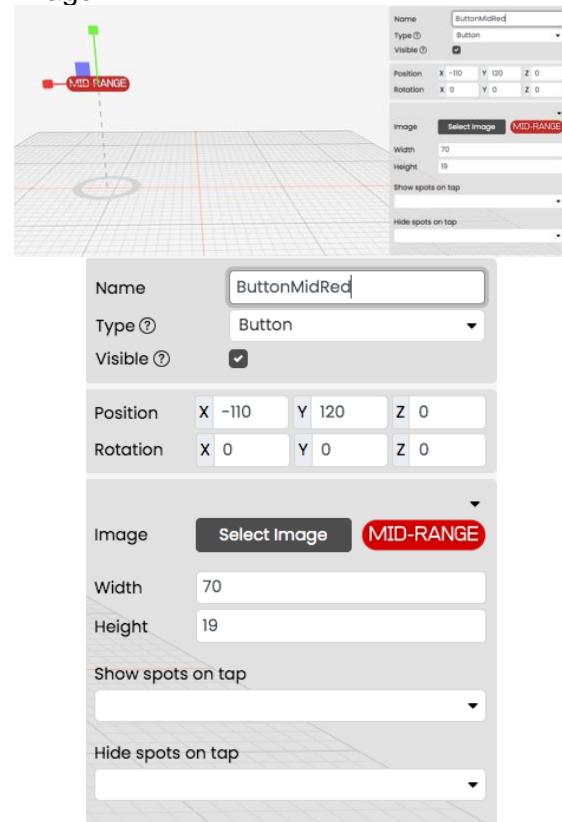Let's create our buttons in effectar, taking into account our decision tree.
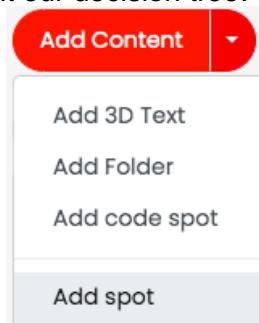
Then we click on interaction and then on Button.

A box like the one shown will open. We must click on Select Image and select our image from our red midrange button.

Once selected we must modify its position and size as can be seen in the following image.

|	
Name	ButtonMidRed
Type ⓘ	Button ▾
Visible ⓘ	☑
Position	X -110 Y 120 Z 0
Rotation	X 0 Y 0 Z 0
Image	Select Image MID-RANGE
Width	70
Height	19
Show spots on tap	▾
Hide spots on tap	▾

We repeat these steps for our Mid Range Green button in the same position and our Luxury Red and Green buttons with position (X:-110, Y: 100, Z:0).
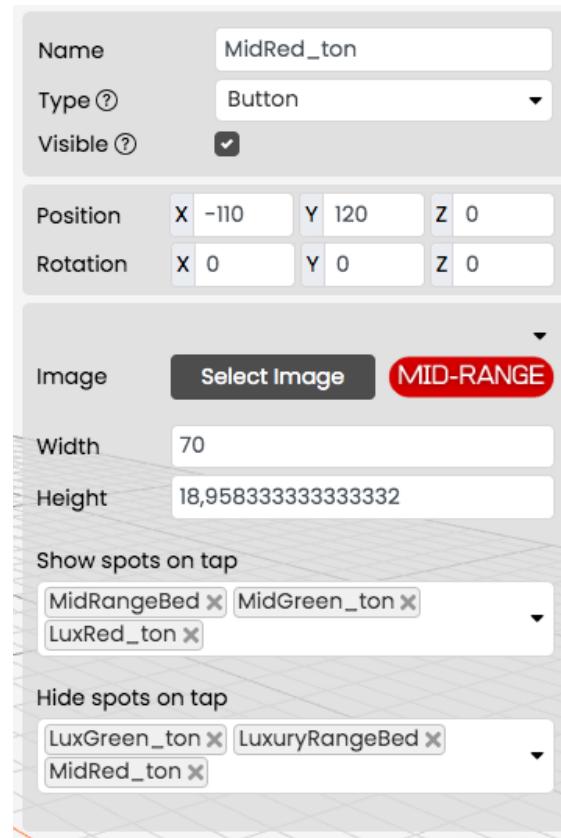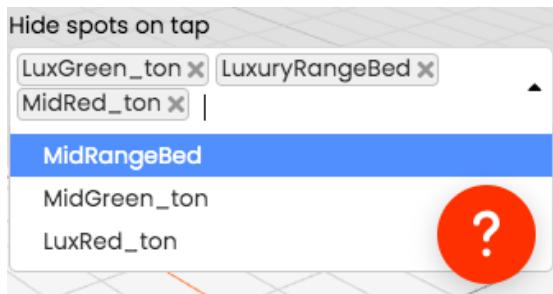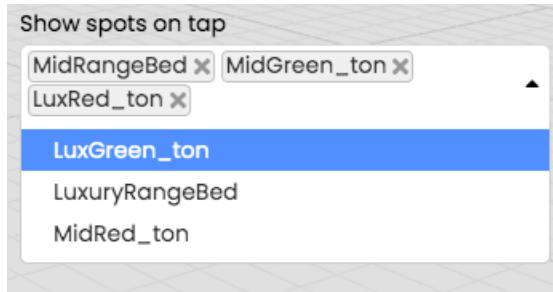
Now that, we have our buttons loaded and we understand the interaction flow, let's program this.

Step 8: programming

We start by showing the red buttons. Then we select the red midrange button.
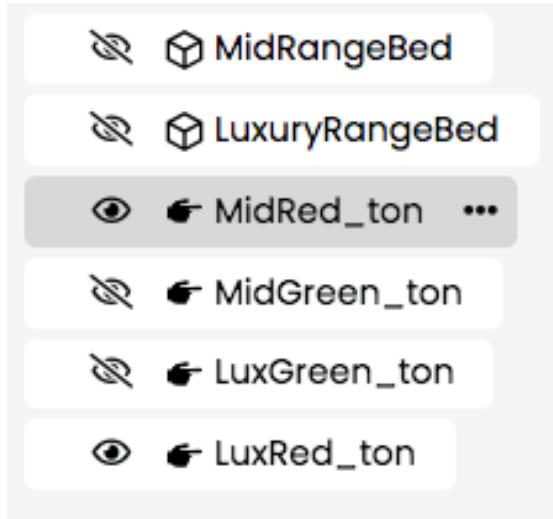
In the right box we begin to select what to show and what to hide, seeing our decision tree.
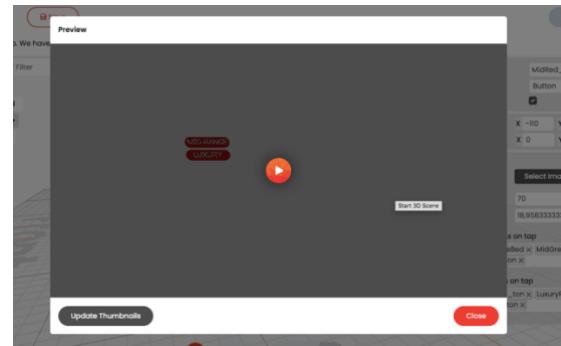

Step 9: Play

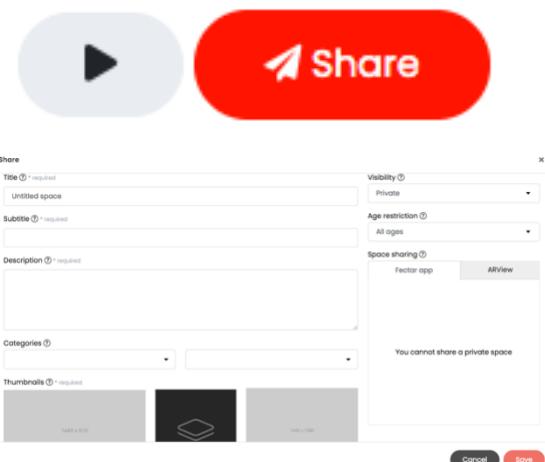It's time to see our prototype working. We click on save.

Then press play and a desktop simulation will open

Step 10: Share

Finally, to use it with your students, we must fill out a little information about our Prototype.
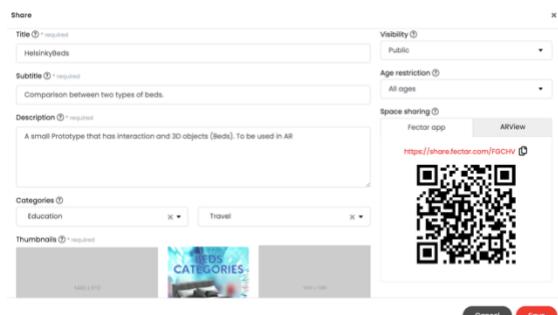

- Title: HelsinkyBeds
- Subtitle: Comparison between two types of beds.
- Description: A small Prototype that has interaction and 3D objects (Beds). To be used in AR
- Categories: Education, Travel.
- Visibility: Public.
- Age restriction: All age

Once you have this information, the QR, link and code of your Prototype will be shown.

Space sharing ⑦

Fectar app	ARView

https://share.fectar.com/FGCHV

Congratulations, we have finished cooking.