# Code an Augmented Reality Scene

Our Augmented Reality dinosaur page is programmed using **HTML** (like any other webpage) and an extra collection of **JavaScript** code called **Aframe**.

To alter the AR scene go to https://glitch.com/edit/#!/fabulous-closed-crowberry and click the **Remix** button on the top right:

You've now got a copy of the original file that you can change.

You'll see a list of files on the left of the screen. Click on the one called **index.html**
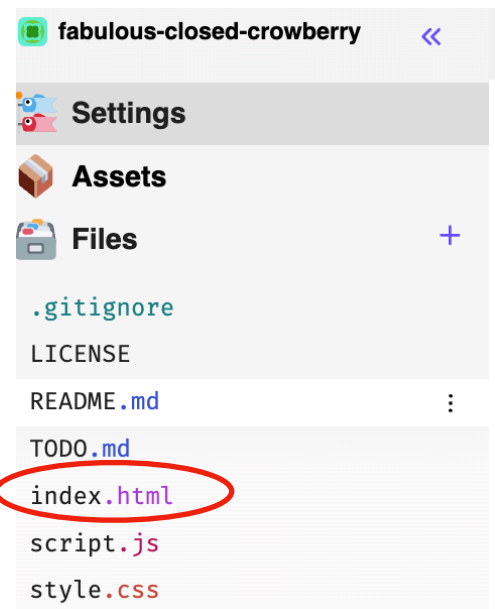
Change the size of the dinosaur

To do this we need to change the numbers next to the word `scale` on **line 37** of the file:
All the settings to do with the dinosaur's size and postion have three numbers. This is because it's a **3-dimensional** model in a 3-dimensional scene.

```
<a-entity id="dino" position="0 -2 -5" scale="0.75 0.75 0.75">
```

-     The first number is how big the dinosaur is from **left to right**
-     The second number is how big the dinosaur is **up and down**
-     The third number is how big the dinosaur is **towards or away** from us.

Try...

- What happens is you change **just one or two** of these numbers?
- Or change them all to **different values**?

Change the position of the dinosaur

The dinosaur has two settings that change its position. The first one, the numbers next to the word `position` on **line 37** again, move it **left to right**, **up or down**, **closer or further away**.

```
<a-entity id="dino" position="0 -2 -5" scale="0.75 0.75 0.75">
```

- **Try some values** and see what happens.

You can also change the way the dinosaur is facing by changing the numbers next to `rotation` on line 38.

```
<a-entity position="0 0 0" rotation="0 30 10"
```

Change the dinosaur into something else

In the index.html file, the block of code starting on **line 22** with **<a-assets timeout="30000">** and finishing on **line 33** with **</a-assets>** tells the browser **where** to find the dinosaur model. The model's id is **spinosaurus.**

```
<a-asset-item id="spinosaurus" src="https://cdn.glitch.com/324
            response-type="arraybuffer"></a-asset-item>
```

This id is used in the code starting on **line 38** that tells the browser **where** and how to **display** the model - only this time the id has a **# symbol** in front of it.

```
<a-entity position="0 0 0" rotation="0 30 10"
        gltf-model="#spinosaurus"
        animation-mixer
        shadow="cast: true; receive: true"></a-entity>
```

There are another two models available in the web page:

```html
<a-asset-item id="zombie" src="https://cdn.glitch.global/9
            response-type="arraybuffer"></a-asset-item>
```

And

```html
<a-asset-item id="cat" src="https://cdn.glitch.global/9e861f
            response-type="arraybuffer"></a-asset-item>
```

Change "#spinosaurus" into either "#zombie" or "#cat" and see what happens!

```html
<a-entity position="0 0 0" rotation="0 30 10"
        gltf-model="#spinosaurus"
        animation-mixer
        shadow="cast: true; receive: true"></a-entity>
```

Saving your AR code

If you'd like to be able to save your AR creation to show friends and family later, you'll need to create a Glitch account, otherwise your code will be deleted after a week or so.