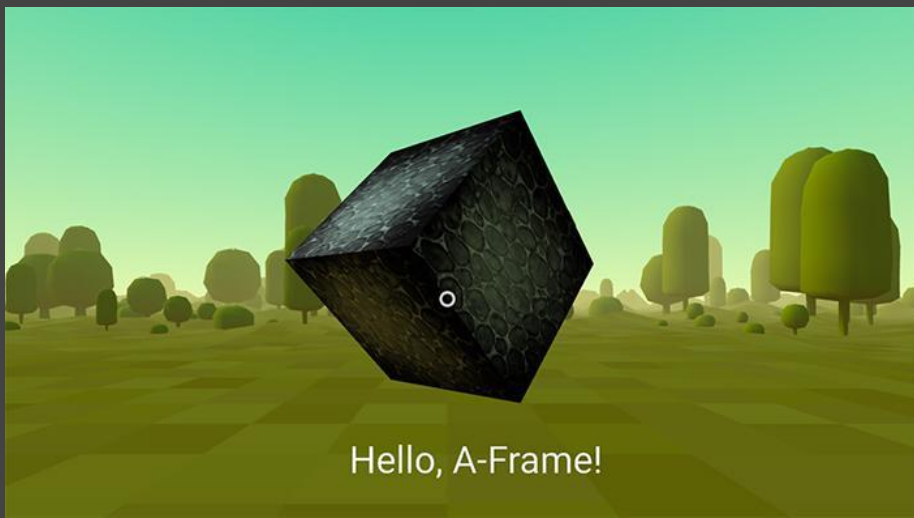


# 1st Workshop

Basic A-frame tags, create a scene, movement  
and camera. Basic objects





```
<html>
```

```
</html>
```

- Basic HTML is code written between tags.
- Tags are special words inside < and > characters.
- Most tags are double. Which means you need two of them, one for open like <html> and another to close </html>.
- Between tags there are more tags in a tree-like structure.



**<a-scene> tag**

```
<html>
  <head>
    <script
src="https://aframe.io/releases
/1.4.0/aframe.min.js"></script>
  </head>
  <body>
    <a-scene>
  </a-scene>
</body>
</html>
```

- A-Frame websites, like every website, have a `<head>` and a `<body>` tags.
- Inside `<head>` we place stuff needed to make the page work, like the `<script>` tag that gave us A-Frame capabilities.
- Other tags inside `<head>` are `<title>` or `<meta>`.
- Inside the `<body>` tag we need to place our 3D objects, inside a `<a-scene>` tag.

```
<a-scene>
```

```
  <a-box
```

```
    color="#666666"
```

```
    position="0 2 -5"
```

```
    rotation="0 45 45"
```

```
    scale="2 2 2">
```

```
  </a-box>
```

```
</a-scene>
```

- The `<a-scene>` tag handles all the needed setup for 3d scenes.
- There are some basic 3D objects, like `<a-box>`.
- Others are: `<a-plane>`, `<a-sky>`, `<a-torus-knot>`, `<a-sphere>`, `<a-cylinder>` and `<a-cone>`
- They all share the properties: *color*, *position* (x, y, z), *rotation* (x, y, z) and *scale* (x, y, z).
- It is possible to add many objects to a `<a-scene>`. One, after the other.

```
<a-assets>
```

```
  
```

```
</a-assets>
```

```
<a-plane
```

```
  material="src: #grass;
```

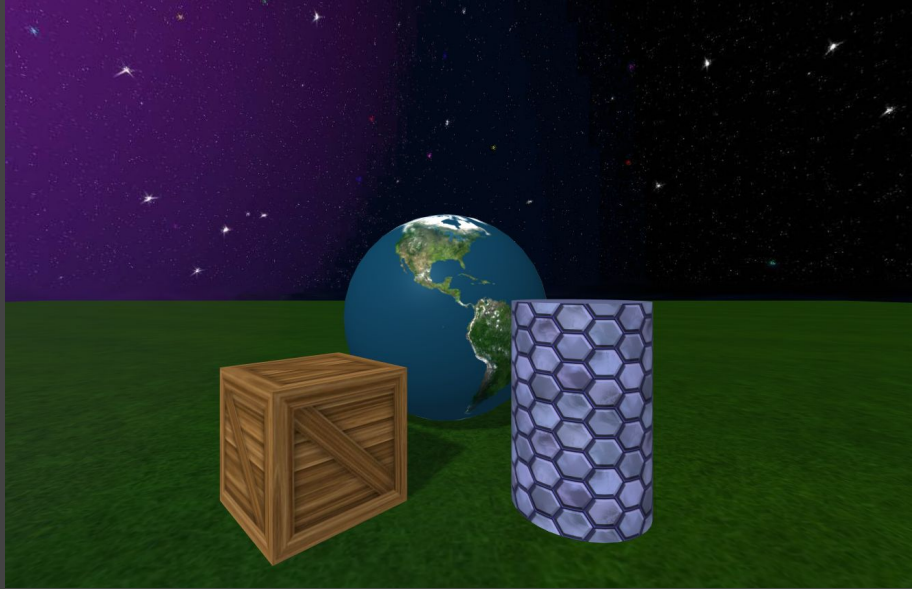
```
    repeat:10 10;
```

```
    transparent: true;
```

```
    opacity: 0.75">
```

```
</a-plane>
```

- Images are used mainly to add texture to an object. Then they are called materials.
- They have specific properties. Some of the most important are:
  - *src*: identification.
  - *repeat*: number of repetitions to cover the surface.
  - *transparent*: true or false.
  - *opacity*: percentage of transparency.
- Take care of the size of your images.

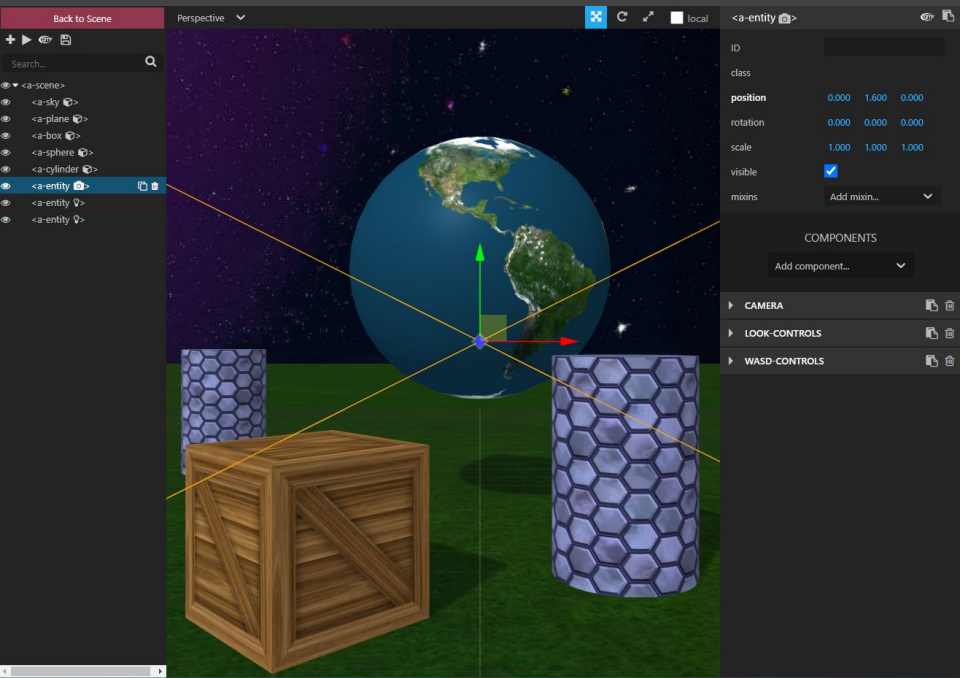


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  - *opacity*: percentage of transparency.
- Take care of the size of your images.



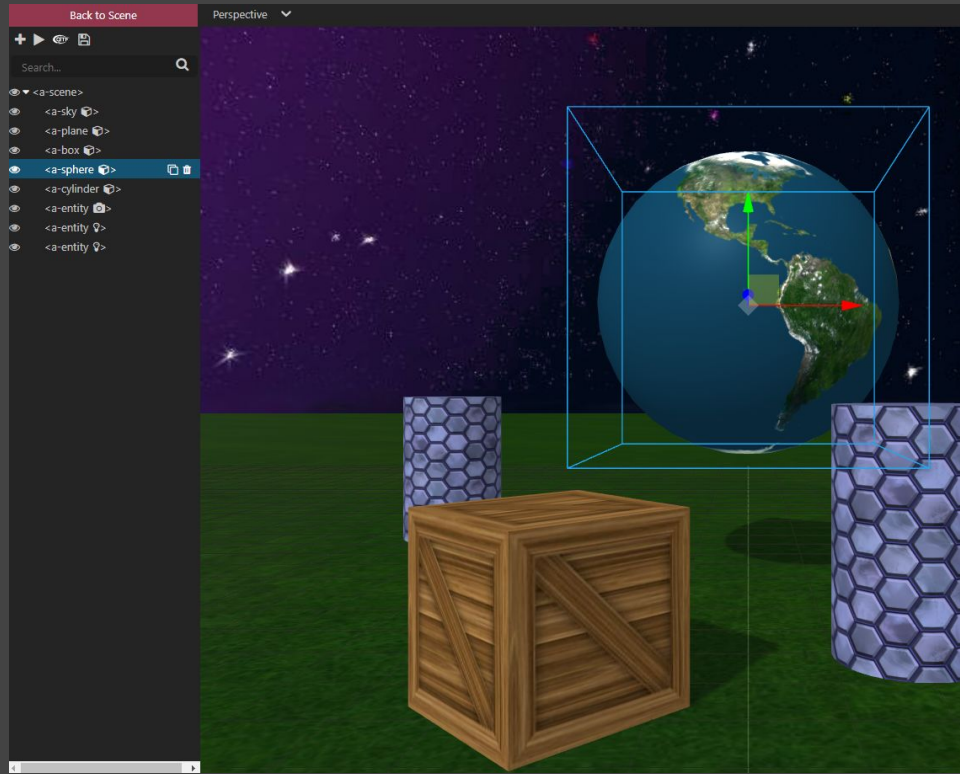
**Ctrl + Alt + i for Inspector**



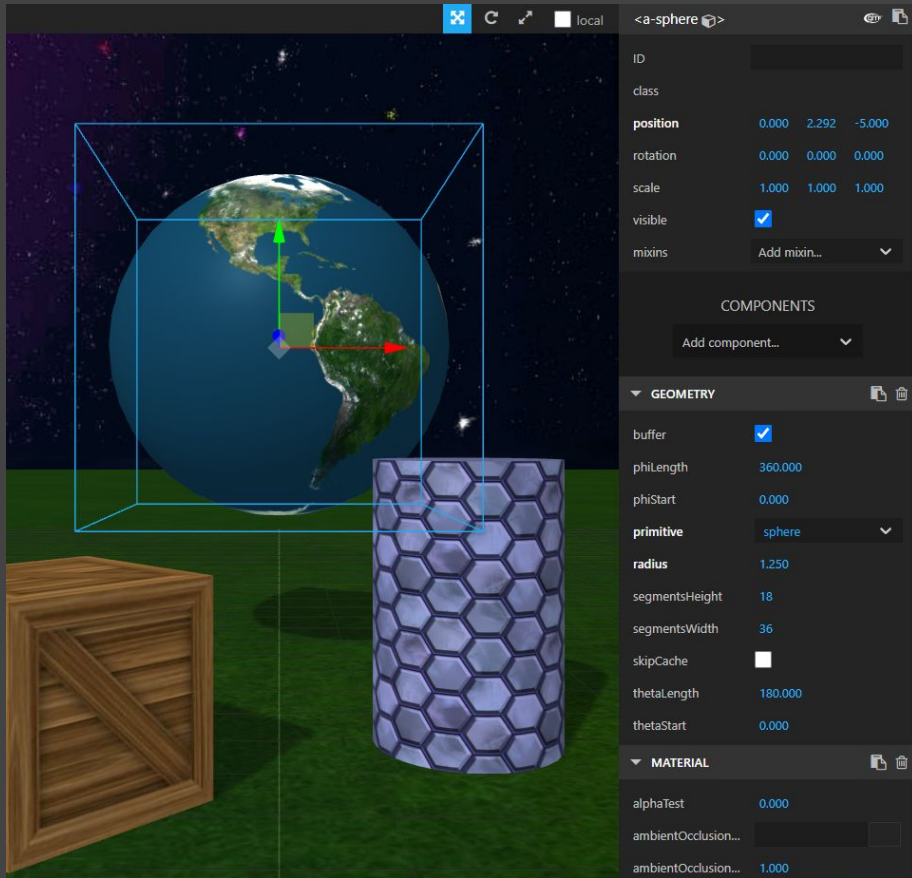


To ease the composition of a scene, A-frame comes with a tool called *Inspector*.

To see it in action, go to [image-texture.html](http://image-texture.html) and hit **Ctrl + Alt + i**



- The menu on the left allows you to select the objects already present in the <a-scene> tag.
- It allows you to move them using the green, red and blue arrows on every selected object.
- You can also change the view to help you see in the three dimensions with number keys 1, 2, 3, 4 and 5.



- The menu on the right allows you to configure every property on every object.
- It allows you to scale, rotate, change colors, lights, materials, etc.
- It is **VERY IMPORTANT** to copy the properties that you like, to be able then to paste them again in your own files.



**RIT**  
REALITIES IN  
TRANSITION

# environment component

#### aframe-environment-component

A component for adding procedural environments to your **A-Frame** demos and experiences.

Press `ctrl + alt + i` to enter inspector and tweak parameters.

[GitHub](#) / [How to use it](#)



In order to start with the basics, A-frame comes with an extra component called *environment*, that allows us to create and customize an entire environment for us.

```
<head>
```

```
  <script
```

```
    src="js/aframe-environment-compone
```

```
nt.js"></script>
```

```
</head>
```

```
<body>
```

```
  <a-scene
```

```
    environment="preset: forest;">
```

```
  </a-scene>
```

```
</body>
```

- In order to use this feature we need to add another `<script>` tag to the `<head>` tag.
- We then can add the property environment to the `<a-scene>` tag.
- There are several preset values for environment: forest, goaland, contact, egypt, etc.
- This creates a scene with floor, sky and some objects. And move around with *wasd* keys.



Try them out at

<https://supermedium.github.io/aframe-environment-component/>

Once you have chosen one, use the Inspector to tweak the properties around and adapt it to your scene.



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# Working Group Time



# How do we start the project on the computer for the hackathon?

- 1) Start the webserver.
- 2) Go to a web browser and type “localhost/aframe/”.
- 3) The *A-frame Examples* page should run.
- 4) Go to your Computer and find the aframe folder.
- 5) Rename the file called *environment.html* to *hackathon-group-X.html* with the number of your group.
- 6) Create a new folder called *hackathon-group-X* with the number of your group.
- 7) All new objects and images must be downloaded in this folder.

# How do we begin the project as a group team?

- 1) Go to the environment component test page and browse through all the environments.
- 2) Choose the environment that will host your world.
- 3) Begin to make changes to adapt it to your scene. Remember to copy paste the configuration to your *hackathon-group-x.html* file.
- 4) Decide with your group, what other 3d objects do you need and search for them inside *model* folder or in [Sketchfab](#)
- 5) Begin to design on a piece of paper your future scene.