A-FRAME COMPONENTS

What is our GOAL for this MODULE?

The goal of this module is to write our own custom components in A-Frame.

What did we ACHIEVE in the class TODAY?

- We learned about the Entity Component System in A-Frame
- We learned how to register custom components in A-Frame

Which CONCEPTS/CODING BLOCKS did we cover today?

- Used AFRAME.registerComponent (name, definition)
- Used <a-entity>,<a-box> tags

How did we DO the activities?

1. We learned to include the Box.js in index.html before the <a-scene>

```
<head>
  <script src="https://aframe.io/releases/1.0.4/aframe.min.js"></script>

  <script src="Box.js"></script>

</head>
```

2. We learned how to register a component, to update the position in the x-direction.

```
// Registering component in box-component.js
AFRAME.registerComponent("move-box", {
  schema: {
    moveX: { type: "number", default: 1 },
  }
});
```

3. We learned how to use the tick handle method.

```
// Registering component in box-component.js
AFRAME.registerComponent("move-box", {
  schema: {
    moveX: { type: "number", default: 1 },
  },

  tick: function () {

    this.data.moveX = this.data.moveX + 0.01;

  }
});
```

4. We learned how to update the value of the position attribute of the entity.

```javascript
// Registering component in box-component.js
AFRAME.registerComponent("move-box", {
  schema: {
    moveX: { type: "number", default: 1 },
  },

  tick: function () {

    this.data.moveX = this.data.moveX + 0.01;

    var pos = this.el.getAttribute("position");

    pos.x = this.data.moveX;

    this.el.setAttribute("position", {x: pos.x, y: pos.y, z: pos.z});
  }
});
```

5. We learned how to attach the component to the entity.

```html
<a-entity position="0 0 0" move-box>

  <a-box>

  </a-box>

</a-entity>
```

We have successfully written our own custom component.

What's NEXT?
In the next class, we will be learning more about A-Frame components and event handlers in javascript.

EXTEND YOUR KNOWLEDGE:
You can refer to the below link to explore more about creating components
https://aframe.io/docs/1.1.0/introduction/writing-a-component.html