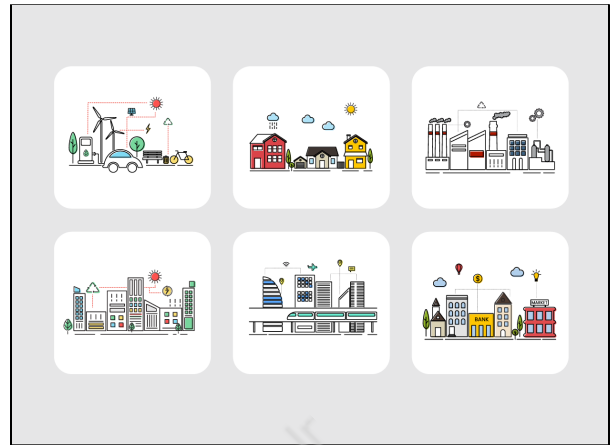


CREATE THUMBNAILS



What is our GOAL for this MODULE?

We created a basic structure for the virtual tour with the HTML page and added the content as entities to the page.

What did we ACHIEVE in the class TODAY?

- Learned to create thumbnails for different places to visit.
- Learned to add different entities for different elements.

Which CONCEPTS/CODING BLOCKS did we cover today?

- `document.createElement()` method and variable `entityEl`.
- `.addEventListener()`, `setAttribute()`, `.registerComponent()` methods

How did we DO the activities?

1. Define "createCards".
 - Add the "thumbNailsRef" array.
 - Add JSON objects having id, title and URL as keys and their values.

```
createCards: function () {  
  const thumbNailsRef = [  
    {  
      id: "taj-mahal",  
      title: "Taj Mahal",  
      url: "./assets/thumbnails/taj_mahal.png",  
    },  
    {  
      id: "budapest",  
      title: "Budapest",  
      url: "./assets/thumbnails/budapest.jpg",  
    },  
    {  
      id: "eiffel-tower",  
      title: "Eiffel Tower",  
      url: "./assets/thumbnails/eiffel_tower.png",  
    },  
    {  
      id: "new-york-city",  
      title: "New York City",  
      url: "./assets/thumbnails/new_york_city.png",  
    },  
  ],  
};
```

2. Define the “createBorder” function to add the ring geometry for the thumbnail cards.
 - Create the entity using document.createElement()
 - Use setAttribute method to set the properties of the entity.

```
createBorder: function(position, id) {  
  const entityEl = document.createElement("a-entity");  
  entityEl.setAttribute("id", id);  
  entityEl.setAttribute("visible", true);  
  entityEl.setAttribute("geometry", {  
    primitive: "ring",  
    radiusInner: 9,  
    radiusOuter: 10  
  });  
  entityEl.setAttribute("position", position);  
  entityEl.setAttribute("material", {  
    color: "#00bcd4",  
    opacity: 0.4  
  });  
  return entityEl;  
},
```

3. Define the “createThumbNail” function to add an image of the place to visit over a circle primitive.
 - Create the entity using document.createElement().
 - Use setAttribute method to set the properties of the entity.

```
createThumbNail: function(item) {  
  const entityEl = document.createElement("a-entity");  
  entityEl.setAttribute("visible", true);  
  entityEl.setAttribute("geometry", {  
    primitive: "circle",  
    radius: 9  
  });  
  entityEl.setAttribute("material", { src: item.url });  
  return entityEl;  
},
```

4. Define the “createTitleEl” function to add the title text of the places to visit.
 - Create the entity using document.createElement()
 - Use setAttribute method to set the properties of the entity.

```
createTitleEl: function(position, item) {
  const entityEl = document.createElement("a-entity");
  entityEl.setAttribute("text", {
    font: "exo2bold",
    align: "center",
    width: 60,
    color: "#e65100",
    value: item.title
  });
  const elPosition = position;
  elPosition.y = -20;
  entityEl.setAttribute("position", elPosition);
  entityEl.setAttribute("visible", true);
  return entityEl;
},
```

5. Set the positions of the thumbnails inside “createCards” and call “createBorder”, “createThumbNail” and “createTitleEl” functions.

```
let previousXPosition = -60;
for (var item of thumbNailsRef) {
  const posX = previousXPosition + 25;
  const posY = 10;
  const posZ = -40;
  const position = { x: posX, y: posY, z: posZ };
  previousXPosition = posX;

  // Border Element
  const borderEl = this.createBorder(position, item.id);

  // // Thumbnail Element
  const thumbNail = this.createThumbNail(item);
  borderEl.appendChild(thumbNail);

  // Title Text Element
  const titleEl = this.createTitleEl(position, item);
  borderEl.appendChild(titleEl);

  this.placesContainer.appendChild(borderEl);
}
```

6. Call the “createCards” function inside the .init() life handler method to see the output.

```
init: function() {  
  this.placesContainer = this.el;  
  this.createCards();  
},
```



We have learned to create thumbnails required for places to visit in a virtual tour.

What's NEXT?

In the next class, we will be learning how to use the A-Frame cursor and handle cursor-events.

EXTEND YOUR KNOWLEDGE:

1. Explore more about [A-Frame](#).