How to Build an Object and Use the Entity Component

1. Start a new Replit using the AFrame language.
2. For this example, we are building a snowman. Delete the cylinder and cube. Change the color of the sphere to white. Copy and paste the sphere object twice. Scale and translate the spheres to simulate the spheres of a snowman's body:

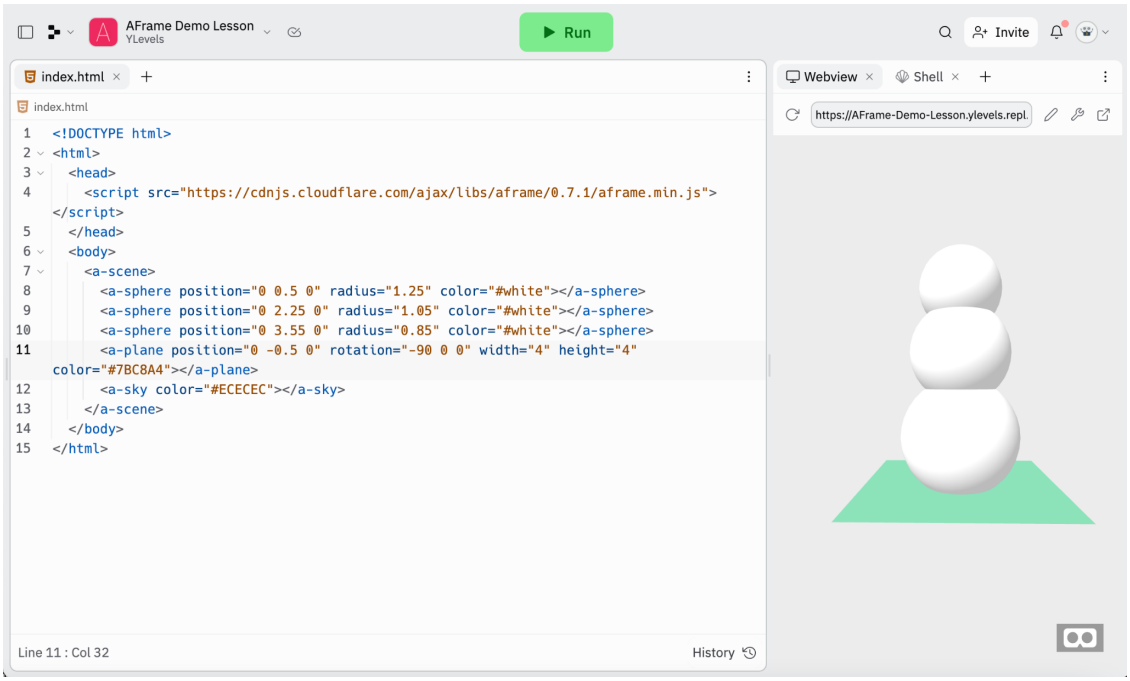

Figure 1.1: The plane has been translated on the y-axis to accommodate for the size of the sphere at the bottom (line 11).

4. Add the snowman's eyes by creating two new spheres. Set their colors to black. Translate the spheres on the x-axis and scale them to an appropriate radius.

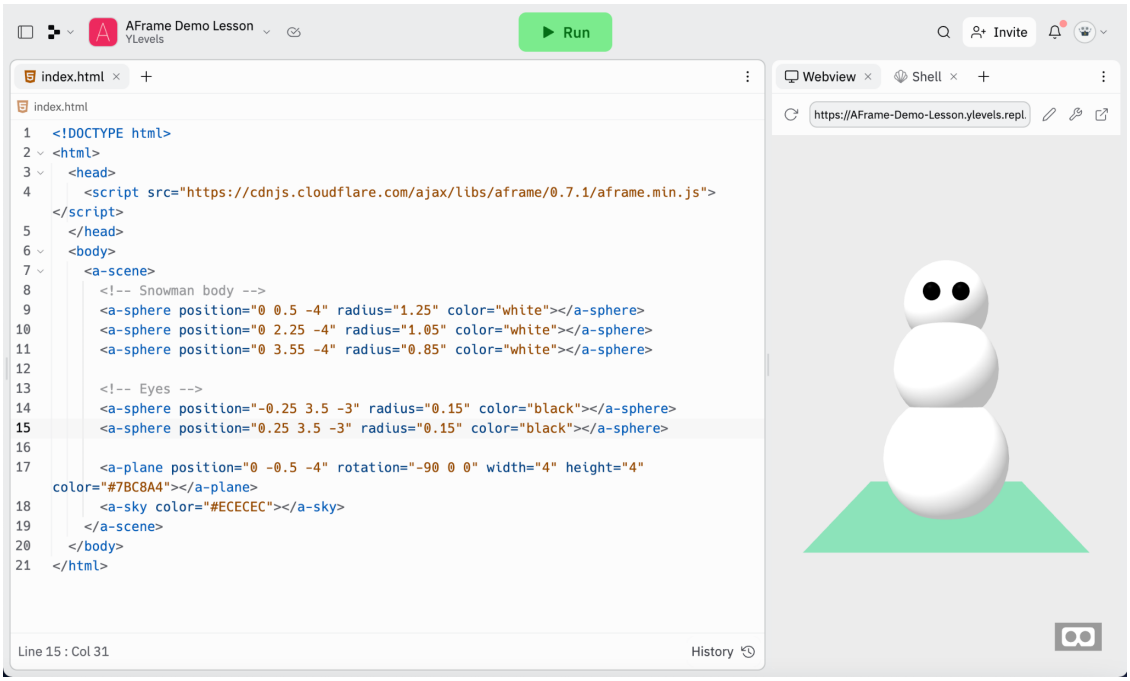

Figure 1.2: Comments have been added to show each part of the snowman's body (lines 8 and 13).

5. To make the snowman's nose, create a cone. Notice it has two different types of attributes: radius-bottom and radius-top. Rotate the cone on the x-axis and translate it on the z-axis.

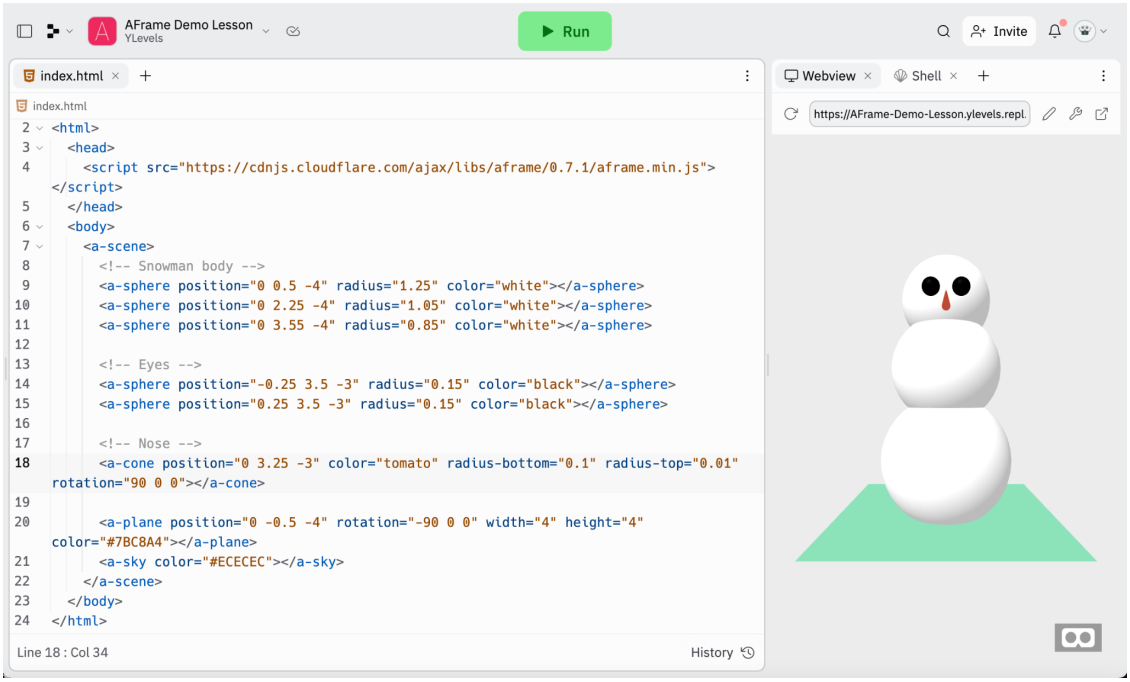

Figure 1.3: Adding the nose (line 18).

6. Create the snowman's arms by adding two cylinders. The cylinders should be positioned on either side of the second sphere. They should also be rotated on the z-axis.

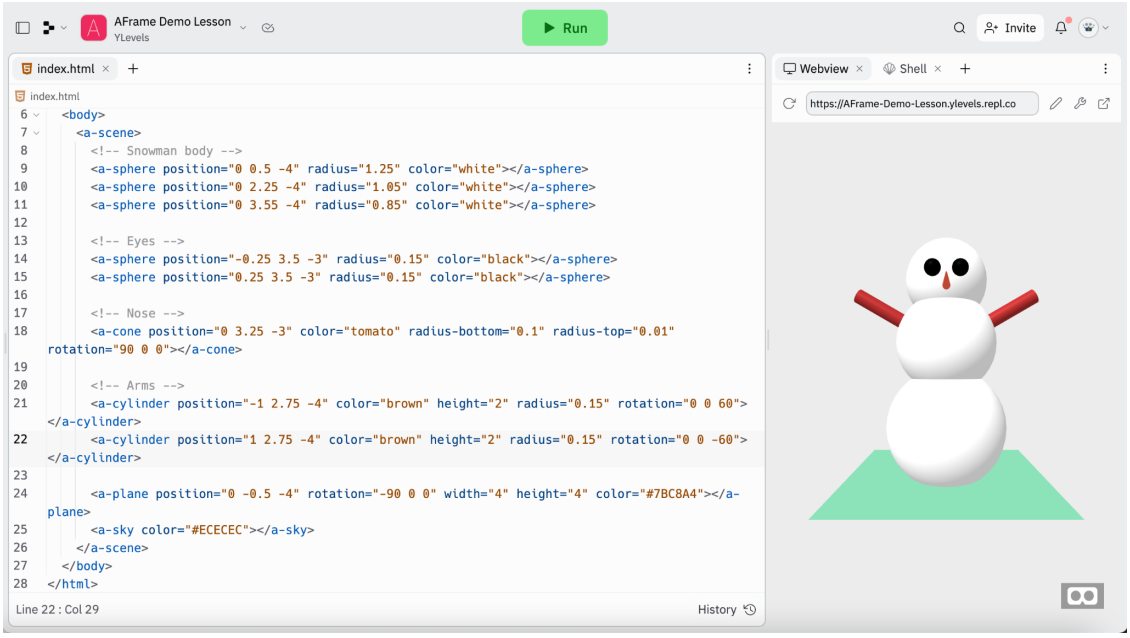

Figure 1.4: Adding the arms (lines 21-22).

7. Now that we have a completed object, we want to place it in an entity so we can transform it by either translating, rotating, or scaling it:

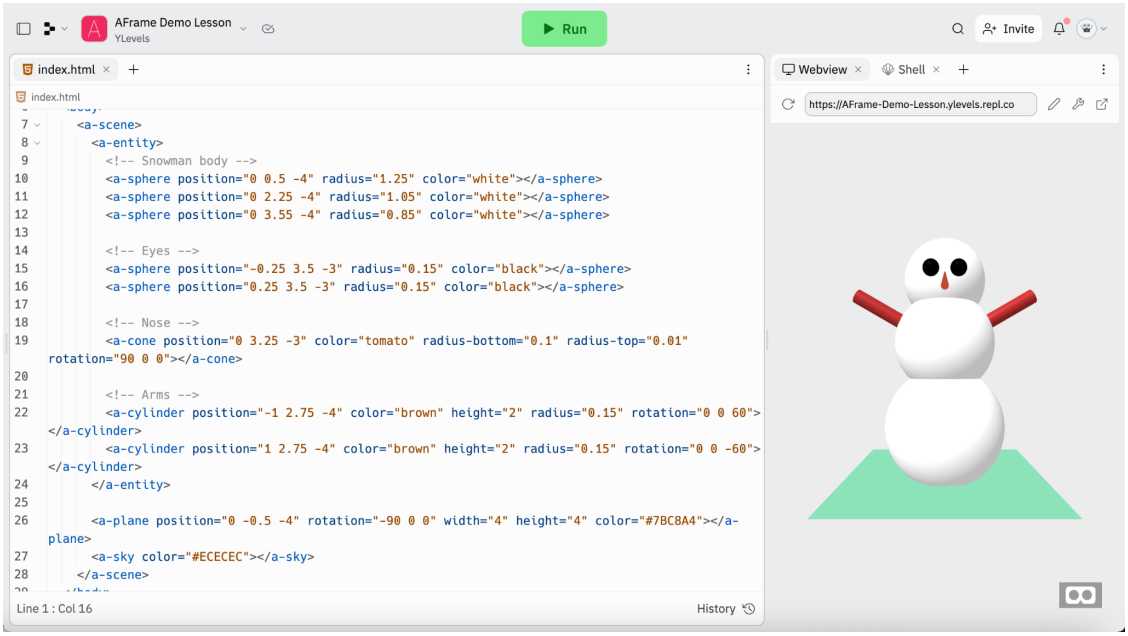

Figure 1.5: Lines 8 and 24 have been added to encompass the object in an entity.

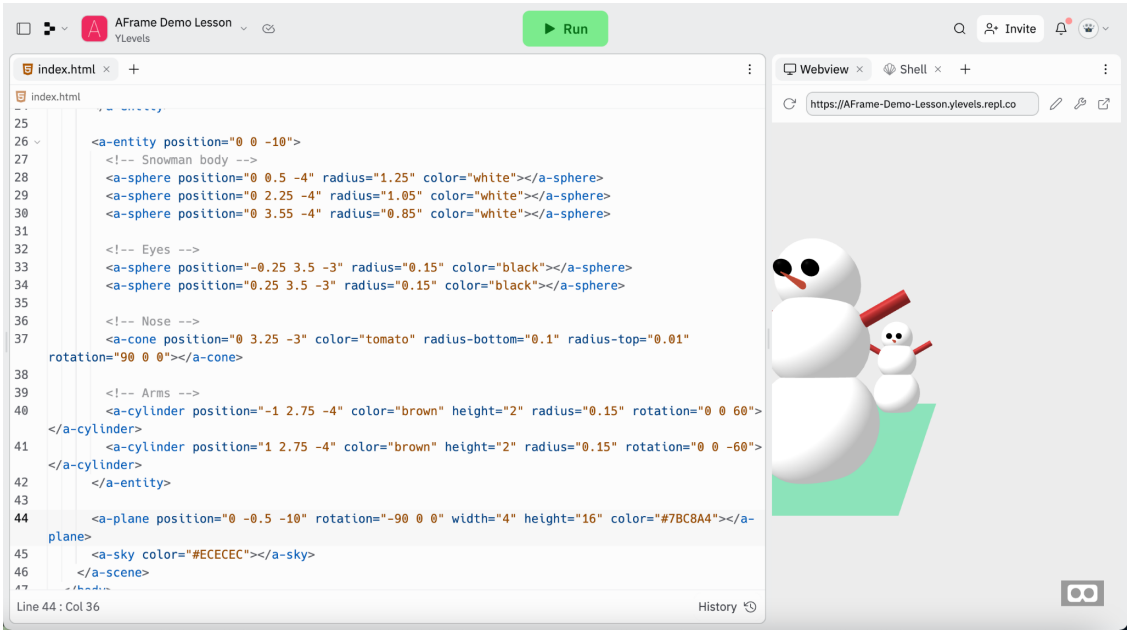

Figure 1.6: The previous entity (lines 8-24) was copied and pasted to create a new snowman (lines 26-42). The new snowman was translated on the z-axis and placed behind the original snowman. (line 26).
Note: The plane's position and height were also changed (44).

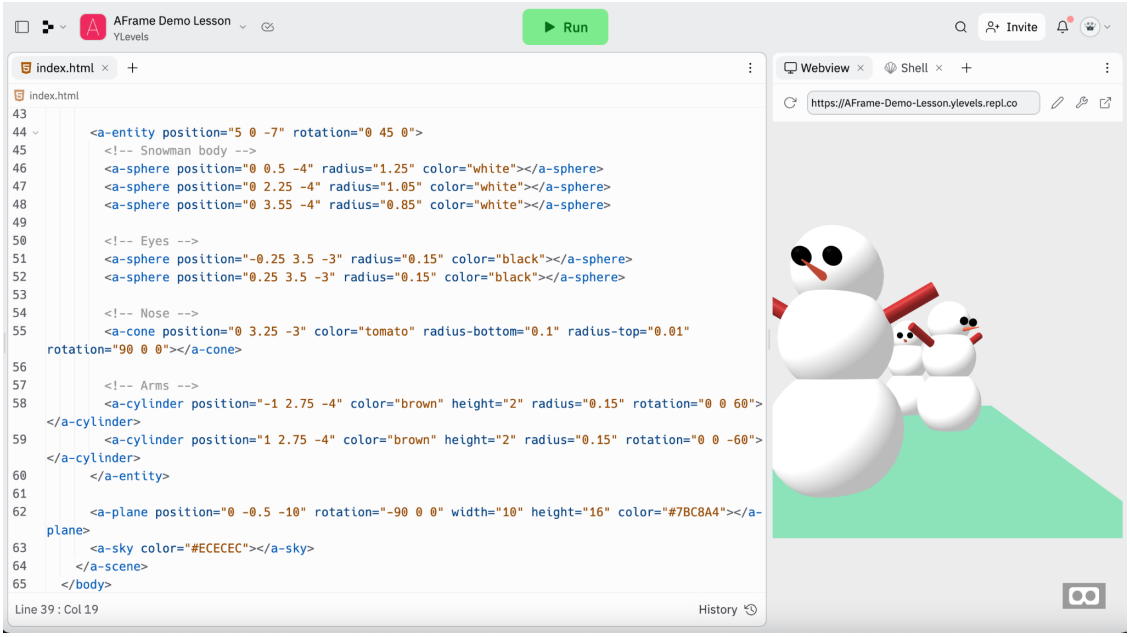

Figure 1.7: Another entity was added on lines 44-60.
This snowman was translated on the x-axis and the z-axis. It was also rotated on the y-axis (line 44).
Note: The plane's width was changed (line 62).

8. Try building another complex object and transforming it to create a scene in AFrame!

Replit:
https://replit.com/@YLevels/AFrame-Demo-Lesson#index.html

Website:
https://AFrame-Demo-Lesson.ylevels.repl.co

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