

Exercise #7: Java3D Sound

Modify the 'FireballTest.java' file that you finished in Exercise 6 to add the following features:

1. Attach a point sound to the fire ball.

Hints: You will need to use the `createAudioDevice()` method of `Viewer` to create and initialize a default `AudioDevice3D` for the `SimpleUniverse`, and try

```
URL url = new URL("file", "localhost", filename);
```

to specify the parameter for `MediaContainer`.

2. (Optional) Set the *attenuation array* to full, half, quarter, and zero volumes at 9, 10, 20 and 30 meters from the sound source.
3. (Optional) Use the `KeyNavigatorBehavior` class of Java 3D to define a behavior that allows you to check the change of sound volume when moving towards or away from the sound, and to check the change of sound direction when moving to the sides of the sound.

Hint: You may need to use a headset when checking sound directions.