

3D Sound

...

public class myGame extends VariableFrameRateGame

```
{ ...
    private IAudioManager audioMgr;
    private Sound oceanSound, hereSound;
    ...

    @Override
    public void initializeGame()
    { ...
        initAudio();
    }

    public void initAudio()
    { AudioResource resource1, resource2;
      audioMgr = AudioManagerFactory.createAudioManager(
          "tage.audio.joal.JOALAudioManager");

      if (!audioMgr.initialize())
      { System.out.println("Audio Manager failed to initialize!");
        return;
      }

      resource1 = audioMgr.createAudioResource(
          "assets/sounds/here.wav", AudioResourceType.AUDIO_SAMPLE);
      resource2 = audioMgr.createAudioResource(
          "assets/sounds/ocean.wav", AudioResourceType.AUDIO_SAMPLE);
      hereSound = new Sound(resource1,
          SoundType.SOUND_EFFECT, 100, true);
      oceanSound = new Sound(resource2,
          SoundType.SOUND_EFFECT, 100, true);
      hereSound.initialize(audioMgr);
      oceanSound.initialize(audioMgr);
      hereSound.setMaxDistance(10.0f);
      hereSound.setMinDistance(0.5f);
      hereSound.setRollOff(5.0f);
      oceanSound.setMaxDistance(10.0f);
      oceanSound.setMinDistance(0.5f);
      oceanSound.setRollOff(5.0f);

      hereSound.setLocation(robot.getWorldLocation());
      oceanSound.setLocation(rainTorus.getWorldLocation());
      setEarParameters();

      hereSound.play();
      oceanSound.play();
    }

    public void setEarParameters()
    { Camera camera =
        (engine.getRenderSystem()).getViewport("MAIN").getCamera();
      audioMgr.getEar().setLocation/avatar.getWorldLocation());
      audioMgr.getEar().setOrientation(camera.getN(),
          new Vector3f(0.0f, 1.0f, 0.0f));
    }

    @Override
    public void update()
    { ...
        // update sound
        hereSound.setLocation(robot.getWorldLocation());
        oceanSound.setLocation(rainTorus.getWorldLocation());
        setEarParameters();
    }
}
```