

Simple Shader/Attribute exercise

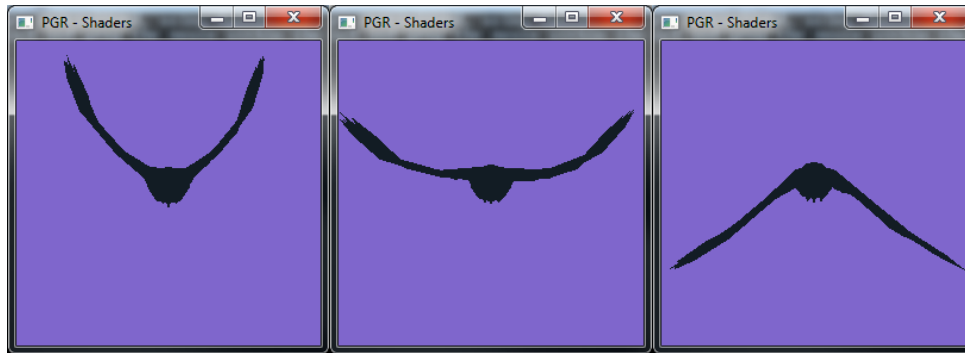
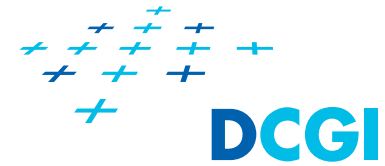
PGR/BI-PGR

Before you begin

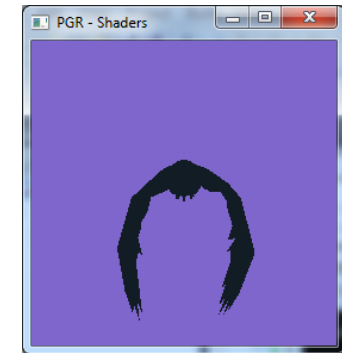


- Take a quick look on a “key frame” animation
 - Time is continuous domain – we cannot store “all” possible positions
 - We can store several “key” positions and interpolate
- http://en.wikipedia.org/wiki/Key_frame
- <http://en.wikipedia.org/wiki/Interpolate>

Our animation

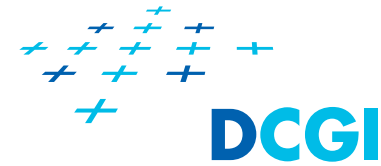


...



time

Task 3



- Check out the output of the prepared application
 - There is no interpolation, we use only one of the key frames
 - The animation looks really “choppy” and unnatural
- a) Declare new shader input variable **aNextPosition**
- b) Use the **aNextPosition** and **aPosition** variables and interpolate between them (use the uniform variable **t**; **mix()** can do the job)
- c) Retrieve the **aNextPosition** location and enable the attribute array
 - You can use the existing code dealing with the **aPosition** variable as an example – the procedure is analogous
- d) Use the **state.nextFrame** variable to index vertices for the **aNextFrame** shader attribute