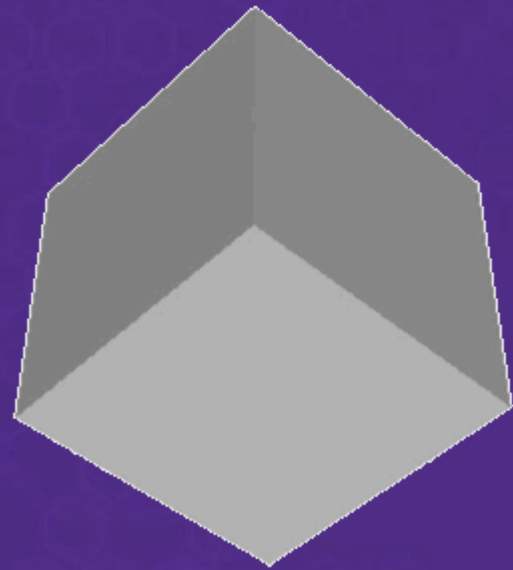


Developing Graphics Frameworks with Java and OpenGL



Part 11: Animation and Functions

Animation Review

- Uniform values can be changed efficiently between (but not during) draw calls to create animated effects and interactive programs
- Relative: change values based on current value
- Absolute: set values of an attribute based on time/functions

Adding Time to Base Class

- **public double time:**
measures time elapsed (seconds) since program started
- **public double deltaTime:**
measures time elapsed since last render (usually 1/60 second)
- Automatically updated in Base class