

### **Working with Attributes in MELscript Grades**

Now that you have modeled your alarm clock, we are going to add some functionality to it. You'll want to make sure you have an hour hand, minute hand, and an hour hand cog wheel and minute hand cog wheel.

**Using MEL script**, neatly type in the appropriate MEL script that will do the following:

1. When the **minute hand cog wheel** rotates, the corresponding **minute hand dial** will rotate.
2. When the **hour hand cog wheel** rotates, the corresponding **hour hand dial** will rotate.
3. As demo'd in class, **use dynamic visual effects** (smoke, lightning, fire, etc.) within your scene. Use attribute connections to vary one of the following (the visual effect's color, its size, or its intensity).
4. Render out your animation in **320 x 240 resolution** (production quality / 300 dpi / highest quality). **480 frames (20 seconds maximum)**

**Your animation should show the following:**

1. the hour cog turning the hour hand on its own
2. the minute cog turning the minute hand on its own
3. a demo of basic visual effects incorporated into your scene

Submit your MEL script as a .mel file with the following header:

```
// Firstname Lastname  
// CA 3600 Graphics Programming  
// Attributes Project  
// Winter 2010
```

5. Make sure you DOCUMENT your code. In order to receive full-credit, make sure that you neatly format your code, include your name and class information, and COMMENT each line of code - explaining what each line does.

Submit the following files in the **Class\_6\_Due** folder:

**Lastname\_attributes.mel** - your MEL script

**Lastname\_clock.mb** - the mb file that has a functional hour and minute hand.

**Lastname\_clock.avi** (or .mov) - the animation demo

	Excellent (4)	Good (3)	Average (2)	Poor (1)	NOT TURNED IN (0)
<b>Execution 20 points (x 2)</b>	code fully and neatly commented with proper syntax- no spelling mistakes - clock functions as described.	functional code and clock, but MEL script not fully commented - minor spelling mistakes	serious issues in commenting code - some functionality quirks that prevent the clock from working properly.	Fails to meet expectations in technical ability and proficiency	
<b>Technical Specs followed 20 points</b>	All technical specifications (file naming convention, project parameters followed)	Minor misspelling or folder organization issues.	Major misspelling or failure to adhere to major technical specifications.	Didn't follow the technical specifications at all.	
<b>Presentation 20 points</b>	Prepared, <b>professional</b> , and ready to show work when called upon	Prepared, ready to show work when called upon.	Not fully prepared. (i.e. file not in drop-off box, waiting for files to copy, etc.)	No presentation made.	
<b>Animation (20 points)</b>	Compelling camera angles and camera cuts that show the clock in dynamic action. Animated gears mesh cleanly, hands animated in a realistic fashion. Visual effects compliment the scene and create an atmosphere and mood and <b>vary</b> in intensity, color, or size.	Camera angles show the clock, but angles could be more dynamic. Slight issues with gears not meshing correctly. Hands do not move or move too fast. Visual effects present but does not vary.	Camera angles show no variation. One continuous shot, with no camera cuts. Jerky camera movement. Visual effects do not fit or match the scene.	Weak or negligible attempt. Animation is jerky in clock's movement and the camera angles. Visual effects not used.	

**Total Possible Points: 100**