

**COM3503: 3D Computer Graphics Assignment**

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The aspects below were considered when arriving at the final mark in each category.

Out of	Mark	Working program (80)
20	17	Modelling: robot - it is the hierarchical nature that is important including creative head design; room, window, exhibits (phone, egg, swinging spotlight - part of this must swing) and quality.
20	12	Texture: Texture mapping on objects; specular and diffuse map on egg. Quality and attention to detail, e.g. consider stretched, aliased textures; changeable window scene texture.
15	13	Lighting, camera, interface: Spotlight swings in an arc and shines in correct direction; Spotlight bulb appearance changes when switched on/off; Global light sources to illuminate entire scene, interface controls
25	19	Robot animation: five positions with a different pose in each position, smooth motion from position/pose to position/pose and plausible movement, e.g. consider velocity control, facing direction of motion, no collision
		<b>Program Code (20)</b>
20	12	General style, e.g. use of variables rather than literals to promote flexibility, layout of code, methods not overlong, organised classes; Structure for models, e.g. use of separate classes/methods to draw parts of scene. Use of scene graph for drawing a parent child hierarchy, use of variables for altering scene graph nodes; Animation control - should be a flexible solution, e.g. separate class with pose data and interpolation process.
<b>100</b>	<b>73</b>	<b>TOTAL Mark</b>
late	0	number of days late
<b>100</b>	<b>73</b>	<b>FINAL Mark (after any lateness penalties)</b>

**COMMENTS**

All objects modelled well.; You could have been more creative with the animated texture on the background plane.; Good spotlight work.; The robot could have rotated to face the direction of travel, then travel forwards, then rotate to a new pose.; More classes should have been used to structure the code.

What is good about the work: Good attention to detail in the modelling.

What needs to be done to make it better: When the spotlight was disabled/dimmed, the bulb model did not change in appearance.