

## **Raytracer Report**

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### **Module 1**

- Blender export script – tested with zero, one and multiple of each object to ensure all are exported correctly into the lists in JSON format. The values in the output JSON were compared with the values within Blender to ensure they were accurate.
- Camera data reading – initially implemented for one camera in the scene, then improved to read details from different cameras into objects using an indexing system
  - Issues with multiple cameras found when calling the method for multiple objects would read in the same data
- Pixel-to-ray conversion – tested with a Blender script that creates a visualisation of the output ray, to ensure it originates from the camera and heads towards the correct point
- Image read and write – tested with existing .ppm images, editing and saving them with different file names and checking that the pixel colours changed accurately