TDDC32 - Ray Tracing Engine

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1   Introduction

This project consist in programming a Ray Tracer (graphic renderer tool). A Raytracer compute pixel by pixel the image to render using a description of the scene.

The final program should take a textual description of a scene, and render the corresponding image.

2   Modules

We can easily identify 3 modules for this program as show in the figure below : the parser, the world model, the renderer.
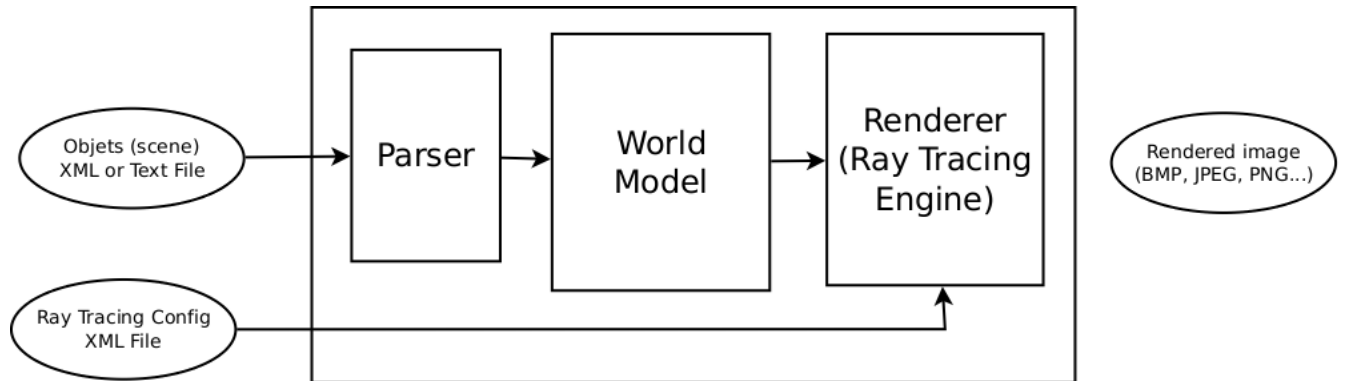

FIGURE 1 – Software flow

3   Iterate and Increment

The iterate and increment principle will be widely used in this project. So a basic raytracer will be create first : only a few object to represent the scene (sphere, cube, plan), only color instead of real texture... Then we can add more functionalities, more object etc...