Assignment 6 Rendering ReadMe

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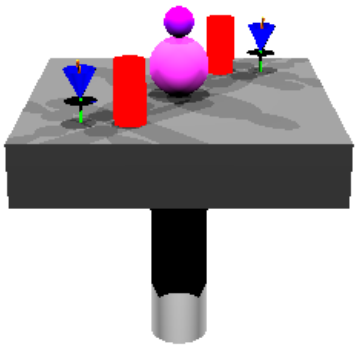
04/26/2016 (Late day used: 1 / Late day remaining: 0)

Part I: Rendering Effect



Part II:

MyScene.h + MyScene_render.cpp

- struct node
  - Added Point3 p and normal vector n, and double t, u, v, theta
- define hardcode
  - PI
  - MAX_RECURSION_DEPTH

- MAX_DISTANCE
- NULL_INDEX

- Extra functions
  - setPixel(int width, int height, int w, int h, const Color &col, unsigned char *pixels)
    - set pixel's color by given the coordinate on the screen and computed illumination color
  - bool rayHitObj
    - check if the ray hit the object or not. Storing the intersections in the Hr.hit() list
  - rayTrace
    - A recursive way to compute the Color at each intersection
  - Color computeIllumination(Point3 P, vector3 dir, int &index)
    - compute local illumination at intersection by computing the ambient, diffuse, and specular light and sum them up.
  - Color resetColor(Color &color)
    - rescale the color to make sure it's in the range.

There are no unknown bugs.
No extra credits part.