

CS5502 Assignment 2

DUE: November 2 (-10% for each day late)

- Download and experiment with the Eric Chen's progressive radiosity program.
- Your tasks include:
 1. Modify `ComputeFormfactors()` in `ffactors.c` based on the paper "A Ray Tracing Algorithm for Progressive Radiosity" by Wallace, Elmquist, & Haines. Your task is to calculate the form factors from the shooting patch to all elements and store them in the array `formfactors[]` as return values. For example, `formfactors[i]` contains the form factor from the shooting patch to element `i`.
 2. Change the meshing level (i.e., `patchLevel` and `elementLevel` fields in `roomPolys[]` in `room.c`), and see how it changes the results.
- Submit a ZIP containing the following for this assignment:
 1. Your version of `ffactors.c`. If you also modify the other files, then please also include all modified source files, and preferably the `.dsw` and `.dsp` files as well, if you use Visual C++.
 2. A window dump of your output image (after at least 100 iterations).
 3. A text file do describe what you observed about the following:
 - (a) How many iterations (approximately) have passed when you see the blue wall's color appear on the grey box?
 - (b) Does a finer mesh (i.e., higher meshing level) improve the output?
 - (c) Anything else interesting that you observed.