

20220712 Project Meeting

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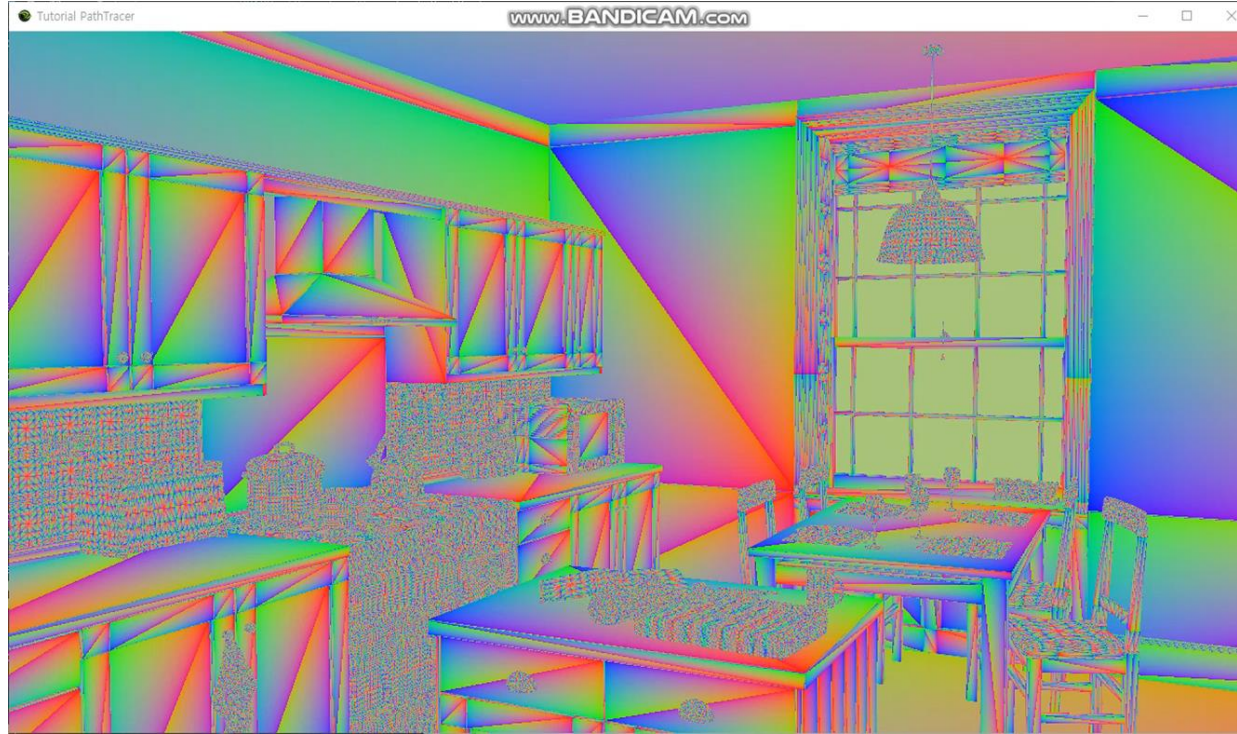
2022.07.12.

PEARLABYSS

Contents

- (2 Week) Work Progress
- TODO

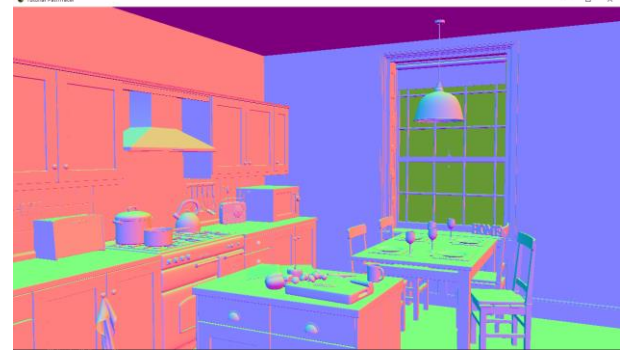
Recall - (1 Week) Work Progress



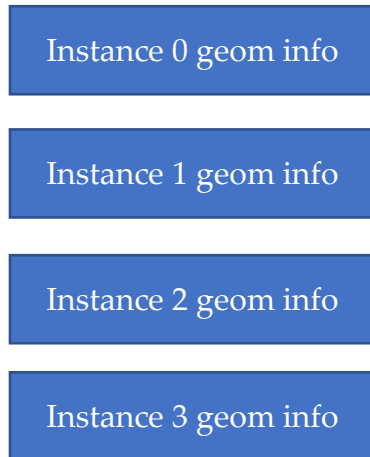
Implemented a very simple ray tracer that loads meshes and show geometry only.

(2 Week) Work Progress

- Material & Normal & UV using Structured Buffer

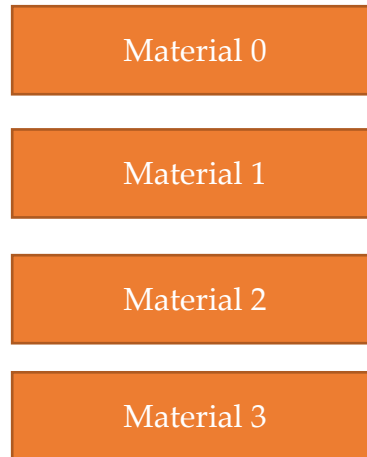


Geometry info (t1)



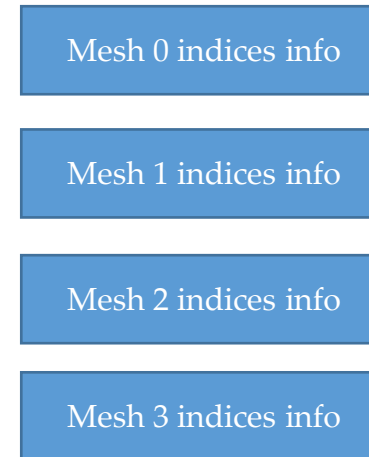
```
Struct GeometryInfo
{
    materialIndex;
    indicesOffset;
    verticesOffset;
}
```

Material info (t2)



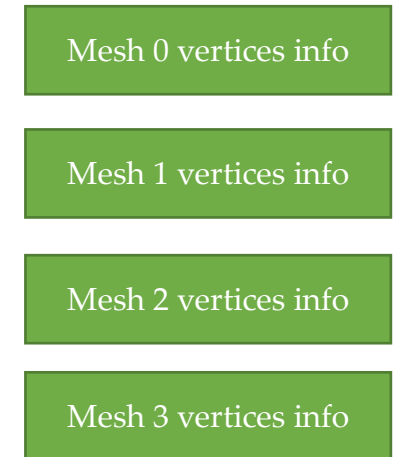
```
Struct MaterialInfo
{
    diffuse;
    diffuseTextureID;
}
```

Indices info (t3)



uint32

Vertices info (t4)



```
Struct VertexInfo
{
    position;
    normal;
    texcoord;
}
```

Global root signature!!

(2 Week) Work Progress

- Implemented texture using DirextXTex.
- Instead of global texture array, local texture using **local root signature** is used (good?)



(2 Week) Work Progress

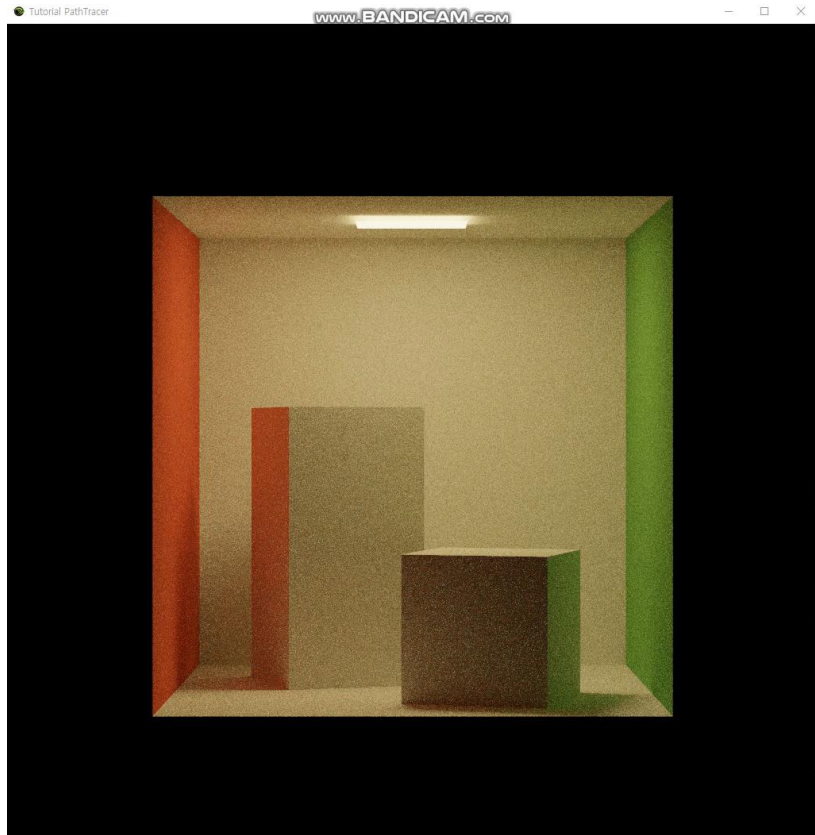
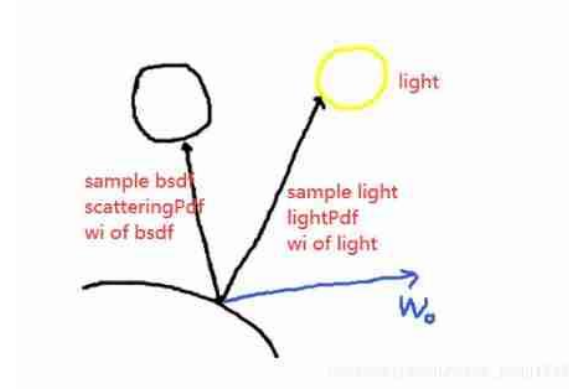
- Implemented a simple path tracer for diffuse material.



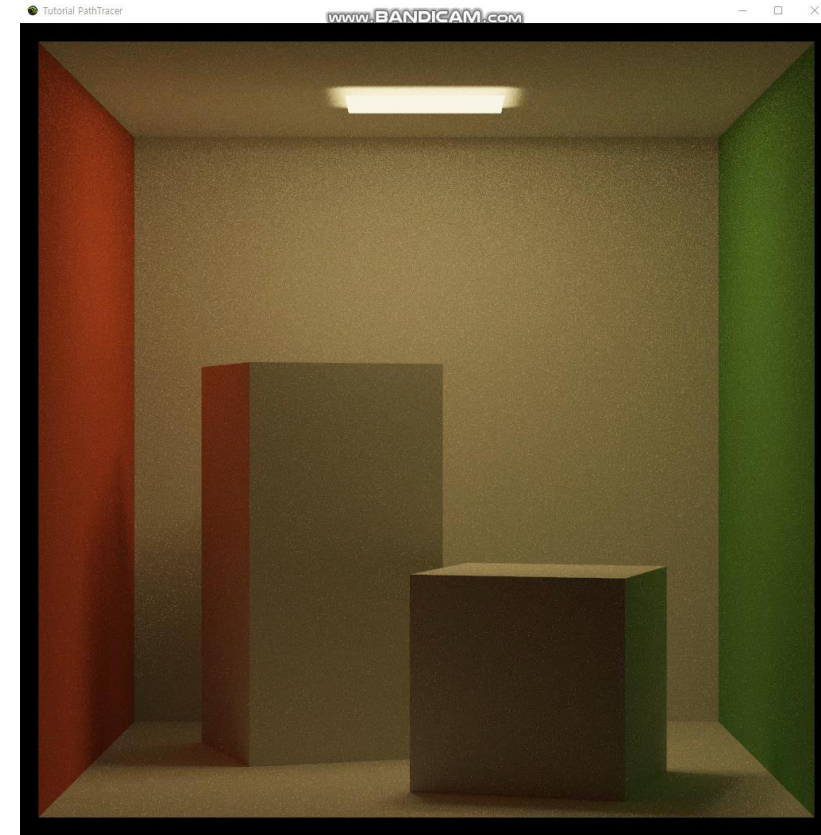
1spp / frame & Max depth : 4

(2 Week) Work Progress

- Implemented a simple path tracer for diffuse material.



With out MIS



With MIS (direct light sampling)

1spp / frame & Max depth : 4

TODO

- MIS with multiple light
- Conductor, Dielectric materials