We wanted our scene to be an elegant, yet colorful bathroom that creates the mood for a relaxing bath; its focal point is the bathtub with floating lotus flowers. Almost all of the time Richard and Melina spent on this project was working together in person.

Melina made the marble countertop sink (including the handles, knobs, faucets, and doors on it) colorful tiles, towels, and shelves in maya. She also used an online plant model, assigned it textures, and made a pot for it to make the shelf plants. She also made the bathtub and water using parts from three different online bathtub models. Melina also positioned and wrote the code for the area lights and point lights in the code. Richard made the glass bottle on the sink, created the light fixture on the ceiling, and made the basket in Maya. In addition, he changed the material files of the objects to determine their glow and ambiance (lights, plant colors, and the glow of the lotuses). He also reworked an existing window model found online to make it more simple and fitting for the scene, in addition to doing the same for the rug.

We found the mirror, curtains, vases, and picture frames online and put in a combination of online and our own textures, including Melina’s drawing of her dog in the frame.

We worked together to implement multi-threading with openMP. We specifically made our code use 7 threads that split up the work of the for loop in the raytracer.cpp file.