Process Notes

January 15

* Talked to Andrea about this project, she mentioned Martazia does this kind of indoor scanning for work

January 17

* Email Professor Graham about creating models and what kind of information I have to give the Mayfair for creating and using a model of their space

January 18

* Asked Andrea about Martazia’s job, she mentions she has talked to Martazia about my project since Jan 15th, conversation happens over Facebook
* Talked to Martazia about this project, conversation happens over Facebook and over the phone
  + She gives me her availability (FB)
  + I tell her what exactly I want to do – scan the actual theatre of the Mayfair Theatre (FB)
  + She calls and explains in more detail what she and her equipment is capable of doing
  + We discuss file formats and software that she can put the scans into (FB)
  + We make plans for me to visit her on Jan 20th for her to show me the equipment and the software she uses to create the scans to expedite the process when we get into the theatre
* Visit to Mayfair Theatre
  + Asked the box office if I could speak with someone who could make decisions on allowing me into the theatre outside of their normal showing hours
  + I am given the email for Lee Demarbre, the owner and programmer of Mayfair Theatre

January 19

* Email to Lee Demarbre asking if I can come and create scans on the morning of Sunday, Jan 21st

January 20

* Visit Martazia
  + She sets up the scanner, a Leica BLK 360
  + We do a practice scan of her bedroom using two scans
  + She shows me how to manually merge scans in the event the software does not automatically recognize two scans are of the same space, and how that can turn out poorly if the same points in the scans are not selected

January 21

* Lee emails me back, Thursdays are posed as the best option, when Markus the projectionist is available
* I message Martazia to coordinate schedules – she is available evenings, weekends, and has a day off on Thursday, Feb 1st
* I email Lee saying we are both available Feb 1st and the date is confirmed

January 25

* Lee emails Markus about getting the scans done on Feb 1st, I am cc’d
* Markus confirms this is a possibility, he will let me in at 10am and the cleaner will let me out when we are finished

February 1

* Scanning at Mayfair Theatre
  + I meet Markus at 10am, Martazia arrives 10 minutes later. I am told the cleaner’s name is Dan, he has not been informed we will be in the theatre but Markus will vouch for us and let him know to let us out when we are finished.
  + We start with a scan at the base of the theatre on the stage in front of the screen.
  + Martazia forgot to charge the scanner so we plug in the battery and wait for it to charge up enough for us to create more scans – the scanner will not work if the battery level is below 15%
  + While we wait for the battery to charge, we plan out the spots for the remaining scans, aiming for a minimum of seven more scans. I want to get scans in the aisles on the floor of the theatre but Martazia is unsure if the scanner software will be able to properly scan and align scans made on an angle, as the aisles are sloped.
  + Dan arrives, we let him know what we’re doing, and the battery has charged enough to allow us to begin scanning again
  + We create a total of twelve more scans, managing to get a scan in each of the aisles on the floor. I also decide I would like a scan of the stairs leading into the theatre, so we do two scans, one at the top of the stairs and another at the base of them to create the actual depth required to make them actual stairs in the 3D model. This created the byproduct of also getting a significant portion of the lobby and even a bit of the ladies’ washroom.
  + The scans are started and managed initially through an iPad, on which we merge the scans as they are processed and uploaded to the iPad from the scanner.
  + We go to Martazia’s house to upload the scans to the computer for further use
* Uploading scans (there was a lot of time spent waiting for things to upload or otherwise process not adequately reflected in these notes)
  + Martazia initially couldn’t get her iPad to connect with the computer. Software update required.
  + iPad connected with the computer, uploaded the scans to the computer
    - Created a folder for the mayfair files so they could be transferred to me after this was done
    - Transferred scans to the computer
    - Indexed scans
  + I look at the scans and get very excited about how well it has turned out – I was concerned about the lack of light in the theatre and was unsure how the light would turn out in the scan.
  + I went and downloaded Autodesk Recap onto my computer, along the way figuring out I can get a free trial of Recap longer than the usual 30 days as I am a student
  + I ask Martazia about ways to submit this file and she suggests the best way to submit would be on a flash drive or something similar, or maybe putting the files in a Dropbox
  + Emailed Professor Graham about submitting the files

February 2

* Professor Graham gets back to me, citing a help page that says .obj files are possible. The .rcp file is only the point cloud and I need to put textures back in it.

February 3

* Poke around Recap, and I find the ‘recap data services’ which include a Cleanup app, which claims to remove unwanted data points, and a mesh file creator!
* Mesh file creator wants me to upload to A360, the Autodesk web app. Okay, I guess.
* Crop the scan to cut out empty space and reduce it to a mesh-able size (under 30m on each side)
* For some reason it makes me sign in, it processes this for a long time, but then I have to request the mesh again before it actually creates the mesh and the .obj, .mtl, and .png files.

February 4

* Try giving the Cleanup app a shot because Martazia and myself and other little things are visible in the theatre that do not need to be part of the scan – I still cannot figure out if it is possible to undo these processes so I decided to run the Cleanup after creating the mesh. If the cleanup worked I could create a new mesh, and if it did not I had the older mesh to submit
* The Cleanup app did not seem to do anything. I am not sure if I used it wrong or if it wasn’t capable of taking out everything I wanted gone.
* Wow, tracking down my notes through various different notebooks and typing them up is taking a lot longer than I thought. Will do this sooner next module.