

GAME3400 FINAL PROJECT

Apartment 3A

Group 2

Will Kibel, Tree Diep, Jonathan Doliver, Eric Sun

Quick Pitch

You play as Sandra, a twenty-something living in a crappy New York apartment for the past year, who struggles with depression and anxiety. Navigate your apartment, learn things about yourself, and leave for your shift at work.

Design Problem:

How can you create a sense of fear, tension, and unease in a player without introducing fantastical elements?

Patterns Used:

[God please give me a flashlight](#) : Implementation of dark lighting and obscure danger (whether enemies or obstacles).

[Unearthly Triggers](#) : **Creating tension by manipulating environmental elements such as lights (making them flicker).**

[From the Darkness He Watches](#) : Utilization of light to create invulnerability or vulnerability.

[You are rendered helpless here](#) : **Implementation of a limited inventory (NO WEAPONS)**

[It All Depends On How You Look At It](#) : **Matching camera perspective to game needs**

[Going Against the Grain](#) : **Film grain/camera effects increase tension and anxiety**

[Feeling Blue in Black and White](#) : **Using monochrome or muted color palettes to convey emotion**

Let the Scene Speak for Itself : Use environmental details rather than explicit narrative dumps to tell your story

The Itty-Bitty Little Things : Using small, subtle details to build an aesthetic or mood

Judge a Character by Their Bedroom : Use the living space of a character to communicate details about them

Let's Table This For Now : Putting important objects on elevated surfaces

Vroom in for Details : The ability to examine/inspect important objects for more information

Can You Hear The Music : Use music to enhance the emotional experience of a scene

Creeaak! : Using sound design to immerse the player in the level

Hear the Evil : Add ambient sound effects to enhance the game feel and elicit an emotional response

Important Links:

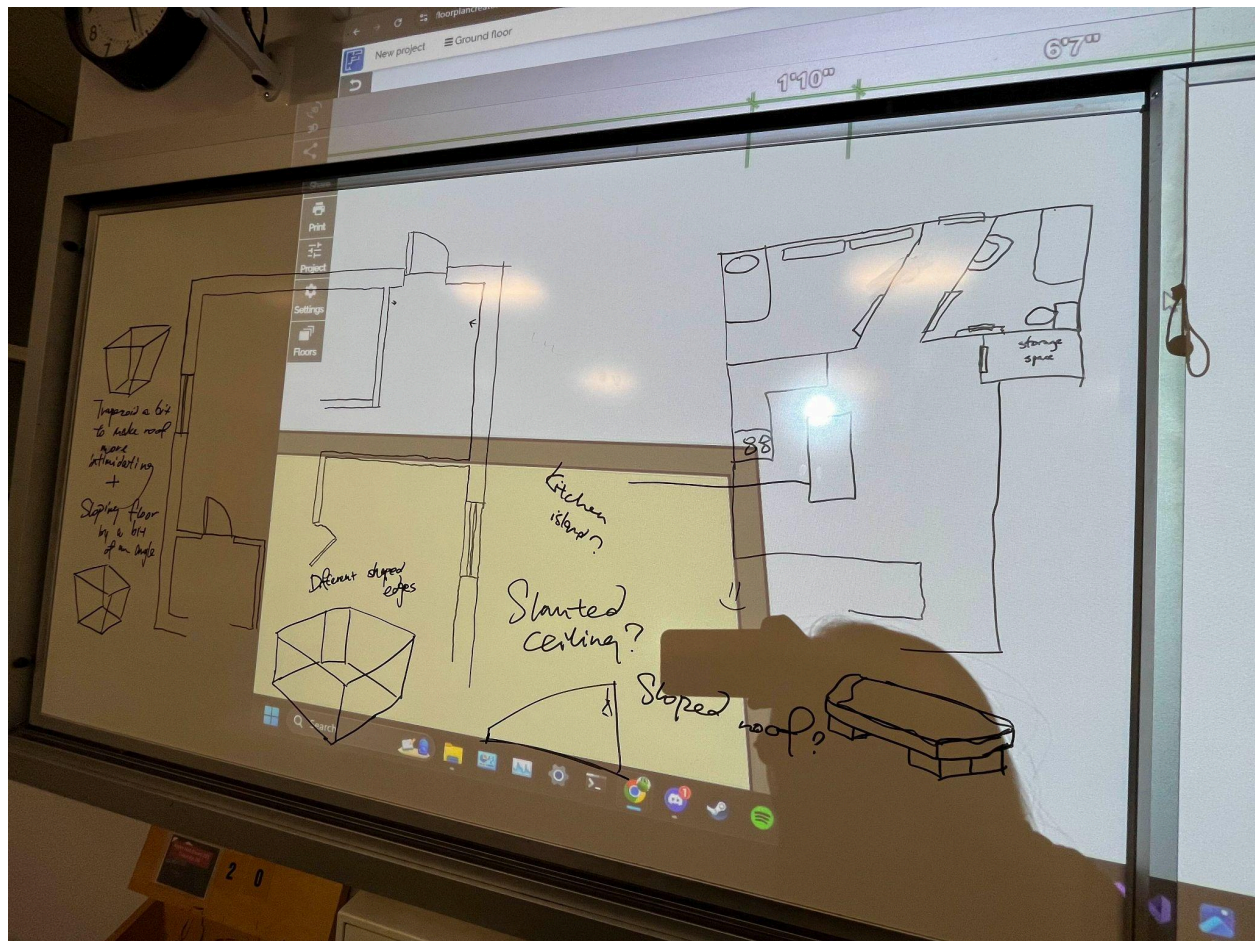
Github: <https://github.com/willkbl/3400-Final-Project>

Trello: <https://trello.com/b/xWliBhC7/sticky-the-stickman>

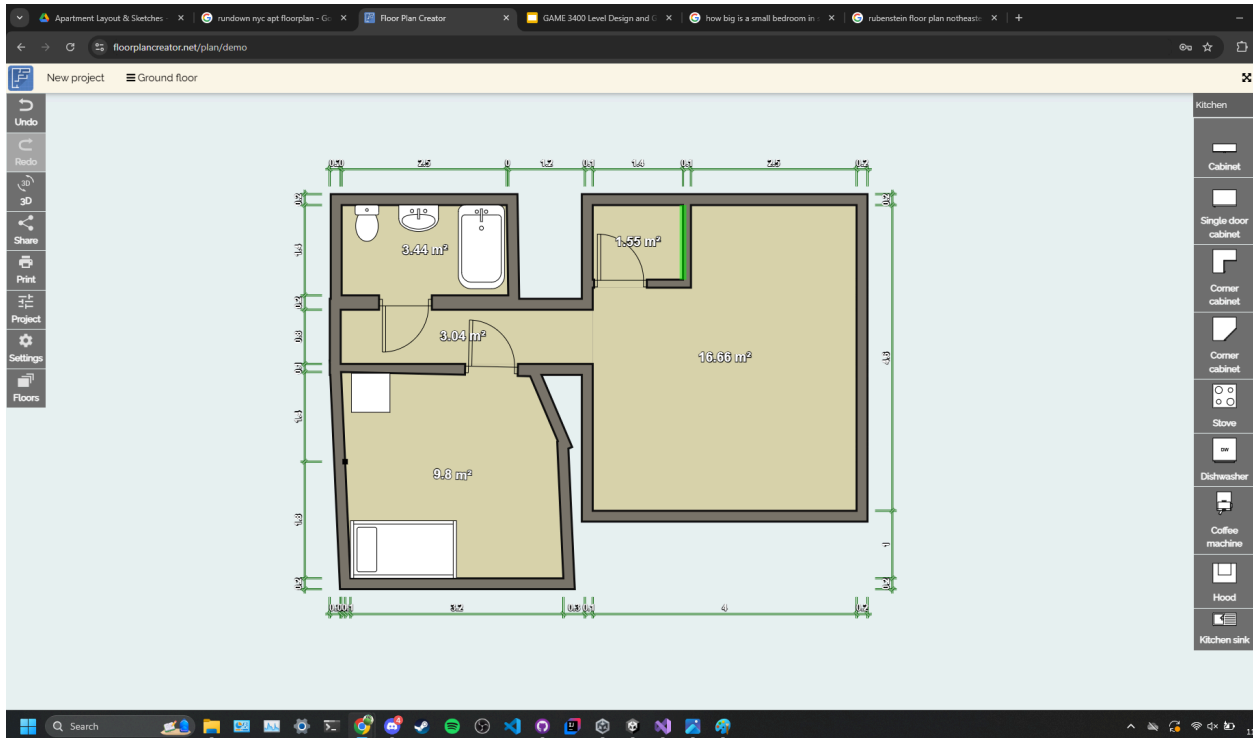
Itch: <https://adrastmusic.itch.io/apartment-3a>

[GOOGLE DRIVE](#)

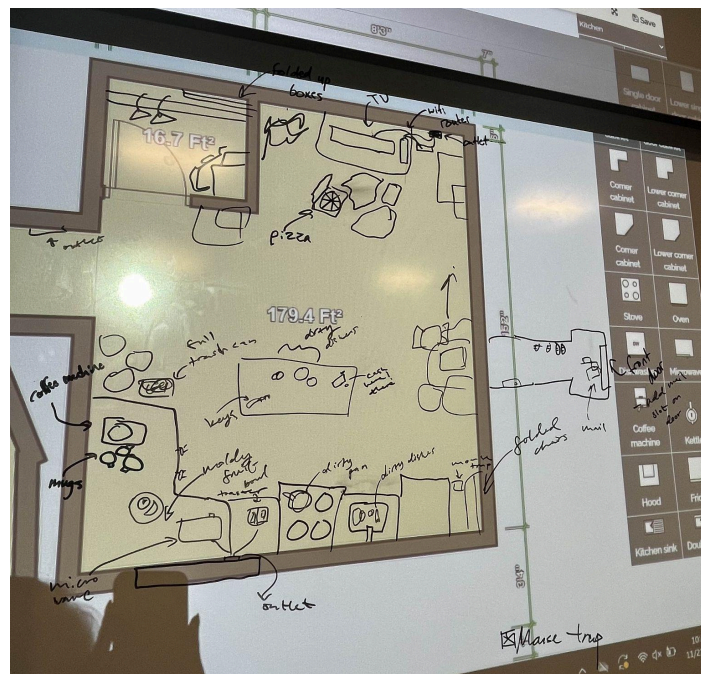
Sketches:



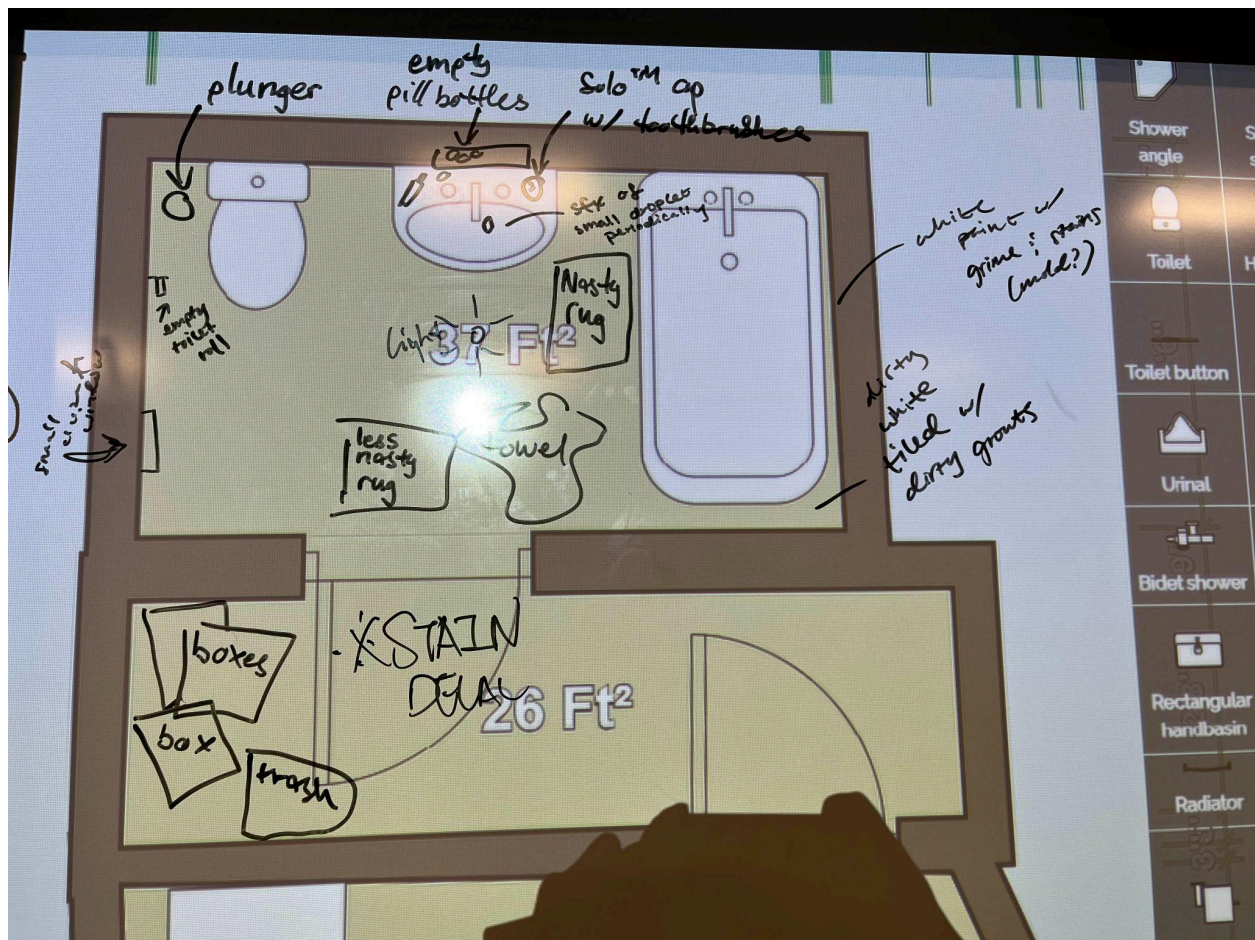
Some initial sketches/ideas, including two early floor plans that we scrapped.



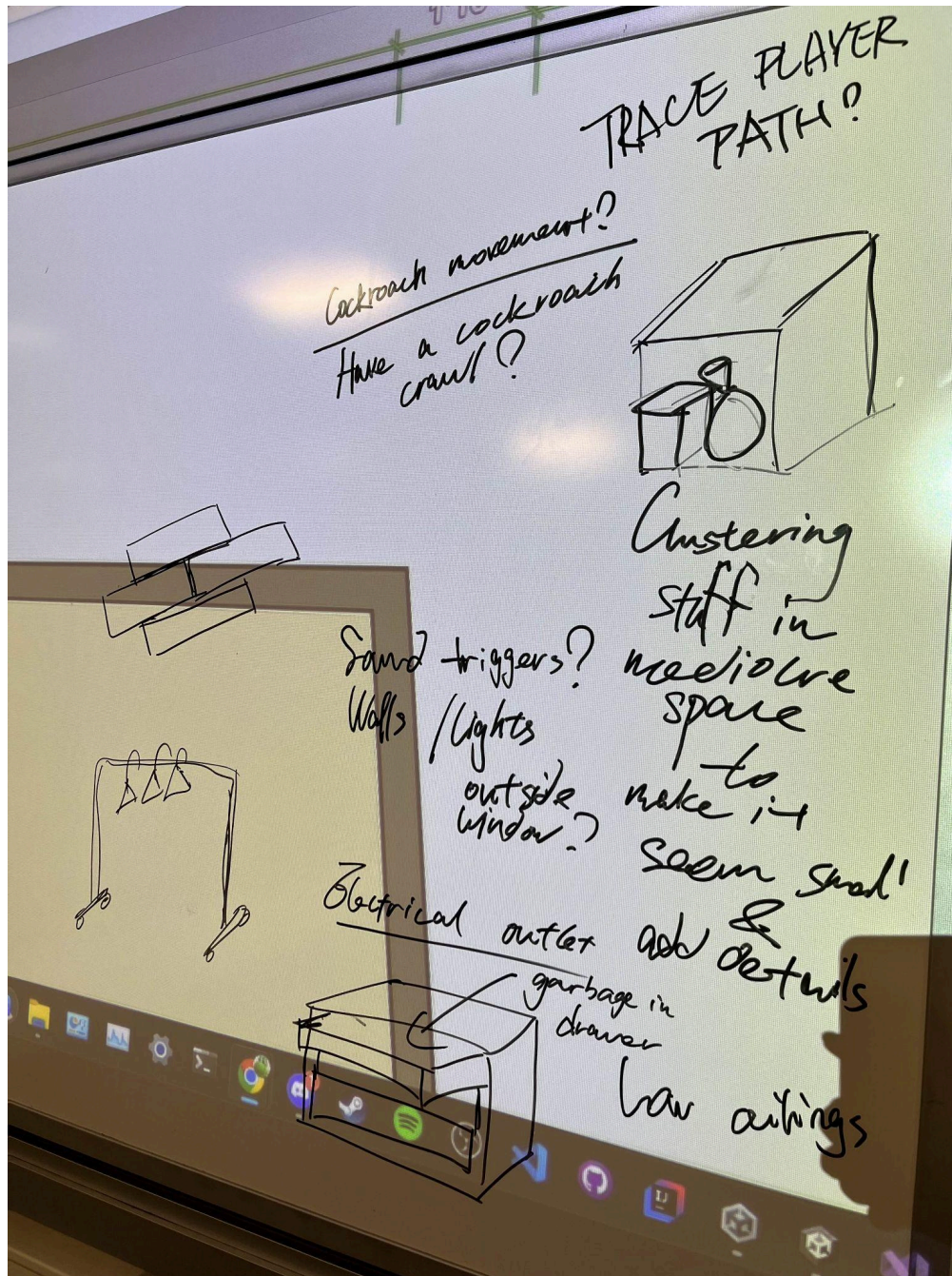
We started with the basic floor plan layout of the apartment, with dimensions in meters.



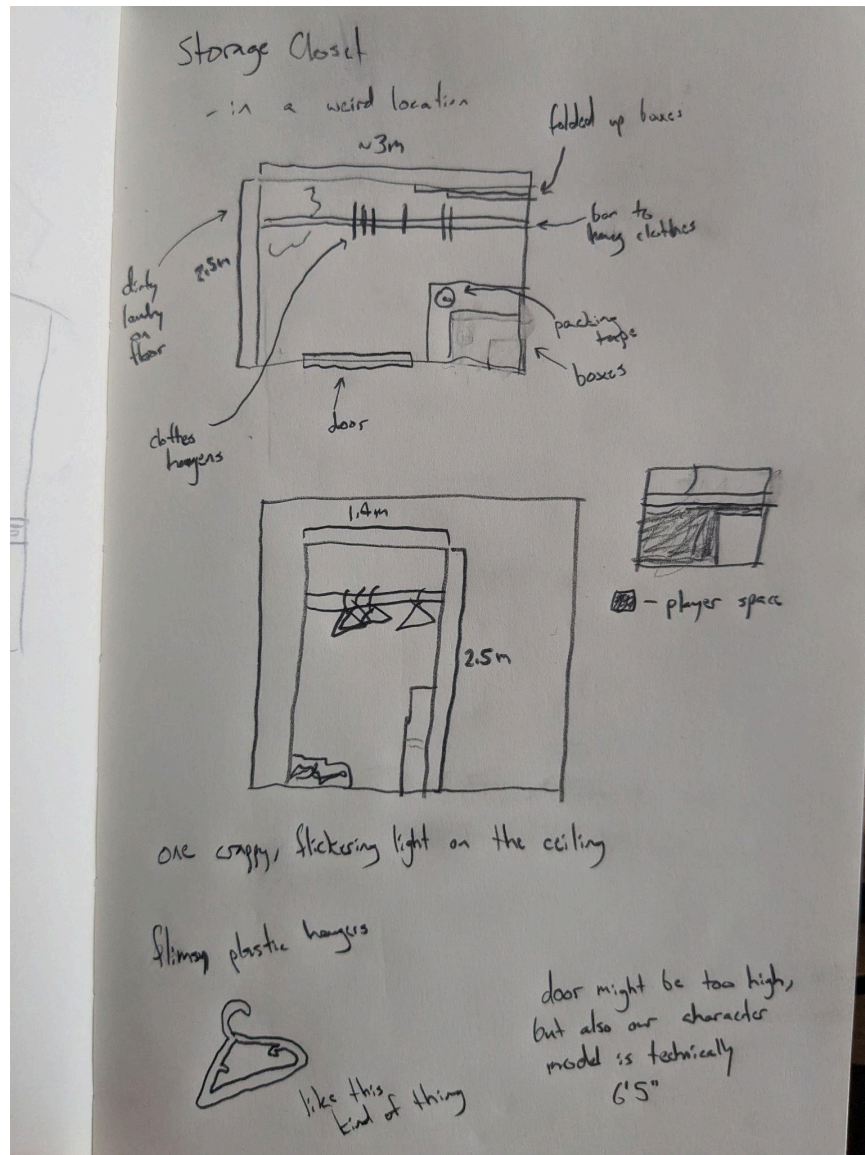
The living room/closet/kitchen/entrance, drawn in dry erase marker over the floor plan we had created.



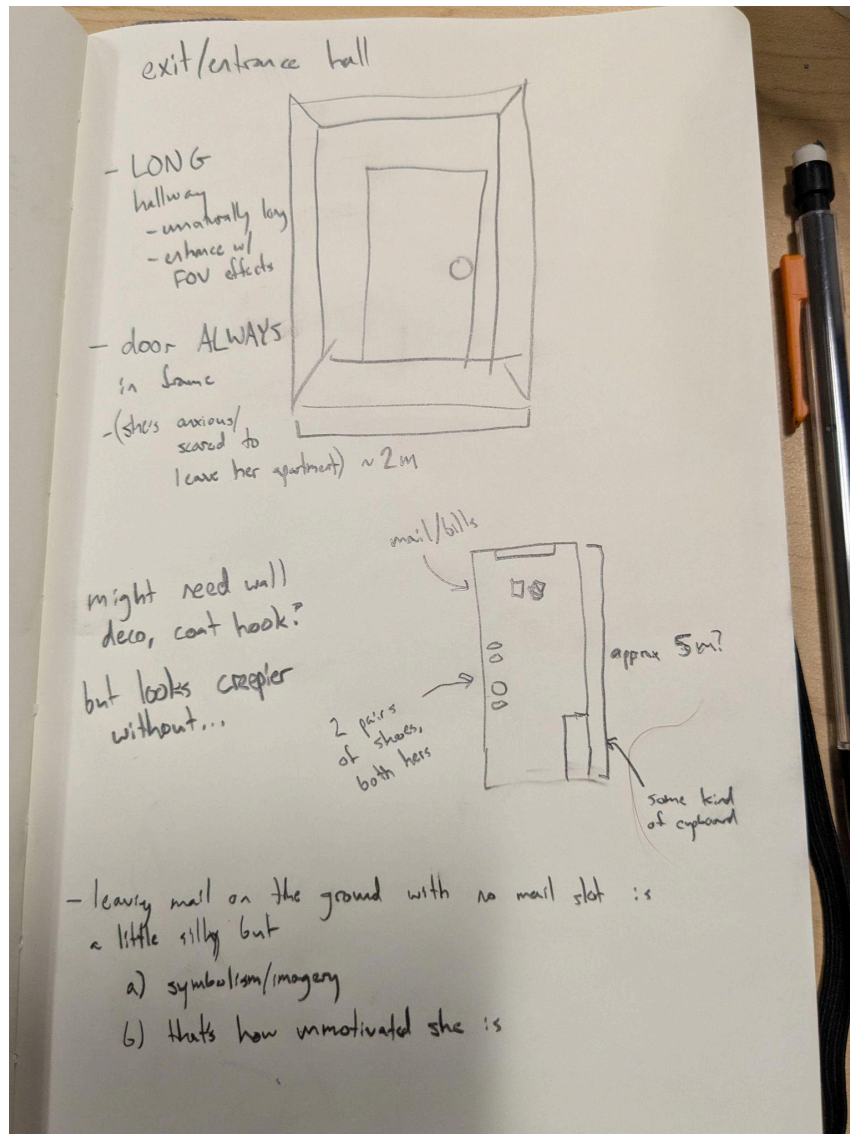
The bathroom and hallway outside the bathroom.



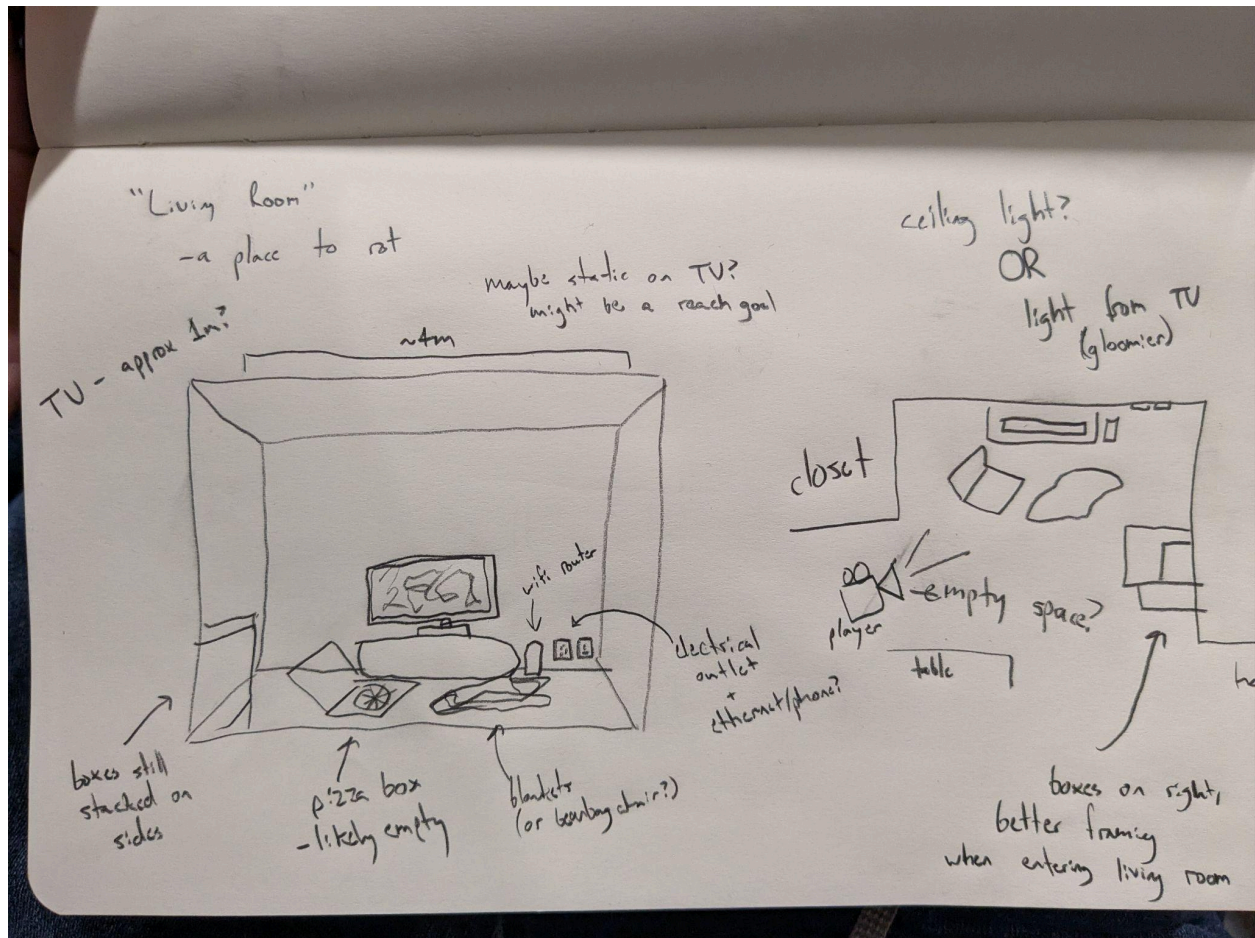
A few other loose sketches/scribbled notes.



A more detailed sketch of the closet area.

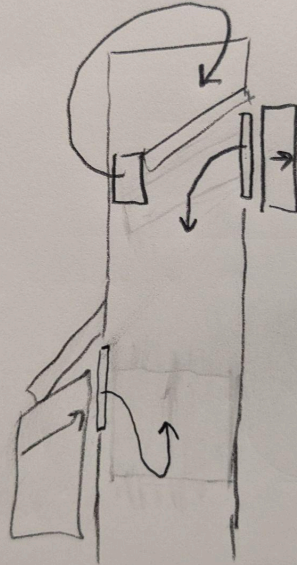


A more detailed sketch of the entrance hallway.



A more detailed sketch of the "living room" area.

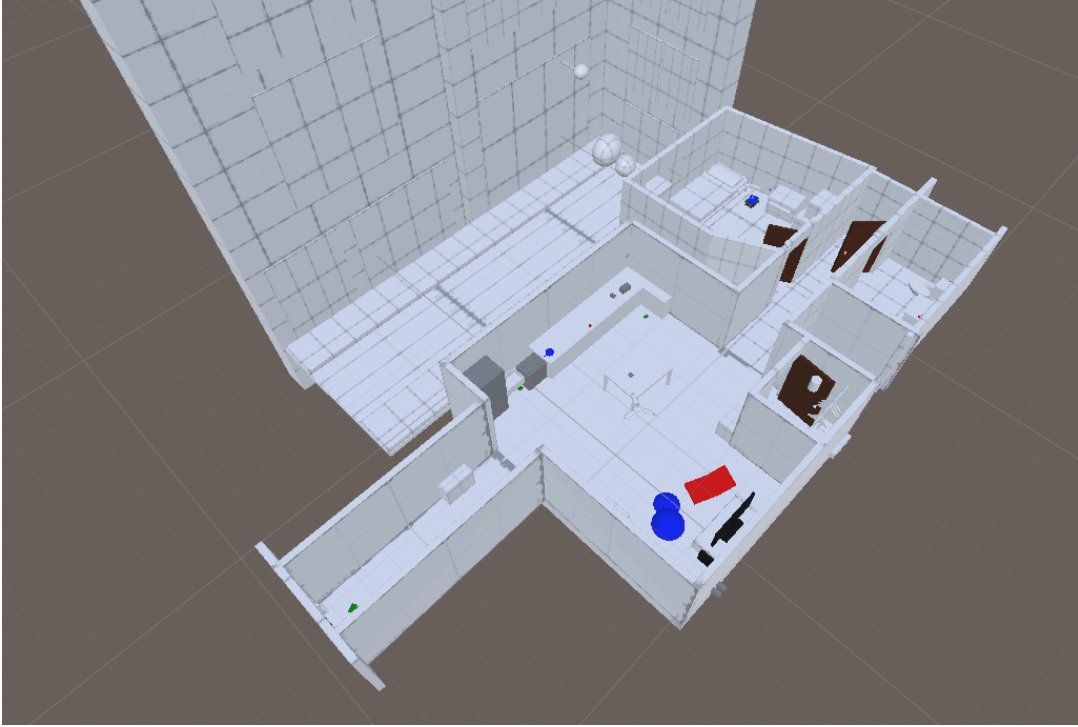
How to do a hallway
w/ static cameras?



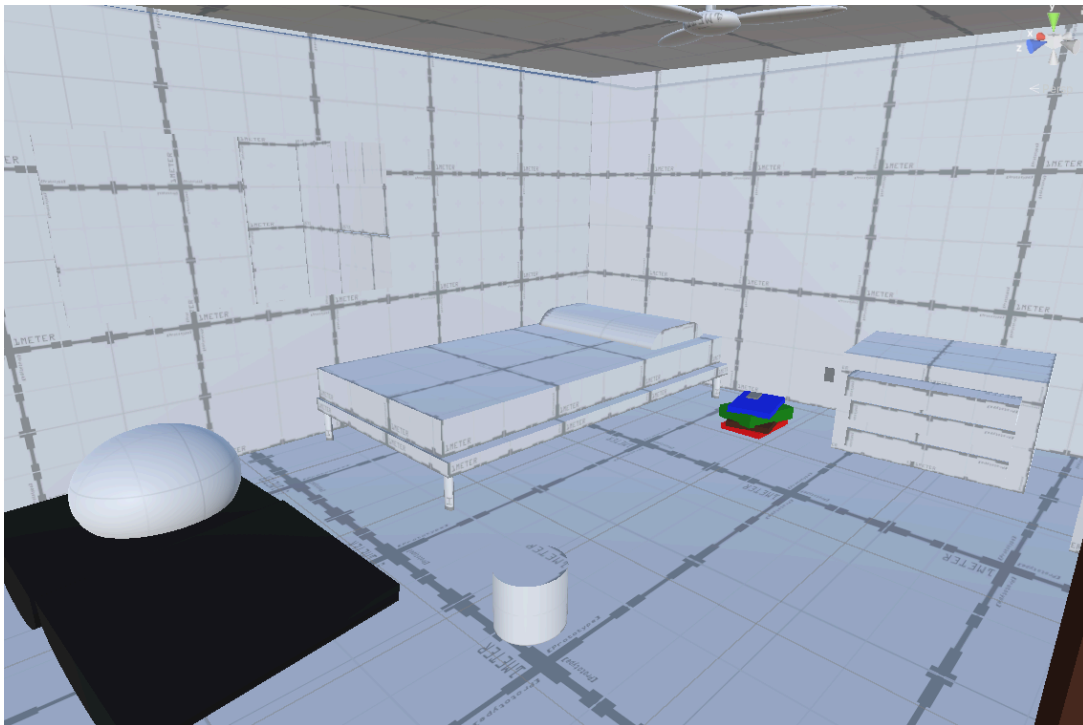
not perfect but hopefully
not too jarring

A quick sketch of how to deal with static cameras/camera colliders for a hallway with 3 main points of interest.

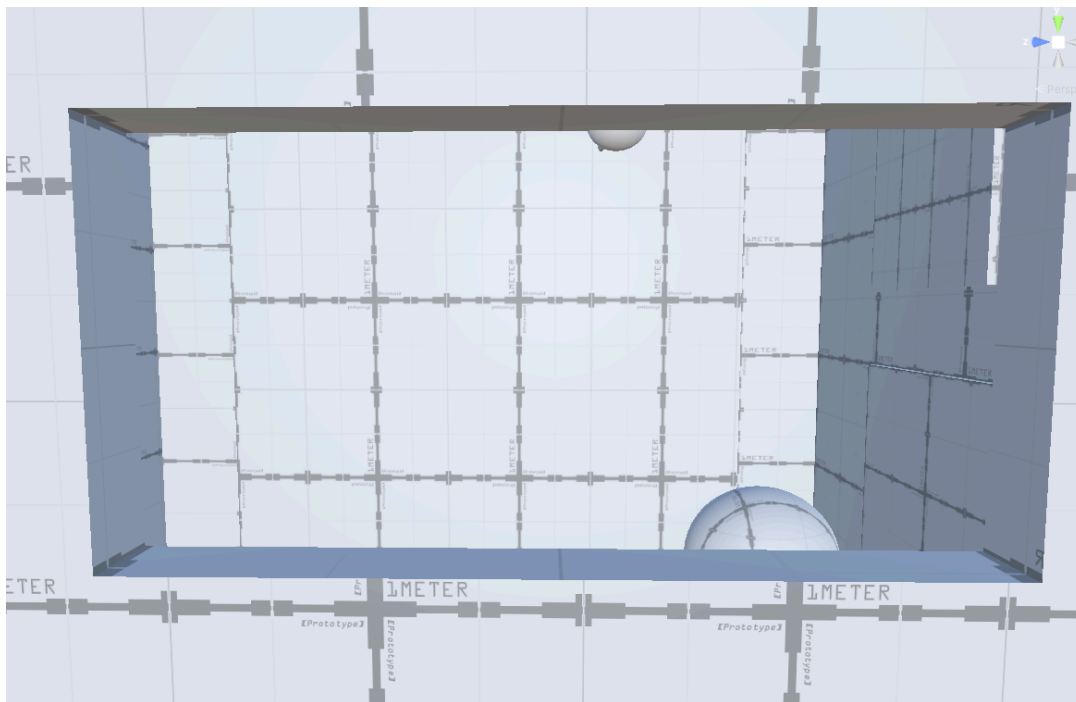
Greybox Screenshots:



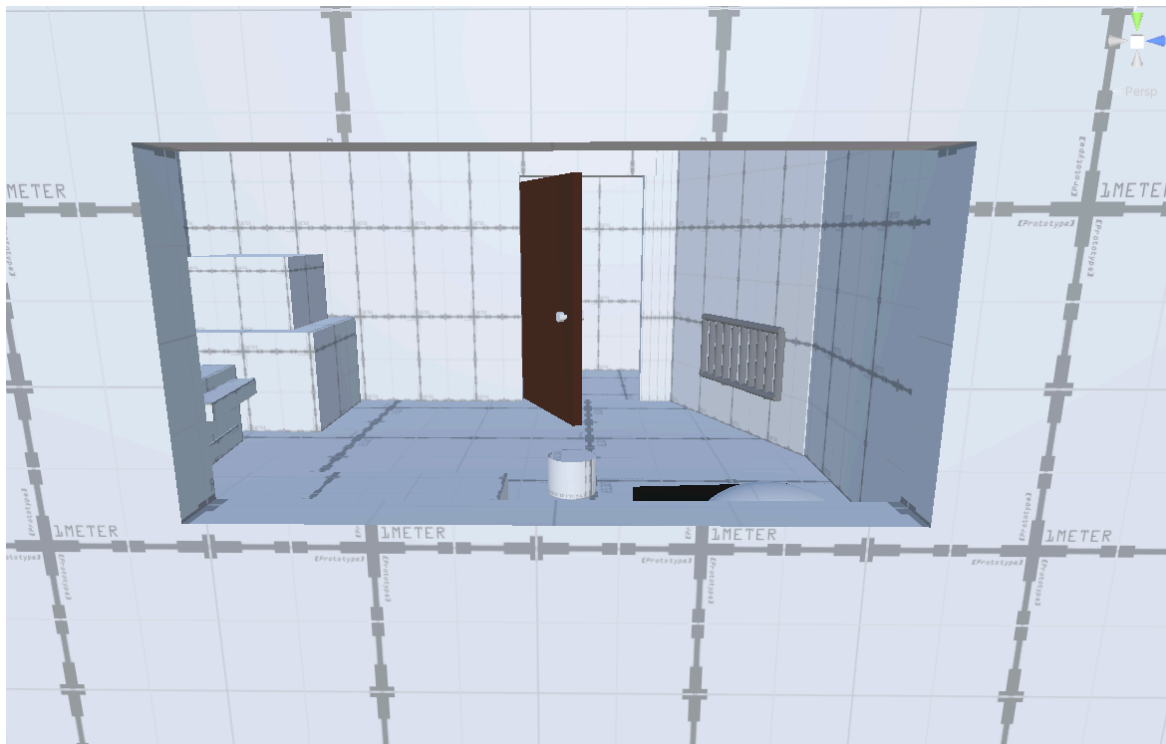
An overhead view of the entire greybox (with ceilings removed). The large walls near the top are buildings outside the apartment.



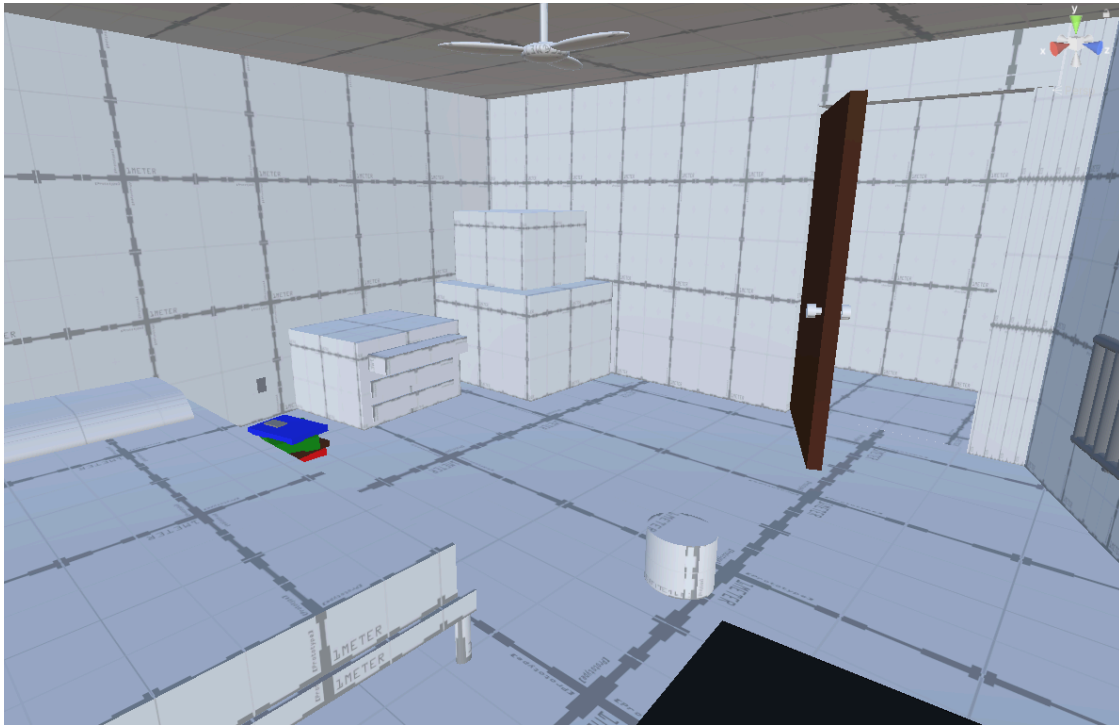
The player's bedroom, and the first location you explore in the apartment.



The view from outside the window. An alleyway, with bushes, hanging lights, and trash cans.



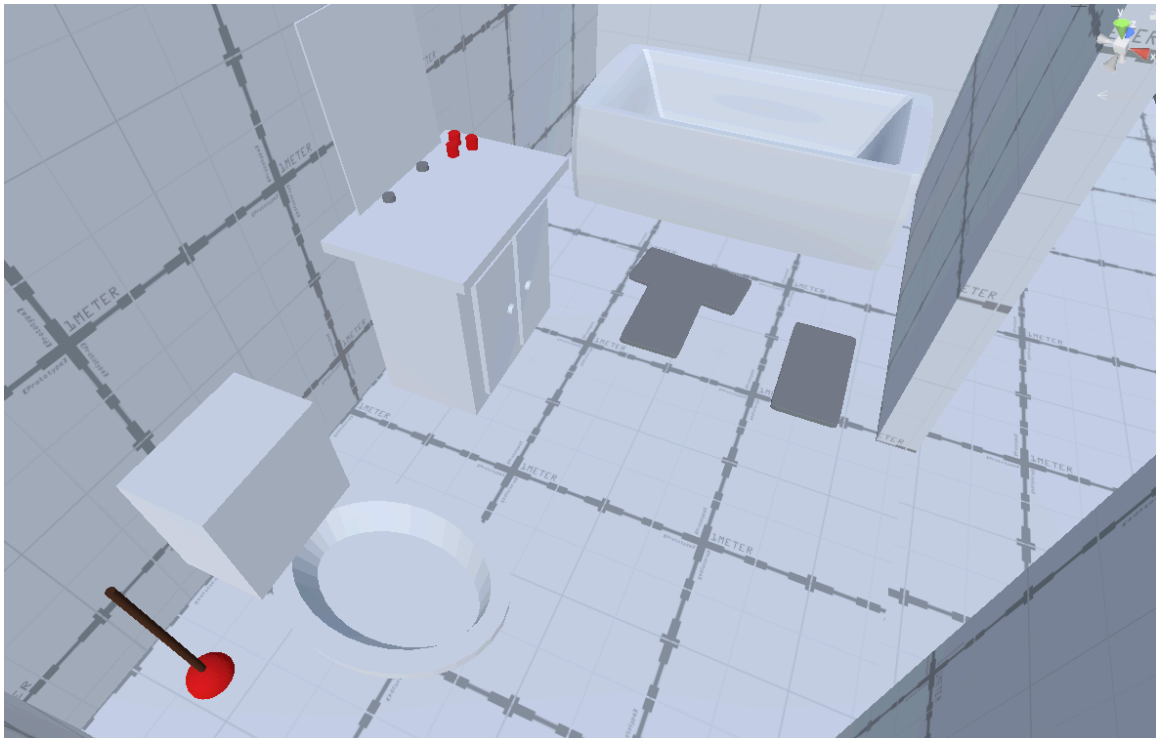
A view of the bedroom from outside the window.



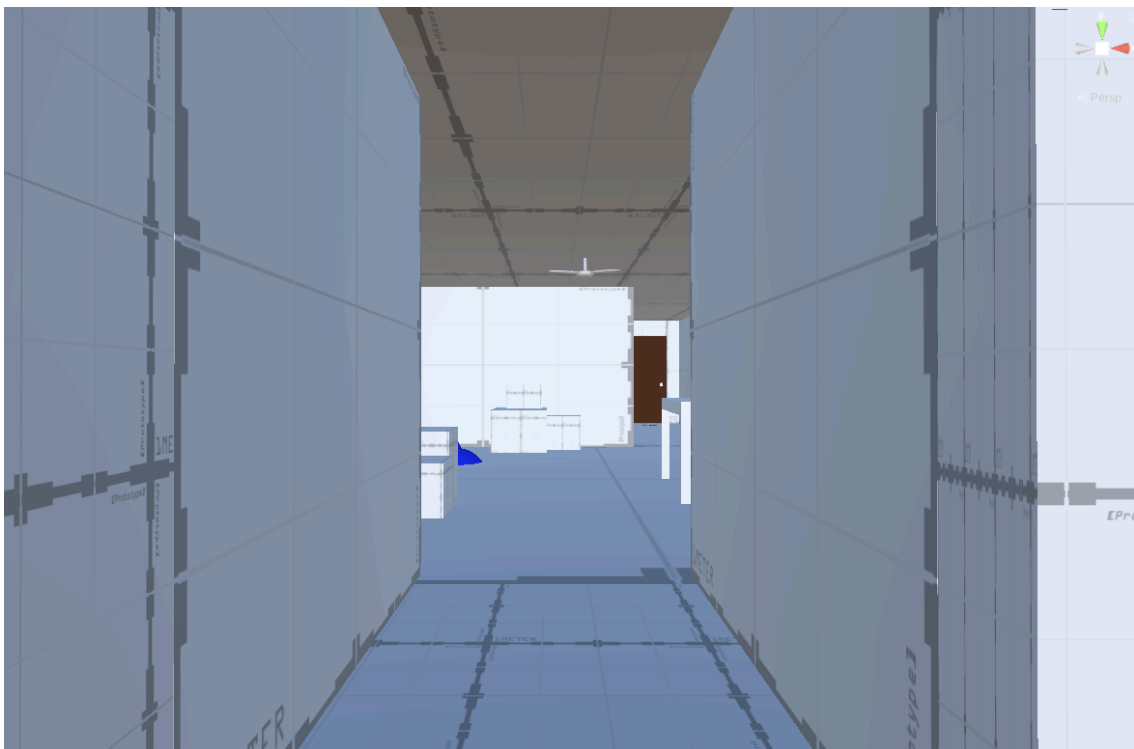
Another angle of the bedroom, this time showing the stacked boxes in the corner.



The hallway the player enters after leaving their bedroom. The door to their bedroom is on the left of this screenshot, while the door to the bathroom is on the right.



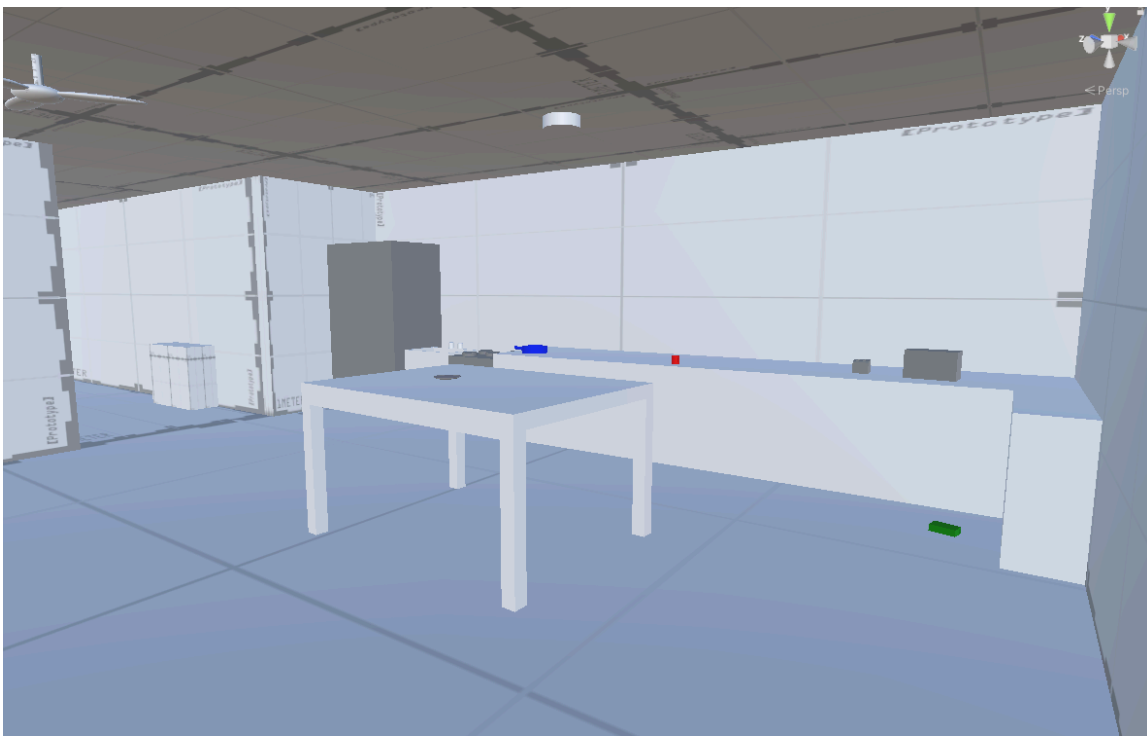
The player's bathroom. Small, somewhat cramped, and dirty.



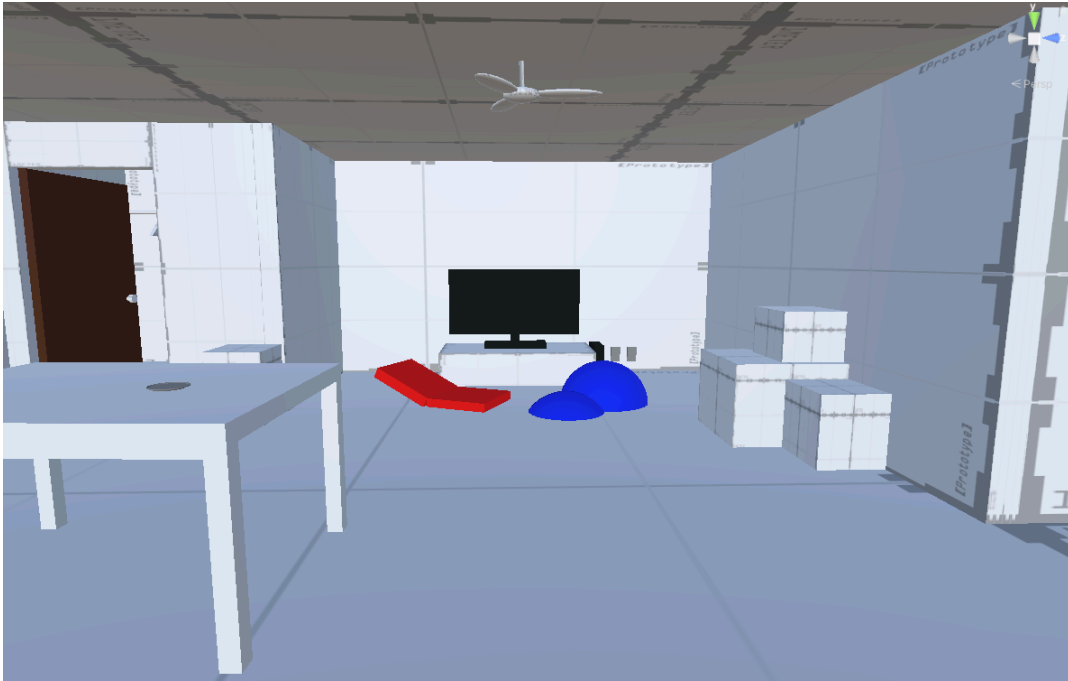
The view the player sees as they walk down the hallway towards the kitchen/living room area.



A small storage closet, to the left as the player enters the living room. Lots of still-packed boxes and unused clothes hangers.



The kitchen. Features several mousetraps on the ground.



The player's "living room" - really a collection of blankets, a TV, and a pizza box.



The entrance to the player's apartment. There's mail on the ground. The player cannot leave through this door until they've explored all there is to explore.

Final Screenshots:



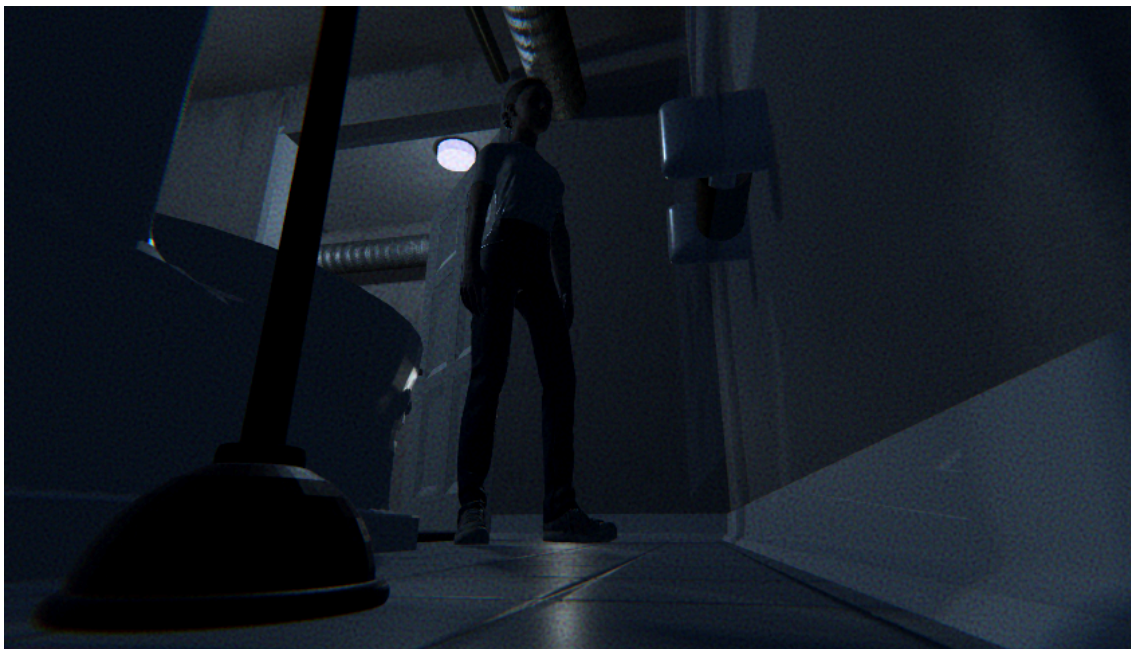
The opening shot of the game, which features the player character standing in her bedroom.



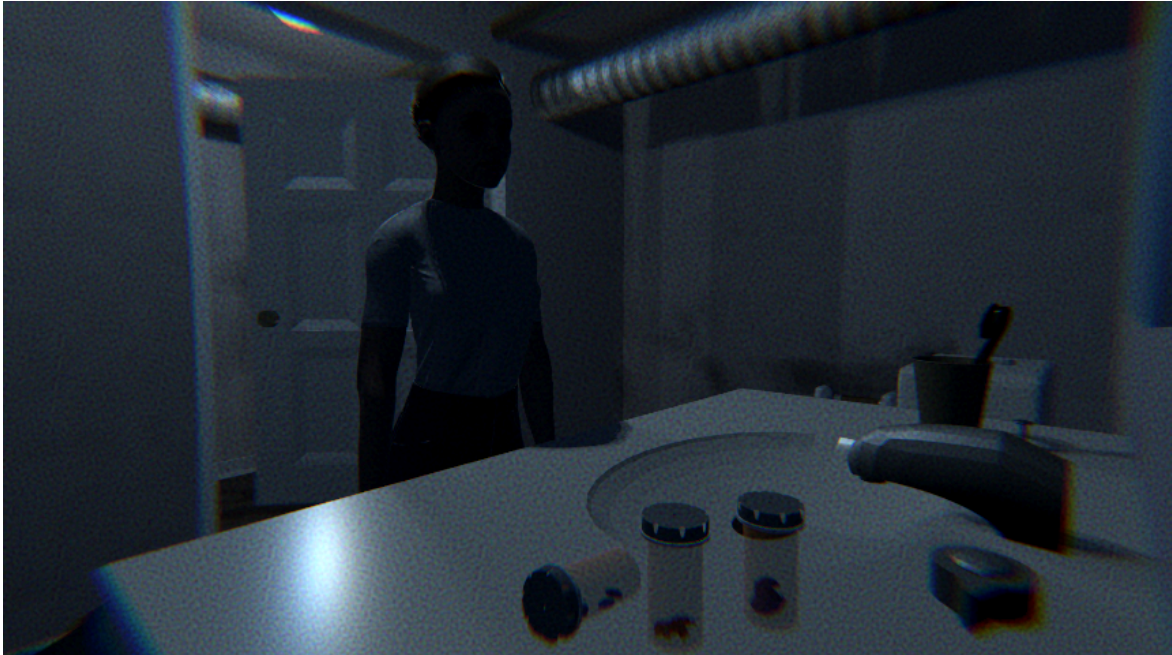
A shot from outside the character's window.



The player going to exit their bedroom. We made sure the bathroom door was visible from this angle, so the player would know where to go next.



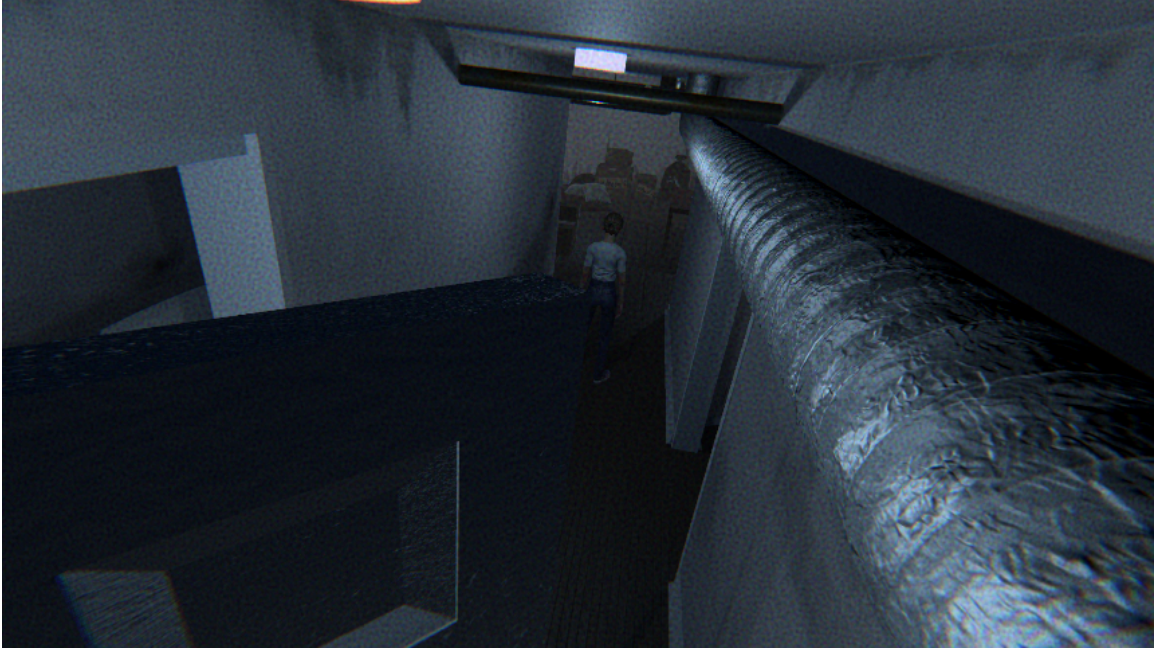
The game's infamous "Plunger Shot." People will be talking about this cinematography for decades to come.



The player looks at themselves in the bathroom mirror, while the camera focuses instead on the bottles of antidepressants on the sink counter.



The player exits the bathroom. Once again, we made sure the player's destination (the living room, then the exit) was visible from this angle so they didn't feel lost.



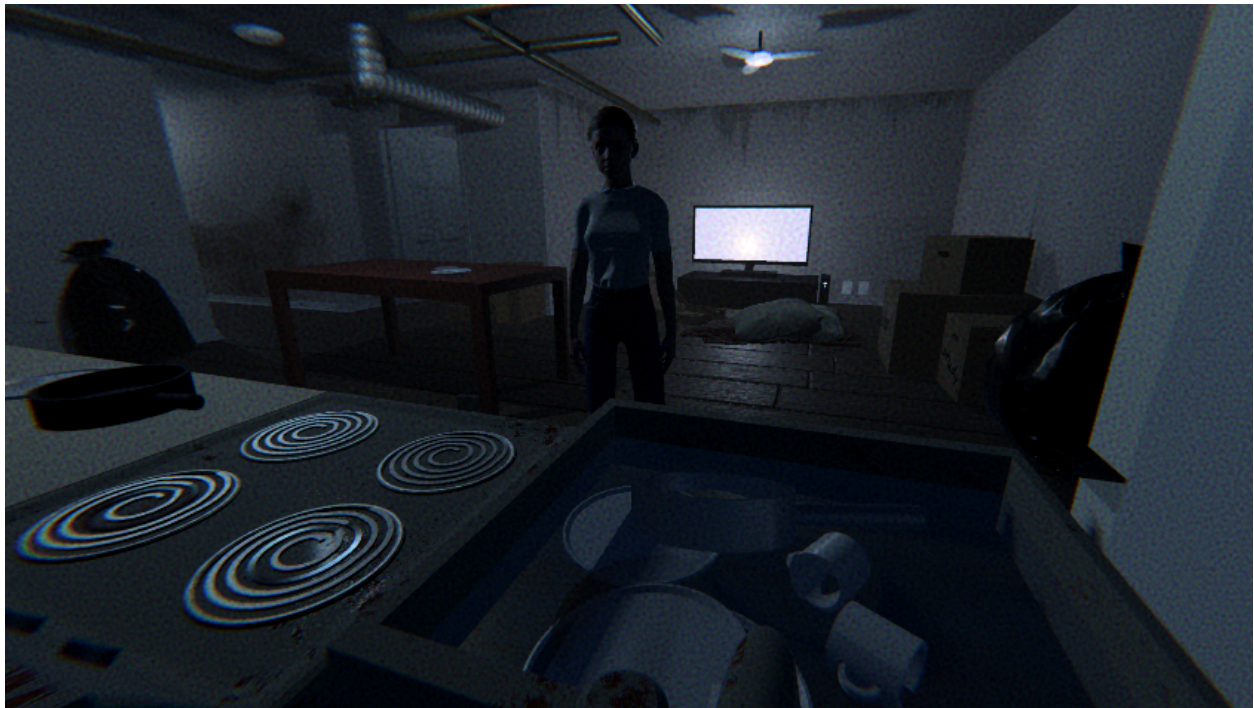
This is the default hallway shot, which triggers as the player leaves the hallway AND if they re-enter it. We framed the shot so that all four hallway options (the bedroom, the bathroom, the living room, and behind the bathroom door) were at least partially visible to the player.



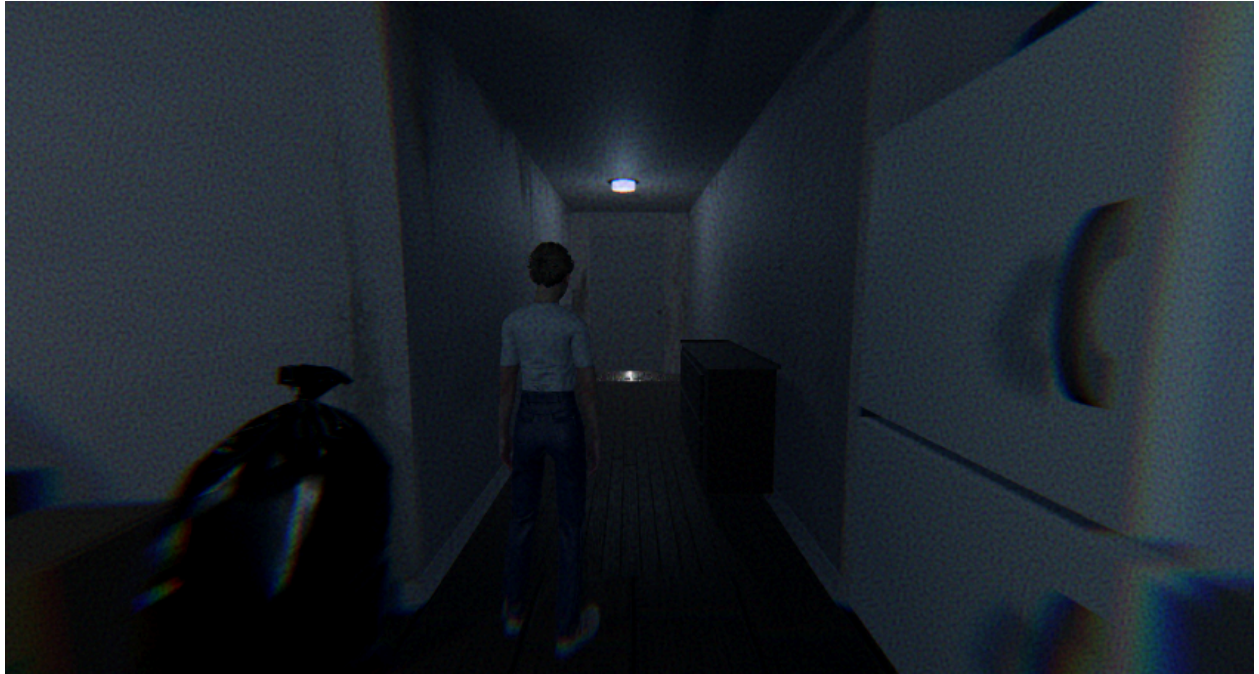
The player's living space. This shot frames three points of interest - the closet, the TV area, and once again the exit.



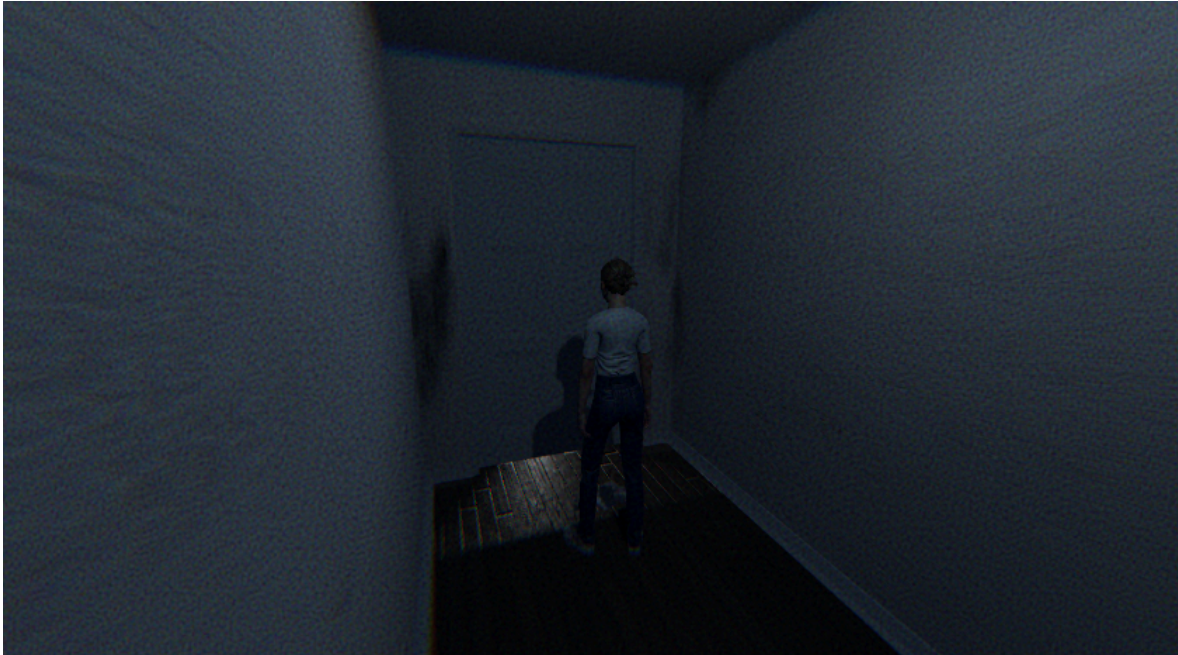
The player's storage closet.



A kitchen camera angle reveals the dirty dishes in the sink.

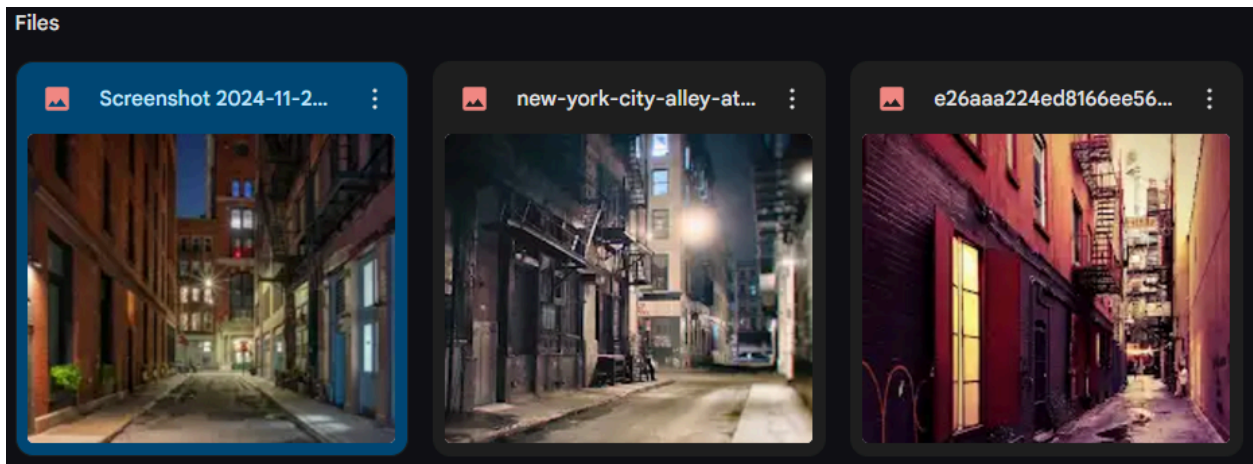


As the player approaches the exit, the camera distorts even further (this also happens at the window and the medication). This is to help emphasize the character's mental state, and how she feels about leaving the apartment.



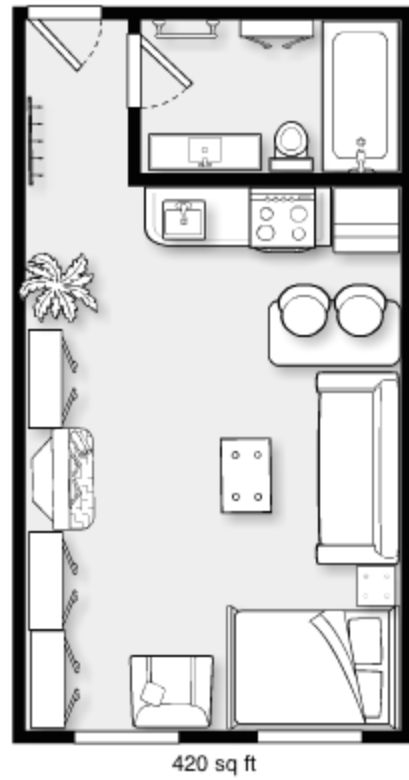
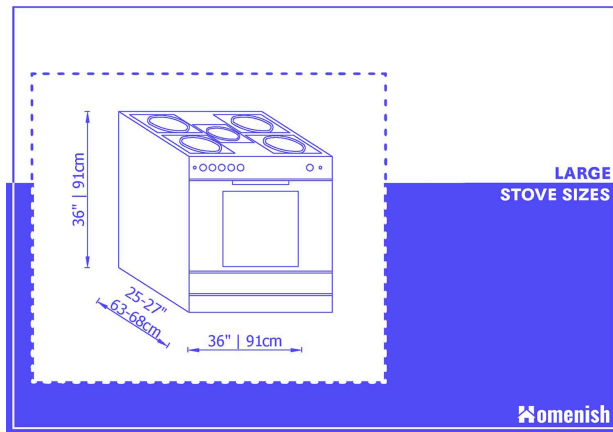
Once the player reaches the front door, they can click on it to leave.

Reference Photos:









23'-10 3/4"







Miscellaneous Design Notes:

FIRST VS. SECOND DESIGN ITERATION

We went through two distinct iterations of this project's design phase - our design problem was the same for both, but the way in which we attempted to solve that problem differed between each iteration. Our first version was optimistically overscoped, and put more of an emphasis on mechanical elements and patterns that supported that. While it could have been a good project, it didn't quite come together the way we wanted it to during the design phase, so we decided to go back to the drawing board and come up with a different idea.

We had several pages of notes and several sketches for that first design, but they almost all ended up getting reworked. Because the design we ended up on has a lot of features that feed into each other (namely the camera perspectives), that early design work we did was important to flesh some ideas out, but likely should have been done more quickly.

BEDROOM

- The bedroom has one angled wall with a radiator on it. While the wall (and the empty space behind it, which the player will never see) doesn't make logical sense for the apartment space, it's meant to make the player feel as uncomfortable with the scene as they are with the architecture. The left wall (relative to player starting position) is also at an angle, although it's much less noticeable.
- Most of her laundry is either still in her suitcase, which is lying on the ground, or spread across the floor near her suitcase.

CLOSET

- Her closet is located outside her room, which is both odd and inconvenient. This is a deliberate choice to both confuse the player (although they may very well overlook it) and to make the apartment seem like even worse of a living space.
- The coat hangers ([model linked here](#)) were deliberately chosen to be the cheap, plastic coat hangers you can get at any store. She doesn't have the money or the motivation to get nice coat hangers, and while it's a very small part of her life, it shows her practicality.
- We also wanted to put only a few sparse, unused hangers in the closet. Her laundry is just spread across the ground or packed into boxes, and she has no motivation to hang things up.

AUDIO

- The background music is written to reflect several things about the scene, most notable the somber and eerie tone ([Can You Hear The Music](#)). It's slow and contemplative, and meant to sound somewhat sorrowful.
- The entire song has a vinyl crackle effect on it, made to sound as if it's being played on an old record player. This helps enhance the eerie feel of the level, and fits in nicely with the camera warping/film grain effects, acting as a sort of audio implementation of that design pattern ([Going Against the Grain](#)).

- The entire song is pitched down 50 cents, placing it out of the regular even-tempered 12-tone scale that most Western music is in. This makes it sound a little less natural and, once again, enhances the eeriness.
- In addition, the entire song is in a $\frac{5}{8}$ time signature, which is an odd meter and not very typical. There are elements in the song that are in $\frac{7}{8}$, or play a 7 against 5 rhythm, which is even more disorienting.
- There are several atmospheres and ambient sound effects used throughout the level, as well as more concrete sound effects (such as the water dripping into the bucket, or the hum of the refrigerator). Both of these types of sounds are used to immerse the player in the level ([Creeaak!](#)) and to enhance the feel of the game ([Hear the Evil](#)).
- Because of the fixed camera, there is often a jarring jump or drop in the volume of these sound effects when the camera switches from one perspective to another. We used this to our advantage to create moments of tension or little miniature “jump scares.”

GENERAL

- This game makes use of a fixed camera perspective, which plays into a lot of the design goals we had for it ([It All Depends On How You Look At It](#)). The fixed perspective fits the game well because we wanted to have lots of control over how the scene is presented to the player, so that we could deliberately create the most uncomfortable or tense view of it. Additionally, it adds some detachment between the player and the character, which guides the player think more about what the character might be going through internally, and also helps communicate the character’s own detachment from their life that they might be feeling. Finally, using a fixed camera perspective emulates old (and new) survival horror games like Resident Evil, Silent Hill, or Signalis (all of which used fixed cameras for similar reasons), which can help elevate the “horror” of the scene if the player has that meta-knowledge.
 - Using a fixed camera also gave us the benefit of being able to hand-pick which parts of the scene were visible or not visible, and what was in focus or not. This meant that we could afford to leave some areas unfinished (if we could be sure the player would never see them) and focus more of our time and energy on making the areas that WERE visible look better.
- All the fixed cameras have some level of post-processing effects applied to them, generally film grain ([Going Against the Grain](#)). By distorting or otherwise messing with the camera, we make the player feel unsettled. This can be used to create a more found-footage horror aesthetic, and can help increase the tension of the scene without directly implying something will happen. The distortion effects increase when the player is somewhere significant and frightening or anxiety-inducing to the main character.
- By letting the player explore the main character’s living space (their wonky, messy, awful apartment), we can give a lot of depth to the character through the environment rather than relying solely on dialogue or other narrative methods ([Judge a Character by Their Bedroom](#)). This was an especially helpful design pattern for us to use because it meant we could use our limited time and resources to focus on creating an evocative space that can communicate a lot of character in a short amount of time, rather than having to create a more elaborate level to say what we want about the character.

- The apartment does not have a typical apartment layout, and (although the player will never see it) a lot of space goes unutilized. This is done deliberately, to confuse the player and to make the space feel more “off.” Similarly, some rooms have angled walls or seams where the walls don’t match up quite right, which both shows the general “state of decay” of the apartment and makes the space feel “off.”
- The apartment has a deceptively high amount of negative space. However, we used the fixed camera to our advantage to try and present angles to the player that de-emphasize the emptiness of the space and emphasize instead the clutter or important environmental details. In addition, it is possible that having some empty space works to unnerve the player (which we talked about in our design process), but we wanted to be careful to strike the balance between unnervingly empty and empty in a way that looks wrong or incorrect.
- For a while, our design involved players being able to interact with objects and receive character dialogue about them. Now, our final iteration is more about using visual cues and design elements to move the player through the space rather, than a concrete gameplay objective. We thought this would be a more interesting design if we limited the amount of dialogue in the game. It also helped us deal with time constraints. Now, the only interaction of this type is clicking on the exit door to end the scene.
- Clicking on the door does not work in our final build. We spent a long time trying to figure out why, to no avail.

Important things to note:

- We are currently using a free character model + animations from Mixamo, as modeling/animating a human character is a bit out of scope for us. We picked the human character that most fit our established character for our scene (although options were limited), and tried to choose walk and idle animations that looked similar to how she would move - somewhat low energy, relatively slow movements. If we had the time and knowledge to make a character model/animations ourselves, they would fit the rest of the game better. As it stands, we think the focus of the game is much more on the environment than the player model, and so what we have works well enough.
- Our font for dialogue is (currently) Arvo, which is free and available at <https://www.1001freefonts.com/arvo.font>.

Textures used:

- https://polyhaven.com/a/painted_plaster_wall
- https://polyhaven.com/a/white_plaster_rough_01
- https://polyhaven.com/a/weathered_brown_planks
- https://polyhaven.com/a/tiled_floor_001
- https://polyhaven.com/a/wood_table_worn
- <https://freepbr.com/product/lumpy-wet-concrete/>
- <https://www.texturecan.com/details/364/>
- <https://freepbr.com/product/jeans-fabric-pbr/>

- <https://freepbr.com/product/base-white-tile/>
- <https://freepbr.com/product/speckled-rust-pbr/>
- <https://www.texturecan.com/details/320/>
- <https://freepbr.com/product/worn-scuffed-plastic-pbr-material/>
- <https://freepbr.com/product/old-soiled-cloth-1-pbr-material/>
- <https://freepbr.com/product/worn-blue-burlap-pbr-material/>
- <https://freepbr.com/product/textured-rubber-pbr-material/>
- <https://freepbr.com/product/vinyl-tablecloth-pbr/>
- <https://freepbr.com/product/antique-wood-veneer/>
- <https://freepbr.com/product/speckled-countertop1/>
- <https://freepbr.com/product/corrugated-cardboard-pbr/>
- <https://freepbr.com/product/older-wood-flooring/>
- <https://freepbr.com/product/soft-blanket-pbr/>
- <https://freepbr.com/product/loose-coarse-fabric/>
- <https://www.texturecan.com/details/531/>
- <https://freepbr.com/product/wrinkled-plain-paper/>

Assets used:

- https://www.freepik.com/3d-model/hanger-010_7368.htm#query=clothes-hanger&position=4&from_view=search&uuid=93849c91-af37-4b35-adbb-af7d33d64c11

Decals used:

https://www.reddit.com/r/blenderhelp/comments/bq383z/need_help_with_adding_a_stained_texture_to_an_old/

<https://www.google.com/imgres?q=wall%20stains%20png%20transparent&imgurl=https%3A%2F%2Fwww.pngall.com%2Fwp-content%2Fuploads%2F8%2FStain-PNG-Picture.png&imgrefurl=https%3A%2F%2Fwww.pngall.com%2Fstain-png%2F&docid=wZxnrQm0fdHTVM&tbnid=RrHJlpCZvX-jcM&vet=12ahUKEwjTgJG-4JyKAxVnvokEHYjgNV4QM3oECGkQAA..i&w=1232&h=380&hcb=2&ved=2ahUKEwjTgJG-4JyKAxVnvokEHYjgNV4QM3oECGkQAA>
<https://stock.adobe.com/search/images?k=movers+icon>

Tools used:

<https://www.remove.bg/>

<https://picsart.com/create>

<https://www.fontget.com/font/marker-comp/>

Substance Painter