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Garrets (www.garrets.org) is a social web platform for people who wish to surf a more human internet.

This paper is meant to document the process of building the web application, but also to motivate the ethos and approach of the social space.

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BUILDING A HOME ON THE INTERNET

I. PROJECT DESCRIPTION

I am building a web platform called Garrets that uses the metaphor of a house to allow users to organize and exchange ideas.

Within a house a user is either a builder, a resident, or a guest. Users can create houses which they are then builders of. Builders can invite other users to become co-builders or residents in their house, forming a community.

A house is composed of rooms that builders can modify over time. Each room may have its own purpose. A library room could be for compiling a list of things to read. A garden room for picking flowers. The kitchen for listening to the radio.

Within a room, residents can chat, emote, put media on shelves, or put a song on the radio if the room provides one. Different rooms in the house can be configured to expose different types of input. Perhaps the library might be a room with only shelves and no chat, as low decibels are to be respected. Perhaps the kitchen can have a radio.

A house could be private or public. If a house is public, guests are allowed to visit the house. A public house could choose to open some rooms to guests, such as a guest room, or keep some rooms private to the builders and residents.

Private houses would be tucked away safely. A house would be private if it contained more sensitive, personal data. An architecture firm might want to make a digital house where they can organize their different projects, and create moodboards. Public houses would form a village. Houses that bring together communities of people. One house might be about cats, another about biking in New York, another about fractals.

My ultimate goal is to transfer the intimacy of home into digital space. I want to enable people to create online spaces which cover the needs of belonging, authorship, and archival that social media is increasingly failing to serve.

Garrets aims to foster an internet where content is *authored* and *consumed* by *people*.

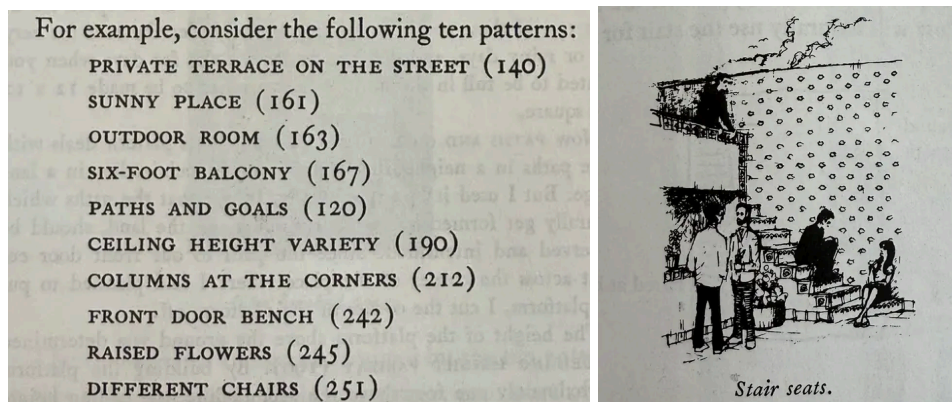
II. INSPIRATION

Home is a place of comfort. Home is a place of safety. Home is a place where one can communicate openly with cohabitants. Home is a place to organize your thoughts and belongings. Home is a place to take your shoes off and lay on the couch.

Or as Gaston Bachelard puts it, “if I were asked to name the chief benefit of the house, I should say: the house shelters day-dreaming, the house protects the dreamer, the house allows one to dream in peace”¹

Home is a place where your voice may not be heard far and wide, but importantly it is heard by you and yours.

Earlier this year I stumbled upon the book ‘A Pattern Language’ by Christopher Alexander, Sara Ishikawa, and Murray Silverstein. It examines patterns that should be considered when constructing your own house. I found that a lot of concepts in the book translated to the digital realm in an interesting way.



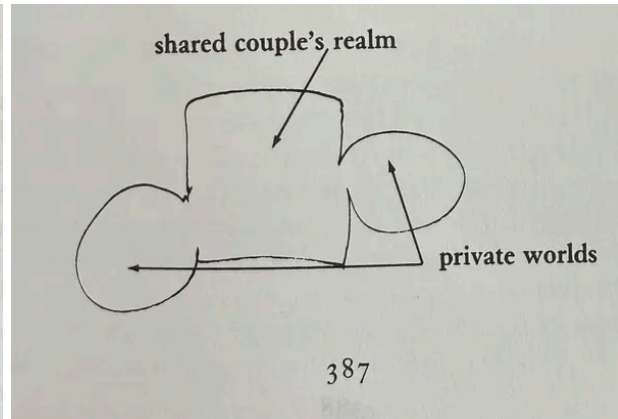
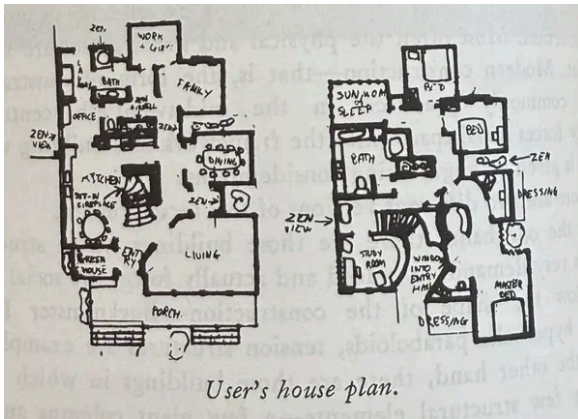
A Pattern Language made me think of the separation between private and public realms within a living space.

Home is a place where our needs of privacy are met. Most conversations do not stick around forever. Digital conversations should perhaps only be ‘heard’ between people who are in a room at the same time. When our data instead stays around for longer, it enables ‘lurking’² or ‘ghosting’³. Some conversations are meant to be had between only two people. Some between more.

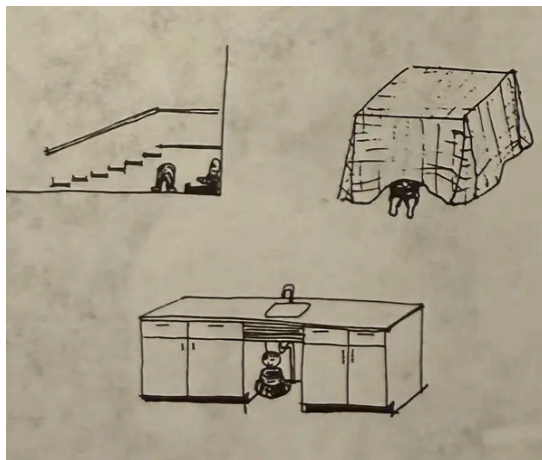
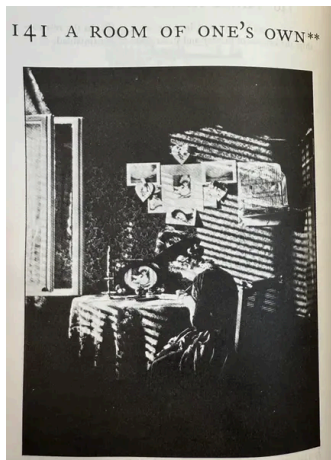
¹ Gaston Bachelard, The Poetics of Space p.6

² <https://en.wikipedia.org/wiki/Lurker>

³ [https://en.wikipedia.org/wiki/Ghosting_\(behavior\)](https://en.wikipedia.org/wiki/Ghosting_(behavior))



Alexander, Ishikawa and Silverstein consider; “Where can the need for concealment be expressed; the need to hide; the need for something precious to be lost, and then revealed? Make a place in the house, which is kept locked and secret; a place which is virtually impossible to discover-until you have been shown where it is; a place where the archives of the house, or other more potent secrets, might be kept.”⁴



It also made me consider how important a sense of ownership is when building a community space. Community members should be able to shape the space they communicate in. To configure a house to match their needs. Some communities might need three rooms, others ten.

When decorating our online spaces, we should have the ability to follow our own set of rules. “Modern decor need not be slick or psychedelic, or “natural” or “modern art,” or “plants” or

⁴ Christopher Alexander, Sara Ishikawa, Murray Silverstein, A Pattern Language p.930, 931

anything else. It is most beautiful when it comes straight from your life — the things you care for, the things that tell your story.”⁵

Home is also a place to store memories. ‘Memory-what a strange thing it is!-does not record concrete duration. We are unable to relive duration that has been destroyed. [...] Memories are motionless, and the more securely they are fixed in space, the sounder they are.’⁶

This passage from the Poetics of Space gave me the idea of a shelf. A shelf can be used to keep something around for longer. We can leave a note on the fridge, or put a book on the bookshelf.

My reading also made me consider what a garden might offer to a house. We can nurture a plant and see it grow over time.

“Artists and creative technologists can help us consider the internet in ways the technology industry still struggles to see: as a place where people relate to one another emotionally, or generate knowledge together, or create safe and supportive communities for common use. [...] If the Internet were a city, what would be its roads, buildings, and parks?”⁷

III.PRECEDENTS

Can a home exist on the internet?

The internet is increasingly driven by metrics and algorithms. Our content is put into boxes, used to train machines on our likes and tastes. The capital of most popular socials is likes and followers. Because of this, our digital consumption increasingly includes brands and influencers, and less of *our people*.

The concept of a connected and human centered internet is of course not a new idea. To name two examples of home from the early days of the internet, Geocities and Webrings allowed internet surfers to link their sites to each other. In linking their sites, people with similar interests were able to discover and empower each other.

In November 1994, Geocities introduced self-publishing to the masses. It was a means of authoring and publishing a personal site to the internet.

⁵ Christopher Alexander, Sara Ishikawa, Murray Silverstein, A Pattern Language p.1166

⁶ Gaston Bachelard, The Poetics of Space p.9

⁷ The Are.na Team, How do you use the internet mindfully? p.5

Geocities users were called ‘homesteaders’. They chose to set up their website in one of six neighbourhoods: the Colosseum for sports sites, Hollywood for entertainment sites, RodeoDrive for shopping, SunsetStrip for music, WallStreet for business and West Hollywood for the Gay and Lesbian community.



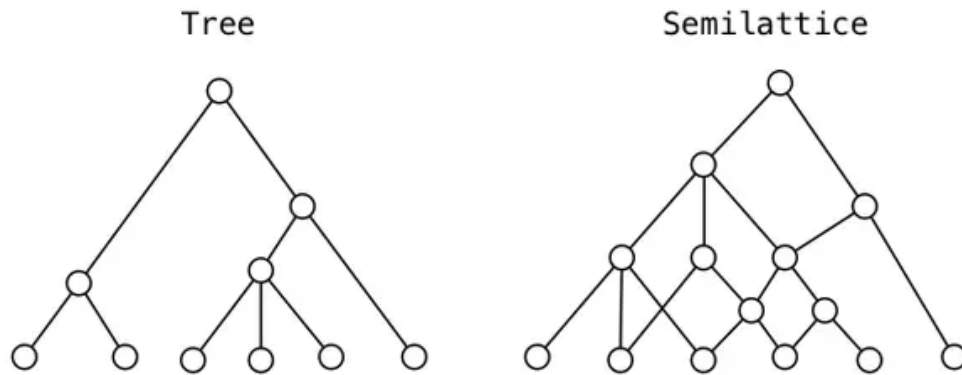
Another precedent that brought internet surfers closer in meaningful ways is Web Rings. Developed in 1994 by Sage Weil, Web Rings were a means of linking similar websites together, to increase discoverability and foster community. The example image below shows two Web Rings; sites in this ring were all related to History.



‘A Web ring is like a giant backyard fence [...] It allows all the people who are interested in the same topic to move in next door to each other, click on an icon, go to their neighbors' houses and see what's happening in there. [...] It allows anyone to create their own little community.’⁸

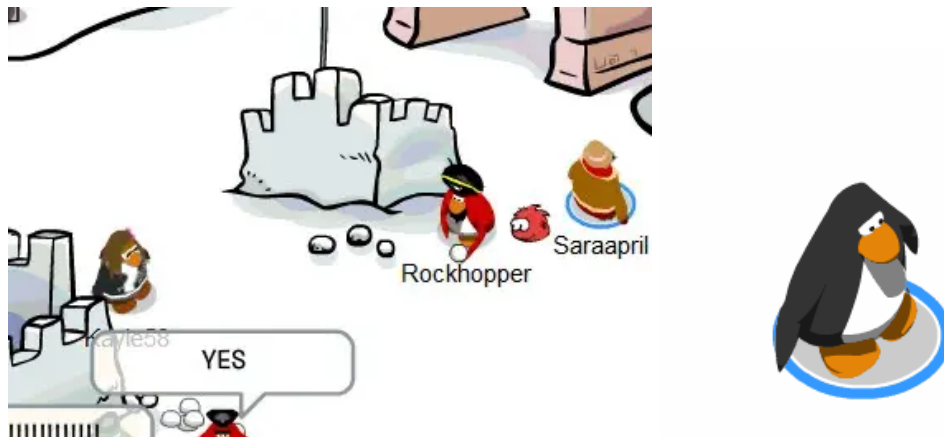
⁸ Tina Kelley, Surfing in Circles and Loving it, New York Times, <https://www.nytimes.com/1999/01/21/technology/surfing-in-circles-and-loving-it.html>

Platforms like Twitch, Instagram, LinkedIn, promote the existence of ‘influencers’. To use graph theory as a metaphor, users act as nodes in a ‘tree’ that other users are connected to when they follow them. Geocities and Web rings connected the internet in an organic way. Instead of structuring it as a tree, it could now be organized more like a semilattice.⁹



In considering home on the internet, I plan to also draw inspiration from virtual worlds. Launched in 2005, Club Penguin was a virtual world that gained wide popularity with younger internet users.

In Club Penguin, users were penguins. They would waddle around a town and communicate with other penguins through a chat interface. Users could also throw a snowball, which had no real effect in the virtual world other than the visual effect. Snowballs in Club Penguin remind us that people take action even if they have no ‘real effect’.



I was a member of Club Penguin, and have fond memories of going to the Pizza Parlor, putting on my chef hat, and role playing taking people’s orders and waiting tables. Or putting on a hard

⁹ Anton Cebalo, The Internet is Like a City <https://novum.substack.com/p/the-internet-is-like-a-city>

hammer hat and attempting to tip the iceberg. Many users including myself made friends on Club Penguin, people they would have repeated interactions with online.

Club Penguin and countless other examples including Neopets, Animal Crossing, Minecraft, and more recently Roblox and Fortnite, teach us that the personification of our digital self can lead to more immersive digital interaction and community. Since the internet started, the tools available to us may have wildly evolved, but our desire for self-expression has not.

IV. PROCESS

‘The perfectly crystalline squares and rectangles of ultramodern architecture make no special sense in human or in structural terms. They only express the rigid desires and fantasies which people have when they get too preoccupied with systems and the means of their production.’¹⁰

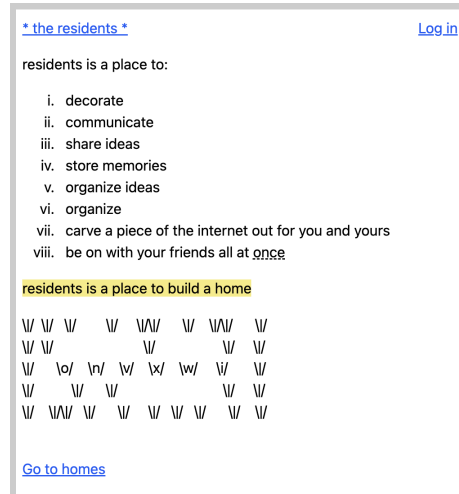
I plan to utilize a minimalist, hand drawn, 'web 1.0' aesthetic to pay homage to what I think of as the more human centered era of the internet; between 1991 when the first website was published on the World Wide Web, and the mid 2000s when social media, Youtube were still in their early phases.

I find that the modern sleek interfaces we see in applications like Slack, Discord, Instagram, Messenger, and TikTok are increasingly homogenous and soulless. I also find that hand drawn sketches, ASCII art and 8-bit illustrations can carry quite a lot of emotion and humanity. I plan to utilize a mix of these techniques as feels appropriate, when designing the interface of Garrets.

I knew this project would be a significant technical undertaking, so I wanted to start with some foundational work even before I had settled fully on aesthetics.

I decided to build the beta version of Garrets for the web, as it is the medium I am most familiar with, and often the most accessible medium for users. It is worth noting that native applications (both mobile and desktop) have a wonderful essence about them; I would love to one day build a native version of Garrets.

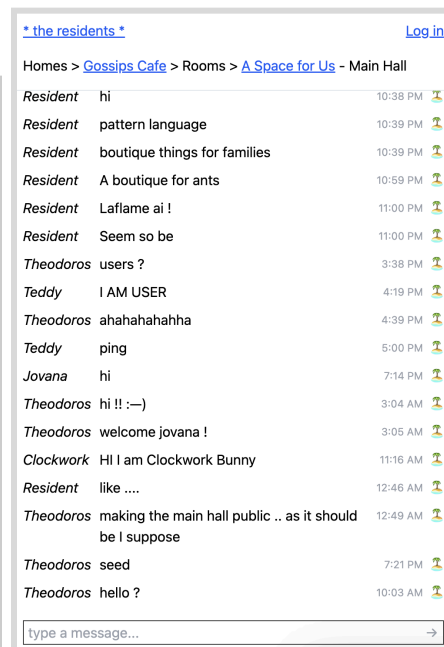
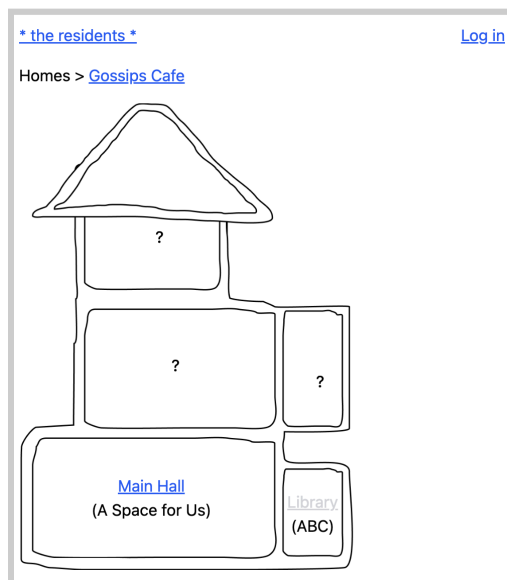
¹⁰ Christopher Alexander, Sara Ishikawa, Murray Silverstein, A Pattern Language p.883



The infrastructure I settled on is as follows:

- i. SvelteKit as a web framework
- ii. Tailwind CSS for styling
- iii. Prisma as my ORM (object relational mapping)
- iv. S3 for media hosting
- v. Pusher.js for websockets (real time application state updates)
- vi. Netlify for web deployment and hosting
- vii. Github for version control (open source !)

My first goal was to get a single house, with a single room, with a chat system in it. So I laid down my initial data models: House, Room, RoomType, Message.



I then decided to add a user base. The user base is critical as it allows for private houses to exist through the mechanism of belonging to a house, I call 'residence'. I built my own email and password user authentication system. It uses `bcrypt` to salt and hash user passwords, and a session based strategy for increased security. This required some new data models: `User`, `Session`, `UserRole`, `Residence`.

* the residents *

Welcome back !

Email

Password

Log in

Not a resident yet? [Sign Up](#)

* the residents *

All the good ones fit.

Name

Email

Password

Sign Up

Already have an account? [Log In](#)

The next thing I wanted to do was create a shelf system that the user can interact with in a room. Shelves are used to pin things on a wall for more long term storage, or simply to decorate a space. For this I added `Shelf`, `MediaFile`, and `MediaType` (although for the time being I plan to only support image). For increased security, lower server load, and better data efficiency, I use signed S3 urls for both media upload and retrieval.

* the residents *

(Theodoros Tsivranidis) Log out

Homes > [Gossips Cafe](#) > Rooms > [ABC - Library](#)

Upload Image

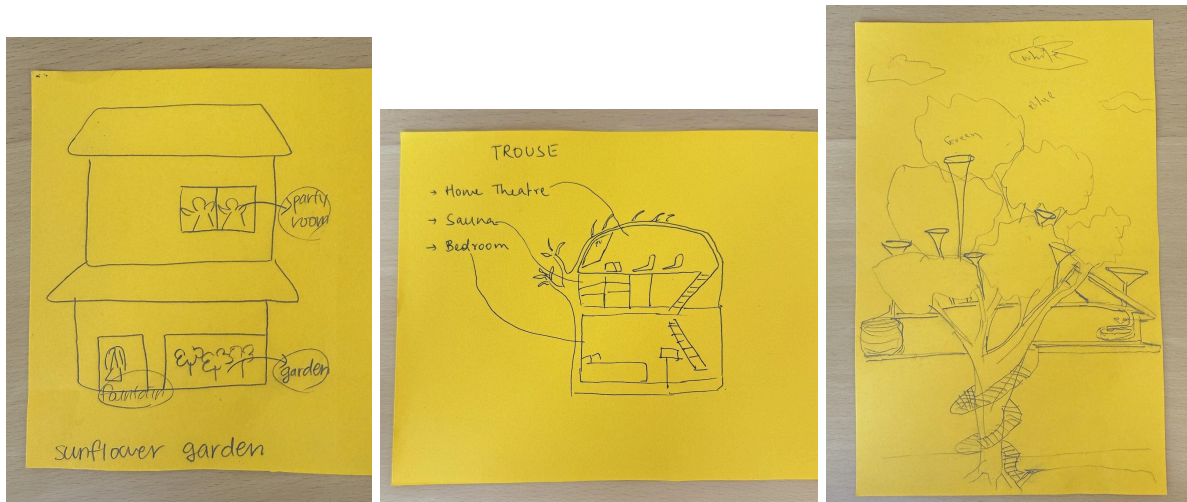
* the residents *

Homes > [Everybody's Home](#) > [ABC - Library](#)

V. USER INSIGHTS

In an attempt to hone in on some core interactions and aesthetics I could work toward I had the chance to run a ‘Dream Home Workshop’ on March 31, 2025.

I asked the participants to imagine a dream home which could take any shape or form, real or imaginary. I asked them to draw a sketch of it, considering some of the rooms in the space, and what each offered toward the dream.



A few ideas became apparent after this workshop.

- 1) Participants found this exercise exciting. They let their imagination run wild, and got excited by things that might not be possible in a real physical house, but could be in this imaginary world.
- 2) Two of the participants imagined a tree house. I believe the significance of a tree house is its organic shape and camouflaged appearance. The way it blends in with its surroundings can offer a unique sense of privacy.
- 3) One participant imagined a fountain in the house, where residents could make a wish, or be reminded of one of their past wishes.

After the workshop, I shared some of my future feature ideas with the participants. In particular I shared my thoughts about the ability to make a house garden, a space in which flowers would grow and a fountain could exist. I have been considering how flowers could be a core mechanic of the platform; something users send to each other in the mail, or a currency used to unlock new rooms in the house.

While discussing the concept of Garrets with others, a friend gave me the idea of a ‘house dog’. This would take the form of some animated sprite that roams the space of its own volition.

It led me to consider how flowers could be a way of domesticating a ‘wolf’ that shows up in the garden. Thereafter the dog could be given a name, receive a collar, and become the ‘house dog’. Once it is a house dog, the user could bring it to the room they’re in by typing its name in the chat. It could bark when a resident types ‘speak’ into the chat, and sit down when a resident types ‘sit’ in the chat.

VI. FUTURE ASPIRATIONS

Based on feedback and my own motivations, I want to prioritize building out:

- 1) The ability for users to create a new private house, modify it with rooms, and invite others to join them. Privacy is a critical feature in the application, as one of the primary features of a home is that it is a place of privacy and safety.
- 2) Sending ‘mail’ to another user. I think this would be fantastic as it would serve as the mechanism for getting invited to a house, and also as a more thought out form of communication. A letter would stick around ‘forever’. A chat message should maybe just stick around for a week.
- 3) The ‘garden’ room. This would be a space where flowers grow. The user could ‘pick’ these flowers by clicking on them. These flowers could then be used to unlock new rooms, create postcards to allow mailing something to another user, or for a variety of other ‘payments’.
- 4) The ‘house dog’. Who doesn’t like dogs?
- 5) The ability to add a ‘radio’ to a room. A resident could tune this to a ‘station’, and broadcast its sound to the rest of the residents in the room.

I find that these types of features will bring an element of magic to Garrets by combining game mechanics with social mechanics. These features would make the platform feel distinctly different from traditional social platforms.

Ultimately, Garrets should be a place where it would be exciting to be on with your friends all at once, whether that be because you are planning a group project, creating a shared moodboard, listening to a song together in the kitchen, or hanging out in the garden alongside the wild flowers.