

Candidate Name: <ECLIPSE>

Candidate Number: <4038>

SOFTWARE REPORT

COMPUTER SCIENCE

PROJECT

H446-03

Name : Lain (Eclipse) Iwakura

Candidate Number : 4038

Title of Project : Wired Genesis - An esoteric library & chatroom

H446-03 – PROJECT CONTENTS

TABLE OF CONTENTS

A. Analysis.....	3
B. Design.....	3
Systems diagram.....	3
C. Developing the coded solution (“The development story”)	3
D. Evaluation.....	3
Project Appendixes.....	4

A. ANALYSIS

Outline for the project:

"I propose an FOSS desktop application with a P2P chat room architecture called Wired Genesis. The main focus will primarily be on the overlap between the technology and the occult (techno-occult) and elements of esotericism and cyberpunk."

"It will also include a repository containing documents, literature and works sent by users which can be viewed and accessed using the decryption password. Essentially a library of documents which typically involve philosophical essays, the occult and implications of technology, so I plan on making it useful for finding research material and resources (as centralized research material can be lacking)"

For context, serial experiments lain is a dystopian psychological horror & avant-garde anime which is well known for its highly cryptic and abstract non-linear plotline, being ambiguous with its interpretations and highly thought-provoking. It depicts a lot of occultic and religious imagery and has a lot of references to esoteric doctrines, and covers topics of wireless connections of humanity using schumann resonance by the means of the collective unconscious embedded within the human psyche, and elimination of the confines of the flesh, covering topics of gnosticism (however it is ultimately up to the interpretation of the individual which philosophy they identify with.) as Lain can link to more esoteric concepts such as that of an egregore.

It focuses primarily on themes of identity, and the distinction between material and the digital realm as the protagonist, Lain Iwakura gets immersed into wired while inevitably grappling with questions of existence and consciousness as she navigates the blurred boundaries between the digital and physical worlds. I hope to incorporate ideas that revolve around the theme of introspection

With such abstract imagery woven throughout the narrative. The series challenges viewers to question their own perceptions of reality, the barrier between the wired and reality, and consider the ethical implications of technological advancement and how events on the wired can impact events in the real world, with digital secret societies and puppet masters operating on the shadows.

This was released in 1998 when technology progression was highly rapid with the rise of AOL landlines and the advent of the world wide web, network communication was increasing in complexity and abstraction. This has led people to raise some questions about the philosophical and existential implications and limits of network communication, and if technology can substitute communication in the real world. Many media tried to simulate the impact of this phenomena with movies such as the matrix, ghost in the shell to video games like deus ex during the turn of the millennium. A lot of these media have been regarded as "prophetic" and profound in how they view the cause-and-effect relationship of technology.
(For more information go on <https://modesofdesign.wixsite.com/explained>)

Stakeholders for the projects:

- SmiVan - CS BSc Hons - technical expert
- Psionic - project oversight committee
- Papa guac - communication team
- NoZaMas - project oversight committee

These users will have an interest in assessing the dependencies that the software will have upon the implementation process, e.g the libraries and repositories, SmiVan may give me advice on various kinds of libraries I could use for my software while giving me advice on the general development process.

Target platform:

This will be targeted towards Linux users primarily but it will also include windows as well. I am targeting it towards people who already understand Serial Experiments Lain and its various implications and interpretations or are keen in learning about it. The users will likely have an interest in the occult or technology whether it's the theory or application of it and are likely keen in diving into esoteric information, being able to also gather research materials so they can do their own independent research and come to their own informed conclusions.

The people will typically be those who seek FOSS software where there are no ambiguities in how data such as network analysis is being used and transferred throughout the software, code will be visible for people to review whether or not the process tailors to their own needs, independence and autonomy is highly encouraged for end-users.

User needs:

Problem: there are no longer any more applications solely focused on the basis of esoteric or niche topics. Most people take technology for granted, but don't try to be philosophically contemplative about the technological ramifications of advanced technology. Media such as Serial Experiments Lain which challenges people to question how much of an effect technology or supposedly the wired has on the world. Where does the boundary lie between the digital and physical world, and can we just substitute technology with reality? Do we even need to experience anything in this world or can we just view everything through the lens of digital binary code? This is what serial experiments lain tries to answer, and this is what my program tries to make people aware of. The beacon of technological liberty.

Another problem really lies on the fact that there's seems to be a decline of introspection and purposeful discussions in open digital agora's and social media networks, rarely anything that will contribute to something profound, even when it's said to be original, a lot of modern posts/threads/discussions are just regurgitations of the same thing. We encourage users to share their own theories, perspectives and visions of the world by looking within themselves, rather than looking outwards, intrinsic value is key. Users should be able to formulate their own opinions, following their own formula and being able to form their own principles outside of conventional grounds, one should not be influenced by external forces when making a proposition and should be able to arrive to their own conclusion through the means of critical analysis, a priori and deductive/inductive reasoning. Wired Genesis will be the central hub where you can be guaranteed to find intrinsic discussions, questioning and dissections of conventions and philosophizing which would be difficult to find in modern chat rooms/forums unless being explicitly academic.

What distinguishes this from other chat rooms?: it is a chatroom which pertains to the research and study of esoteric knowledge and doctrines, using Serial Experiments Lain as reference for aesthetics and also investigating, studying and sharing observations of the prevailing themes revolving around the overlap of technology and esotericism throughout media.

Computational thinking:

Data/Inputs Required:

- User Credentials: Username, password for login and registration.
- Document Metadata: Title, file size, user who uploaded, upload date.
- Search Queries: Inputs for searching documents and chatrooms.
- Chat Messages: User-generated messages within chatrooms.
- Encryption Keys: For secure communication and document handling.

Concurrent Processes:

- Chatroom: I am going to have to consider the fact that multitude of users will be chatting at the same time in different chatrooms
- FTP in Library: More than one user should be able to theoretically upload and access documents concurrently.
- Search Query: Allowing users to use the search queries concurrently, around the same time.

Thinking Logically:

- User Authentication: Selection based on (in)correct login, true/false.
- File Upload: Selection for (in)correct decryption password, true/false.

- Chatroom Access: Selection based on user's choice of chatroom (e.g if /cyberia/ == True then call the instantiation of /cyberia/ object)
- Search Operations: Scanning through documents or chatrooms to find matches (e.g SELECT * FROM Library WHERE name = "theosophy")

Thinking Abstractly:

- Detailed User Profiles: Beyond basic login credentials, detailed user profiles or personal information are not necessary.
- End to end Encryption: Data traveling through the network should not be intercepted, should remain hidden until the key is used to decrypt it from the other users end.

Thinking Procedurally & Decomposition:

User Management System:

- Registration
- Login
- Logout

Library Repository:

- Upload (with decryption password)
- Metadata Storage
- Search Functionality

Compartmentalized Chatrooms:

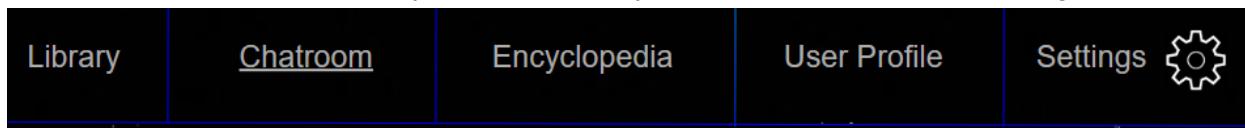
- End-to-End Encryption
- Search Functionality
- Joining chatroom
- Viewing number of users
- Implement end-to-end encryption for chat and document handling
- FTP & TCP - displaying data which is recv and user who sent the message
- Data packets will be broken down during the TCP process.

Encyclopedia Database:

- Data Entry and Storage
- Search and Retrieval Functionality

User Interface:

- It is all divided into library, chat room, encyclopedia, user profile and settings



Settings:

- username, password, alias, description box
- customize theme button (there are only a select few you can pick)
- change photo button
- FTP directory

Why a computational approach is much more suitable and appropriate:

- Working in a systematic way helps with efficiency in processing and is also less prone to error, especially as delays and errors are more likely as the volume of the dataset grows larger.
- Security: Ensuring secure communication and document handling can be effectively managed through encryption algorithms and secure authentication mechanisms.
- Search Functionality: Efficiently indexing and searching through documents and chatrooms require algorithms that can handle large datasets and return results quickly.
- User Interaction: Managing multiple users, each with their own interactions and data, is inherently suited to computational management to maintain consistency and concurrency.
- Data Management: Storing, retrieving, and managing the encyclopedia of information on occult and philosophical topics requires a structured database approach that computers excel at handling.
- The problem of managing a repository of documents and facilitating secure communication between users is well-suited to computational solutions because it involves handling large volumes of data efficiently.

Hardware and software requirements:

- An updated version of a linux distribution e.g Ubuntu 20.04 LTS or later or a Windows 10/11 operating system
Reason: These are modern, updated and frequently used operating systems that provide support for networking libraries and security necessary for my project.
I will be coding it using unix-based libraries and narrowing it down for linux compatibility e.g <sys/socket.h> and i will also code a separate program designed compatible for windows using windows networking libraries such as WinSock
- Qt framework for P2P chatroom architecture + GUI

Reason: This framework follows the P2P chatroom architecture and is a C++ framework which is useful for designing interactive and ethereal GUIs and it is also available on both Windows and Linux.

Qt provides cross-platform capabilities, making it compatible with both Windows and Linux and an intuitive interface, which can be customized to look more mystical and Lain-esque

- OpenSSL library

Reason: for secure end-to-end encryption and communication; reliable cryptographic library.

- Dual-core processor (2.0 GHz)

Reason: A dual-core processor ensures the system can handle multiple threads for the P2P networking and chat functionalities efficiently.

- Visual C++ Redistributable for Windows, appropriate C++ runtime libraries for Linux.

Reason: The application will be written in C++, requiring the appropriate runtime libraries to execute the software on the user's system.

- If using linux: snapd package manager for installing the software off the snap repository

- SQLite database software -

Reason: To manage and store user credentials, document repository, encyclopedia topics and chat logs. This will be necessary for using search queries on the application.

- 2 GB RAM minimum or 4 GB recommended

Reason: it may depend on whether or not you're using windows or linux as well as you can't necessarily direct or regulate memory resources in an adequate fashion compared to linux which allows for more freedom in resource allocation so Linux may help for more of a minimalistic usage of resources.

4 GB may be recommended if you want to run multiple applications simultaneously however.

- 500 MB of free disk space available

Reason: For the necessary features of the site this will be what is necessary for software installation, accessing chatrooms and accessing the library however additional storage is generally preferable as chat logs and document storage in the library may vary overtime.

- A 64-bits version operating system/distribution

Reason: As I will be coding it specifically for 64-bit processing as it is most modern and commonly used, as a result I will not be coding for 32-bit processing compatibility.

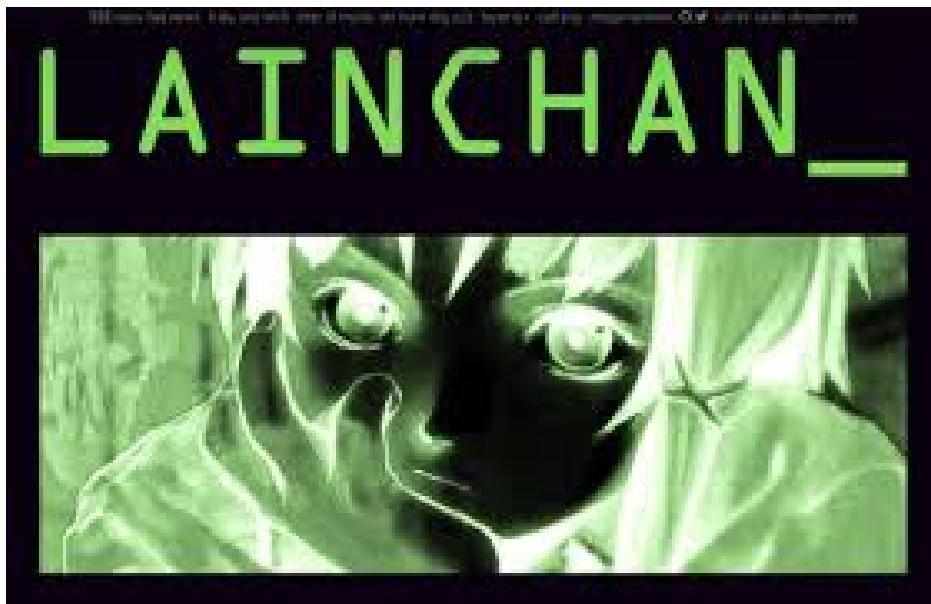
- A stable internet connection with at least 1 Mbps upload and download speed.

Reason: High internet bandwidth is integral for chatrooms & download/upload.

- Integrated graphics

Reason: minimal graphic processing, does not require anything excessive but minimalist for generic GUI functionality to be sufficient.

Research example - Lainchan:



Lainchan is an anonymous chan styled imageboard which revolves around topics of programming, philosophy and cyberpunk culture. It has different boards such as /Ω/ which is the technology board. The site's theme revolves around Serial Experiments Lain and therefore attracts a lot of programming, linux and cyberpunk dystopia enthusiasts who are interested in the implications of technology used for communication and often think about topics such as cybersecurity and how their data is being managed by large corporations. People who are attracted to a more libertarian and decentralized approach to technology and programming are often found in lainchan discussing Linux distributions and open-source software and this partly stems from the fact that people are considerate about the ethical use of data management and are often skeptical about how large proprietary companies go about managing data. People in lainchan often encourage intellectual discussions and autonomy as well.

The essence of lainchan closely links to the target demographic of my project as people there share the same niche interests which can't be found in every community, including discussions of technology, philosophy and esoterism. Lain is the symbol of the bridge that joins both technology and occultism together.

Implementations:

Displays all of the discussion boards revolving around different topics



Board segmentation: The top of the site displays all different types of boards you can explore, which engage in different kinds of discussion. I will plan on implementing compartmentalised boards just like in lainchan, for relevant discussions.

Latest Posts

Do It Yourself: >>11439 I don't think ...

Literature: >>9052 > I just feel I need a...

Programming: You certainly can, good luck s...

Musical and Audible Media:
<https://erner5.bandcamp.com/> ...

Do It Yourself: >>11185 That's cool! Did...

Do It Yourself: >>11311 >security >GSM Thin...

Humanity: >>78914 >What drawn you to o9...

Random: >>40135 I'm very sorry, ...

Random: >>40135 >First is as you note...

Drugs 3.0: >live resin vape >5.5% beer

Technology: >>76363 no volume is just an ...

Programming: >>38601 Oh, and you may be in...

Technology: Added some gateway configurati...

Random: >>40131 Forgive me, the ...

Literature: >>4838 While I believe this i...

Latest post display: Upon entering the site, you can see the latest and most relevant threads chronologically.

The screenshot shows a forum post interface. At the top, there's a banner for "NAVİ" with a green eye logo and the text "POWERED BY NAVİ". The main header features a character wearing a bear mask and the text "LAINちゃん サイバーパンクはアヒルです". Below the header is a pink checkered floor graphic. The main content area has a dark background. A green header bar at the top of the form says "Posting mode: Reply [Return]". The form fields include:

Name	<input type="text"/>
Email	<input type="text"/>
Subject	<input type="text"/> Post <input checked="" type="checkbox"/> Spoiler Image Wrap <input type="button" value="Spoiler (CTRL + S)"/>
Comment	<input type="text"/>
Select	File / Remote / Oekaki
File	Choose file <input type="file"/> No file chosen Choose file <input type="file"/> No file chosen Choose file <input type="file"/> No file chosen
Password	<input type="password"/> 9WIUpznP (For file deletion.)

Thread posting: To post a thread, you would typically have to enter your name and/or email address, the subject of your thread and the comment, typically describing the post in depth. You may also choose to upload some file, typically an .jpg or .png image file. A unique password is generated in order to delete a specified post that the user created.

[-] File: 1657978098422-0.jpeg (135.57 KB, 1520x1080, 38:27) [lain-room.jpeg](#) ImgOps iqdb
█ **Burnout John Titor** 2022-07-16 06:28:20 No.31859 [Reply] [Watch Thread]

Did you ever experience programming burnout? What I mean is inability to write any code. I quit my last job, which I liked very much and easier driver, because I procrastinated and didn't actually focus and write anything. This problem only becomes worse over time. How to deal with that?

18 posts and 2 image replies omitted. [Click to expand](#)

█ **DEBUG-CONTENTS** 2024-03-11 05:05:03 No.38528
 >>34266
 Sounds like that's a healthy lifestyle and definitely one way of keeping yourself productive. Exercise also relieves the stress and tension.

You got no worries and if you start feeling like you might burn out, take a break immediately anon
 Kinda late to the thread.

█ **Donna Hawthorne** 2024-03-11 05:43:14 No.38529
 >>38487
 What's up with the custom model anon? As someone with no compute, I thought those were fun to deal with, like making your own model, setting up the whole pipeline to retrain it based on the images you have.

Would love to know more :D

█ **Technician** 2024-03-11 11:52:42 No.38532
 >>38449
 That's actually a good point. I've been a webdev for over 20 years and I'm at a point where I can no longer enjoy coding. I've been experiencing burnout symptoms for over a year. I should try

File: 1655638631408-0.png (63.58 KB, 439x291, 439:291, BonkTheEgg.png) ImgOps iqdb
█ **Chani** 2022-06-19 04:37:11 No.31529 [Watch Thread]

I have fully free time of a day because I'm neet.
 So I decided to make some useful programs like text editor, chat application etc which can be alternatives what I'm using currently. But I don't think learning programming without books is impossible?

█ **Winternute** 2022-06-19 05:04:43 No.31530
 >Learning programming without books is impossible?
 libgen

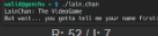
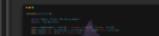
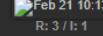
█ **pop** 2022-06-19 05:36:54 No.31531 >>31532 >>31559 >>33087
 >>31529 (OP)
 >Where should I start? Which language will be good?
 First you need a good text editor, like GNU Emacs or NeoVim (or VSCode) if you don't like Emacs or NeoVim).
 Both GNU Emacs and NeoVim contain a tutorial:
 >Start emacs and type C-h t
 >Start nvim and type :Tutor
 Pick a high-level language because they provide you with instant feedback and you can build useful programs quicker. I recommend:
 ><https://www.lua.org/pil/contents.html>
 ><https://ds25gfe.github.io/fyscheme/>
 Once you have learned the basics, you should do some exercises at <https://projecteuler.net/> and <https://exercism.org/>
 To help you pick a language, compare these two programs that I stole from Internet and pick the language you like more:

```
;; Scheme (using Guile)
(use-modules (srfi srfi-1))

(define (fizzbuzz n)
  (cond
    [(zero? (remainder n 15)) 'Fizzbuzz]
    [(zero? (remainder n 3)) 'Fizz]
    [(zero? (remainder n 5)) 'buzz]
    [else n]))

(λ n fizzbuzz (iota 20 1 1))
```

Thread display & interaction: Lainchan has threads which users can create and people can respond to using the reply button. Each thread and reply has a unique number, which indicates the number of threads and replies that came before it. People would generally upload an attachment image file which corresponds to their thread post as well.

Sort by: Image size: Search: Search						
 R: 4 / I: 0 Prototyping with Excel? For anyone that's a hobbyist programmer or a hired one I have a question. Is it common practice for people to use Excel spreadsheets	 R: 64 / I: 3 Lisp General: Save the Hard Decisions for Last This is the Lisp General, ask any and all Lisp questions here. Below is a link to the general's texts which contain many links to	 R: 42 / I: 3 (sticky) Programming Employment This is the Programming Employment thread, which exists for all general discussion regarding the topic. All discussion of	 R: 132 / I: 17 (sticky) The Beginner's General This is the Beginner's General for beginners' questions.	 R: 86 / I: 14 Mathematics /EZ/ To discover what was dearly missed in schooling, this general will serve as a playground.	 R: 32 / I: 1 tldr: Why is C++ compilation still slow even though computers get faster all the time? I have been programming in C++ since approx. 2001. Back then I did not mind the slow compile times,	 R: 25 / I: 1 Linux native applications I want to make a simple text editor to run natively on linux. I looked at Qt and GTK, but I really don't like them. Can I go a level
 R: 52 / I: 7 Simple/Small Programs in this thread, we make programs/code as small as possible, this means you can do anything you want as long as its on just one file and is under 150 lines, you can use your preferred programming language for this, in this case I used the	 R: 253 / I: 20 All things C The other thread hit bump limit. Let's continue our discussion about the C programming language !	 R: 23 / I: 1 Language design I've already tried many times to design my own programming language. It often starts when I identify features I miss in the language(s) I use and ends when I find another	 R: 2 / I: 1 Working with large amount of data fetching from websocket Gonna need some help here. I'm trying to code a program in C# that	 R: 50 / I: 5 Declarative Programming Do you think there are any declarative programming languages at the moment that are developed enough to be useful?	 R: 171 / I: 8 Most beautiful languages? In your opinion what are some of the most beautiful languages? Do you know why you find them beautiful or do you just vibe ?	 R: 194 / I: 42 Personal projects Hi, Lain, Let's have a thread for share our personal projects and get reviews. > URL > Language / Framework > Description
 R: 3 / I: 2 I need some help. I wrote a lottery number generator, but it's missing one final element to generate winning numbers. I've been trying to learn programming just to write this. The program that does the heavy lifting is in Python, but I have as well a quantum bit generator in Q# and it computes pseudo	 R: 10 / I: 0 Is anyone else here into type theory? I find it extremely depressing how pretty much every popular language decided to disregard pretty much all research into the topic.	 R: 3 / I: 1 Graphics Programming Real-time or pre-rendered. Some resources: ray tracing in one weekend: https://raytracing.github.io/ physically based rendering: https://pbr-book.org/4ed/contents_shadertoy.html https://www.shadertoy.com/	 R: 104 / I: 38 Machine Code Meddling and the Lower Levels This is the thread for those of us who enjoy the machine codes, the assembler languages, and the rest of	 R: 0 / I: 0 Rust Debugging Sorry if this is not an appropriate thread. The Rust thread has reached its limit. Did anyone ever encounter this problem ? https://github.com/rust-lang/rust	 R: 43 / I: 2 Python 3 Python 3 Welcome Lainons! (whether you are new to programming or more experienced with Python 3) Post your code and questions ITT.	 R: 45 / I: 4 Tel Thread Hi, lainons. Yesterday I started learning Tel and it seems like its paradigm of everything being a string is simply better and easier than
 R: 135 / I: 11 Ada General : Thread := Post; This is a thread for discussing the Ada programming language. There doesn't seem to be	 R: 190 / I: 17 Text Editor General This is the text editor general, the thread for the discussion of implementing, or implementations of, text editors for programming and	 R: 11 / I: 2 I got recommended this book "Data Science for Business": Tom Fawcett, for learning practical data analysis and such "practically" from scratch, I was wondering if it's worth it	 R: 45 / I: 4 Productivity Tips These tips should all be relevant to Programming, but most of them will be relevant to other creative tasks. I'll give three: https://adventofcode.com/2023/day/1	 R: 167 / I: 30 Machine Learning General thread for ML related topics. Let's talk about our current projects, learning aids, questions, curiosities and forth. Also	 R: 73 / I: 7 Advent of Code 2023 Like last year (>>33531), let us post about the Advent of Code (https://adventofcode.com/2023)	 R: 61 / I: 3 Has college/university education worked for you in learning to program?

Catalog and search feature: Lainchan also has a catalog feature that allows users to browse through different threads, from most recent to least, facilitating quicker navigation. Especially with the search feature, you can find and archive old posts which may be hard to find otherwise without constant scrolling. I like this feature in particular because it allows users to revisit posts, and especially if the thread contains useful resources or information, it may be necessary for users to go back on the old thread to retrieve that information, facilitating research for whatever reason the person may be researching

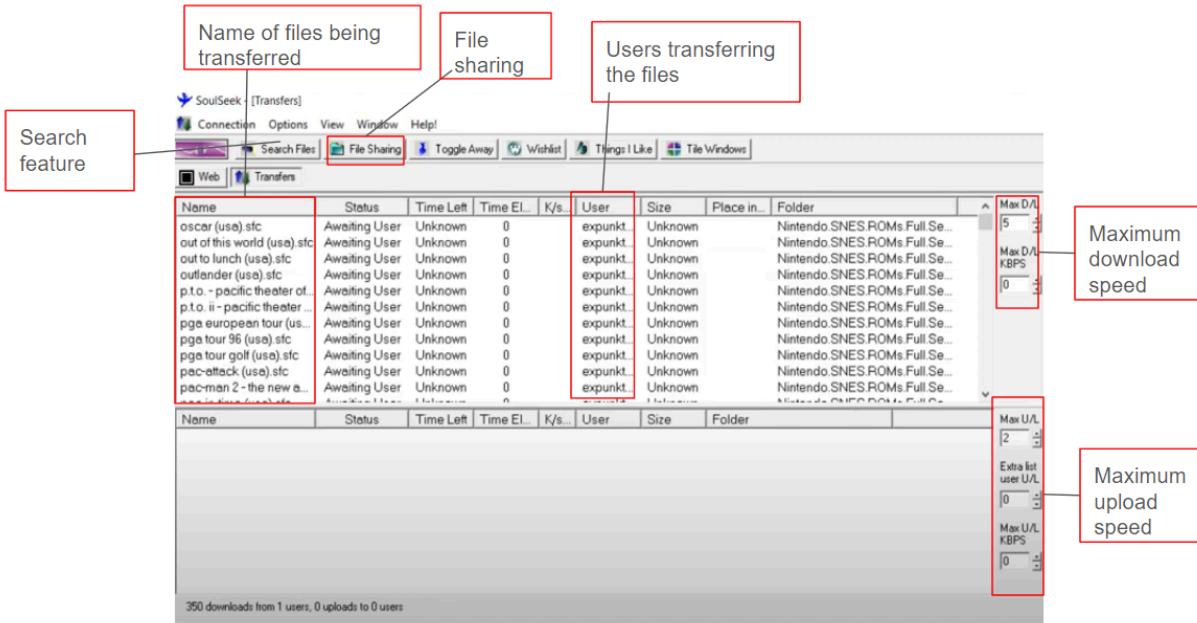
Research example - Soulseek:

Soulseek is a peer-to-peer (P2P) file-sharing network and application with compartmentalized chat rooms. Despite it generally being used to exchange music, it can also be used for other purposes such as for programming and linux communities.

Implementations:

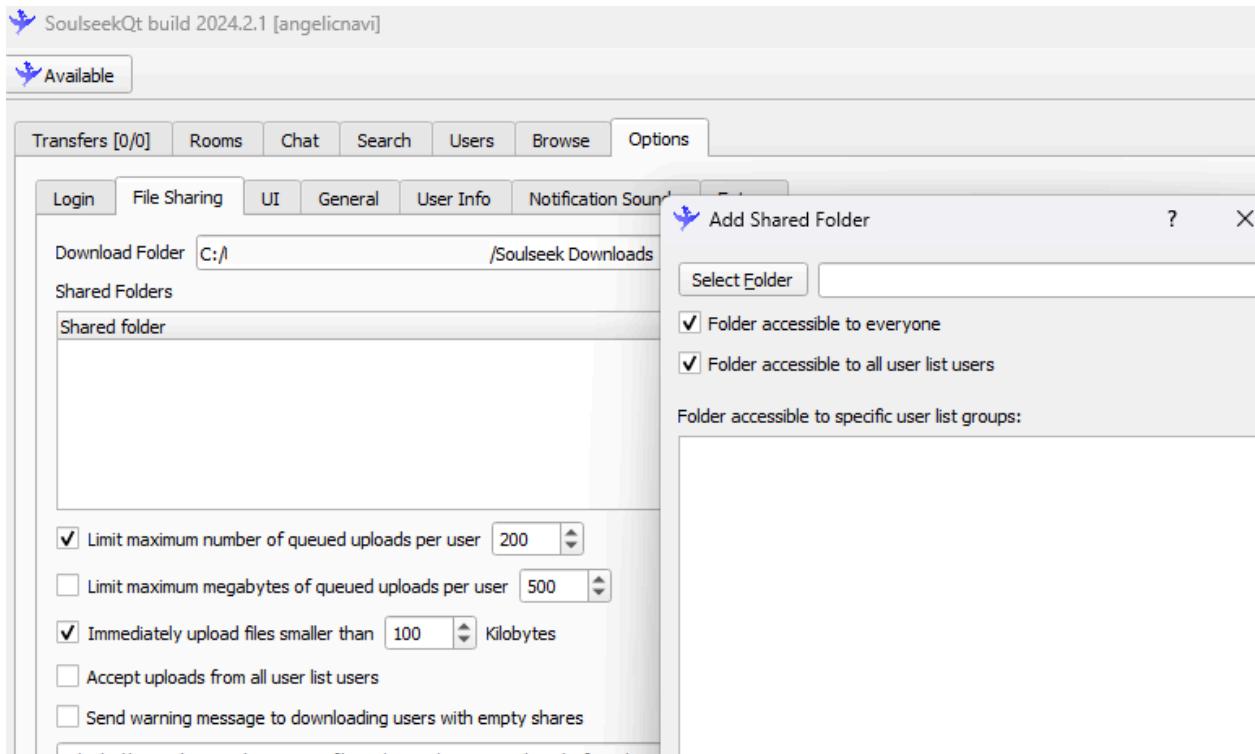
Room Name	Users
indie	195
INDUSTRIAL	20
Italia	15
Italian_dancefloor	14
japanese music	66
Jazz	5
Jazz (Full CDs)	26
Jazz-Rock-Fusion-Guitar	9
Juggalo Family	9
Jungle	20
Last.fm	13
library music	10
Linux	56
lossless	93
Lossless Scores	21
Mac Users	7
Metal	30
minimal music	16
MovieMusic	22
MOVIES	47
museek	7
New Crystal Vibrations	5
New Zealand	6
noise	20
NORWAY	5
OLD SKOOL GANGSTA	8
OLDSCHOOL 88-94	39
Original Blues Bunker	8
PERU	5
Portugal	7
Post Punk	11
programming	23
progressive house	20
Progressive Rock	30
PSYCHEDELIA	19
Psychedelic/Acid Rock	8
Psytrance	29
PUNK/HARDCORE/GRIND	13
r/musichoarder	52
Rare Music	99
RareVHS/DVD/Rips	10
REGGAE	20
Retro Gaming	16
RPG	10

Chatroom-Based Organization: Soulseek organises and segments virtual chat rooms based on specific interests and music genre. Users can join these chatrooms to connect with people with similar interests.



Search Functionality: Soulseek allows users to search for specific files or artists within the network. Searches can be filtered by file type, bitrate, and other criteria. I will be using a filter system as well, which is the purpose for the implementation of SQL queries.

User Chat: Users can communicate with each other via text chat within the application. This allows for sharing recommendations, discussing music, and connecting with other users who share similar interests.

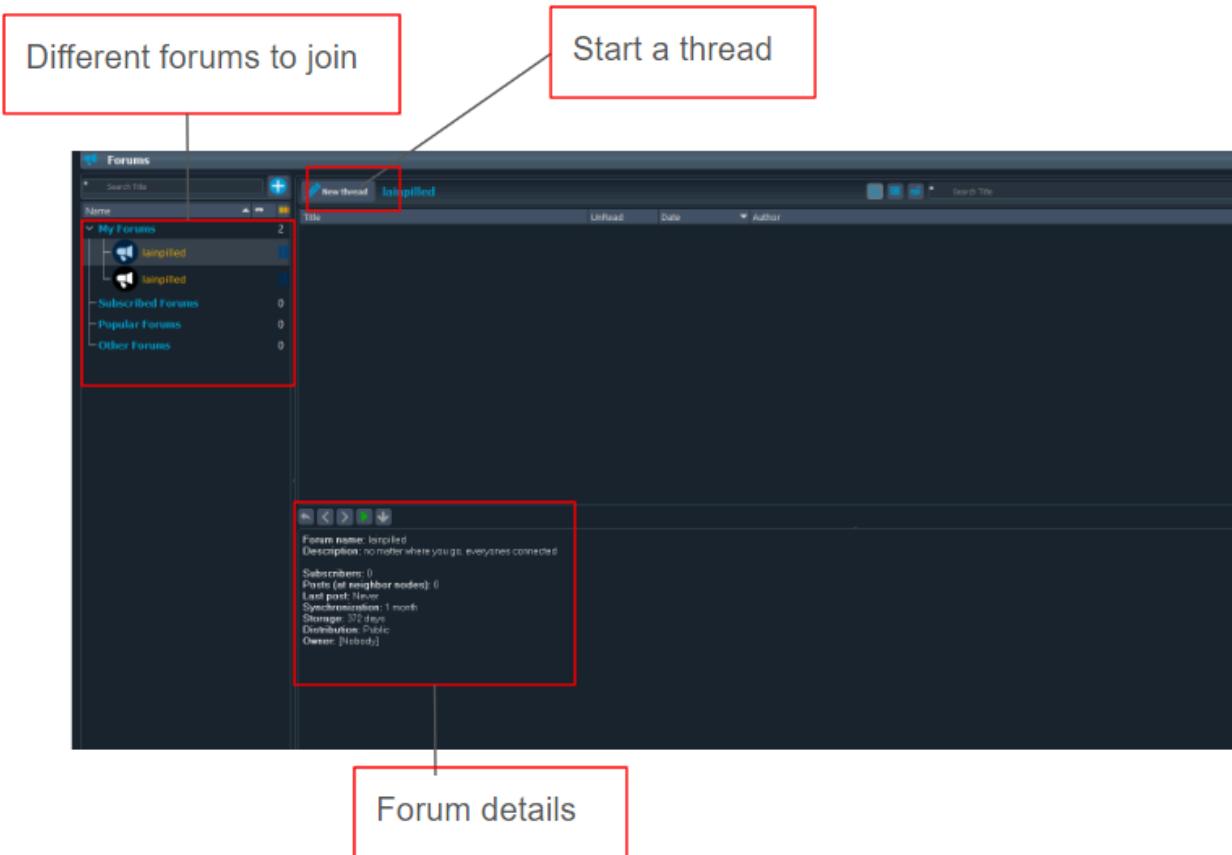


Research example - Retroshare:

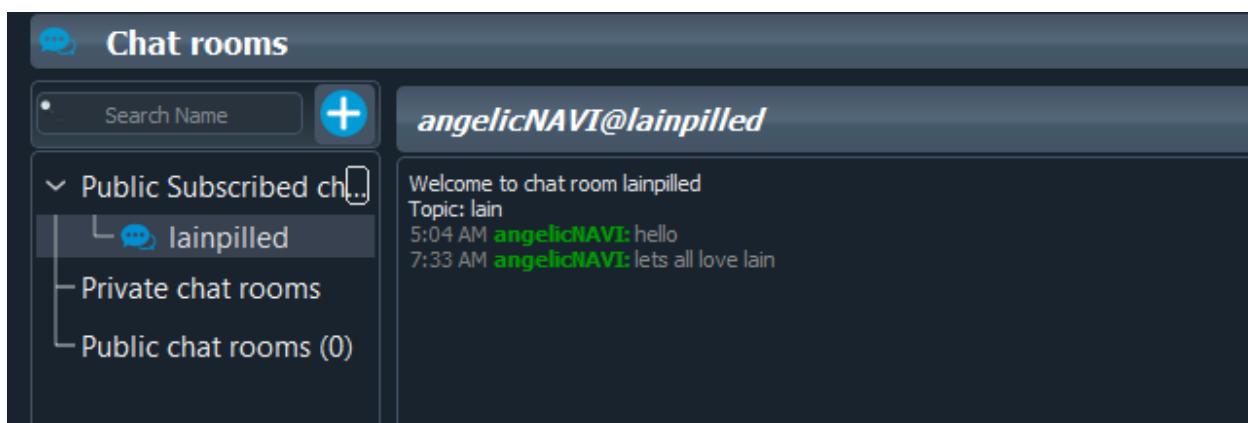
Retroshare is a free and open-source peer-to-peer communication and file sharing app based on a F2F (friend to friend) network built by GNU Privacy Guard. It is also decentralized therefore it is highly recommended for those who want technological autonomy and privacy. It has gained traction within linux communities but is not exclusive to linux. It has chatrooms and forums, much like what I plan on implementing.

File Sharing: Users can share files of any type and size with their friends and contacts on retroshare. File transfers are encrypted, decentralized, and P2P, reducing the risk of data interception or censorship.

Decentralized Infrastructure: Retroshare operates on a decentralized network architecture, meaning there is no central server controlling communications or file sharing. This gives users autonomy over their data and reduces risks of exploitation.



Forums and threads: Retroshare has forums and threads, where users can share relevant information and collaborate on topics of interests



Chatrooms: decentralized P2P chat rooms are found in retroshare as a way of meeting new people and having discussions.

The screenshot shows the Retroshare application's user interface. At the top, there are two tabs: 'Person' and 'Circles'. Below the tabs, there is a profile picture for 'angelicNAVI' and the name 'angelicNAVI'. A section titled 'Identity info' contains the following information:

Identity name :	angelicNAVI
Identity ID :	32e5e0714817f5187b0e421218c84958
Type:	Identity owned by you, linked to your Retroshare node
Owner node ID :	357EDCEB5550521A
Owner node name :	angelicNAVI

User profile: Users can manage their profile, and each account has an unique identity ID. it's what allows you to connect to the retroshare network as it represents a network node.

Conclusion:

In conclusion, Lainchan has features such as a catalog, thread discussion and revolves around the theme of Serial Experiments Lain and techno-occultism, however it does not have chat rooms or a file sharing library/repository. I plan on implementing a lain-themed esoteric application but with chat rooms and file sharing to make it more interactive and to enable P2P interaction. I will also include a login page first off instead of the typical anonymous imageboard that Lainchan provides. Therefore users will have a consistent unique identification which sticks with them, as stored within the database using SQL. Instead of having 'Wired Genesis' be like SoulSeek with the distribution of music and .mp3 files, the file sharing process will be static and will be uploaded into the program where other people can download and access, but only with a specified decryption key. I also really do want to emphasise using lain as a totem for cyber autonomy, as this distinguishes Retroshare, which lacks the esoteric link of

techno symbolism. Again I will make it open-source, but I probably will not be adding implementations of anonymity like Lainchan.

Questionnaire - Primary research responses

Introduction:

I posted my questionnaire on Lain communities such as a discord server called the "Wired Collective" and on the lainchan.org imageboard, specifically on the programming board /λ/. Therefore the responses shown originate from members of these communities. As of now I've got 13 respondents.

Since my project is based on something niche and the intention of it is to have a restricted entry, for augmenting introspective discussion, and minimizing shallow content, I did not plan on posting it to anyone from the school as it will likely ruin the responses, quality over quantity. I will probably continue to have a running stream of responses due to me posting the questionnaire on an imageboard/forum, my thought process is that there is no point getting advice from people who aren't interested in the proposed idea themselves.

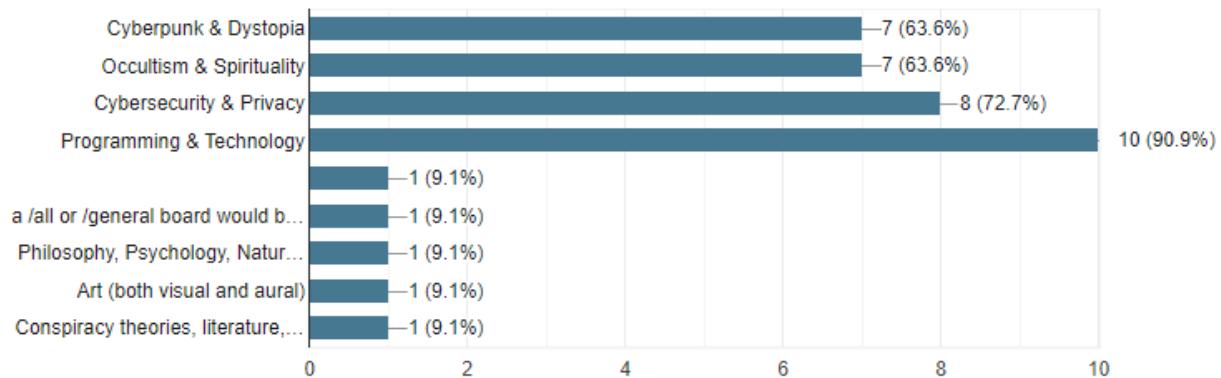
So simply put, the end-users are those who have interest in engaging in a community of people interested in the occult, esoteric theories, technology and lain and those who engage in such communities.

Question 1: Here are the kinds of topics which end-users would like to discuss in the software. The most voted is programming and technology, which makes sense. Some additional options were /all/ chatroom, philosophy, psychology, art, conspiracy theories and anime chat rooms.

What kind of topics would you want the discussions to primarily revolve around?

 Copy

11 responses



the threads for reference:

<https://lainchan.org/%CE%BB/res/38946.html>

Updated thread:

<https://lainchan.org/%CE%BB/res/39571.html>

Question 2: I then began to propose a potential implementation, asking users whether or not they would want a soundtrack to play when they're browsing through the software, some agreed that it would amplify the immersive experience of being in the wired, but many thought it would be irritating. I believe the reconciliation here would be to use the settings to disable the soundtrack or enable it, which users here have already suggested below, keeping it configurable/optional, so that will be my plan from now on.

Would you like a soundtrack/OST when running the software?

 Copy

11 responses

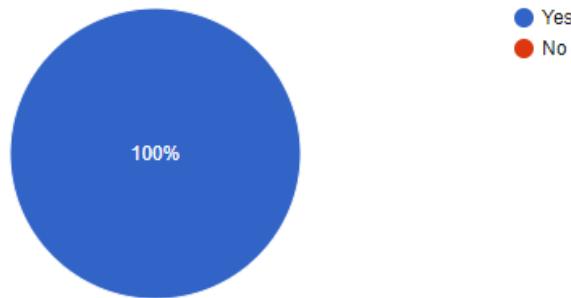


Question 3: Pretty much everybody agreed that the idea of a library is an intriguing proposal, after it's apart of the core of the project criteria apart from the chatrooms so I will stick to the theme of the library pertaining to academia.

Does the idea of repositories of PDF documents pertaining to academic research sound interesting to you?

[Copy](#)

11 responses



Question 4: the consensus generally agreed that it should be its own unique chatroom independent from lainchan, there does not need to be another lainchan 2.0 with imageboard functionality, therefore i'm not planning to incorporate something akin to -chan imageboards, but still committing to the proposal of segmented having segmented boards which follow the p2p architecture.

Would you be interested in a imageboard forum in the style of Lainchan? Any suggestions on forum implementation?

13 responses

I'm more interested in the topic of discussion rather than the style of the board, if it's obnoxious in its presentation it'd be annoying but other than that I don't really have an opinion

All related chans are kind of inactive, I dont use them and people seem to not be interested anymore

a formal forum-look would be best suited, image boards tend to be a pain to search specific topics on

Well, I'd rather for the work to be added on lainchan itself to make it better, instead of making a whole new lain-focused imageboard

I usually don't participate in imageboards beyond reading, so only somewhat.

I think an imageboard forum like Lainchan would be great, I mean Lainchan is already really fun. As for implementation, sorry no idea.

I already know a good imageboard in the style of lainchan. Don't recreate lainchan.

textboard

BIPOC lainchan is an imageboard

Maybe a "Sub Category" that is basically a 'mini forum' within a larger one for conversations that branch out a little but still within the topic (so we wont have a billion threads that are just *slightly different*)

we already have lainchan, why not integrate the site into your application with a scraper?

yes

I would love a forum like lainchan, I think if it were like this last one or like the classic 4chan it would be perfect

Question 5: Some users proposed interesting ideas for UI features, thriving for simplicity and adherence to unix philosophy but with tons of potential and customizability, perhaps even a note-taking element that has an asymmetrical architecture to it, and also a profile for users, which i will incorporate in a section called “user hub” I may also look

into the design of a terminal from the PS1 serial experiments lain video game as some form of inspiration, a dark, ethereal and y2k cybercore element to it.

What features or elements would you like to see in the user interface of Wired Genesis? List them below.

13 responses

channels,user profile, theme selection

- the ability to anonymize a post/a response
- a blocking-feature
- the ability to hide certain boards
- notify responses under our posts/our responses

Simplicity

The software should be a chat software, it shouldn't be like a web browser that can juggle 90000 tasks at the same time, it should follow the Unix philosophy (do one thing, and do it GOOD)

That also shouldn't prevent it from being customizable as fuck, for example look at neocities and nekoweb, they are static site hosting providers, all they do is host text files and a couple pics, but the potential for creativity is endless.

Broadly speaking I would like a dark GUI, or at least an option of such.

It would be nice to have a user-associated note-taking element to make notes on people (like that of discord), but stored locally on the writer's end for privacy.

When it comes to the chatroom, a way to type messages and to send them, the library could also have a search bar and sections about different topics that could make it easier to navigate

Simple, public API.

A lisp repl!!!!

custom css, profile anthem

Maybe a "terminal" like in the Lain PS game, or maybe even a 'Lain Tamagotchi' that changes expression/interacts with how much/often you post & on what channels.

less mouse buttons, more keyboard input. would be cool to have a terminal 00 color scheme maybe. of course an old internet style, but not too chaotic.

good filters

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Question 6: I then asked how we could foster more introspective and insightful interactions, which is a common problem in a lot of communities on the internet. Users proposed that moderation would help a lot to achieve this standard, but also closing posts which don't promise any potential or spark any kind of trajectory which may lead to insightful and meaningful discussions, and maybe making users complete some

puzzles to interact in some communities so it shows that the person is dedicated to sharing meaningful information which I think is a very interesting idea. If I have time I may be able to incorporate puzzles into the software, however it won't be apart of my primary criteria list and won't be something I focus on until I complete the primary requirements. Moderation will definitely be implemented in some shape or form.

What strategies can we employ to foster meaningful interactions and to maintain the introspective essence of this software?

13 responses

-make it easy to keep contacts with wanted users
-a thorough moderation

We got to be welcoming of course, but we should also be tolerant and patient and keep needless controversy and ragebaiting to a minimum... kind of like how Iainchan already does it

It's possible that adding a private knowledge base for each user (perhaps in a way similar to Logseq) could help with this.

Would be an interesting feature to make it possible to pass select segments of that knowledge base to others in some kind of chat object, or have public knowledge bases which can be linked to from private ones.

Honestly with it being a p2p Lain-themed chatting software, I'm quite certain that alone will ensure that the userbase will be very introspective, also sorry, I can't really think of anything

Heavy moderation (see what's happening lately on Iainchan, or see other chans where no meaningful interaction can arise since the emphasis is on quantity rather than quality). I don't mean marking things as controversial but closing posts that don't inspire any discussion, clarify on their ideas or are just easy dopamine (porn, desktop threads, room threads, etc.)

A nice, sober aesthetic.

gatekeep it properly

Maybe one or two "Mass general chat" void of specific topics and open to the community. As well as big title messages when someone makes a new thread.

maybe a whitelist or the ability for users to create and moderate their own chatrooms like irc. even better, make users complete some puzzles (maybe akin to what HackTheBox offers) so that they have some degree of investment before posting. this could psychologically influence them to actually care.

email server,

I think some kind of event would be good (keeping the seriousness of the site clear) some kind of easter eggs as they call it, such as: the fauxx site or mebious neocities, that kind of thing.

Question 7: To enhance an aesthetic which reflects serial experiments lain “wired” theme I may plan on implementing techno-sigils in the page and a blue aesthetic with a minimalist-esque aesthetic. A user suggested it to have an underground-scene element to the aesthetic, emphasizing the obscure element of this software. I will incorporate an aesthetic which will be dark and blue, ethereal and mystical, and with elements of cyberpunk to reflect the similarity between the Wired in Serial Experiments Lain and i will also add quotes in each page to enhance the immersion and maintain the existential themes and motifs of the show. I will try to implement imagery which translates the serial experiments lain 1999 album into visual form.

Glitch art basically

not necessarily

As weird as it sounds like, it should have a smidgen of an underground-scene looking aspects of it, something that while a few people only know about it, even fewer people actually partake in it, an inspiration would be cs.rin.ru and other piracy sites

I think a lot of the SEL aesthetic is contained in the ambient and ethereal music (see "serial experiments lain BOOTLEG" 1999 album by Akira Takemoto), and the visual aesthetics of the show. How to translate these visual aesthetics to an application I'm not too certain though.

I think adding some quotes from serial experiments Lain pertaining to different sections of the library or above the chatroom window could add to the immersion

Are there any particular design choices that would perhaps reflect more of the cyberpunk aesthetic of "Serial Experiments Lain"? Any esoteric immersions?

13 responses

Maybe some techno-sigil

anything works

I'd say have an unseen counter that logs the amount of times users say a certain word & then slowly change the whole page to reflect that. (Like if users say 'red' a lot, *slowly* the individual channel will start to tint red). This can be applied to soundtrack & other variations.

as i mentioned before a terminal 00 theme could be cool. maybe sometimes see other online users watching you type or be able to watch other users. forced screen sharing i guess. not a great idea in practice but on paper it sounds cool. just stuff like that because no matter where you go everyone's connected

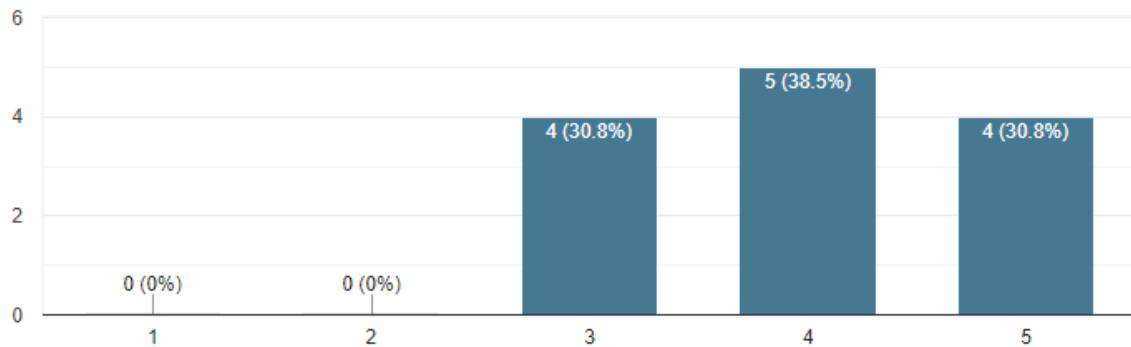
create a test before entrance, filter out bots

I think it would be good for the blue color to be representative of the site or for it to have a minimalist aesthetic with obvious cyberpunk inspiration.

Question 8: Most people agree that ease of use and an intuitive user interface is important for a chatroom. Therefore I will be taking that into consideration when designing the application.

How important is ease of use and intuitiveness in navigating the chatroom interface? [Copy](#)

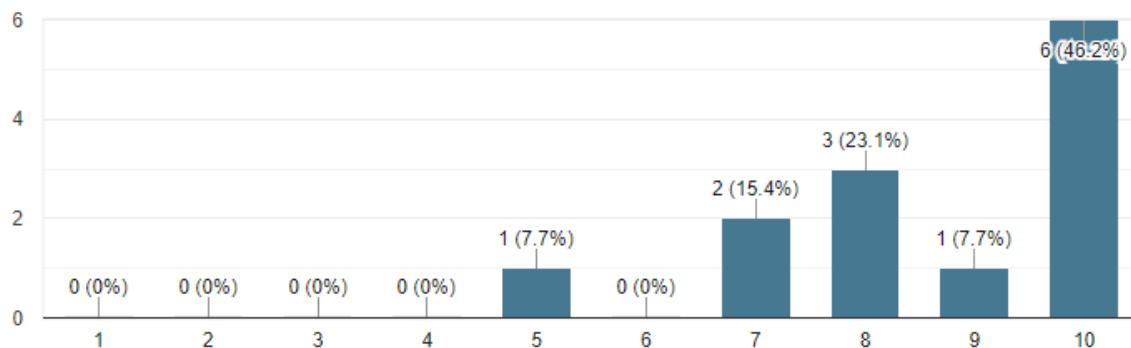
13 responses



Question 9: Most people prioritize privacy and security when using a chatroom with most people picking 10/10. I was already planning on making information transparent on the users end anyways as the software will be FOSS with repositories available on github and with end-to-end encryption as the cryptographical architecture of the chatrooms.

On a scale through 1 to 10, how much of a concern is privacy and security to you in a P2P chatroom environment? [Copy](#)

13 responses



Question 10: I will plan on incorporating some sort of moderation system, however as users said, an automod system is definitely something to be cautious about as it can easily go wrong and may lead to a ton of censorship which wouldn't be ideal. A way to accommodate for this would probably be to have chatrooms have custom moderation.

Would an auto-moderation system be useful?

 Copy

13 responses

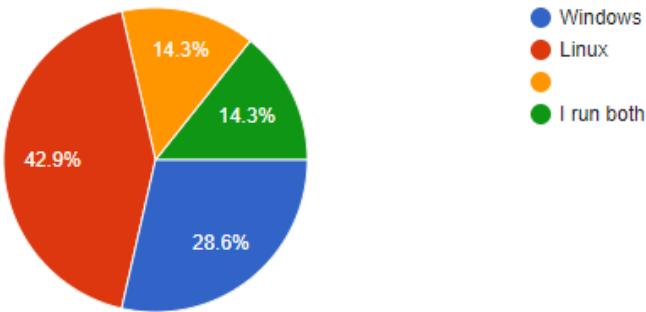


Question 11: Most end users here use linux, which helps to know since I am planning on incorporating this software onto linux, however I will take windows into consideration as well which may just take a few configurations of the program in order to make it compatible for windows and usage of different C++ libraries and packages, plus I probably will need it to be compatible for windows if I wanna run the application in school.

What do you run, Windows or GNU/Linux?

 Copy

7 responses



Question 12: I realized a little after asking this question that while it is important to address issues with big tech and proprietary software farming peoples data, it shouldn't be the focal point of the software, being useful and innovative is the underlying foundation of a FOSS application, and as one user said; "promotion of good ethics can be done when it has a ground to stand on." Plus I feel like by having it already being a FOSS software, the promotion of cyber autonomy and open source software kind of speaks for itself, and there really doesn't need to be much action beyond that.

Would you prefer Wired Genesis to have a focus on promoting cyber autonomy from big tech and being pro-open-source?

Copy

13 responses



Why and why not? (optional)

7 responses

not being dependant on the wellness of a big-tech company and having the transparency that the open-source model allows is always a plus. nowadays, it is difficult to trust that everything that happens behinds the curtains of big-tech corps is done with our wellness and privacy in main scopes

While Switching to free software and escaping walled gardens are a great thing to advocate for, it's hard to convinced the average Joe with that idea

Also most of the users would probably already know that anyways

While I generally greatly favor this as an ethical standpoint, making it specifically a "focus" is probably not a great idea.

The "focus" should be on making it useful and innovative, and promotion of good ethics can be done when it has a ground to stand on.

If it's job is to be a chatroom/forum software focus on exactly that. If you make it FOSS that'll be enough to promote autonomy and FOSS ideas.

Big tech is an impediment to the free flood of information

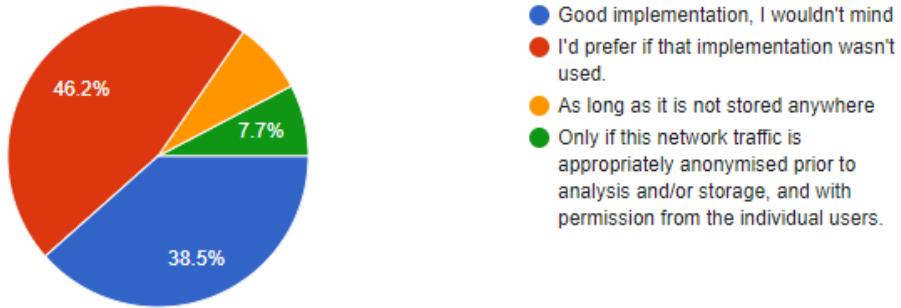
Question 13: I was thinking of incorporating wireshark into the application so I can collect network analytics, however most users seemed to disagree with the notion of a software which collects network data. However I think that it wouldn't be a problem so long as the source and recipient of traffic is anonymized, essentially only viewing the means but not the ends, viewing the network packets routes but not the destination, also it can simply be viewed in real-time without the data needing to be stored anywhere

as I probably have no use for the data anyways unless it is for cybersecurity purposes and detecting vulnerabilities which is why I initially planned on implementing such a software to begin with to my application so it doesn't end up turning into acid rain levels of anarchy instead of a stable libertarian styled application, which libertarian software still requires regulation, it's just that user freedom outweighs the said regulation.

Would you mind Wired Genesis to collect data analytics for network traffic using software such as Wireshark?

 Copy

13 responses



Question 14: I will definitely plan on incorporating an encyclopedia pertaining to esoteric topics, information is a very important motif in serial experiments lain, and being able to have access to esoteric knowledge will definitely enhance the immersion, and will cover the essence of a lot of concepts which links to serial experiments lain and the wired.

Should we include an encyclopaedia pertaining to the occult & esoteric topics? Would you be interested in it?

13 responses

having an encyclopedia is always difficult since it asks for someone knowledgeable enough about a given subject to maintain it (weeding out wrong informations and updating dated one). however, if given the ability to, it would surely be welcomed

I have no strong feelings, one way or the other.

I think it would be a fun addition, honestly occult and esoteric things are pretty interesting, I don't really know too much about them but I would love to delve into them more and such an encyclopedia would be really helpful

Keep it small.

Yes very much

Yes

absolutely i think that it would fit very well into the lain theme

Question 15: Some custom features which could be added are lain-themed error pages and every time a page starts, the copland OS enterprise startup screen could play, of course wired puzzle games as well which could link to existential motifs and symbolism of lain however these are only secondary and aren't essential for the project, just something else to incorporate for when I end up having the time to spare, perhaps more boards like conspiracy theory boards that I may consider.

Are there any additional features or functionalities inspired by "Serial Experiments Lain" technology that we can integrate into the chatroom?

13 responses

The Wired, the connected, ability to make bridges between apps would represent this.

nothing in mind

Idk

I can't think of any

:)

Lain themed error pages

I guess I'm not too sure how they could be properly "translated" into this project.

the little wired games would be cool but focus on meeting the criteria for your project lol

spook board, experiment board, conspiracy board

I have an idea (although this would be more decorative) every time the page starts the CoplanOS logo appears like Lain's computer

Question 16: Now I asked for any overall conclusions or personal insights that the end-users may want to add at the end of the survey, a user gave me a ton of different software and video games to look into for inspiration when it comes to design and functionality, such as: libp2p, akkoma, logseq, hypnospace outlaw and broken reality which could allow me brainstorm more features but I feel as if I already have a lot in my disposal, but these softwares could help look into subtle features, especially involving a personalized knowledge base where users can share personalized insights, which is apart of my secondary project criteria list. I will probably have to send this report to give updates on project incorporation and reach out to more users as I'm sure there's many who will enjoy an idea of an esoteric lain-themed p2p chatroom and I may and am keeping in contact with some of the end users who have completed this survey.

Overall, Is there anything else you would like to share or suggest regarding the Lain-themed software implementation?

13 responses

Think of a way for people to actually use it.

it would be better to give up on a feature if it undermines the user experience : a usable software will always be superior to a faithful one

Don't go too overboard

You may wish to review projects like libp2p, Akkoma and Logseq, as well as games like Hypnospace Outlaw and Broken Reality for ideas and inspiration.

Depending on things you want to do you may also find content-addressable peer-to-peer hypermedia distribution to be helpful, where I'd recommend reviewing IPFS as it does exactly that.

Good luck!

I can't think of anything

-

No, just do it

No.

Please keep this running for as long as possible & reach as many people as possible!

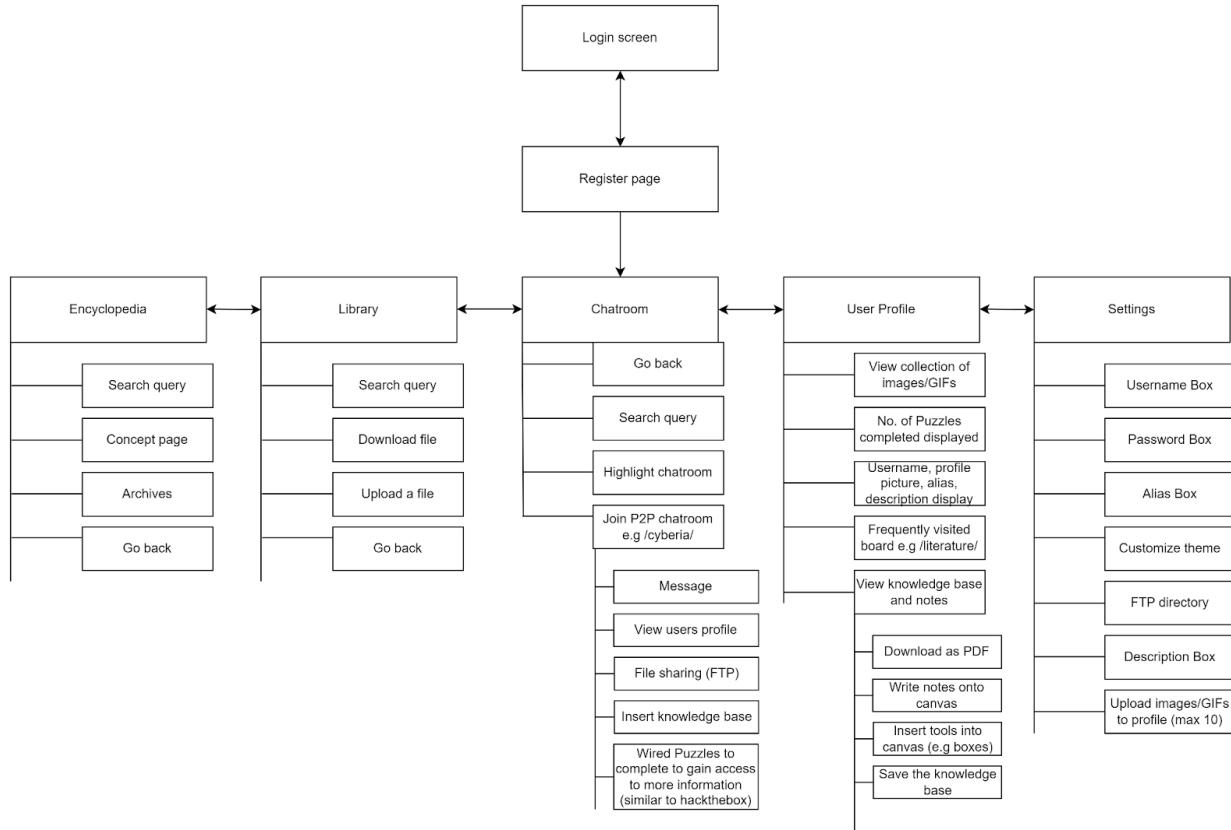
we'll meet again i'm sure, i'll talk to you then if i have any ideas. good luck and have fun!

not right now

The truth is I don't have any other suggestions, only what was said above

B. DESIGN

SYSTEMS DIAGRAM



[HTTPS://APP.DIAGRAMS.NET/?TITLE=COPY%20OF%20COPY%20OF%20WIRED%20GENESIS.DRAWIO&CLIENT=1#G156RHRI4FbJEQMZMJcyRagozoHznXEHAl#%7B%22PAGEID%22%3A%22TGTQN3A6-IYPb4MLYF3%22%7D](https://app.diagrams.net/?title=Copy%20of%20Copy%20of%20WIRED%20GENESIS.DRAWIO&client=1#G156RHRI4FbJEQMZMJcyRagozoHznXEHAl#%7B%22pageId%22%3A%22TGTQN3A6-IYPb4MLYF3%22%7D)

Justification for the Approach:

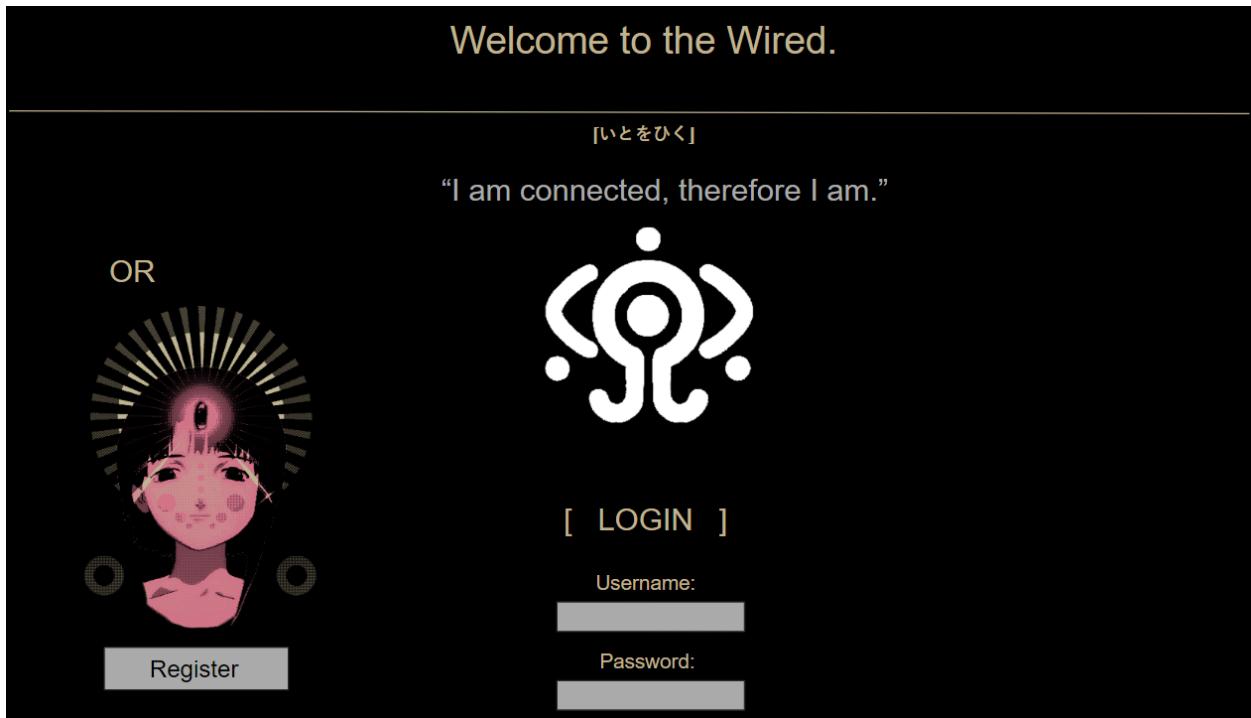
- Login/Register Justification: Essential for securing access to the system.
- Encyclopedia Justification: Provides a repository of knowledge related to the occult and philosophical ideas, essential for the target user base.
- Library Justification: Facilitates document management, crucial for sharing and accessing research material.
- Chatroom Justification: Core functionality for user interaction and communication, supporting the community aspect of the platform.
- User Profile Justification: Allows personalization and tracking of user activity, enhancing user engagement and customization.
- Settings Justification: Provides options for users to customize their experience and manage their settings

- Each module's functionality is refined into detailed operations, such as "Search query", "Download file", and "Upload a file" in the Library module.

- Security considerations, such as end-to-end encryption in Chatrooms and encrypted file storage in the Library, are incorporated from the start.
- The design follows a logical flow from user authentication (Login/Register) to accessing various features (Encyclopedia, Library, Chatroom, User Profile, Settings).
- The design decomposes the system into specific functionalities like user authentication, document management, encrypted communication, and user customization.
- The system is divided into distinct modules: Login/Register, Encyclopedia, Library, Chatroom, User Profile, and Settings..

Proposed GUI interface:

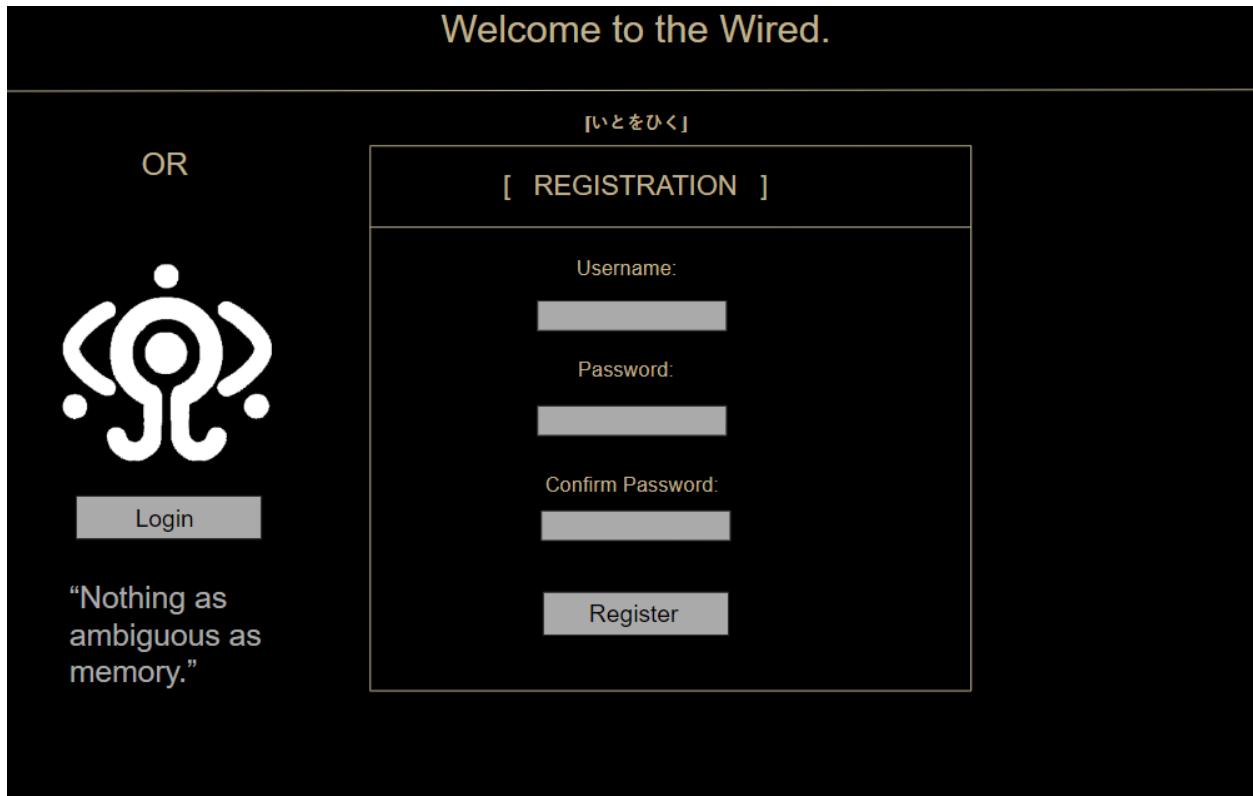
1. The login screen



Features:

- >Username and password entry box
- >Registration page button

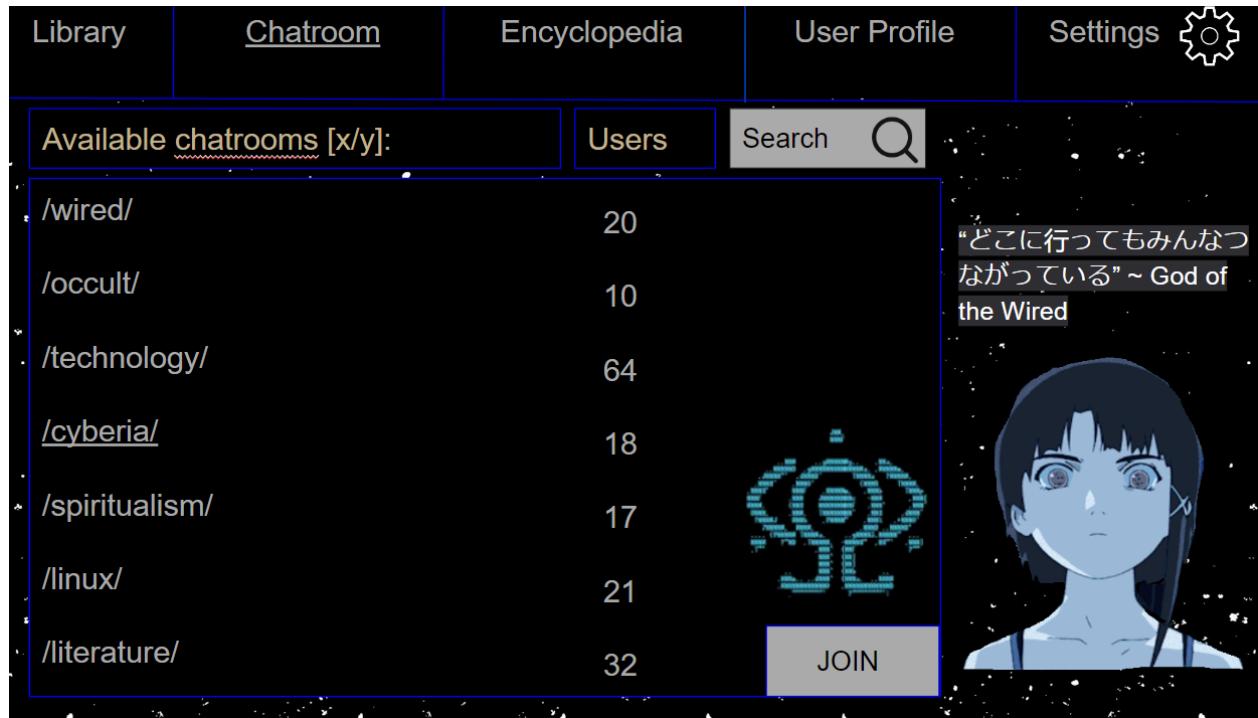
2. Registration page



Features:

- >Username, password and confirm password box
- >Register button
- >Login page button

3. Chatroom list page



Features:

- >segmented chatroom boards e.g /cyberia/
- >clicking on a board underlines it, thereby allowing you to join
- >join button
- >search inquiry
- >view number of users available on chatroom
- >ability to navigate through library, encyclopedia, user profile and settings

4. Interacting on the chatroom

Library

Chatroom

Encyclopedia

User Profile

Settings

Go back <-

WELCOME TO /CYBERIA?/
[MEMBER]

eclipse: no matter where you go,
everyone's connected

Send a message...

SEND

USER: eclipse

Note...

Features:

- >automatic “WELCOME TO /XYZ/ [MEMBER]”
- >displaying data which is recv and user who sent the message
- >send button
- >send a message box where you can type messages
- >ability to view the users profiles of whom you’re interacting with
- >write a private note
- >FTP & TCP
- >ability to navigate through library, encyclopedia, user profile and settings

5. The Library of the Wired

Library Chatroom Encyclopedia User Profile Settings

Library

Search 

"If you're not remembered, then you never existed"

Title:	File size:	Uploaded on:
Fanged Noumena	2 MB	

[(Techno)-Occult) documentation]

Title of Document:

Choose file

Submit

Go back



[保存]

Library Chatroom Encyclopedia User Profile Settings

Library

Search 

"If you're not remembered, then you never existed"

Title:	File size:	Uploaded on:	Written by:	
Fanged Noumena	2 MB	26.04.24	Nick Land	<input type="button" value="Download"/>
Kybalion	3.7 MB	28.04.24	The Three Initiates	<input type="button" value="Download"/>

[(Techno)-Occult) documentation]

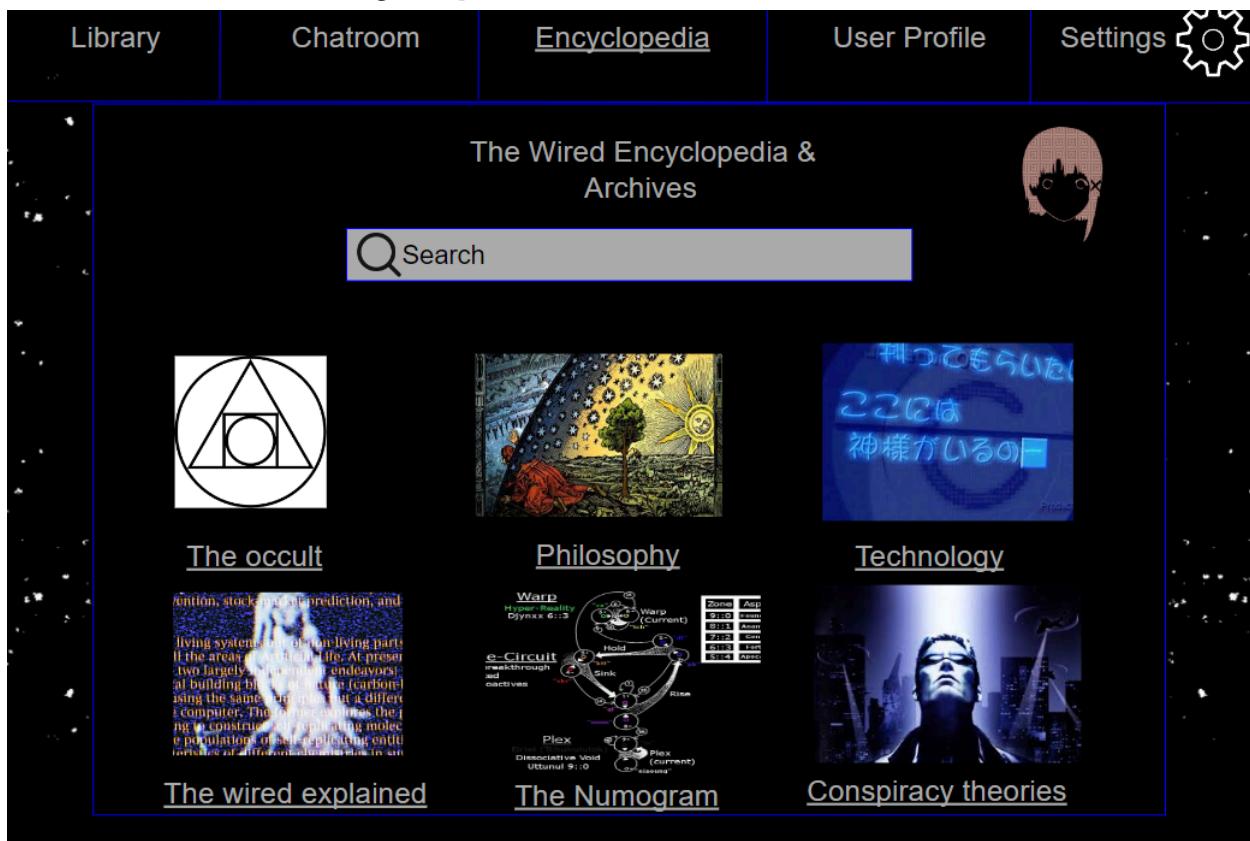


[保存]

Features:

- >repository of pdf documents stored
 - >download button
 - >each file has fields pertaining to metadata such as: title, file size, upload date, and who uploaded the file
 - >search inquiry
 - >techno-sigil
 - >ability to navigate through library, encyclopedia, user profile and settings
 - >upload file button
-
- >title of document box
 - >choosing file button which will allow you to navigate through files (pdf exclusive)
 - >submit button
 - >go back button

6. The Wired Encyclopedia & Archives



The screenshot shows a dark-themed website interface. At the top, there is a navigation bar with five items: "Library", "Chatroom", "Encyclopedia" (which is underlined, indicating it is the active page), "User Profile", and "Settings" with a gear icon. Below the navigation bar, the main content area has a header "The Wired Encyclopedia & Archives". To the right of the header is a user profile picture of a person with short hair. Below the header is a search bar with a magnifying glass icon and the word "Search".

The main content area features several sections with images and titles:

- The occult**: An image of a circle containing geometric shapes (a triangle and a square). Below the image is a brief text snippet.
- Philosophy**: An image of a person sitting in a lotus position under a tree, with a sun-like object in the background.
- Technology**: An image of a person's face with a futuristic, glowing blue effect around it.
- The wired explained**: An image of a complex diagram labeled "Hyper-Reality Dynxx 6:5" with various nodes and connections.
- The Numogram**: An image of a circular diagram labeled "Warp" and "e-Circuit breakthrough narratives".
- Conspiracy theories**: An image of a person's face with a city skyline in the background.

Features:

- >search inquiry
- >different segmented pages pertaining to different topics e.g technology, philosophy, conspiracy theories and the occult
- >ability to navigate through library, encyclopedia, user profile and settings

7. Settings

The screenshot shows a navigation bar at the top with five tabs: Library, Chatroom, Encyclopedia, User Profile, and Settings. The Settings tab is active, indicated by a blue border and a gear icon. Below the tabs is a dark-themed settings form. At the top center of the form is the word "Settings". On the left side, there are six input fields with labels: "Username" (eclipse), "Password" (redacted), "Alias" (anonymous), "Theme" (e.g Purple Cybercore), "Description" (No matter where you go, everybody's connected), and "FTP directory" (/home/user/downloads). To the right of these fields is a preview area showing a anime girl's face with a blue glow. Below the preview is a "Change photo" button. Further down is a section titled "Upload images to display on profile (max 10):" containing a list of files: Miku.jpg, Tsuki.jpg, Ccru.jpg, Cyber.jpg, Occult.jpg, Neuromancer.jpg, Lain.jpg, and computer.jpg. A "Upload" button is located at the bottom right of this list.

Features:

- >username, password, alias, description box
- >customize theme button (there are only a select few you can pick)
- >change photo button
- >FTP directory - location where downloaded files should be stored by default
- >ability to navigate through library, encyclopedia, user profile and settings

8. User profile

Library	Chatroom	Encyclopedia	<u>User Profile</u>	Settings 
<p><u>User profile</u></p> <p>USER: eclipse</p>  <p>Alias: anonymous</p> <p>Description: No matter where you go, everybody's connected</p> <p>Frequently visits /linux/ and /literature/</p> <p>View knowledge base & notes</p> <p>GIFs/images:</p>  <p>CCRU DOES NOT, HAS NOT, AND WILL NEVER EXIST lainchan.</p> <p>3/8 puzzles completed (complete more)</p>				

Features:

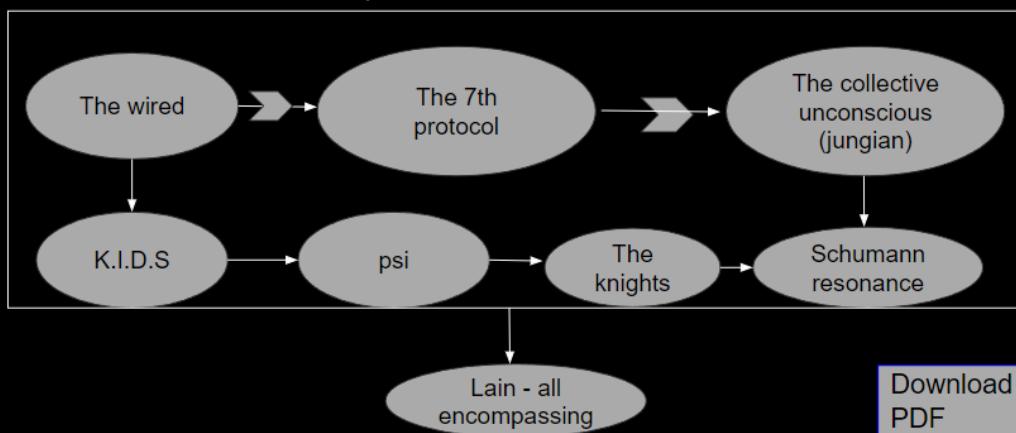
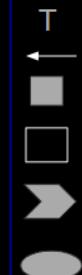
- >A collection of GIFs/Images which can be displayed by editing profile on settings & uploading images (.png, .jpeg) & .gifs onto the Image section
- >Displays username, profile picture, alias, description (given)
- >Displays the boards that you visit frequently
- >A label which updates when you complete puzzles which appear in chat rooms (not necessarily but a bonus feature if possible)
- >view knowledge base & notes button
- >ability to navigate through library, encyclopedia, user profile and settings

9. Knowledge base & personalized notes

[Library](#)[Chatroom](#)[Encyclopedia](#)[User Profile](#)[Settings](#)

Eclipse's knowledge base

Eiri Masami was a chief research worker in Tachibana Labs. He caused the theory about Earth's neural network to progress. He advocated that every human's unconscious should be connected to a wireless network without devices through the Schumann effect. He added a function to use the Schumann Resonances to the 7th protocol code on his own discretion.

[Download PDF](#)

Features:

- >download it as a pdf
- >ability to write notes
- >ability to make diagrams
- >various other tools to incorporate into the knowledge base (text, box, arrow, border and ellipses)
- >ability to navigate through library, encyclopedia, user profile and settings

Stakeholder Feedback and Sources:

Sources:

- Slide: 3 & 5-9:
<https://www.vecteezy.com/vector-art/25754239-black-stars-sky-background-starlight-wallpaper-design-white-dots-background-design>
- Slide 1 & 7: <https://fauux.neocities.org/>
- Rest of the images: Serial experiments Iain (1998)
- Slide 5-6: Example of Techno-sigil incorporation (template):
<https://artreview.com/the-return-of-magic-in-art/>
- Slide 7 & 9: Numogram: Fanged Noumena - Circuitries By Nick Land
- Slide 7: Gnosticism/~~Philosophers~~ stone
- Slide 9: Tsuki project, Neuromancer, Iainchan.org, CCRU, Hatsune Miku

Feedback

The user interface is easy to access and has good aesthetics.

I like the colour scheme and occult theme.

However, I think that it can be distracting to the user in some areas and should be more minimal.

Good use of login page

Data structures:

Key class diagram along with key methods:

User
username: String
hashed_password: String
password: String
created_at: Date
register() login() logout() hash_password() verify_password()

Library
title: String
file_size: Int
uploader: String
upload_date: Date
encrypted_file: Bin
upload_document() search_document()

Chatroom
name: String numUsers: List messages: List
list_chatrooms() search_chatrooms()

EncyclopediaEntry
title: String
content: String
category: String
<u>add_entry()</u> <u>search_entries()</u>

Message
content: String
sender: User
timestamp: Date
encrypted_content: String
<u>send_message()</u> receive_message() encrypt_message() decrypt_message()

Encryption
encrypt(data, key) decrypt(enc_data, key)

Knowledge Base & Notes
tools: List canvas: Image
<u>addToCanvas()</u> <u>removeFromCanvas()</u> <u>addTools()</u> <u>removeTools()</u>

User Profile
images: List details: String
<u>add_images()</u> <u>add_details()</u> <u>remove_images()</u> <u>remove_details()</u>

<https://app.diagrams.net/#G1vN0nVHrQigJcqMA5vKFrLB5pgtUv6wIS%7B%22pageId%22%3A%22C5RBs43oDa-KdzZeNtuy%22%7D>

Justifications:

- Handles user authentication and security, which is crucial for a P2P chatroom platform. Hashing passwords ensures that even if the database is compromised, plaintext passwords are not exposed.
- The Library provides a repository for users to share and access documents securely. Encrypting files ensures that only authorized users can access the content, maintaining the confidentiality of potentially sensitive information.
- Justification for chatroom class: This class facilitates the creation and management of chatrooms, providing functionality to list and search chatrooms, which is essential for user navigation and interaction.
- Justification for message class: The Message class handles the creation, encryption, and decryption of messages, ensuring secure communication within the chatrooms.
- The User Profile class enables personalization and customization of user profiles, enhancing the user experience.
- This class facilitates the interactive and dynamic aspects of the knowledge base, allowing users to manipulate and interact with content visually and functionally.
- The EncyclopediaEntry class supports the creation and retrieval of informational content related to the occult, alchemy, and philosophical ideas, enriching the knowledge base available to users.
- Encryption: Centralizes the encryption and decryption logic, promoting code reuse and ensuring consistent encryption practices across the platform.

External text file (.txt file):

```

logins:
scored once clicking the register button with a valid criteria

user: eclipse, password: anon456
user: schizoanalysis, password: numogram8

pdf documents:
scored once clicking on the upload button with a valid criteria

title: fanged noumena, size: 12 MB, upload date: 07.01.24, author: Nick Land
title: neuromancer, size: 15 MB, upload date: 07.01.35, author: William Gibson

encyclopedia:
topic: CCRU
topic: numerology
topic: schizoanalysis

file sharing notes:
wired.pdf
theory.pdf|

```

SQLite Database:

Login Table:

User ID	Username	Password
Filter	Filter	Filter
1	1 Lain	KnightsofWired1337
2	2 Eclipse	anon456
3	3 cyber-seraph	phantasm1337
4	4 tsuki	systemsphere228
5	5 MysticGnosis	ethereal42
6	6 Anonymium	matrix1337
7	7 MirageCascade	twilight42
8	8 helios-protocol	deusexmachina1
9	9 wired-nexus	observer93
10	10 MidnightMystic	protocol123
11	11 WiredDisciple	technovoid89
12	12 CosmicRune	eldritch1337

Library Table:

DocumentID	Title	File Size	Upload Date	Author	User
01	Egregore of the Wired	2 MB	07.10.24	tsuki	tsuki
1 02	Fanged Noumena	3.7 MB	11.07.24	Nick Land	tsuki
2 03	Neuromancer	4 MB	01.07.35	William Gibson	Lain Iwakura
3 04	Snow Crash	2.1 MB	11.07.24	Neal Stephenson	Eclipse
4 05	The Dark Enlightenment	3.7 MB	12.07.24	Nick Land	tsuki
5 06	Count Zero	1.8 MB	12.07.24	William Gibson	cyber-seraph
6 07	Techgnosis	3.2 MB	12.07.24	Erik Davis	Anonymium
7 08	Capitalism and Schizophrenia	2.4 MB	12.07.24	Gilles Deleuze	cyber-seraph
8 09	The Eye in the Pyramid	2 MB	12.07.24	Robert Anton Wilson	MysticGnosis

Encyclopedia Table:

ConceptID	Concept Name ^{▼1}	Tags	Date Created	Date Modified
Filter	Filter	Filter	Filter	Filter
1	Accelerationism	nick land, esotericism, philosophy, technology	01.07.24	12.07.24
2	Egregore	lain, esotericism, mysticism, technology	02.07.24	11.07.24
3	Numerology	esotericism, jung, mysticism, religion	02.07.24	12.07.24
4	Gnosticism	esotericism, mysticism, religion, philosophy	02.07.24	12.07.24
5	The Knights of the Eastern Calculus	serial experiments lain, esotericism, philosophy, media	02.07.24	12.07.24
6	Jungian Archetypes	psychoanalysis, philosophy, esotericism, mysticism	02.07.24	12.07.24

Username = "eclipse", password = "anon456"	Valid (return 0)
Username = "eclipse", password = NOT "anon456"	Invalid (return 1)
Username = NOT "eclipse", password = "anon456"	Invalid (return 1)
Username = "tsuki", password = "systemspace228"	Valid (return 0)
Username = "tsuki", password = NOT "systemspace228"	Invalid (return 1)
Username = NOT "tsuki", password = "systemspace228"	Invalid (return 1)

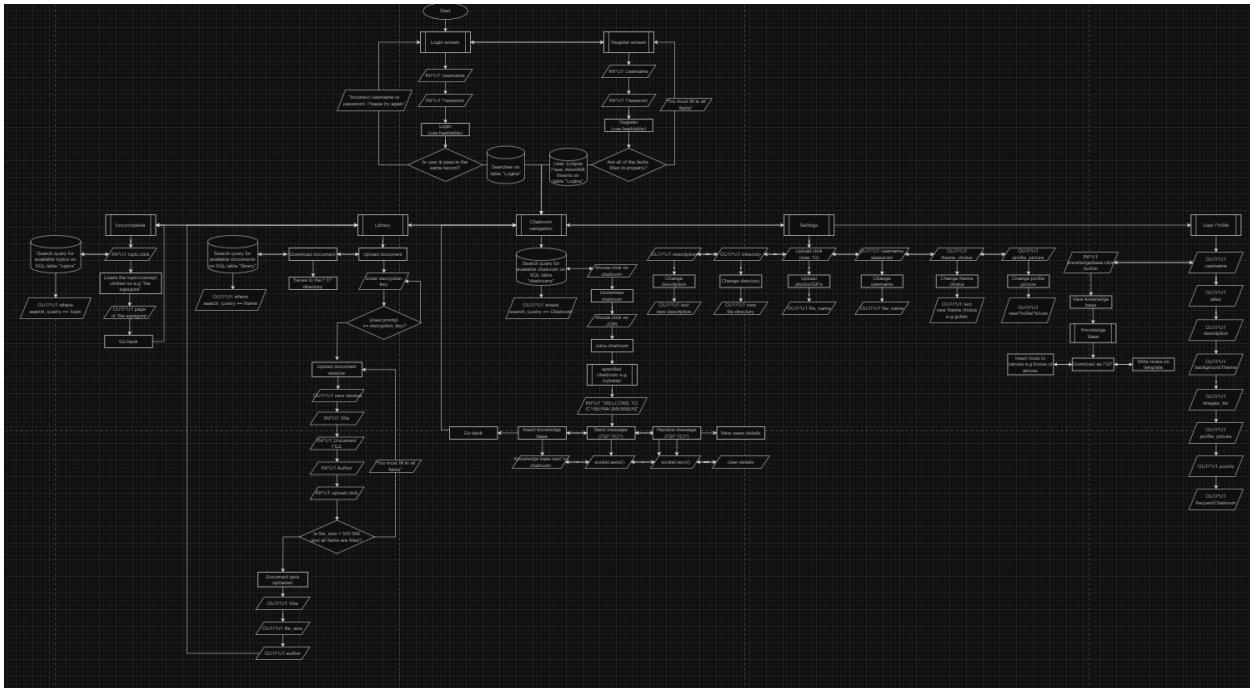
Username = "eclipse", password = "systemspace228"	Invalid (return 1)
Username = "tsuki", password = "anon456"	Invalid (return 1)
Username = "tsuki", password = (blank box)	Invalid (return 1)
Username = "eclipse", password = (blank box)	Invalid (return 1)
Username = (blank box), password = "anon456"	Invalid (return 1)
Username = (blank box), password = "systemspace228"	Invalid (return 1)
Username = NOT "eclipse", password = (blank box)	Invalid (return 1)
Username = NOT "tsuki", password = (blank box)	Invalid (return 1)
username = (blank box), password = NOT anon456	Invalid (return 1)
Username = (blank box), password = NOT "systemspace228"	Invalid (return 1)
Username = (blank box), password = (blank box)	Invalid (return 1)

A set of algorithms:

Flowchart of the whole program:

Full program flowchart (it is barely visible when I post it here on google docs):

<https://docs.google.com/presentation/d/1AoZXmubdu4IPh5Xhb1KWKoOBHDStm1wdJoizGoPZlU8/edit#slide=id.p>



<https://app.diagrams.net/#G1EFoI1X1boeo0JIK5xwvenldwbChNR8P#%7B%22pageId%22%3A%22C5RBs43oDa-KdzZeNtuy%22%7D>

Pseudocode of the Program:

<https://docs.google.com/document/d/1GoOg6b53AXijUmnNT7uikoeQ6fjClcLeNzTnBWeSL45Ek/edit>

Key variables for each module:

Name	Data Type	Explanation	Justification
username	String	Stores the username of an authorized user. (hashed)	It allows for authentication when logging onto your account.
password	String	Stores the password of an authorized user. (hashed)	It allows for authentication & security purposes when logging onto your account. (so people can't hijack your account)
decryption_key	String	Stores the decryption key.	Verifies if the content stored in the variable aligns with what the user enters when uploading documents to the server.
title	String	Stores the title of the document.	To display the name of the document on the library repository.

author	String	Stores the author of the document.	To display the name of the author on the library repository.
file_size	Real	Stores the file size of the document	To display the file size of a document. (100 MB max)
searchQuery	String	Stores what users search on the search box.	Used to search through a table (library or encyclopedia) for the string the user inputted.
description	String	Stores the users description.	To display the description of the user on settings and user profile.
directory	String	Stores the FTP directory.	To automatically direct to a directory whenever a user wants to download a document or do anything FTP related.
themeChoice	String	Stores the name of the theme choice.	To display the name of the theme choice in settings. (e.g ethereal gothic or cybercore)
profilePicture	Binary	Stores the profile picture of the user.	To display the profile picture of the user in chatrooms, settings and user profile.
alias	String	Stores the alias of the user.	To display the alias of the user in chatrooms, settings and user profile.
users	Array	It stores the name of the users you're interacting with currently.	To display the name of the users that you're currently interacting with.
backgroundTheme	Binary	Stores the background theme of the user's profile.	To display the background theme of the user profile.
imageList	Array[Binary]	Stores an array of images which have been uploaded by the user.	To display the images on the users profile adjacent to each other.
frequentChatroom	String	Stores the most frequently visited chatroom	To display on the users profile
puzzle	Integer	Stores the percentage of	To display on the users profile

		puzzles completed	
topic	String	Stores the name of the topic viewed on the encyclopedia	To allow one to access the page of a specified topic on the encyclopedia.
chatroom	String	Stores the name of the chatroom	To allow one to access the specified chatroom

sendMessage	String	Stores the message which is going to be sent via TCP	To display the message to the other end(s)
recvMessage	String	Stores the message which is going to be received in the other end	To display the message which is received from your end.
knowledgeBase	String	Stores the notes stored in the knowledge base	To display the notes to users on chatrooms

C. DEVELOPING THE CODED SOLUTION (“THE DEVELOPMENT STORY”)

<See H446-03 Project Advice Booklet for help and guidance of what must go here.>

D. EVALUATION

<See H446-03 Project Advice Booklet for help and guidance of what must go here.>

PROJECT APPENDIXES

Insert as many project appendixes as you need for your project.

These might include, but are not limited to:

- Complete Code Listing (ESSENTIAL)
- Interview Transcripts
- Meeting notes
- Observation notes or questionnaires