

By Team 3

quit |

Small Steps, Big Changes





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# Team Bio



Devin  
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Henry  
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Austin  
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Ivan Gunn

We are a group of passionate computer science students from Old Dominion University united by a common goal: to bring technological innovation to the addiction recovery landscape. With diverse backgrounds in software development, data science, and mobile app design, our team combines technical expertise with a deep commitment to making a meaningful impact in the lives of individuals seeking recovery.





# Problem Statement

# Whoa!

**Individuals battling addiction struggle to access the support they need**



**Finding nearby treatment centers and support groups can be overwhelming during critical moments**



**A solution is needed that simplifies connecting with personalized treatment options is essential to remove barriers.**





# Elevator Pitch

**In-person Help**

Find Aid

**Secured Accountability**

Receive Support

**Motivation & Knowledge**

Gather

Information





# Elevator Pitch pt.2

3 Cs of Addiction Recovery

**Commitment +**  
**Receive Support**

Receive reminders, build a support network, track recovery process

**Connection +**  
**Find Aid**

Find Nearby Treatment Centers  
and support groups

Main packages of Quitit

**Clarity +**  
**Gather**  
**Information**

Find facts, get recovery resources, stay motivated

# Problem Characteristics

## Limited Access to In-Person Support

Those struggling with addiction lack the resources to find in-person support to match their needs.

## Fragmented Resources

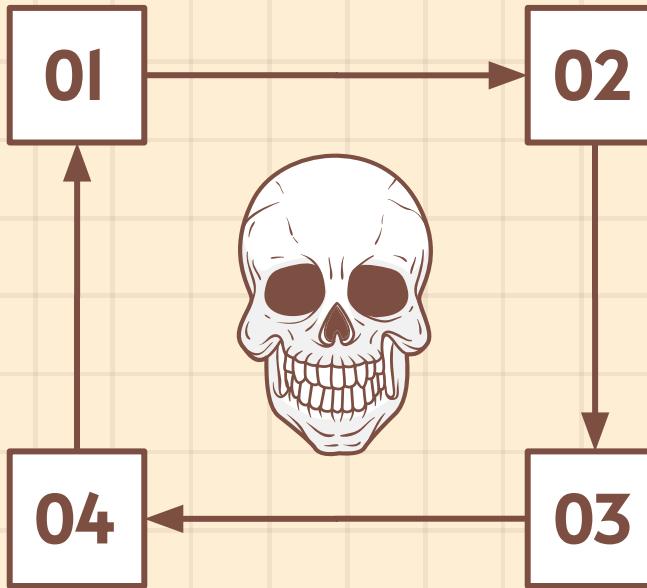
Recovery tools are often scattered across multiple platforms, making it difficult for users to find comprehensive help in one place.

## Inconsistent Accountability

Those struggling with addiction have no way of staying accountable outside of centers during daily life.

## Lack of Motivation

Individuals often lack systems to track their progress, stay motivated, and follow a clear recovery plan.





# Current Process Flow



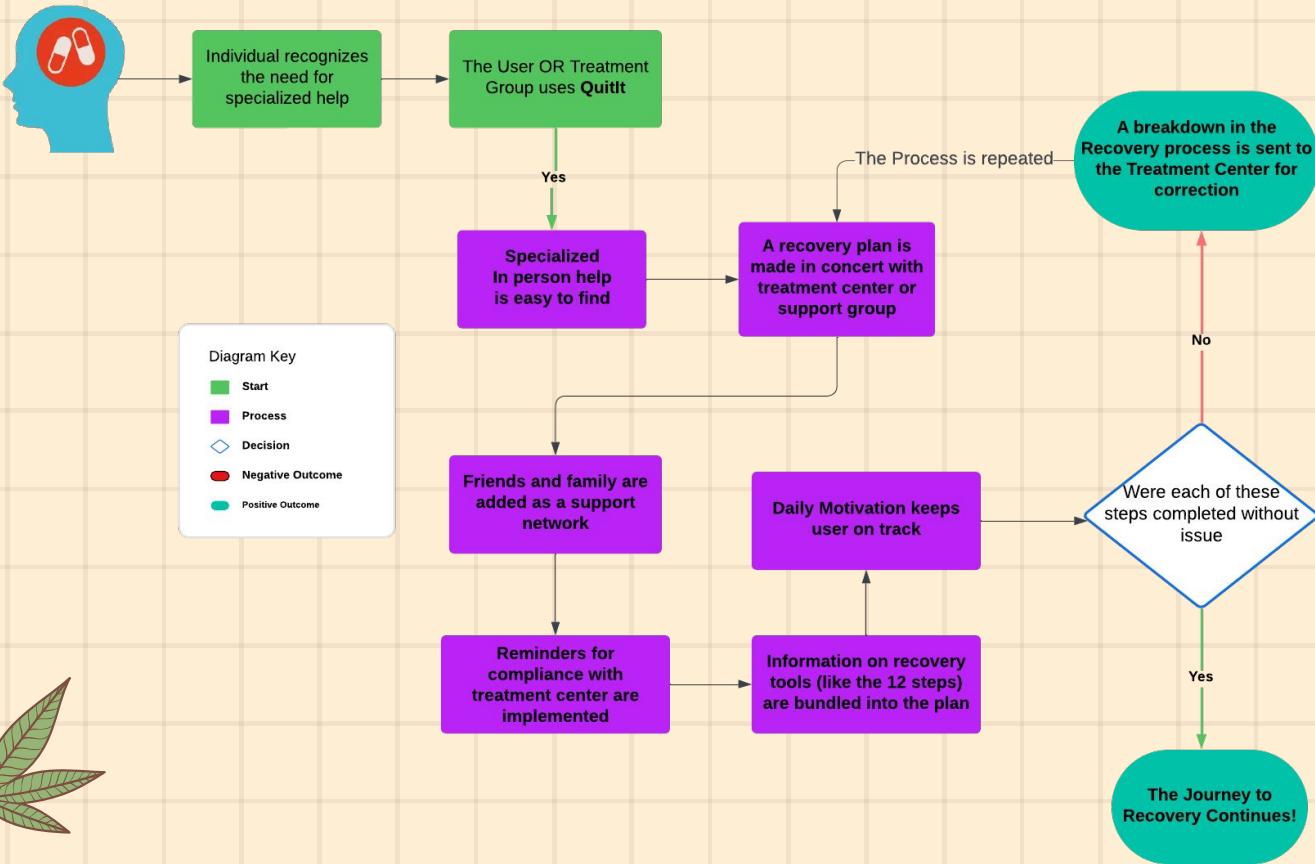
# Solution Statement

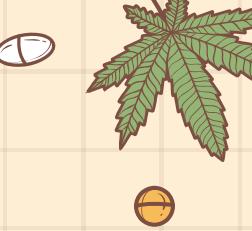


QuitIt is a comprehensive recovery platform that connects users with in-person support, tracks progress, and offers daily motivation. The app connects users to personalized in person support, offers a secure recovery plan and integrates resources into a single, cohesive tool to help individuals stay on track and achieve lasting recovery.



# Solution Process Flow





# What will **QuitIt** Do?



- Find in-person support for personalized needs



- Generate Recovery Check-Ins with accountability tools



- Structured motivational recovery plan



- Comprehensive, easy-to-use tools all in one place.





# What will **QuitIt** NOT Do?



- Does **NOT** provide medical treatment or therapy



- Does **NOT** guarantee recovery



- Does **NOT** replace in-person support



- Does **NOT** track any medical aspects



# Connection + Find In-Person Support Easily



The Free, foundational feature of **QuitIt** designed to connect users with immediate, personalized, in-person addiction recovery resources in their area.

- Customized Support
- Resource Ranking
- Comprehensive Information
- Navigation Assistance





# Commitment + Stay on Track with Support

A premium feature designed to help individuals stay on track with their recovery through structured engagement and support from loved ones and professionals.

- Recovery Check-Ins
- Support Network Engagement
- Progress Insights
- Scheduling Assistance



# Clarity + Clear Paths to Recovery

A premium comprehensive in-app resource hub designed to motivate and guide individuals through their recovery journey with easily accessible tools and structured content.

- 12 Steps Guide
- Motivational Content
- Habit Tracking
- Online Support Groups



# Key Stakeholders: Customers, End Users, and Partners



## Customers

- Treatment Centers
- Healthcare Providers
- Employers / Organizations

## End-Users

- Addiction Recovery Seekers
- Family and Friends of Users
- Support Group Members

## Stakeholders

- Treatment Center Providers
- App Development Team
- Investors / Partners
- Mental Health Professionals
- Wider Community



# Monetization Consideration



## Monthly Subscription Model

Individual Recovery Seekers could pay monthly to access Compliance + (Support network and accountability tools) and Clarity + (Recovery plan and information)



## (Main Model) Partnerships with Treatment Centers

Business to Business Model - Charge outpatient treatment centers to offer ongoing compliance tracking (Compliance + & Clarity +) for their patients.



## Affiliate & Corporate Wellness Programs

Offer QuitIt Premium products (Compliance + & Clarity +) as a part of package to related affiliates and corporate wellness programs





# Competition Matrix

Indirect Competitors

Product Category	Quick-Quit	Addiction Help	FindTreatment	I am Sober	The Phoenix
Rehab Center Locator	✓	✓	✓		
Clinic Locator	✓	✓	✓		
Support Group Finder	✓	✓		✓	✓
Filter by Addiction Type	✓		✓		
Filter by Specific Location	✓		✓		
Filter by Proximity	✓		✓		
App-Based	✓			✓	✓
Daily Inspirational Quotes	✓			✓	✓



# Development Tools

## Development Building:

- Integrated Development Environment:  
VsCode & Android Studio
- Version Control: Git
- Continuous Integration and Continuous Deployment: GitHub Actions & Workflows

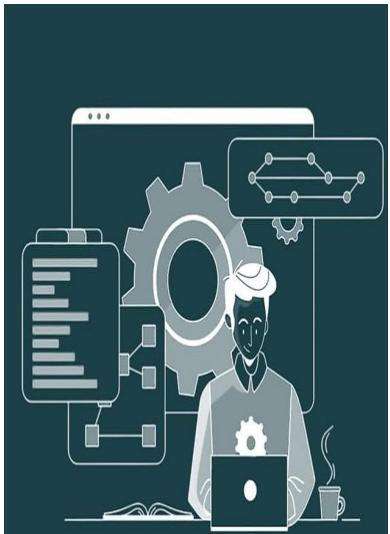
## Development Deployment (tentative):

- Selected Language (Backend): JavaScript
- Selected Language (Frontend): JavaScript
- Testing FrameWorks: Jest
- Documentation Tool: JSDoc





# Major Functional Component



- Gui/App:
  - Allows for searches of database to find rehab centers/addiction clinics and/or support groups
    - Recommends closest center for specific addictions
  - Allows user to find contact information of clinics more easily
  - Gives daily inspirational quotes
- Backend Framework:
  - Utilizes Node.js as the backend framework to handle API requests and manage the application logic
  - Manages the integration of external services such as location APIs for finding nearby rehab centers



# Major Functional Component pt.2

- Database:
  - Track user information
    - Keep records of past rehab centers/addiction clinics visited and current addictions being treated
  - Compile lists of support groups, addiction clinics, and possible addictions
  - Compile lists of inspirational quotes
  - Keep track of user feedback
- Operating System:
  - The application is designed to be platform-independent or based on Linux server-side deployment using Docker for containerization, ensuring scalability and easy deployment
- Security Measures:
  - Implements encryption for sensitive user data
  - Regular backup protocols are in place for data recovery





# Risk Probability Assessment

Risk	Impact (1 - 5)	Probability (1 - 5)	Solution Strategy
Data Breach or Security Vulnerabilities	5	3	End-to-end encryption, security audits / pen testing
System Downtime	5	2	Strong Cloud provider and data redundancy
Inaccurate GPS	3	2	Use Multiple Sources and allow user location input
Data Loss	4	1	Same as system Downtime
Unable to scale	4	3	Code Optimization
User not wanting to share personal data	3	3	Clear privacy policies and data transparently
Misidentification of Treatment Centers	2	3	Update database and use user feedback for verification.
Low User Engagement	2	4	Utilize personalized notifications, and reward systems
Legal Issues or Non-Compliance	5	1	Get legal consultation
Ineffective Emergency Response	4	2	Contact emergency services
Monetization effects	2	5	Transparent Policies



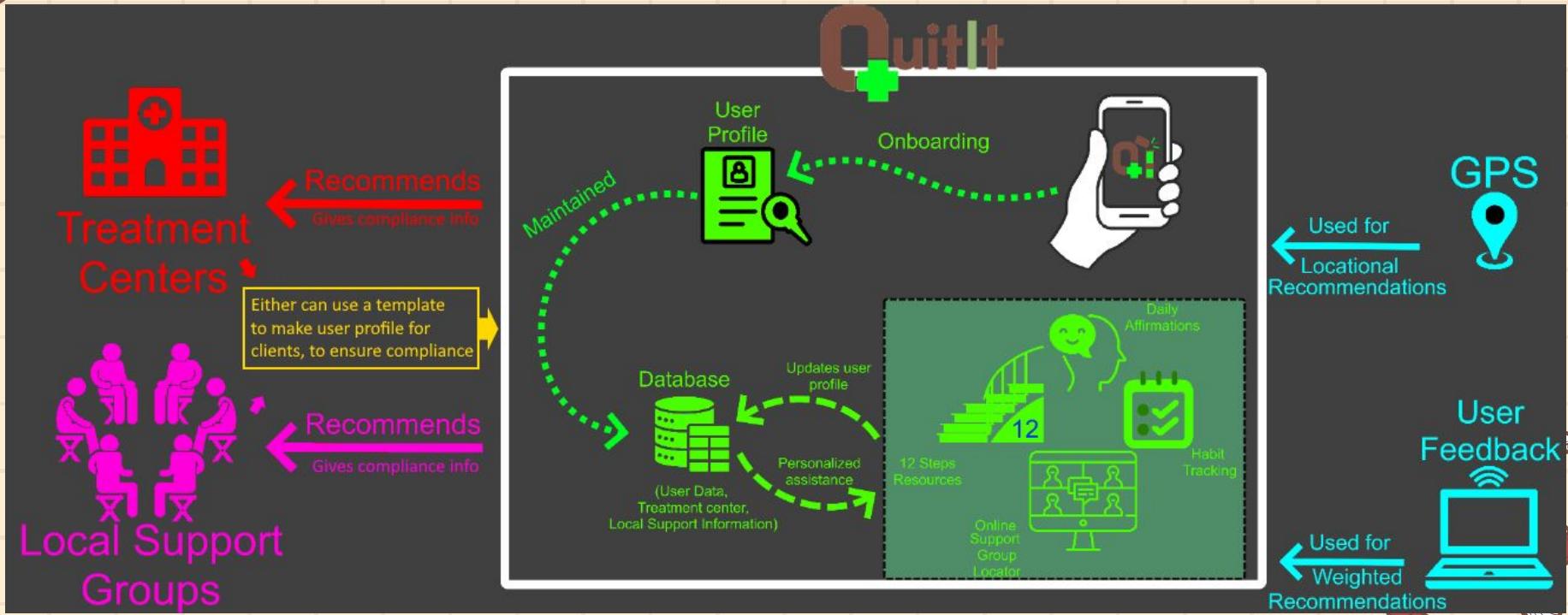
# Risk Matrix

Impact \ Probability	Very Low	Low	Medium	High	Very High
Very High	Legal Non Compliance	System Downtime	Data Breach		
High	Data Loss	Ineffective Emergency Response	Failure to Scale		
Medium		GPS Accuracy	User Reluctance	Treatment Center Data	
Low			Inaccurate Center Info	Low User Engagement	Monetization effects
Very Low					

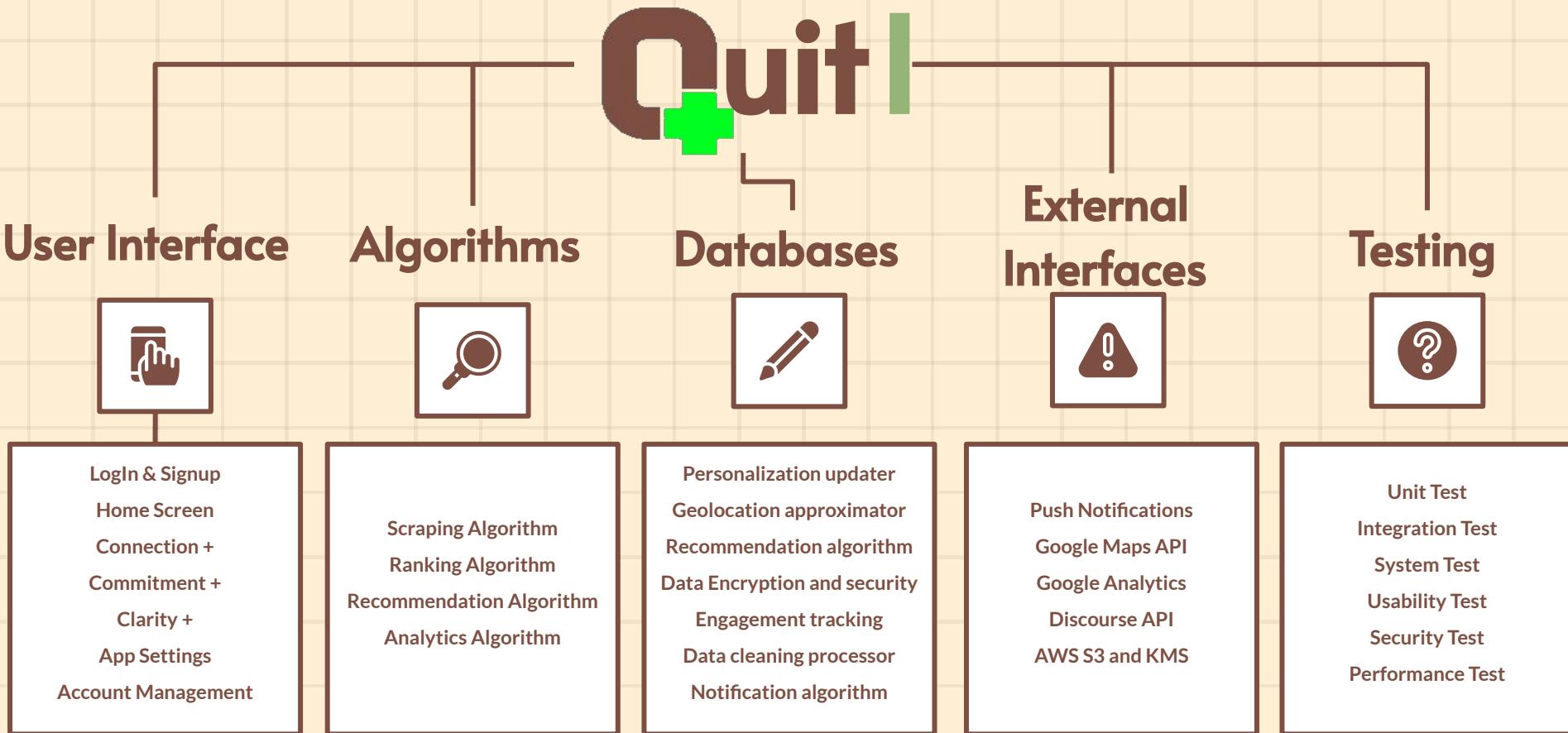




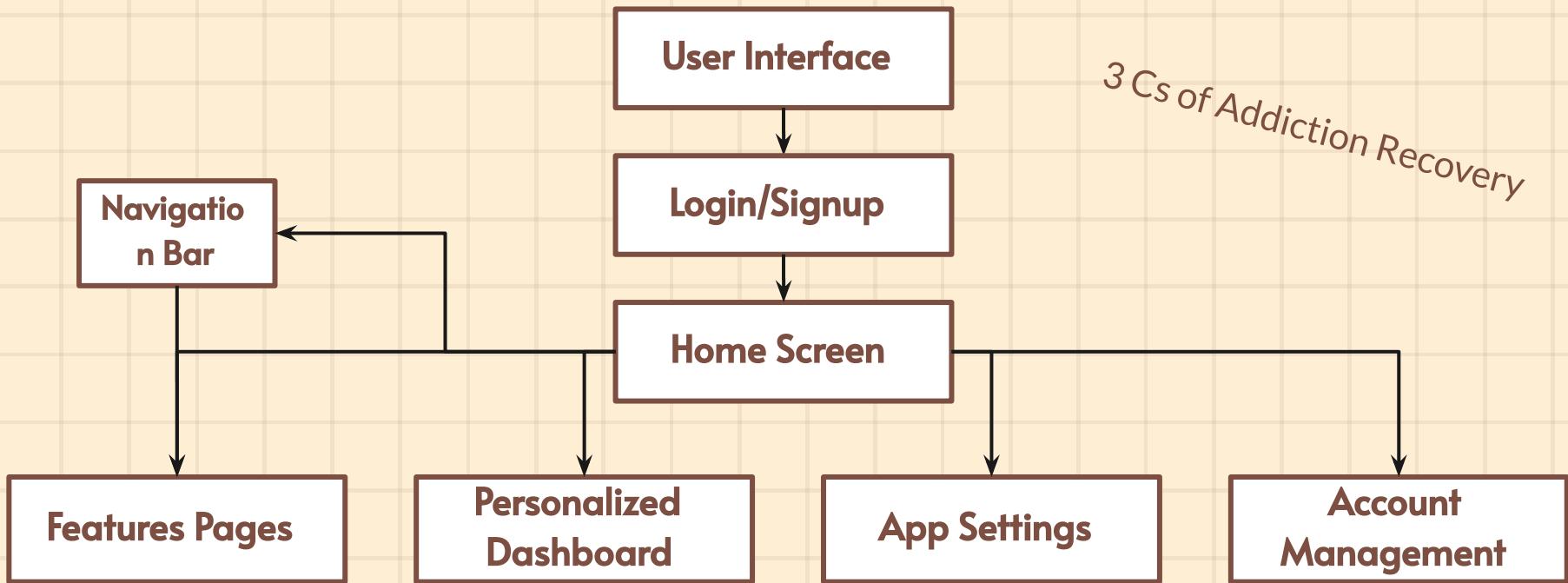
# Major Functional Components Diagram



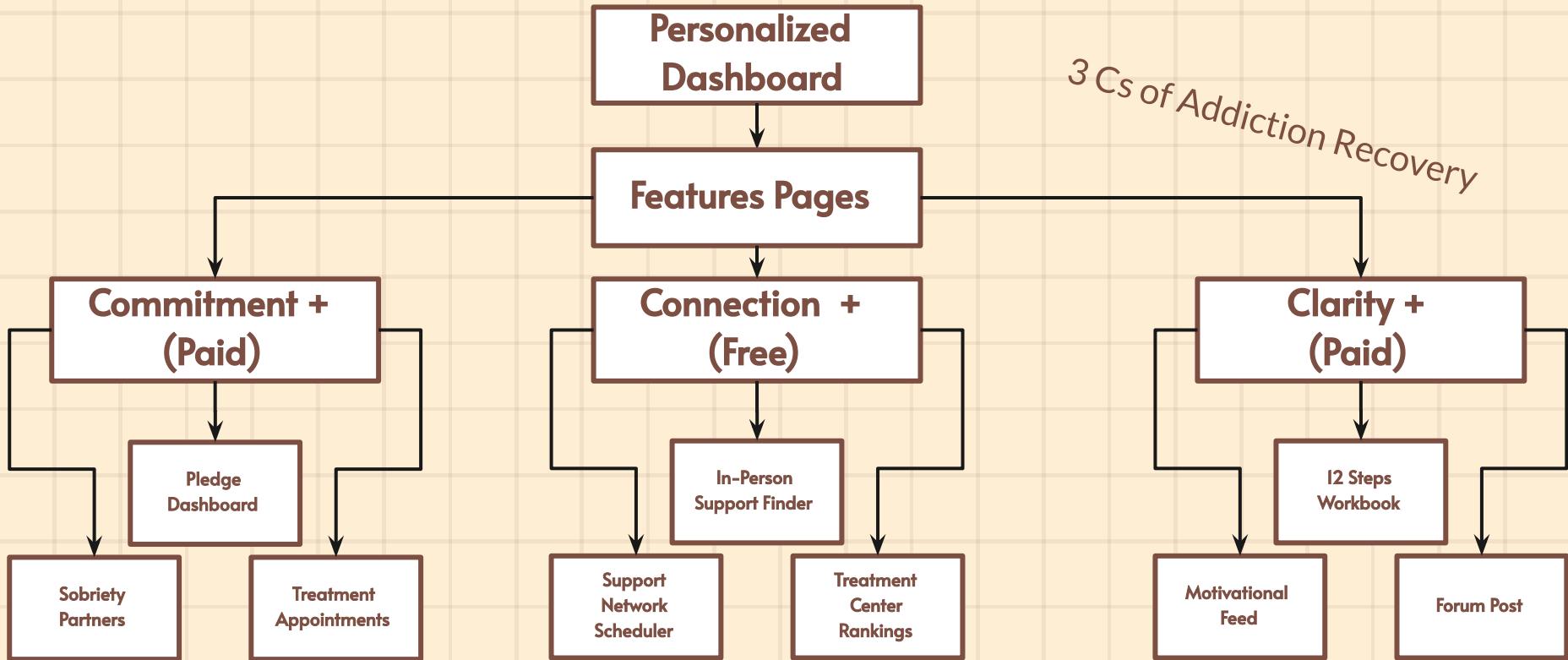
# Work Breakdown Structure



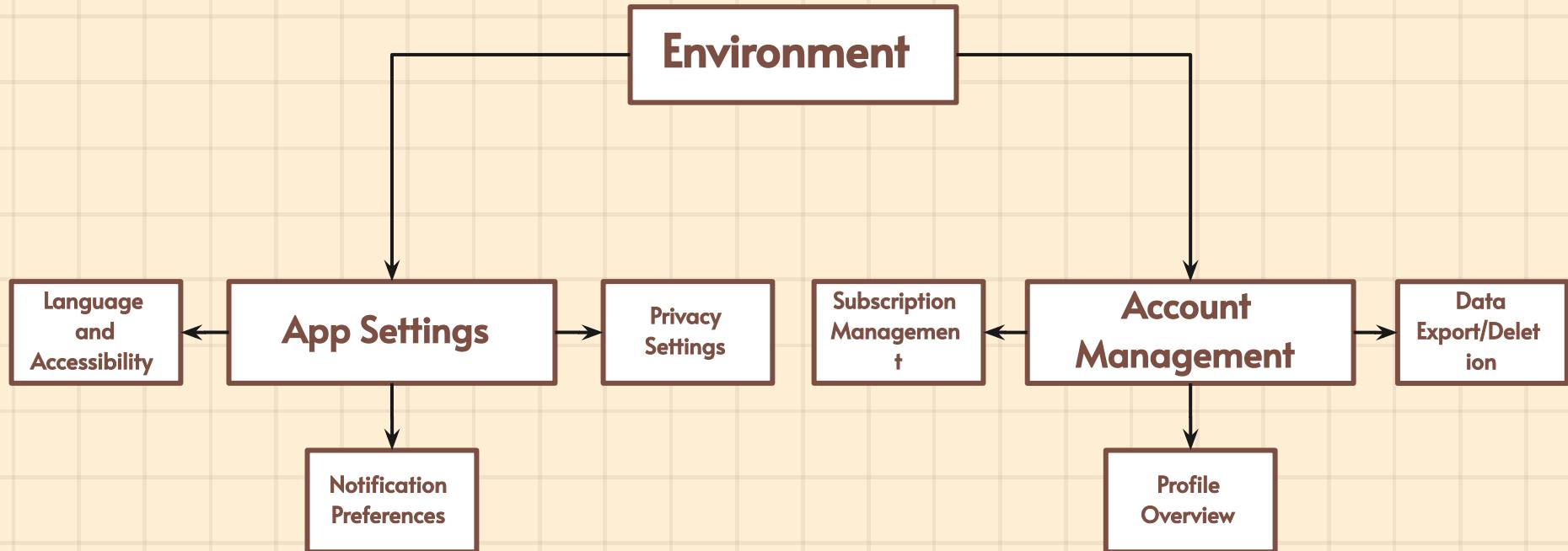
# WBS - User Interface - Home Screen



# WBS - User Interface - Personalized Dashboard



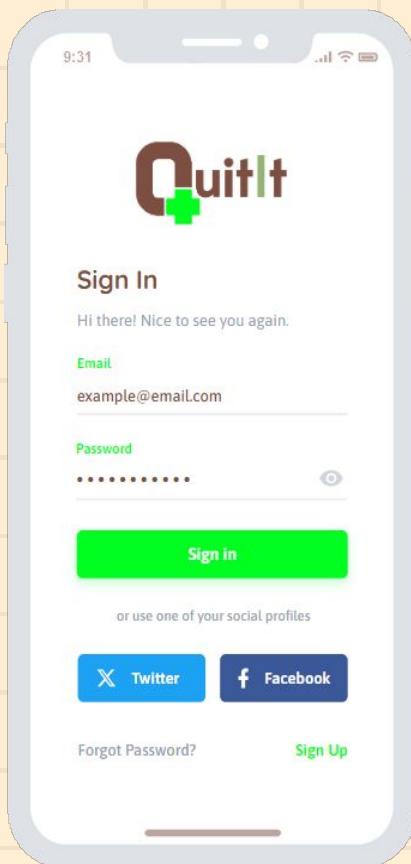
# WBS - User Interface - Settings



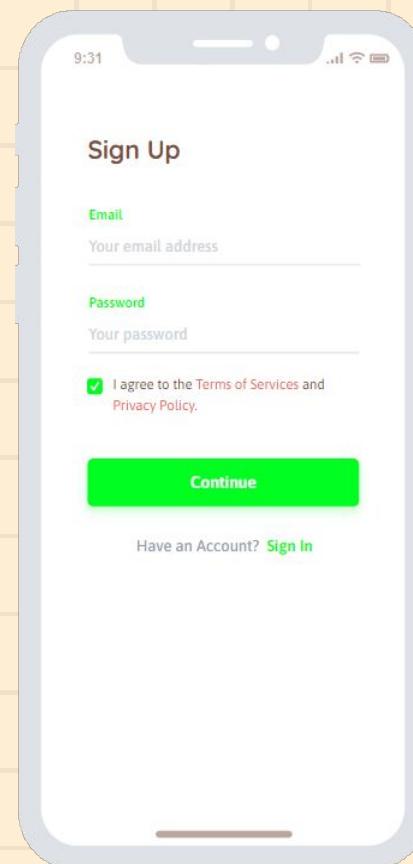
# Prototype Mockups Part I



Splash Screen

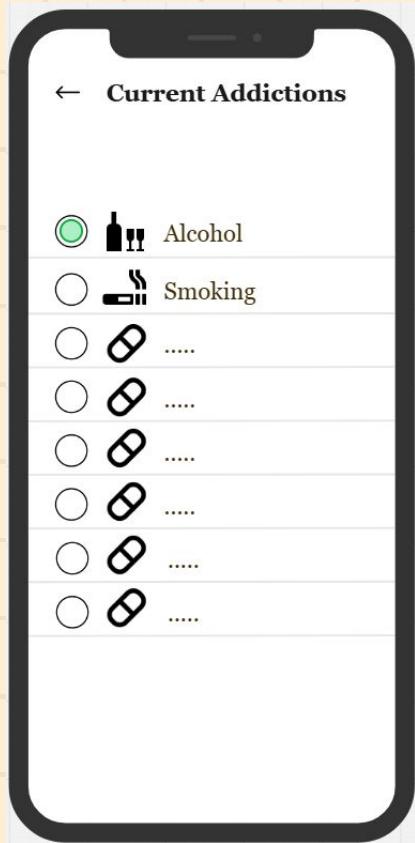


Sign In Screen

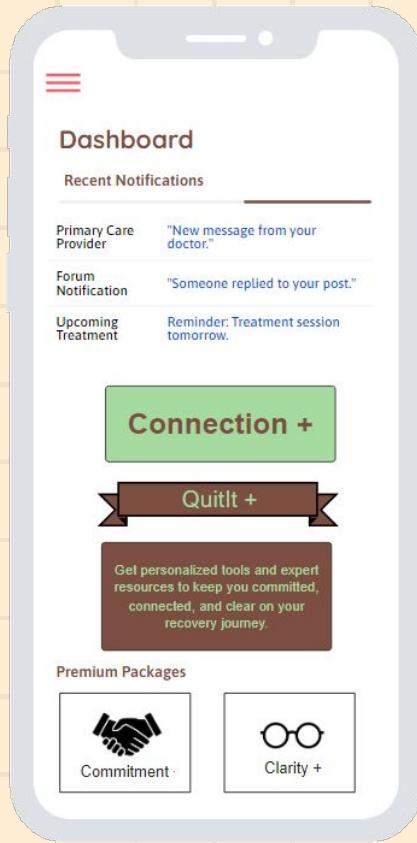


Sign Up Screen

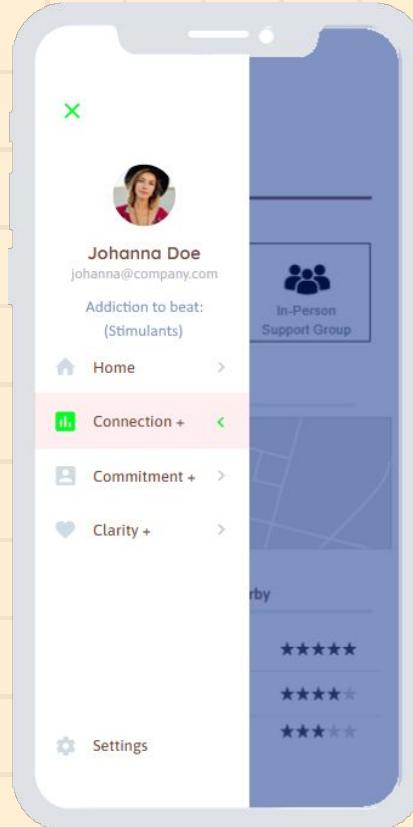
# Prototype Mockups Part 2



Customization Screen

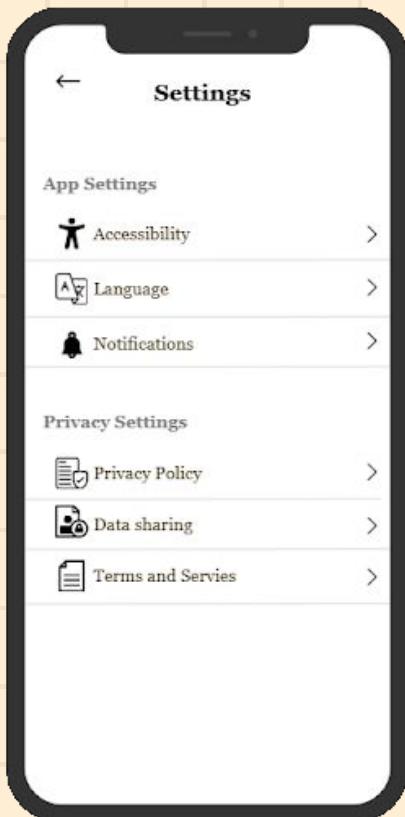


Home Screen



Navigation

# Prototype Mockups Part 3



Settings



Account Management

# Prototype Mockups Part 4

## Free Feature

Connection +

Find In-Person Help

- Treatment Centers
- In-Person Support Group

Support Map

Top Treatment Centers Nearby

Center	Rating
Inspiration Health	★★★★★
BeBold Recovery	★★★★★
Women's Treatment Center	★★★★★

Find Aid

## Premium Features

Commitment +

Daily Pledge

Connect to your doctor

Why do you wish to be sober

I pledge

Upcoming Treatment Appointments

Month	Day	Year				
December	26	2024				
Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

[Insert addiction] Sober Streak!

Time Unit	Value
Months	6
Days	14
Hours	35
Seconds	21

Sobriety Partner Progress

Steve S. Sober Streak | Next Virtual Check-in

Just reached 210 days sober | 01/08/2025

Receive Support

Clarity +

Your Affirmation Today

Today, December 12

24 hours is all we have, make it count! - Epictetus

Online Support Group Locator

Addiction Facts

12 Steps workbook

Step 5: Self Assessment | 3 / 20

Recent Forum Post

User	Topic	Post
Katie	Online Shopping	"I finally saved enough to buy a car"
Molly31	Social Media	"Today is my Birthday!"
Steve	Stimulants	"Stopped last week and haven't had cravings since"

Gather Information

# Algorithms

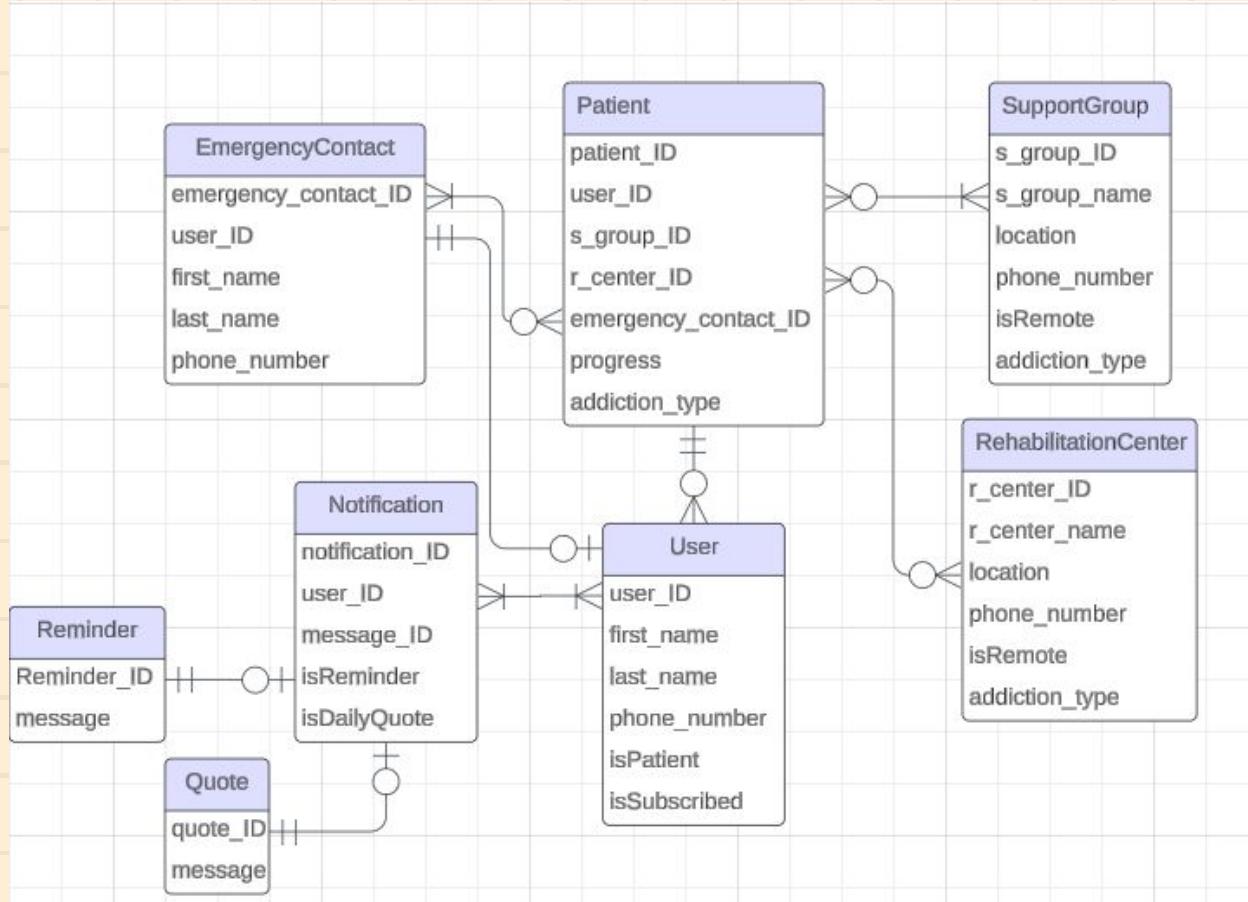


## Search Algorithms:

- **Finding rehabilitation centers**
  - A scraping algorithm (data scraping) is necessary to gather data from reputable websites about rehabilitation centers, including location, types of services, and reviews.
  - A data analysis algorithm can process this data to ensure relevance and quality, while filtering based on location and type of addiction
- **Filtering and sorting search results**
  - A data analysis algorithm can analyze the scraped data and rank the results according to user-defined parameters, such as distance, type of addiction, and ratings.
  - Additional analytics could help refine results over time based on user feedback.
- **Matching users with support groups**
  - A matching and recommendation algorithm can recommend the most suitable support groups. This algorithm would analyze user profiles and group characteristics.
  - This may include data analysis of both user behavior and group success metrics to improve matching accuracy.
- **User Progress Tracking and Analysis**
  - Develop algorithms to monitor and analyse user engagement and progress.
  - Analyzing this data can help tailor support and resources to individual user needs



# Database Schema





# Real World Product vs Prototype

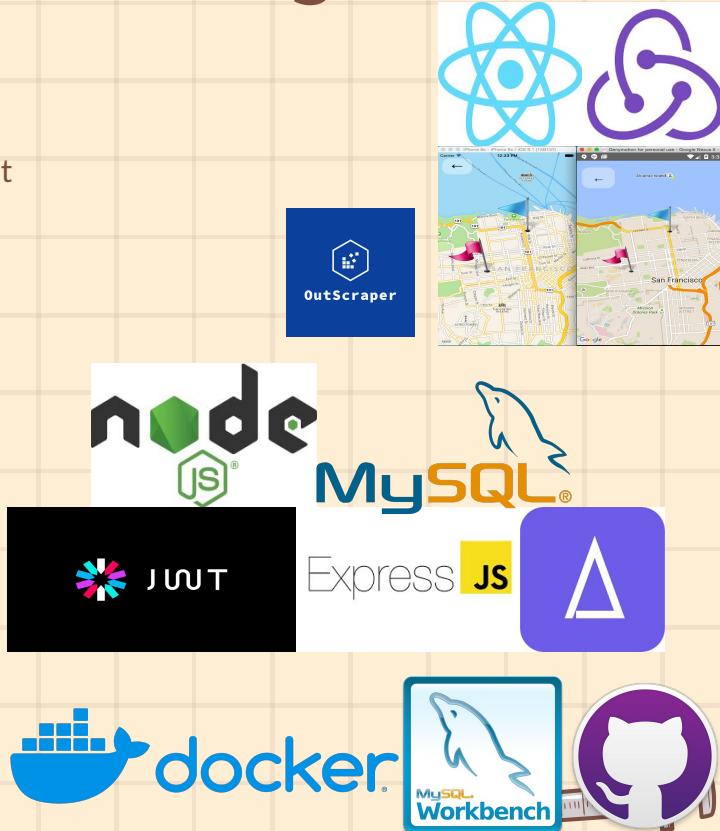
Feature	Prototype	Product
Daily inspirational quotes	✓	✓
Track recovery progress	✓	✓
Emergency safety features	✓	✓
Locate nearby rehab centers	✓	✓
Find support groups	✓	✓
Filter by addiction type	✓	✓
Support for wide range of addiction types		✓





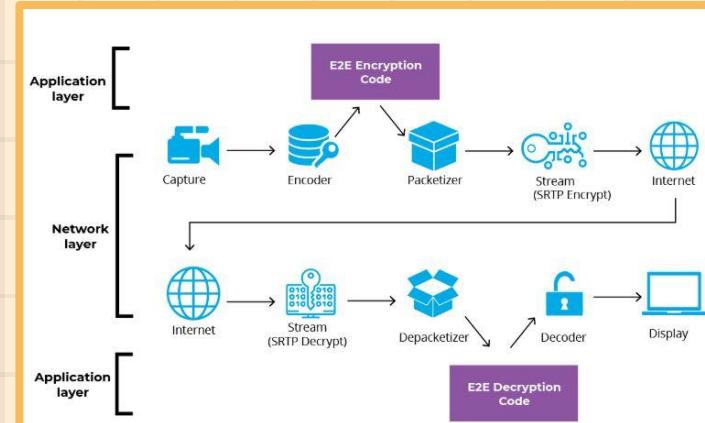
# Required Libraries, Tools, & Technologies (Dependencies)

- Frontend Libraries
  - React Native - Build cross-platform application with JavaScript
  - Redux - State management in React application.
  - React Native Maps - Integrate map functionality for rehab locations
  - Axios - HTTP requisitions to backend API
- Backend Libraries
  - Node.js - Build JavaScript runtime environment
  - Express.js - Web framework for Node.js
  - MySQL - Database handles structured data seamlessly to backend
  - JWT (jsonwebtoken) - JSON Web Token authentication
  - Argon2 - Secure user passwords
- Other Technologies
  - SQL Workbench - Manage database application
  - GitHub - Integration and deployment tool
  - Docker - Containerization for platforms of application
  - Outscrapper - Aggregate treatment center data



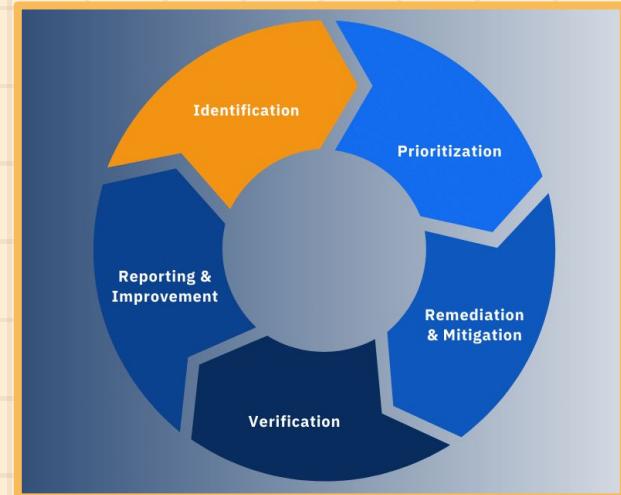
# Privacy & Security I

- Encryption
  - End-to-end encryption for sensitive data like user profiles, messages, and location history
  - Utilize strong encryption algorithms like AES-256, regularly updated to resist attacks
  - Secure storage and transmission of encryption keys, separate from user data
- Authentication & Authorization
  - Multi-factor authentication for user login, using opts for authorization such as biometrics and two-factors
  - Regular audit of user roles and permissions to ensure least privilege access
- Data Storage & Handling
  - Store user data according to industry standards: ISO 27001, SOC 2.
  - Data retention is done according to regulations of GDPR and HIPAA
  - Dispose of data securely with legal and regulatory requirements



# Privacy & Security II

- Vulnerability Management
  - Secure coding practices and reviews shall be undertaken to avoid vulnerabilities in development
  - Vulnerability disclosure program for ethical hackers will be used to evaluate the app and system
- Third-Party Integrations
  - Third-parties will be vetted for security and privacy
  - Any shared data will be anonymized and third party trackers and analytics minimized
- Privacy Policy
  - A comprehensive privacy policy in direct language which is accessible within the app will be written
  - Policy will be updated promptly as needed, and will contain full disclosure of transparency with data practices





# Resources

1. "Barriers to Addiction Treatment: Why Addicts Don't Seek Help." *American Addiction Centers*, 5 Sept. 2024, [americanaddictioncenters.org/rehab-guide/why-addicts-dont-seek-help](https://americanaddictioncenters.org/rehab-guide/why-addicts-dont-seek-help). Accessed 17 Oct. 2024. 1)
2. National Institute on Drug Abuse. "Principles of Effective Treatment." *National Institute on Drug Abuse*, 18 Jan. 2021, <https://nida.nih.gov/sites/default/files/podat-3rdEd-508.pdf>. Accessed 17 Oct. 2024. 2)
3. "Barriers to Addiction Treatment: Why Addicts Don't Seek Help." *American Addiction Centers*, 18 July. 2024, <https://americanaddictioncenters.org/rehab-guide/treatment-barriers>. Accessed 17 Oct. 2024. 3)
4. "Relapse Rates in Addiction Programs." *Journal of Consulting and Clinical Psychology*, vol. 27, no. 4, 1971, pp. 455-467. EBSCOhost, [https://onlinelibrary.wiley.com/doi/10.1002/1097-4679\(197110\)27:4%3C455::AID-JCLP2270270412%3E3.0.CO;2-R](https://onlinelibrary.wiley.com/doi/10.1002/1097-4679(197110)27:4%3C455::AID-JCLP2270270412%3E3.0.CO;2-R) Accessed 24 Oct. 2024.
5. "Leveraging Technology to Enhance Addiction Treatment and Recovery." Miller, William R., and Jean W. Twomey. *Journal of Substance Abuse Treatment*, vol. 44, no. 1, 2013, pp. 1-4. Taylor & Francis Online, <https://www.tandfonline.com/doi/abs/10.1080/10550887.2012.694606>. Accessed 24 Oct. 2024.





# Thanks!

Do you have any questions?

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