

Lab 0 - QuitIt

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Feb. 13, 2025

Version 0

## Table of Contents

1 Introduction	3
1.1 Societal Problem	3
1.2 Solution	3
2 QuitIt Product Description	3
2.1 Key Product Features and Capabilities	3
2.2 Major Components (Hardware/Software)	3
2.2.1 Hardware	3
2.2.2 Software	3
3. Identification of Case Study	3
4 Glossary	5
5 References	5

**List of Figures****List of Tables**

## **1. Introduction**

QuitIt is a comprehensive recovery platform designed to assist individuals seeking help with addiction, and to offer support to those who wish to help the individual. The platform offers personalized support with connecting users to in-person resources, tracking their progress, providing daily motivation, and an online community that provides access to experiences and knowledge from those who have in one way or another encountered addiction. Additionally, QuitIt features an AI-powered recovery coach to provide personalized guidance and support to both individuals in recovery and their loved ones. There will be an emergency contact feature to enable the user to reach such services or family in the event of a crisis, particularly for recovering individuals who are at risk for relapse or overdose. This app addresses the societal problem of addiction as a centralized tool that streamlines these features.

### **1.1 Societal Problem**

Addiction is a persistent and pervasive societal problem that affects families, individuals, and communities. Those struggling with addiction have numerous challenges:

- Limited access to in-person support
- Lack of motivation
- Inconsistent accountability
- Uncoordinated resources

### **1.2 Solution**

QuitIt offers an effective solution to progress with in these challenges by providing a platform which possesses the features of:

- Integration of in-person support resource connection

- Offering motivation and other's experiences with addiction
- Helping to build recovery plans

With these tools and resources, QuitIt works to help individuals and families to find recovery from addiction.

## **2. QuitIt Product Description**

The mobile application QuitIt is designed to assist in addiction recovery by providing a consolidated platform for users to connect with in-person support, find recovery resources, track their progress, and learn useful experience. The design is to be user-friendly, accessible, and provide a focus on security and privacy.

### **2.1 Key Product Features and Capabilities**

QuitIt presents a range of functionalities designed to advance recovery on a secure platform. This app integrates a comprehensive array of resources including treatment centers, support groups, and a dedicated online forum. Quantifiable metrics are used for tracking progress related to a recovery plan. Geolocation mapping is used to connect users with necessary resources. These features are implemented to combat common challenges faced in recovery such as limited support networks, consistent accountability, sustained motivation, and dealing with fragmentary resources.

A system tracking user movement exists to ensure compliance and safety during recovery. This allows healthcare professionals and family members to track the location of patients in recovery, to ensure their safety with an important aspect of support. This feature is customizable to meet individual needs and preferences, offering options to share location data with specific individuals, or for specific amounts of time.

With the idea of prioritization of the user's safety, QuitIt maintains an effective emergency contact feature. This allows users to connect quickly with emergency services or designated emergency contacts directly by the app. This offers a potential lifeline in crisis situations, to ensure users have the ability to get help when they need it the most.

In addition to the features mentioned above, QuitIt also includes an AI-powered recovery coach. This virtual coach provides personalized guidance and support to individuals in recovery and their loved ones, offering features such as:

- Personalized guidance, including for risks of crisis and providing useful resources.
- Coping skills training and relapse prevention planning, adapting to stages of recovery.
- Offering scenario and questionnaire conversation to figure out situations.

The AI Coach is designed with empathy, using evidence-based practices and prioritizing user safety. It can be customized to match individual preferences, offering different interaction styles and levels of formality. While it is not a replacement for human therapists, it serves as a valuable tool for enhancing motivation, building coping skills, and fostering a supportive recovery environment.

Figure 1: Main Functional Component Diagram

## **2.2 Major Components (Hardware/Software)**

The product is intended to be deployable to various devices, mostly smartphones and tablets, consisting of frontend user interface, backend framework, and a database.

### ***2.2.1 Hardware***

QuitIt is compatible with smartphones, computers, and tablets, and capable of running on various operating systems of Android and iOS.

### 2.2.2 Software

The software components include:

- Frontend: React Native, Redux, React Native Maps, Axios
- Backend: Node.js, Express.js, MySQL, JWT, Argon2
- Database: MySQL, Supabase
- Other Technologies: SQL Workbench, Docker, GitHub, Outscaper

### 3. Identification of Case Study

- Intended user - Individuals seeking help with recovery, as well as their friends and family who might find information on the forum useful.
- Intended Use - Used as a comprehensive platform for users to have the resources necessary for recovering from addiction. Such resources include the ability to ask questions, connect to others, enable permitted monitoring, and log information.
- Potential Future Users - Mental health professionals, wider communities, treatment center providers.

### 4. Glossary

**Geolocation Mapping:** Identification process for determining user's real-world location by device location.

**Quantifiable Metrics:** Measurable data options to track progress such as milestones achieved.

**Secure Platform:** Digital environment which uses encryption and other security elements to prioritize protection of user data.

**Support Networks:** A collective of peers, friends, professionals, family members, mentors, and others who provide emotional and practical assistance to recovery.

**Treatment Centers:** Facilities that offer care for individuals who have addiction, including therapy, rehabilitation programs, and detoxification.

## 5. References

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