Software Requirements Specification

PuffAway

Version 3.0

Prepared by

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Revisions

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1 Introduction

Due to the increase of vaping in today's society, we decided to tackle this habit and help users quit. To encourage and guarantee a higher chance of quitting we created a mobile application based on Dr. Jeffrey M. Schwartz book "The 4-Step Solution". This book outlines 4 crucial steps to rewire the brain and quit a negative habit. In this document we will outline the software requirements that lead us to build this product.

1.1 Document Purpose

The purpose of this document is to outline the requirements and the nature of the application. A software requirement specification document shows what the software is supposed to do as well as how it is supposed to perform. In other words, this document will outline the function as well as the non-functional requirements.

The product that is described in this document is called PuffAway (v3.0). It is a mobile application that will help users quit the bad habit of vaping. To do this it is built with the 4-step process outlined by Dr. Jeffrey M. Schwartz book "The 4-Step Solution". Specifically this SRS's scope is the mobile application that will act as a system to help the user quit vaping.

1.2 Product Scope

The software that is outlined in this document is a self-help based application that assists users in quitting the bad habit of vaping. It's purpose is to solely help users quit vaping. To do this it has a few objectives:

1. Help users record/journal any of the components within vaping
2. Walk users through the 4-step solution outlined by Dr.Jeffrey M. Schwartz book "The 4-Step Solution"
3. Help users to set goals and achieve them
4. Motivate and congratulate users upon their path to quitting

With these objectives in mind we provide the benefit of having a safe and secure system in which users can use to achieve their goals. With the use of technology, people will not need someone to keep track of their habits or actions, instead they can rely on the software/application that we provide.

1.3 Intended Audience and Document Overview

The intended audience for this document is the client as well as professors/teaching assistants.

The client will most likely want to read the Introduction and the Overall Description section. These sections will give a general idea of what the software's goal is and what it can do functionality wise. The Specific Requirement section is also useful to them if they want to know the details of what we are exactly creating.

The professor/teaching assistants will most likely want to read everything to give us a good and accurate grade :)

1.4 Definitions, Acronyms and Abbreviations

IOS: an operating system used for mobile devices manufactured by Apple Inc.

SDK: SDK is the acronym for "Software Development Kit". The SDK brings together a group of tools that enable the programming of mobile applications.

Vaping: Vaping is the act of inhaling and exhaling an aerosol produced by a vaping product, such as an electronic cigarette.

Vapers: a person who vapes, especially by using e-cigarettes

1.5 Document Conventions

<In general this document follows the IEEE formatting requirements. Use Arial font size 11, or 12 throughout the document for text. Use italics for comments. Document text should be single spaced and maintain the 1" margins found in this template. For Section and Subsection titles please follow the template.>

Subsections will be bolded with a heading number.

Font will be Arial font size 14, 12, or 11.

Italics will be for comments.

1.6 References and Acknowledgments

H. Canada, "*Government of Canada*," *Canada.ca*, 05-Mar-2020. [Online]. Available: https://www.canada.ca/en/health-canada/services/smoking-tobacco/vaping.html. [Accessed: 02-Apr-2020].

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"What does the acronym SDK mean? AT Internet definition," *AT Internet*. [Online]. Available: https://www.atinternet.com/en/glossary/sdk/. [Accessed: 02-Apr-2020].

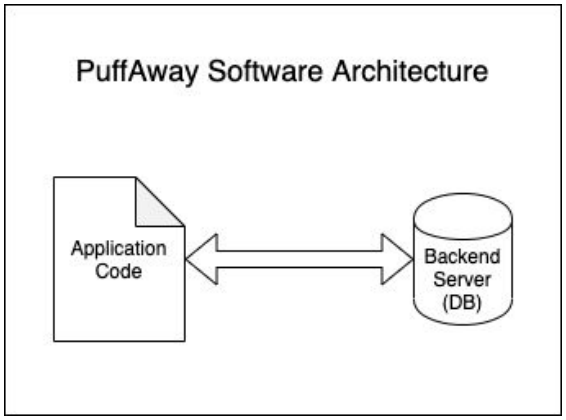
2 Overall Description

2.1 Product Perspective

This product's perspective is a new mostly self-contained product. This is a new product that does not come from a product family, and is in fact one of the only vaping habit trackers on the market.

For this product to reach and be available to as many users as possible it should be a cross-platform application that is mostly self-containing with an exception for the backend server.

With all that being said, the software itself should be made up of a few parts. There is the application code as well as a backend server where user data and information is stored. To give a better understanding of what the software should look like at an architectural level, please view the diagram below.



As you can see there isn't much within the PuffAway product that makes it not self-contained. Everything that is needed is within the application code and the server. When the application needs information about the user it will ping the backend server with its own calls while using the internet.

It should be noted that the user will not have to know about the backend server or interact with it. They solely download and use the application on their mobile phones.

2.2 Product Functionality

The requirements of the product are fairly simple. But to be explicit the following required major functionalities will be briefly explained. To give some background on the application before the functionalities are explained it should be noted that the goal of this product is to record/journal actions a user has with their vaping habits. The application will also follow a 4-step solution mentioned in early sections. It should contain the ability for a user to set a goal and receive achievements from the application when goals are achieved.

2.2.1 Create Account

For user personalization and the proper storage of data we require individual user accounts. To achieve this requirement we would need an account creation functionality

2.2.2 Sign-In

Following up with account creation, once a user creates an account they should be able to sign-in to an existing account whether it be on a different device or same device.

2.2.3 Sign-Out

Similar to signing in to help a user protect their data, a functionality that is required is the ability to Sign-out.

2.2.4 Log A Vaping Session

The first step to changing a bad habit is relabelling. This means understanding that there is an underlying reason behind your habit, such as stress, loneliness, or fatigue. When you label your thoughts with what triggered it, you can more deeply internalize that there are other things you can do to cope with your triggers. This is why logging a vaping session is a major component/functionality

2.2.5 Log Thoughts With Vaping Session

The second step is reframing, in the thoughts section, you should write down what you think a wise advocate would say about the situation. A wise advocate, as explained by Dr. Schwartz, is someone who truly cares about you, and knows what's best for you in the long run. By writing this down after every vape session, you will become more mindful of negative thoughts, making it easier to listen and follow through with other thoughts that are in line with your goals. This is why logging your thoughts whilst you vape is another major component/functionality

2.2.6 Give Recommendations/Alternatives

The 3rd step is to refocus. Refocusing means understanding that you don't have control over your thoughts and feelings, they arise in the brain, but you do have control over your actions. Instead of dwelling on your negative thoughts, you should push them out of your mind by doing an alternative activity. To help users achieve this we must give recommendations/alternatives.

2.2.7 Writing Reflections

The 4th step is to revalue. Revaluing means taking a step back and looking at the bigger picture, at how this habit has affected your life negatively. It can also help fuel users and remind them why they started the goal to quit or minimize in the first place. This is a crucial step and a requirement in terms of functionality

2.2.8 Create A Goal

In any path to quit or start a habit one must first create a goal. This is to set something to work towards and allow for some wins when the goal is reached. Creating a goal is an important requirement in this product.

2.2.9 View Visual Representation of Progress

This is to help the user keep track of their progress and hopefully get motivated by it. Another reason to have this is to help users not get bored of achieving their goal

2.2.10 Give Achievements

Achievements are an external motivation method that will help encourage the user to quit their habit of vaping.

2.2.11 Personalize Settings of Application

Since we are dealing with self-help, it is known that individuals differ from one another. This means that everyone should be able to personalize their own settings from triggers to their recommendations.

2.3 Users and Characteristics

Users that will use this product will be vapers whether they are frequent (daily) or infrequent (few times a week). They will vary from being technically savvy to being slightly technically inexperienced but be able to operate a mobile phone application. To use our application and heap the benefits, a user must use their phone on a semi-frequent to frequent basis in order to log all the actions they have with their vaping habits.

Personal characteristics of users will be related to willpower and persistence to quit vaping. If a user has high will power and is persistent to quit vaping then they will use this application until they quit. These are the users that are important to this product. With their positive experience they will leave higher rated reviews and allow us to grow our product to more people that want to quit vaping

It should be noted that currently we are not building this application for health care providers. Perhaps in the future we can add some functionality for them to view progress.

2.4 Operating Environment

Due to the portability requirement and wanting to reach as many users as possible, we with the operating environment will be both Android and IOS. Please note the operating environment only includes mobile devices as that is a requirement in this project.

2.5 Design and Implementation Constraints

The design and implementation constraints are the following:

1. Take up less than 100MB of Memory space
2. Real time application
3. Cross-platform application (available on both IOS and Android phones)
4. System shall be standalone aside from a potential backend server
5. The user should only be making an input command at a time. No parallel actions.

2.6 User Documentation

This product shall have its own user documentation that will walk through how to use this application. It will be developed while building the application and will be able to be found in the submission of this assignment.

2.7 Assumptions and Dependencies

The following is a list of assumptions and dependencies for the requirements outlined in this document:

- A user will have a single account
- A user will not be able to submit two commands at the same time.
- The max number of users using our application at a given time will be 100,000.
- The users that use your application are over the age of 12
- The users will have access to internet connection

3 Specific Requirements

3.1 External Interface Requirements

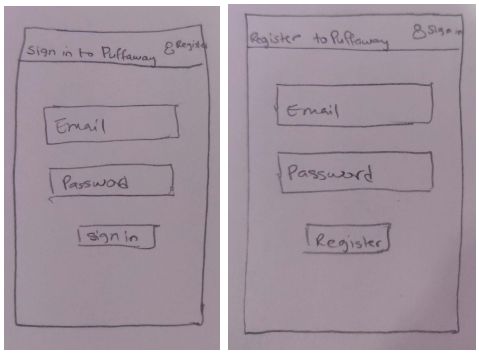
3.1.1 User Interfaces

A goal we had in mind when developing this product was to have it be very intuitive and usable. We believe in a client centered approach meaning that we think about the user first. If we put ourselves in the users perspective, and want to use this product in their daily lives to assist them in quitting vaping then that requires a well designed and easy to use application. To ensure this we used wireframes/mockups to imagine what interfaces we would have and think about whether they are intuitive and easy to use.

The following user interfaces are made specifically for the major functionality requirements laid out in section 2.2 of this SRS.

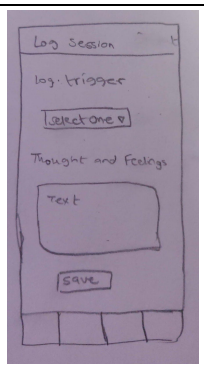
3.1.1.1 Create Account & Sign-in

As mentioned in section 2.2 these are 2 crucial functionalities that we must provide. Within these functionalities the user interface requires 3 major things, email, password, and a button to sign-in or register with. With these things in mind we created a generic layout.



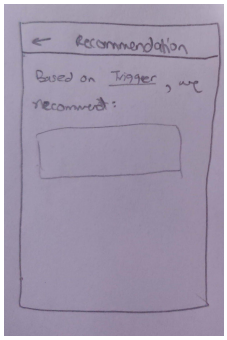
3.1.1.2 Logging A Vaping Session (With Thoughts)

To satisfy the 2 requirements of logging a vaping session and writing down thoughts that were tied with that session there are a few required things on the user interface. There needs to be a way for the user to select what triggered the session, as well a text area for the user to write down their thoughts. Aside from this there needs to be a way for the user to continue to the following page so there has to be a button as well. With these requirements in mind, the user interface should look something like the following:



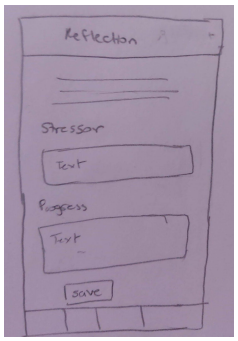
3.1.1.3 Viewing Recommendations

After logging a vaping session the user should receive a recommendation/alternative for the trigger so that they can opt out of the regular vaping habit. To satisfy this requirement it only requires text that contains the recommendation. Just to be specific and help the user identify why we are suggesting something another requirement should be some text explaining the trigger that caused this.



3.1.1.4 Writing Reflections

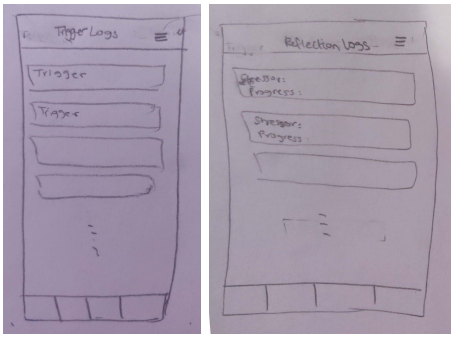
To satisfy the requirement of writing a reflection there should be 2 text boxes with titles. 1 for the user to think about how they felt today, whether they felt any stressors that may have caused them to vape. 1 should be how they feel about their progress. There also is a need for a button to save the reflection



3.1.1.5 Viewing Past Logs and Reflections

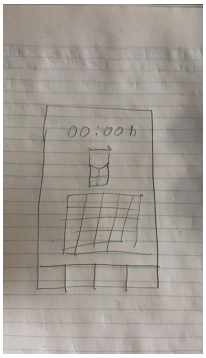
To help encourage users, past vaping sessions and reflections should be viewable so that the user can reflect on their past experiences. To satisfy this requirement there needs to be some

type of cards that show information about the trigger and their thoughts, as well as what they said in the reflection. These should be simple text fields surrounded by a box.



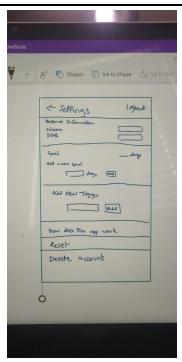
3.1.1.6 Viewing Current Progress

Another way to encourage the user is to have the current progress. We wanted to have a vape pod that shows the user a virtual pod with liquid inside that mimics the amount they should have to achieve their goal. To do this we need a vape pod with liquid inside. Other requirements we have include having a time since last hit being displayed, and a calendar to show how many times the user has vaped recently. This user interface will be a dashboard where they can view all the statistical data that has been collected.



3.1.1.7 Profile / Goal Setting

This user interface is one of the more complicated ones. We wanted to include personalization within the application and have it so the user can have their own triggers and recommendations. We also need to allow them to edit their name that is displayed in case they entered it wrong when signing up. For the goal setting functionality, we thought it would be best to save it in the profile page and have the achievements here as well. To do most of these things we need text boxes and buttons. Basically components that will allow the user to control the settings and change some of the fields such as goal.



3.1.2 Hardware Interfaces

This product only has one hardware interface requirement being a mobile phone. The type of phone is limited to Android and IOS the specific version is yet to be determined.

3.1.3 Software Interfaces

In terms of software interfaces, there are only a few. As illustrated in the Product Perspective (Section 2) there are 2 major components of this product. The application code and the Database. These 2 components will need to communicate to each other using a safe and secure channel. Most likely HTTPS. The data items that are to be sent back and forth are JSON like data elements that encapsulate the data fields. The purpose for communication within our application are the following things:

- User authentication
- User data (name, past logs & history, statistics)
- Creating new logs & reflections
- Editing user information
- Creating & editing goals

3.1.4 Communications Interfaces

The communication interface of this project includes the database and server. The application sends login/other information that is encrypted to the back end. When sending data to the backend database the channel should be standard HTTPS encryption. When the data is at rest, it also uses its own encryption to protect the database information. These requirements will ensure that our application is secure.

3.2 Functional Requirements

3.2.1 Create Account

Encrypt Password

- To create an account we must ensure that the user's password is secure. To do this we must encrypt the password using a one-way hashing.

Create New User

- After hashing the password it is safe to create a user using a user model and store it in the backend database.

3.2.2 Sign-In

Encrypt Password

- Similar to creating an account, to verify a user we use the one-way hashing algorithm to check to see if the password is the same.

Verify User

- Checking the email and the password to verify the user.

3.2.3 Sign-Out

As mentioned in section 2.2 we must allow the user to sign-out to protect their data. To do this it is a simple session handling operation that erases all local session information.

3.2.4 Log A Vaping Session

Create new vaping session log

- Based on what the user selects as the trigger, create a new vaping session model with the specific trigger and the date/time. Store it in the database.

3.2.5 Log Thoughts With Vaping Session

Append written thoughts with vaping session

- Select what the vaping session that was just created and append the thoughts to that specific data entry in the database.

3.2.6 *Give Recommendations/Alternatives*

Based on what the user chose as the trigger, search a pre-made database of recommendations that are tied to that specific trigger and return that to the frontend application for the user to view.

3.2.7 *Writing Reflections*

Allow the user to write their thoughts and send it securely to the backend creating a reflection model and saving it as a data entry.

3.2.8 *Create A Goal*

A user should only have one goal at all times. To create a goal the user should be able to enter in the days they want a pod to last and have that attribute of the user be updated accordingly. This means that the operation includes accessing the user model and changing the goal attribute.

3.2.9 *View Visual Representation of Progress*

Calculate Time Since Last Hit

- This operation should access the backend database and take the latest vaping session data entry. Calculate the time since that session and return it to the frontend.

Calculate Amount Left In Pod For Goal

- Through accessing the goal of the user, calculate the ratio amount per day of the liquid that should be left in the pod.

Extrapolate The Vaping Sessions For Graph

- By accessing all the vaping session entries in the database, calculate the number of sessions done per day.

3.2.10 *Give Achievements*

Achievements will be based on the time since last hit. If a user reaches a certain time since the last hit ie, a day, a week, they may be rewarded with an achievement that is a model added to their profile in the backend.

3.2.11 *Personalize Settings of Application*

Edit Name

- The user should be able to view their current name and edit it. Submitting an edit should access the user information in the backend and update the name attribute.

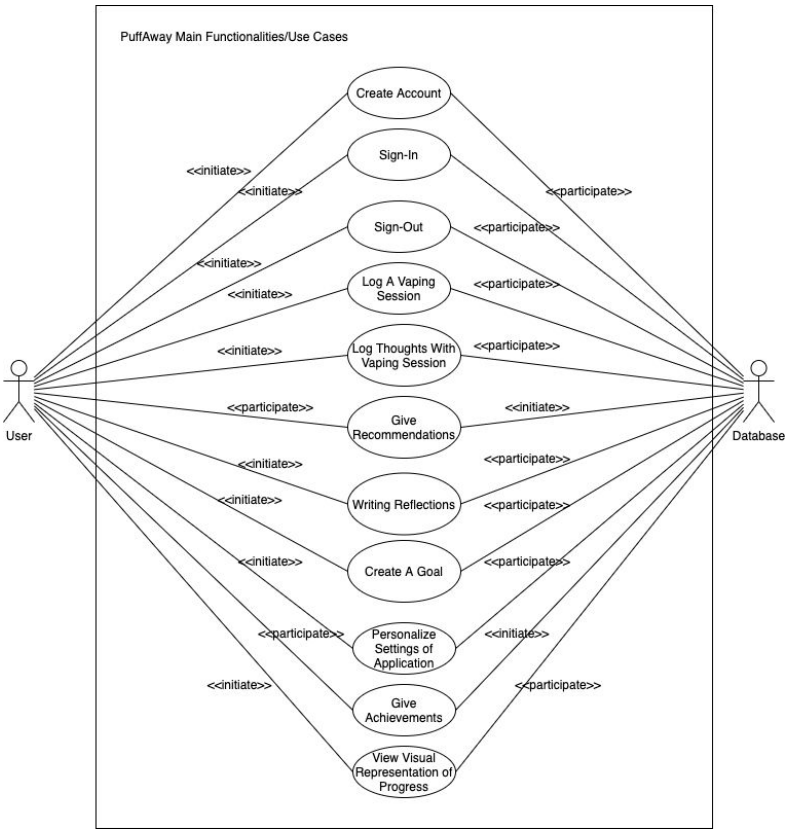
Add Trigger

- Since triggers are specific to the user, there should be a data structure tied to the user for their own specific triggers. Adding a trigger would append the new trigger to that data structure for that user.

Behaviour Requirements

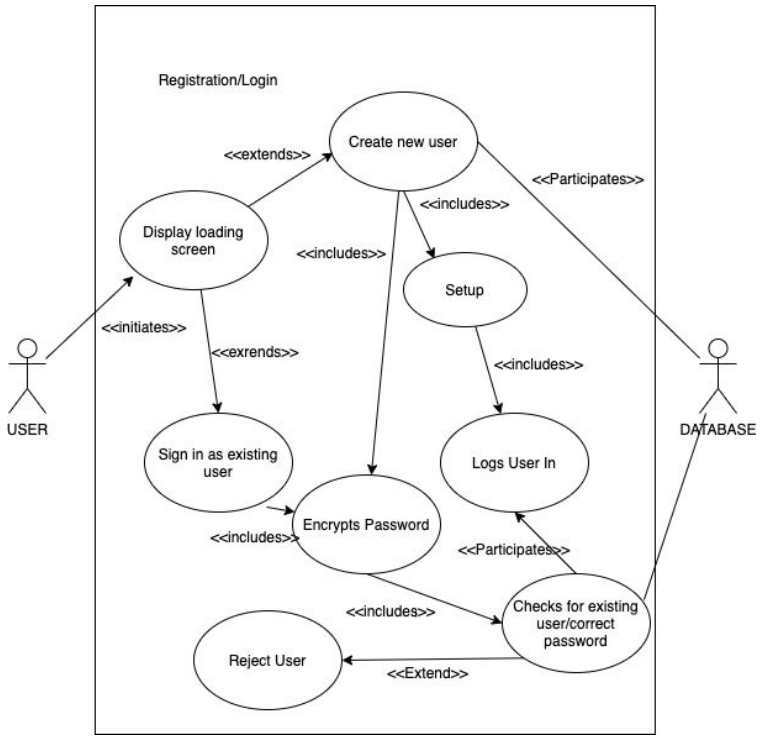
3.2.1 Use Case View

In terms of a use case diagram, it would be best to show the main major ones and then break it down into individual pages.



As you can see, this use case diagram highlights the actors and the main functionalities described in section 2.2. From here we categorize the use cases into pages in which we believe the application should look like.

3.3.1.1 Registration/Login



Use case name	Display loading screen
Description	This loading screen is to enforce reframe steps. We wish to send positive quotes as much as we can and having a loading screen that carries positive quotes and recommendations can help users.
Participating actor(s)	User
Entry condition(s)	User opens application on device
Flow of events	- Once user opens device the loading screen should be shown - After a few seconds redirects the user to the sign in page
Exit condition(s)	N/A

Use case name	Create New User
Description	User should be able to create a new user account

Participating actor(s)	User
Entry condition(s)	User selects create new user on register page
Flow of events	- User enters in email - User enters in password - User click submit
Exit condition(s)	User clicks submit

Use case name	Sign In As Existing User
Description	Users should be able to sign in to an existing account if they have one
Participating actor(s)	User
Entry condition(s)	User selects sign in on sign in page
Flow of events	- User enters in email - User enters in password - User click submit
Exit condition(s)	User clicks submit

Use case name	Encrypts Password
Description	This use case is important in ensuring the security of the user account. To prevent hackers from accessing their password and hacking into their account we need to hash/encrypt the password before sending it to the database.
Participating actor(s)	N/A
Entry condition(s)	Included through the sign-in or create new user use case
Flow of events	- encrypts password
Exit condition(s)	N/A

Use case name	Setup
Description	To help users who are new to the application, we want to add a setup page that helps them enter in their personal information that we didn't ask when they signed up. As well as give them some information about the application and how to use it.
Participating actor(s)	User
Entry condition(s)	User registers for the first time
Flow of events	- User types in personal information (name and date of birth) - User sets goal - User presses submit or skip button
Exit condition(s)	User presses the submit or skip button

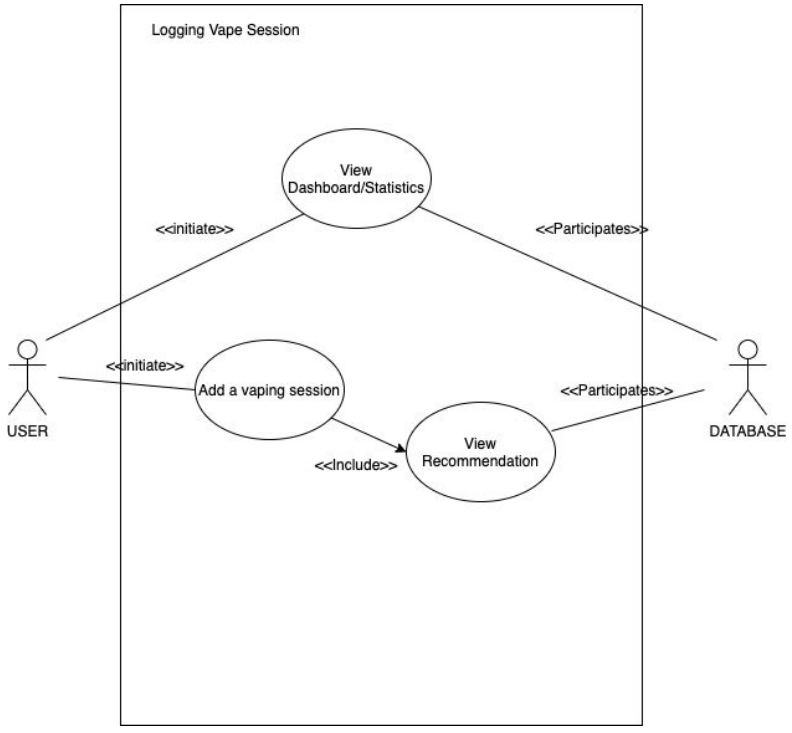
Use case name	Logs User In
Description	Attaches a session token to the user and allows them to access main functionalities of the application
Participating actor(s)	User and Database
Entry condition(s)	User successfully registers or logs in
Flow of events	- Creates a new user session and gives it to the user local storage
Exit condition(s)	Giving the user a session token

Use case name	Checks For Existing User and Password
Description	Using the encrypted password and username, this use case should check and verify the user using the database
Participating actor(s)	Database
Entry condition(s)	Included through setup and check for existing user use case

Flow of events	- Check for the email - Verify the hashed password with the email - Return true or false
Exit condition(s)	Returning true or false

Use case name	Rejects User
Description	If the verification of the user is false, then that means the user should be rejected access
Participating actor(s)	User and Database
Entry condition(s)	Extended from the check for user and password use case
Flow of events	- Display error message
Exit condition(s)	Displaying error message

3.3.1.2 Logging Vape Session



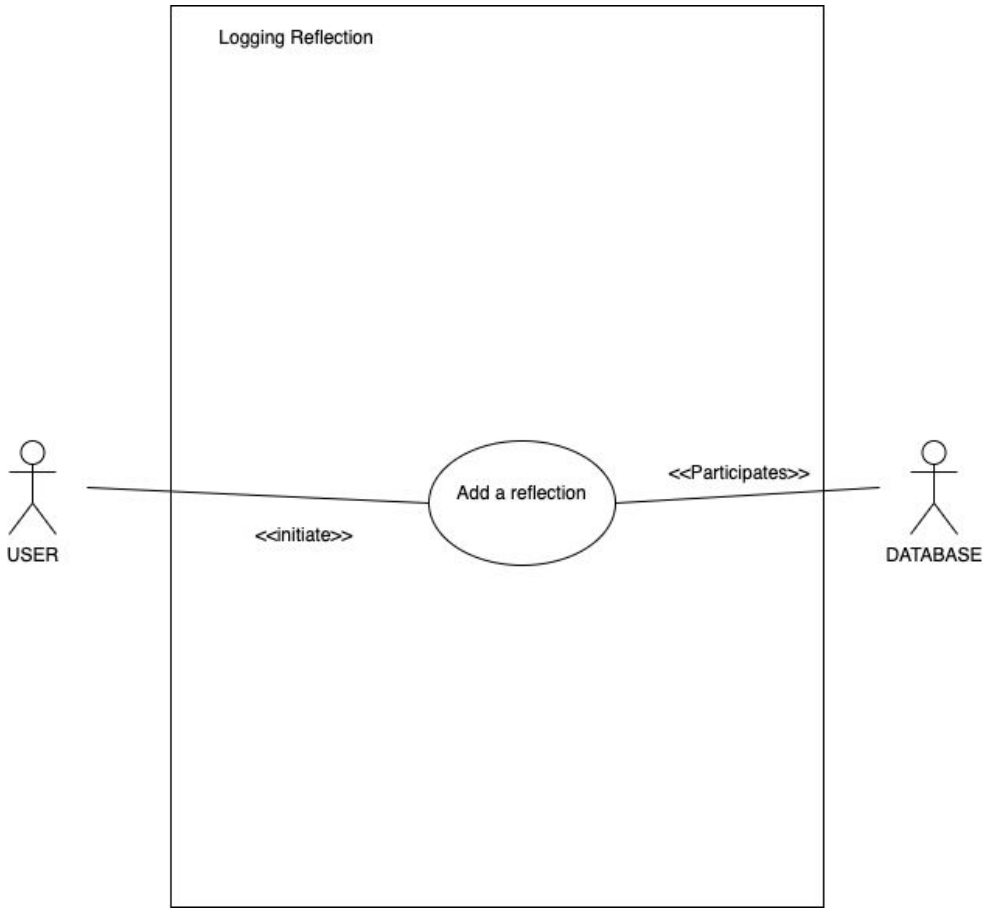
Use case name	View Dashboard/Statistics
Description	After logging in the user should be greeted with the dashboard/statistics
Participating actor(s)	User and Database
Entry condition(s)	User logs in
Flow of events	- Calculates the time since last hit, virtual vape pod amount, and number of vape hits per day - Displays calculations
Exit condition(s)	N/A

Use case name	Add A Vaping Session
Description	Adding a vaping session is part of the 4 step process. This use case includes 2 of those steps, relabeling and refocusing. By allowing the user to enter in the trigger that caused them to vape and their thoughts on this vaping session.
Participating actor(s)	User and Database
Entry condition(s)	User presses on add button for adding a vaping session
Flow of events	- User selects the trigger that triggered them to vape - User enters in their thoughts on why they vaped - User submits entry
Exit condition(s)	User submitting entry

Use case name	View Recommendation
Description	Part of the 4 step process, to refocus is the step for users to take recommendations and apply them. To help users with this use case will display a recommendation based on the trigger they select
Participating actor(s)	User and Database

Entry condition(s)	User selects next after submitting a vaping session
Flow of events	- User views the recommendation retrieved from the backend - User presses finish button
Exit condition(s)	User pressing finish button

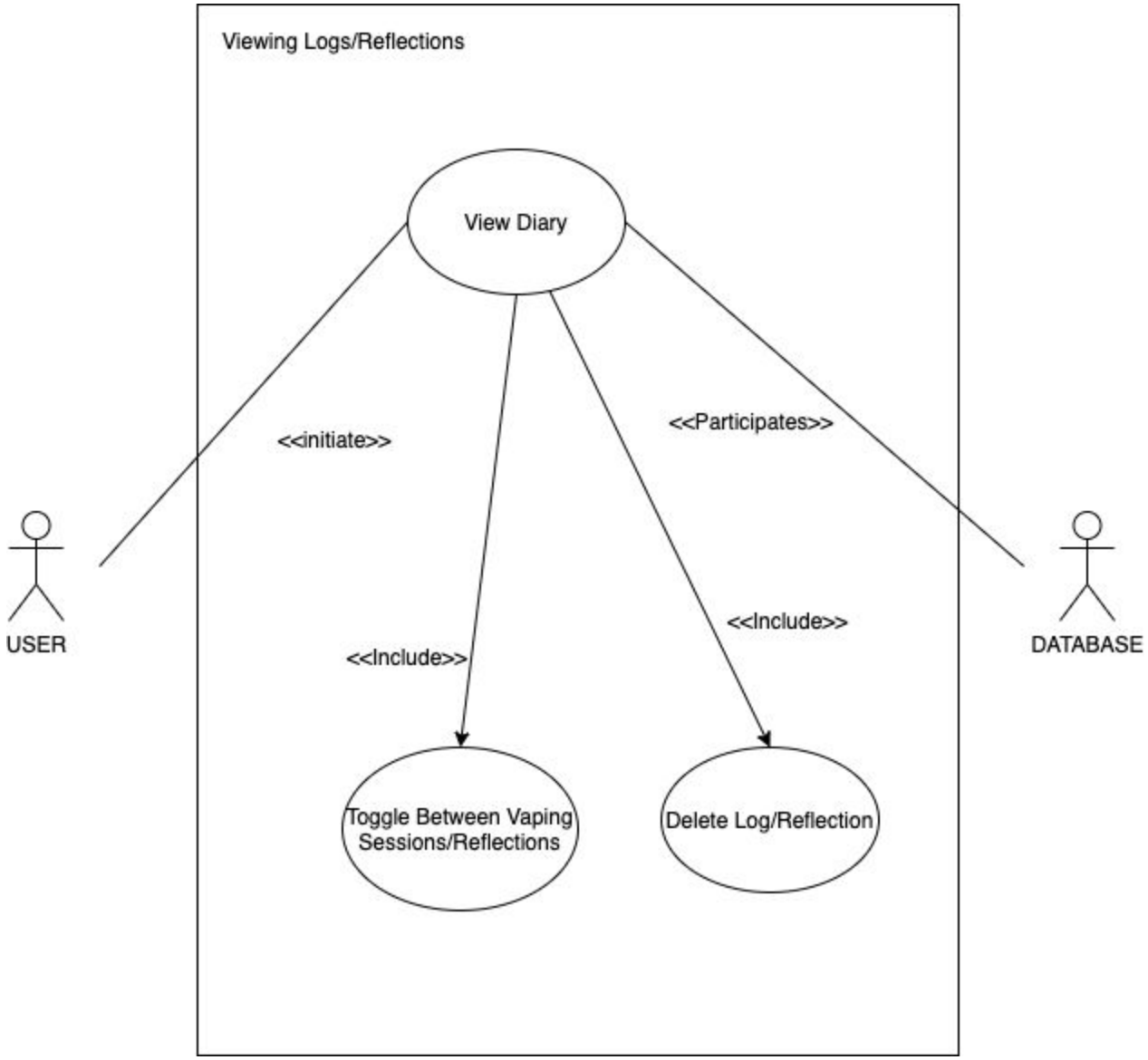
3.3.1.3 Logging Reflection



Use case name	Add A Reflection
Description	Part of the 4 step process, to revalue is the step for users to self reflect about their actions and to remind themselves why they started. To help users with this revaluing step, this use case offers a place to write down their stressors in their daily day and talk about their progress.

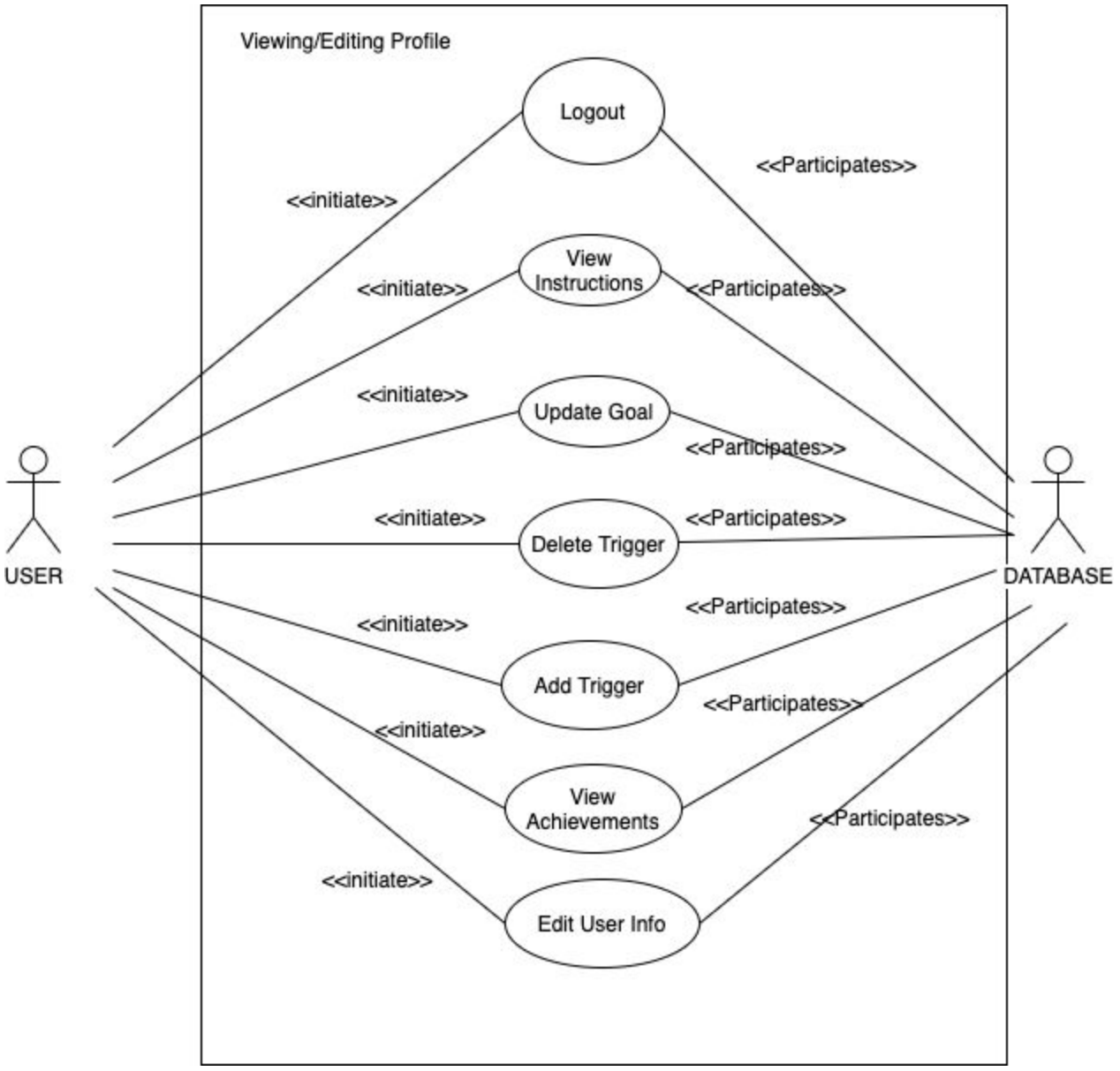
Participating actor(s)	User and Database
Entry condition(s)	User clicks on the add reflection button
Flow of events	- User types in their daily stressors - User types in thoughts about their progress - User pressing the submit button
Exit condition(s)	User pressing submit button

3.3.1.4 Viewing Logs and Reflections



Use case name	View Diary
Description	To allow for more self reflection this use case shows the user their past actions/history
Participating actor(s)	User and Database
Entry condition(s)	User selects Diary button
Flow of events	- User views the past vaping session information or reflections - User presses toggle between vaping sessions and reflections - User presses Home button
Exit condition(s)	User presses Home button

3.3.1.5 Viewing/Editing Profile



Use case name	Logout
Description	Logging out is a required functionality to help protect the user data on a device. This use case covers that functionality
Participating actor(s)	User
Entry condition(s)	User presses the Logout button
Flow of events	- Application deletes any session data

Exit condition(s)	N/A

Use case name	View Instructions
Description	Some users may have skipped the setup page as well as simply forgetting the instructions of the application. To help these users this use case provides instructions that are viewable whenever the user wants.
Participating actor(s)	User and Database
Entry condition(s)	User presses the View Instructions button
Flow of events	- User views the instructions of the application - User presses Back button
Exit condition(s)	User pressing Back button

Use case name	Update Goal
Description	For users who want to edit their goal (perhaps after achieving it) the user can change their goal
Participating actor(s)	User and Database
Entry condition(s)	User selects the goal text box
Flow of events	- User changes the goal text box - User presses Update Goal button
Exit condition(s)	User pressing Update Goal button

Use case name	Add Trigger
Description	To allow for personalization in the application, some users want their own specific triggers. This use case allows for this functionality
Participating actor(s)	User and Database
Entry condition(s)	User presses Add Trigger button

Flow of events	- Trigger text box appears - User enters in a new trigger - User presses Add Trigger button
Exit condition(s)	User pressing Add Trigger button

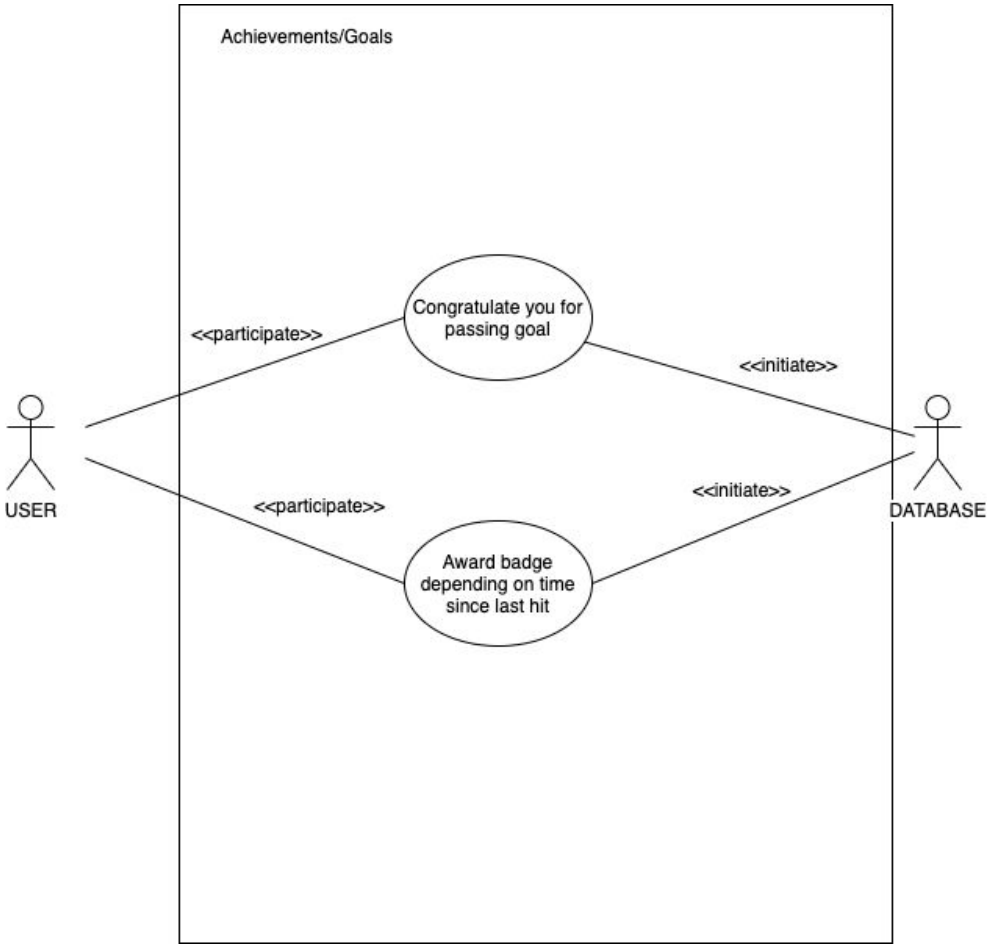
Use case name	Delete Trigger
Description	For users who have added their own specific triggers, some may want to delete them. This use case allows for this functionality
Participating actor(s)	User and Database
Entry condition(s)	User selects the Delete button beside custom triggers
Flow of events	- User presses Delete button - The specific trigger disappears
Exit condition(s)	N/A

Use case name	View Achievements
Description	Part of the Achievements requirement a required use case is to show the achievements of the user
Participating actor(s)	User and Database
Entry condition(s)	User presses the View Achievements button
Flow of events	- User views achievements - User presses Back button
Exit condition(s)	User pressing Back button

Use case name	Edit User Info
Description	For users who want to edit their personal user information this use case should be included
Participating actor(s)	User and Database

Entry condition(s)	User selects the user information text box (name or date of birth)
Flow of events	- User changes the user information text box - User presses Update Information button
Exit condition(s)	User pressing Update Information button

3.3.1.6 Achievements/Goal Setting



Use case name	Congratulate You For Passing Goal
Description	This use case is to satisfy the requirement of gamification and achievements. To help externally motivate users this use case is tailored to congratulating the user through notifications
Participating actor(s)	Database and User

Entry condition(s)	User has surpassed goal
Flow of events	- User receives notification about passing goal
Exit condition(s)	N/A

Use case name	Award Badge Depending On Time Since Last Hit
Description	This use case is to satisfy the requirement of gamification and achievements. To help externally motivate users this use case is tailored to awarding badges based on users time since last hit
Participating actor(s)	Database and User
Entry condition(s)	User submits a vaping session
Flow of events	- Backend calculates the time since last hit - Awards the user with a badge if there is an achievement hit
Exit condition(s)	N/A

4 Other Non-functional Requirements

4.1 Performance Requirements

The following are the performance requirements for this product.

1. Any transaction will not take longer than 10 seconds
2. The application may not freeze/crash more than 1 time per month
3. The application will be in real-time meaning there will not be a need to refresh the application
4. Ability to handle 1000 request at the same time
5. Storage will not be at capacity with 100,000 users

4.2 Safety and Security Requirements

The level of security is expected to be at industry standard. Since the product hosts personal information from name to password and other session information such as the users thoughts, everything must be fully secure.

In regards to the user login information it is a requirement to securely encrypt the password before storing it in the backend database. The proper encryption should be a one-way hashing algorithm. This is to stop potential hackers from gaining access to user accounts.

When data is sent to and from the backend, the channel should be https standard to ensure that users cannot access/alter the data.

The resting data such as journal storage should also be encrypted to prevent any user/potential hacker to access, view and alter any data.

4.3 Software Quality Attributes

When building this application the team had a few requirements in mind. To briefly name them, we wished it was portable, usable, and robust.

4.3.1 Portability

For the largest reach of clients, as well as the target market, the team decided that portability is a must. What it means to us to be portable is to have it be available in mobile phones specifically in both IOS and Android operating systems. We insist that our application be cross-platform and able to run on both IOS and Android.

4.3.2 Usability

To ensure that the users have a positive experience with the application it must be easily usable with a small learning curve. If this requirement is not satisfied, it would make it difficult for users to use our application and even harder to quit their bad habit of vaping. To achieve this, we will intricately plan the pages and keep a consistent layout/theme between them. Since some users

will be confused on the core concept behind our application we will have a setup page that teaches them the basic concepts. As well as have a user manual that shows them in great detail

4.3.3 Robustness

In terms of Robustness, we do not want the application to freeze or have any glitches no matter what the user does. Whether it be different and weird intricate sequences we wish that the product is robust and works as it should. To ensure this we will intricately test the components using Unit Test, Widget Tests, Integration Tests, and Validation Tests.

5 Other Requirements

5.1 Gamification:

The application should have a gamification aspect to ensure that the user doesn't get bored. It can also act as an external motivator to help the user quit their goal. With some gamification aspect, the user will be more motivated and happy using our application.

Appendix A – Data Dictionary

N/A

Appendix B - Group Log

Wed, Mar 24, 1:00 Online

Present: Everyone
Regrets:

Notes:

- UI needs polishing still
- Start working on SRS and SDS as a team
- The keyboard pops up automatically when navigating within the app

Action Items:

- Yusra: complete UI overhaul
- Everyone: work on SRS and SDS
- Spencer: Add focus nodes in pages to make the app flow better - improve UX

Wed, Mar 17, 1:00 Online

Present: Everyone
Regrets:

Notes:

- Looking back on sprint 2
    - UI is kind of bland, default flutter UI
    - The app has no instructions
        - It's too hard to understand without context
    - No account setup when registering a new account
- What needs to be done for sprint 3
    - Add more to the settings page
        - Achievements
        - Date of birth
    - UI overhaul
        - Rounded boxes
        - Centring widgets
        - Larger, more readable text
    - Machine learning integration into the recommendations
    - Setup page for first-time users
    - Add goal graph to dashboard

Action Items:

- Abdulaziz: Flesh out settings page into profile settings
- Backend engineers: Help with getters/setters for the setting page again
- Yusra: Setup tests for the end of the sprint
- Yusra: Touch up the entire app's UI
- Hashim: Add in ML integration
- Spencer: Work on the dashboard and assist Hashim with navigation
- Phil: Start on documentation, such as use case diagrams
- Phil: Approve app's design with vapers

Wed, Mar 11, 1:00 ACEB 4400

Present: Everyone
Regrets:

Notes:

- Completed dashboard
- Need to complete settings
- Created tests for the end of the sprint

Action Items:

- Frontend engineers: Finish settings
- Backend engineers: Help with getters/setters for the setting page
- Yusra: Start testing

Wed, Mar 4, 1:00 ACEB 4400

Present: Everyone
Regrets:

Notes:

- Looking back on sprint 1
    - Implemented the 4 steps successfully
    - App needs "typical app features"
        - sign in and register with email and password
        - Customize profile with name and DOB
    - Can't see past reflections
- New features for sprint 2
    - Settings page
    - Dashboard
    - Diary for reflections
    - Sign in with email and password
- Phil completed wireframing the app

Action Items:

- Frontend engineers: Focus on new pages
- Backend engineers: Add getters/setters for new pages

Wed, Feb 26, 1:00 ACEB 4400

Present: Everyone
Regrets:

Notes:

- Started sprint today
- Assigned stories in the sprint to people
    - Phil wireframing/planning
    - Hashim, Yusra, and Spencer for frontend
    - Abdulaziz for backend
        - Decided on using firebase
- Checked over the wireframe and Jira with the TA
- Need to add versions to each sprint
- Need to create tests for testing
    - Manual testing for sprint 1
    - Automated testing for later sprints

Action Items:

- Phil: Add TAs and Prof to Jira
- Yusra: Add TAs and Prof to GitHub

Wed, Feb 5, 12:30 ACEB 4400

Present: Everyone
Regrets:

Meeting Minutes:

- Requirements:
    - ~~login screen~~
    - User research
        - How many pods do you use per week/how long they last?
        - How much often do you smoke?
        - List triggers (compare our trigger with theirs, check which apply to you)
    - An in-depth description of the app with instructions
        - List 4 steps with explanations
    - Log the vaping habit

        - When you vape in the day with trigger
        - When your pod finishes
    - List your triggers
    - View logs in a calendar (colour day based on number of vape sessions)
    - Statistics page on pods usage (graphical/textual, convert to a number of cigarettes)
    - Set goals
    - View progress (progress bar in the shape of a vape pod that empties as you progress)
    - Suggestions to mitigate triggers
        - Preset or custom

- Discussed the overview of the project, ie pages/views and the tasks associated with them
- Triggers for vaping:
    - Time of day
    - Wake-up routine
    - Boredom
    - Vape smell
    - Stress
    - Seeing someone vaping
    - Fatigue
    - Partying
    - Sex

Tasks:

- Start building out Jira

Next Meeting: Monday, Feb 6 12:30

<u>Monday, Jan 27, 12:30 ACEB 2450</u>

Present: Everyone

Regrets:

Meeting Minutes:

- Discussed features and tools inside Jira (backlogs, stories, subtasks, assigning members, etc)
- Not much about Flutter, need to do more research on it
- Four steps are: trigger, thoughts, feeling, and action
- The habit we are tackling in this project will be vaping. Attempting to stop the habit

Tasks:

- Think about the software as a whole, what will we need in terms of pages/views

- Be ready to discuss the tasks associated with the pages/views

Next Meeting: Monday, Feb 5 12:30

Monday, Jan 20, 11:30 ACEB 2450

Present: Everyone

Regrets:

Meeting Minutes:
- Completed team contract collectively

Tasks:
- Look into Jira
- Find Flutter resources (tutorials, blogs, etc)
- Read the 4 steps

Next Meeting: Monday, Jan 27 12:30

TODOS for the second sprint not in the back log

- Home page like spencer wanted so we can have:
    - Vape pod pic
    - Gesture control

The four step solution

This app follows the 4-step solution for the book “You are not your brain” for changing your bad habit of vaping. The four steps outlines are:

1. Relabel - Take the pattern out of the autopilot and bring it to the conscious mind using mindfulness.
    - Logging Triggers provides the functionality to log if you felt the need to vape, have vaped, and if you finished a vape pod. This makes you more mindful of your bad habit as there are usually underlying causes. The progress screen shows the time since the last hit which makes you more aware of how much you are vaping and the intervals.
2. Reframe - Change one's perspective about the pattern and see it as it really is
    - Loading screen displays a different message or question to help reframe vaping as it really is
3. Refocus - We need to understand that the only part of the pattern that we have control over is our actions

- Recommendations page has custom recommendations based on the trigger chosen to help you refocus to a different and more meaningful task. This will slowly help you find a better alternative to vaping for different triggers.

4. Revalue - step back and see the bigger picture and see how this pattern affected your life negatively
    - Logging reflections provide you a safe space to talk about your vaping habits whenever you want, preferably at least once a every week to keep reminding you of your goals. A complementary feature is the statistics page which shows you the bigger picture that you can analyze.