

Introduction

App Vision

The app utilise a combination of tracking and motivation features to assist users in their journey to quit smoking. features include:

- **Tracking:** Users could track their smoking habits, including the number of cigarettes smoked per day, triggers that lead to smoking, and progress towards their quit date.
- **Recommendations:** The app could provide personalised recommendations for activities or strategies to help distract from cravings, such as exercise, deep breathing, or mindfulness techniques.
- **Motivation:** The app could also provide motivational messages, progress tracking, and rewards for milestones reached, such as reaching a certain number of smoke-free days or reducing the number of cigarettes smoked per day.
- **Reminders & alerts:** The app could remind the user of their quit date and send alerts when they are near a trigger or feeling a craving.

Overall, the app would aim to provide a personalised and supportive experience for users as they work to overcome their nicotine addiction and withdrawal symptoms.

Target Audience

The target audience for an app that helps with fighting nicotine addiction and withdrawals would likely be individuals who are currently smoking or have recently quit smoking and are looking for support and resources to help them stay smoke-free. This would include:

- **Adult smokers:** The app could be marketed to adult smokers of all ages who are looking to quit smoking.
- **Recent quitters:** The app could also be marketed to individuals who have recently quit smoking and are looking for additional support as they navigate the withdrawal process.
- **People who want to quit smoking but haven't yet:** The app could be marketed to individuals who are thinking about quitting smoking but haven't yet taken the step to do so. It could be used as a tool to help them prepare for their quit date.
- **Family and friends of smokers:** The app could also be marketed to family and friends of smokers who are looking for resources to help support their loved one's quit attempt.

Scope

1. High level features

high-level features and user functional requirements for smoke include:

- **Tracking:** Users should be able to track their smoking habits, including the number of cigarettes smoked per day, triggers that lead to smoking, and progress towards their quit date.
- **Recommendations:** The app should provide personalised recommendations for activities or strategies to help distract from cravings, such as exercise, deep breathing, or mindfulness techniques.
- **Motivation:** The app should provide motivational messages, progress tracking, and rewards for milestones reached, such as reaching a certain number of smoke-free days or reducing the number of cigarettes smoked per day.
- **Reminders & alerts:** The app should remind the user of their quit date and send alerts when they are near a trigger or feeling a craving.
- **Personalisation:** The app should allow the user to personalise their experience by setting quit date, tracking their progress, setting reminders and alerts, and selecting the type of recommendations they want to receive
- **Security:** The app should have a secure login system to protect the user's data and progress tracking.
- **Accessibility:** The app should be accessible to all users, including those with disabilities.
- **User-friendly interface:** The app should have a clean, user-friendly interface that is easy to navigate and understand.

- **Compatibility:** The app should be compatible with the latest version of iOS and should be regularly updated to ensure optimal performance and security.
- **Analytics:** The app should have the ability to track the user's progress and provide analytics on their smoking habits and milestones.
- **Support:** The app should have a help centre or support feature that allows users to get assistance with any issues or questions they may haveTypes of users

2. Types of Users

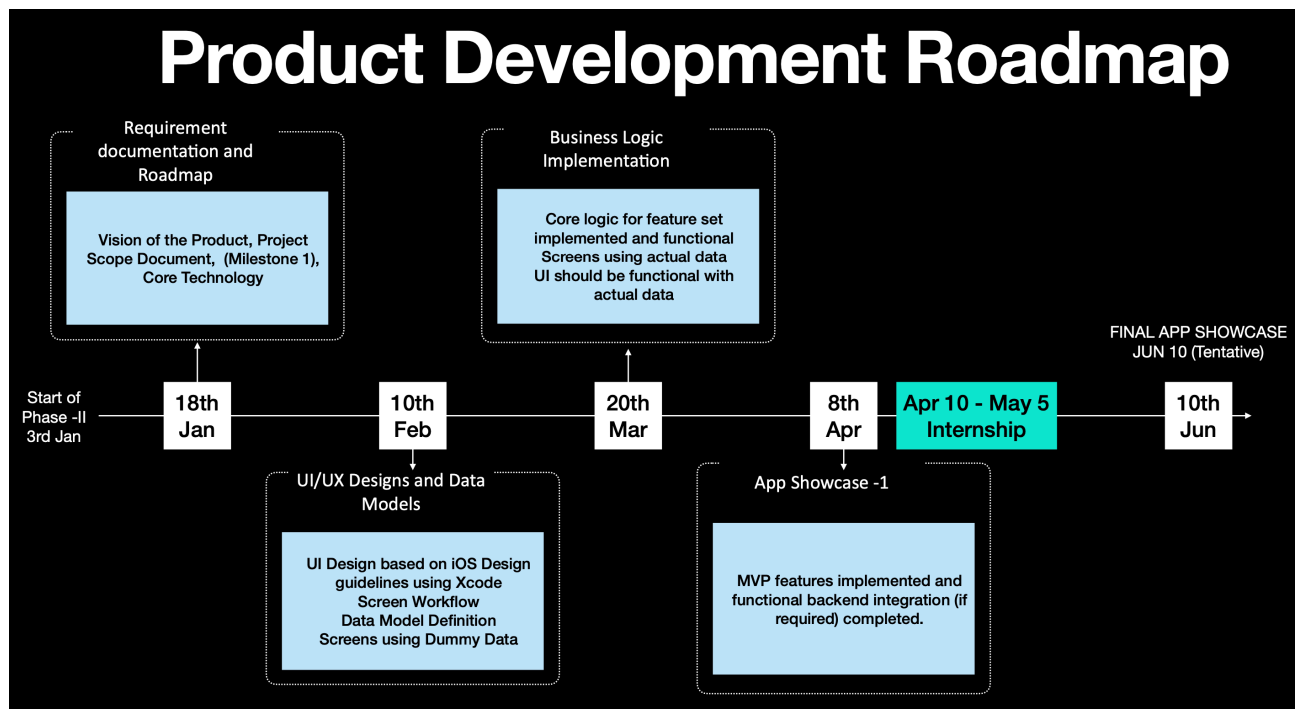
In the context of the app that helps there are a few different types of users that could be considered:

- **Customers:** Customers would be the individuals who download and use the app to help them quit smoking. They would be the primary users of the app and would be the ones interacting with the various features and functionality.
- **Vendors:** Vendors could include any external organisations or companies that the app may be partnering with to provide additional resources or support for users. For example, the app may partner with a healthcare provider or a nicotine replacement therapy company to offer additional resources and support to users.
- **Advertisers:** Advertisers could include any companies that pay to have their products or services advertised within the app.
- **Developers:** Developers would be the individuals or teams responsible for creating and maintaining the app. They would be responsible for implementing the various features and functionality, as well as troubleshooting and resolving any issues that may arise.

3. Technical Specifications

- **Supported devices:** The app should be compatible with the latest iPhone and iPad models and should be optimised for different screen sizes and resolutions.
- **Technology stack:** The app could be developed using a technology stack such as Swift or Objective-C for the iOS app and Firebase or similar backend services.
- **Operating system version:** The app should be compatible with the latest version of iOS and should be regularly updated to ensure compatibility with new versions as they are released.
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- **Dependencies:** The app depends on various libraries, frameworks, and APIs such as UserNotifications, HealthKit, CoreData, Spotify . These dependencies should be carefully managed and updated as necessary to ensure that the app continues to function correctly.
- **Third-party services:** The app may use third-party services like Firebase for user authentication, database, analytics, and push notifications.

4. Time Line Roadmap



Non Functional Requirements

1. API Integrations

Integrate with various APIs in order to provide additional functionality and resources for users. Some of the API integrations that could be considered include:

- **Spotify API:** The app could integrate with the Spotify API to allow users to access and listen to music or playlists that may help distract them from cravings or provide a sense of calm.
- **HealthKit API:** The app could integrate with the HealthKit API to allow users to track their smoking habits, such as the number of cigarettes smoked per day, and to share that data with other apps, such as a fitness tracker.
- **Firebase API:** The app could integrate with Firebase API for user authentication, database, analytics, and push notifications.
- **UserNotifications API:** is an iOS framework that allows apps to schedule and manage the display of local and remote notifications. It can be used the UserNotifications API in a number of ways, such as:
 - **Reminders:** The app could use the UserNotifications API to schedule reminders for the user's quit date and to remind the user of their progress and milestones.
 - **Alerts:** The app could use the UserNotifications API to send alerts to the user when they are near a trigger or feeling a craving.
 - **Personalised notifications:** The app could use the UserNotifications API to send personalised notifications to the user based on their progress and habits.
 - **Progress tracking notifications:** The app could use the UserNotifications API to send notifications to the user to remind them of their progress and the number of smoke-free days they've achieved.

- **In-app notifications:** The app could use the UserNotifications API to send in-app notifications to remind the user of their progress, encourage them to track their smoking habits, and provide motivational messages.

The app should be designed such that it can handle the notifications even in the background and when the app is closed.

2. Compliance with regulations

For release on the App Store & to ensure that it is legal and ethical, some regulations that the app should comply with include:

- **Health and Medical Information:** If the app provides information on health or medical topics, it should comply with regulations such as HIPAA (Health Insurance Portability and Accountability Act) and FDA (Food and Drug Administration) guidelines for the use of medical information.
- **Privacy and Data Protection:** The app should comply with regulations such as the GDPR (General Data Protection Regulation) and the CCPA (California Consumer Privacy Act) for the protection of user's data and personal information.
- **Advertising and Marketing:** it should comply with regulations such as the FTC (Federal Trade Commission) guidelines for advertising and marketing, including ensuring that any advertising claims are truthful and not misleading.
- **Substance Abuse:** If the app is related to substance abuse, it should comply with regulations such as the Substance Abuse and Mental Health Services Administration (SAMHSA) guidelines for substance abuse treatment and prevention.

3. Accessibility Compliance

Some accessibility compliances that the app should follow include:

- **Accessible User Interface:** The app's user interface should be designed and built to be accessible to users with visual, auditory, and motor impairments. This includes providing alternative text for images, using high-contrast colours, and providing easy-to-use keyboard navigation.
- **Dynamic Type:** The app should support Dynamic Type, which allows users to adjust the font size in the app to make it easier to read.
- **Contrast:** The app should have good colour contrast to ensure the text and other elements are easy to read for users with visual impairments.

Assumptions

1. Assumptions about user

- The user is a current or recent smoker who is looking to quit smoking.
- The user has access to a iPhone or a similar iOS device and is comfortable using apps on their device.
- The user is interested in tracking their smoking habits and progress towards quitting.
- The user is open to trying different strategies and activities to help them quit smoking, such as exercise, deep breathing, or mindfulness techniques.
- The user is motivated to quit smoking and is willing to put in the effort to do so.
- The user is willing to share their progress and connect with other users in a community setting.
- The user is able to communicate in the language the app is developed in.
- The user has a stable internet connection in order to use all the features of the app.

2. Technical assumptions

technical assumptions or dependencies that are made are :

- The app is developed using a technology stack that is compatible with the latest version of iOS, such as Swift.
- The app has a robust and secure backend system, such as Firebase, that can handle user authentication, data storage, and analytics.

- The app is compatible with various APIs, such as Spotify, HealthKit, and Google Maps, in order to provide additional functionality and resources for users.
- The app is tested on a variety of iOS devices to ensure compatibility and optimal performance.
- The app is optimised for different screen sizes and resolutions.
- The app is designed to handle notifications even when the app is closed or in the background.
- The app uses a third-party library or framework for handling some of its features, such as UserNotifications, HealthKit, CoreData, etc.
- The app is designed to work with the latest version of iOS and the developer team should be able to update the app as new version of iOS are released.

3. Business assumptions

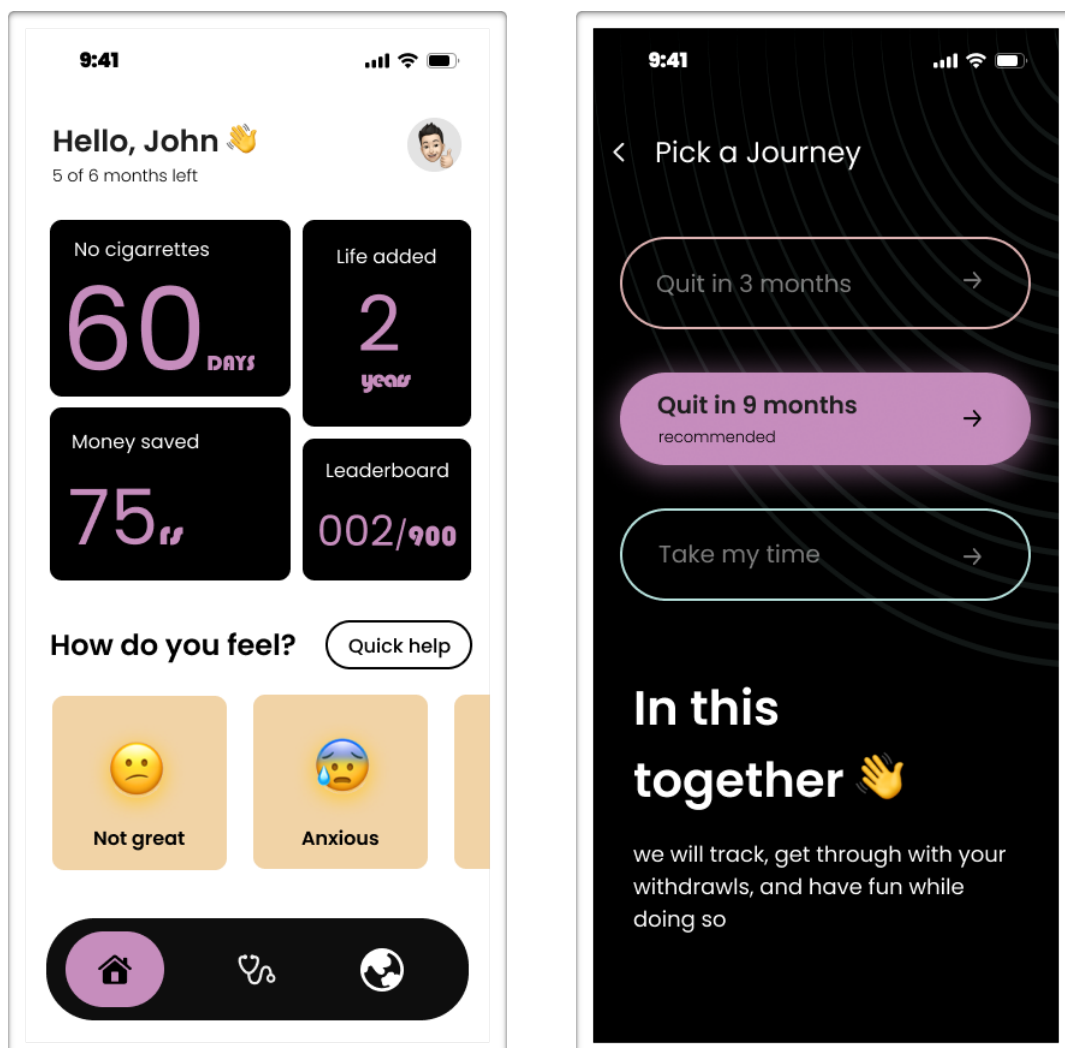
business assumptions that are made are:

- The app will generate revenue through advertising, in-app purchases, subscriptions, or partnerships with other companies or organisations.
- The app will have a large user base and will be successful in the app store.
- The app will be able to generate a positive return on investment for the development team or company behind the app.
- The app will be able to attract and retain users through its features and functionality, and by providing a high level of support and resources to users.
- The app will be able to generate positive word-of-mouth and attract new users through positive reviews and user testimonials.
- The app will be able to generate positive feedback from healthcare providers and other organisations involved in smoking cessation.

Detailed Functional Requirements With Wireframe/Prototype/Mockups

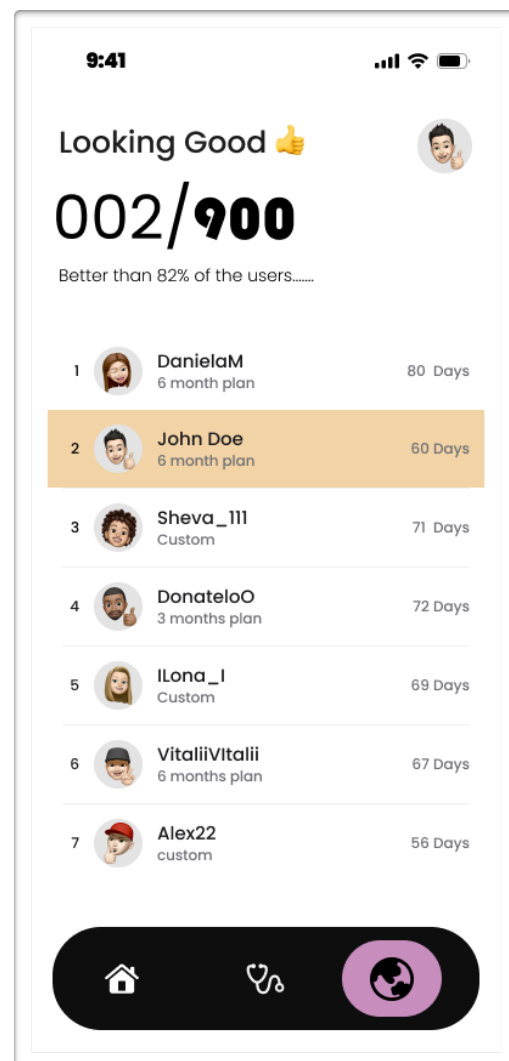
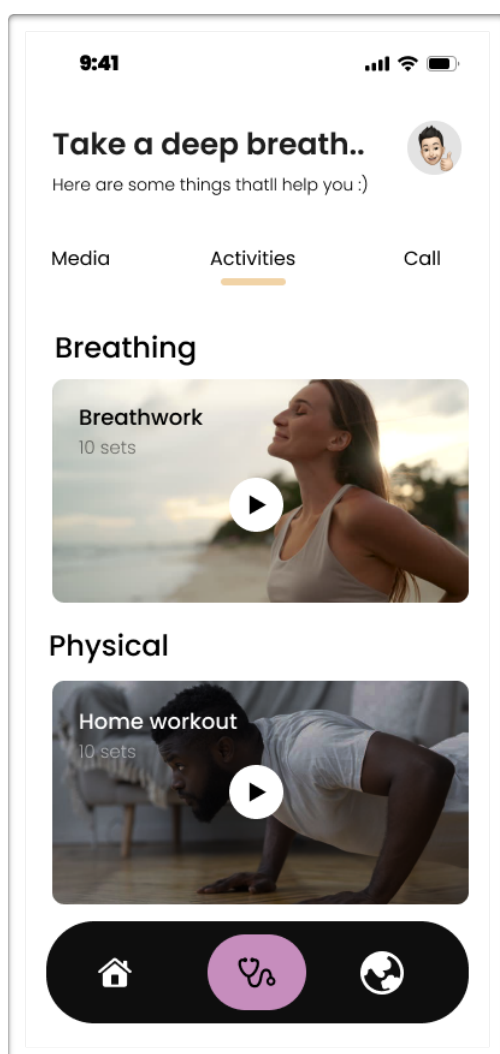
1. Basic: Foundational Features

- **User registration and login:** Users should be able to create an account and sign in to the app to track their progress and access personalised resources.
- **Tracking:** Users should be able to track their smoking habits, including the number of cigarettes smoked per day, triggers that lead to smoking, and progress towards their quit date.



2. Dissatisfiers: Must-Have Features

- **Recommendations:** The app should provide personalised recommendations for activities or strategies to help distract from cravings, such as exercise, deep breathing, or mindfulness techniques.
- **Motivation:** The app should provide progress tracking, and rewards for milestones reached, such as reaching a certain number of smoke-free days or reducing the number of cigarettes smoked per day.
- **Reminders & alerts:** The app should remind the user of their quit date and send alerts when they are near a trigger or feeling a craving.



3. Satisfiers : Nice-to-have features

- **Personalisation:** The app should allow the user to personalise their experience by setting quit date, tracking their progress, setting reminders and alerts, and selecting the type of recommendations they want to receive
- **Community:** The app should include a social aspect, allowing users to connect with others who are also trying

4. Delighters : Innovative features

- **Rewards-based system:** The app could offer a rewards-based system that incentivises users to reach their quit date and continue to stay smoke-free. These rewards could be tangible, such as discounts on products, or intangible, such as virtual badges.
- **Gamification:** The app could incorporate game-like elements to make the quitting process more engaging and fun for users, such as levels, points, and a leaderboard that users can compete on.
- **Integration with wearable devices:** The app could integrate with wearable devices such as smartwatches or fitness trackers to track the user's physical activity, sleep, and heart rate. This data could be used to provide personalised advice and recommendations to users.
- **Self-help guided meditation and mindfulness sessions:** The app could have a self-help guided meditation and mindfulness sessions feature that could help user to deal with the withdrawal symptoms, stress and anxiety.

Appendix

1. Policy Documents:

- **User Data Policy:** This policy would outline how user data is collected, stored, and used by the app. It would also specify how user data can be deleted or exported upon request.
- **Community Guidelines:** This policy would outline the acceptable behaviour for users within the app's community feature, such as no harassment, hate speech, or sharing of personal information.
- **Advertising Policy:** This policy would specify how advertising is displayed within the app and what measures are taken to protect users from inappropriate or misleading advertising.
- **Content Moderation Policy:** This policy would outline how the app handles user-generated content, such as reviews and testimonials, and specify how any inappropriate or offensive content is moderated.
- **Privacy Policy:** This policy would outline how the app collects, uses, and shares user data, including any third-party services that the app uses. It would also specify how user data is protected and what measures are taken to comply with regulations such as the GDPR and CCPA.
- **Refund Policy:** This policy would specify the conditions under which users can request a refund for in-app purchases or subscriptions.
- **Terms of Service:** This policy would outline the terms and conditions under which the app can be used, including any restrictions or limitations on usage.

2. High level design Documents:

here is a general overview of what the control flow and data flow could look like:

Control Flow:

1. User opens the app and is presented with the login or registration screen.
2. After logging in, the user is taken to the home screen where they can access various features such as tracking, recommendations, and community.
3. The user can navigate through the app using the navigation bar or tab bar and access different sections of the app.
4. The user can update their profile and personalise their experience by setting quit date, tracking their progress, setting reminders and alerts, and selecting the type of recommendations they want to receive.
5. The user can track their smoking habits, including the number of cigarettes smoked per day, triggers that lead to smoking, and progress towards their quit date.
6. The user can access personalised recommendations for activities or strategies to help distract from cravings, such as exercise, deep breathing, or mindfulness techniques.
7. The user can access motivational messages, progress tracking, and rewards for milestones reached, such as reaching a certain number of smoke-free days or reducing the number of cigarettes smoked per day.
8. The user can log out of the app when they are finished using it.

Data Flow:

1. User data is collected when the user registers or logs in to the app.
2. User data is stored in a backend system such as Firebase, and is used to provide personalised recommendations and resources to the user.
3. User data is shared with third-party services such as Google Maps, Spotify and HealthKit, in order to provide additional functionality and resources for users.
4. User data is analysed to track the user's progress and habits, and to provide personalised recommendations and resources.
5. User data is also used to generate anonymous analytics and usage statistics to help improve the app and optimise the user experience.
6. User data is protected and secured in accordance with relevant regulations and policies, such as HIPAA and GDPR.
7. User data is deleted or exported upon request, in accordance with the app's data policies.
8. User data is shared with the community feature, but only if the user consents to share their progress and receives feedback from other users.

Screen Workflow:

1. **Splash Screen:** The app will open with a splash screen that displays the app's logo and name.
2. **Smoking Habits Screen:** This screen would allow the user to input more detailed information about their smoking habits, such as the number of cigarettes smoked per day, the times of day they typically smoke, and any specific triggers that lead to smoking. This information would be used to provide more personalised recommendations and resources to the user.
3. **Login/Registration:** The user will be prompted to log in or register for an account if they haven't already. They will be able to create an account using their email or mobile number, or by using social media accounts.
4. **Home Screen:** After logging in, the user will be taken to the home screen where they can access various features such as tracking, recommendations, and community.
5. **Profile Screen:** The user can access their profile by clicking on the profile icon on the home screen. They can update their profile, personalise their experience and change the setting of the app.
6. **Tracking Screen:** The user can track their smoking habits, including the number of cigarettes smoked per day, triggers that lead to smoking, and progress towards their quit date by clicking on the tracking feature on the home screen.
7. **Recommendations Screen:** The user can access personalised recommendations for activities or strategies to help distract from cravings, such as exercise, deep breathing, or mindfulness techniques by clicking on the recommendations feature on the home screen.
8. **Leaderboard Screen:** The user can compete in a virtual ranking system based on his tracking activities and can hence be motivated

9. **Notifications Screen:** The user can view their notifications and alerts, such as reminders for their quit date or personalised messages based on their progress by clicking on the notifications icon on the home screen.
 10. **Settings Screen:** The user can access the app's settings by clicking on the settings icon on the home screen. They can change their account settings, such as their password, email or mobile number, or change the app's settings, such as notifications and reminders.
 11. **Help/Support Screen:** The user can access help and support resources by clicking on the help/support icon on the home screen. They can view FAQs, contact customer support, or access other resources to help them quit smoking.
 12. **Logout Screen:** The user can log out of the app by clicking on the logout icon on the home screen.
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