



The Tobacco Cessation App Case Study



Introduction

The consumption of tobacco kills more than 8 million people every year, globally. According to the World Health Organization, the Southeast Asia Region (SEAR) has the highest number of tobacco consumers with nearly 20% smokers and 80% take tobacco without smoking. Hence, when the WHO approached us to build a mobile app that would help the users quit tobacco consumption, we lapped up the opportunity with great enthusiasm and a sense of purpose.

For years the WHO has been running relentless campaigns to inform people of the best ways to quit tobacco and the tobacco cessation app is a technological step the global organization is taking in this direction.

The app was meant to be a prototype app that would be later adapted to local socio-economic scenarios when it is to be used in respective countries. The app intends to provide users with a platform to track their overall tobacco usage, view their health improvement as they reduce their tobacco consumption and also get a sense of the money they save by not spending it on this addictive and harmful habit. The app may be used as an educational platform to tell the users how tobacco affects your health, what are its harmful effects, the dangers of smoking and also to provide tips to quit smoking and quit tobacco consumption. The mobile app would be available both on Android and iOS.



Features

The primary focus of the tobacco cessation app is to help its users quit tobacco consumption by tracking their progress and see the benefits they are accruing right in front of their eyes. To enable this, the client required the following features in the tobacco quitting app

- ▣ A seamless interface that would enable the users to quickly download and install the mobile app and register themselves and immediately understand how to quit tobacco as quickly as possible.
- ▣ Easy navigation so that the users can access all the crucial parts of the mobile app easily and without a steep learning curve.
- ▣ Interactive sections and pages so that the data and information is engaging and ever-evolving.
- ▣ Users should be able to register using their email or social media accounts.
- ▣ Users should be able to enter the specifications about their current tobacco consumption.
- ▣ Graphical representation of their progress.
- ▣ Their health data should be easily visible.
- ▣ They should be able to see how much savings they are making by reducing their tobacco consumption.
- ▣ The users should be able to enter details about how they are quitting tobacco consumption on an ongoing basis.



Challenges

Of course, the biggest challenge for such an app would be to encourage a maximum number of people – habitual tobacco users – to download the tobacco cessation mobile app, and start using it as soon as possible, and as easily as possible. On development levels, we had the following challenges:

- ▣ A very easy and engaging interface.
- ▣ Dynamic visualization of the data being maintained by tobacco users.



- ▣ The ability to enable the WHO to adapt the mobile app according to different regions and countries it is to be used.
- ▣ Notifications based on user preference as well as health-related updates from the WHO server.
- ▣ Detailed input/survey from the users registering for the first time such as for how long they have been consuming tobacco, what is the frequency, what is the form of consumption, how much they are spending, what is their age, in how many days or months they would like to quit, what is the reason that they would like to quit, and so on.
- ▣ The users should be able to enter family members but the family members should be able to maintain their own profiles and their own tobacco quitting habits and health data.
- ▣ Deployment of the mobile app both for Android and iOS with near-to-zero differences in both the interfaces.



How we took up the challenge

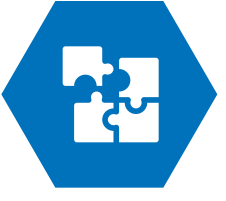
This was a prestigious project from the World Health Organization and we didn't want to leave any stone unturned towards our effort. Since the mobile app was to be built for a highly sensitive group that may already be addicted and in many instances, even be reluctant to use the tobacco cessation mobile app, our primary aim was to understand the core users as clearly as possible. Our development team spent lots of time with prospective end users on what they expected of such a mobile app and what problems they faced with the existing options in various play stores.

Our mobile app development team also extensively interacted with the WHO consultants to clearly develop an understanding of what they intended to achieve through the mobile app.

In the beginning we prepared a wireframe and presented it to the team from the WHO. There were a few iterations but they were quickly implemented. Then we prepared the prototype.

For creating the prototype we used Adobe XD. To enable users to register themselves and manage their progress, for the database we used MySQL. We picked the best technology at our disposal to build the UI as well as the back-end. The frontend of the app was built with React native platform, whereas we used Laravel to build the backend.

The prototype was delivered to the client and they have already begun to implement many of its features at the ground level.



Results

The Tobacco cessation mobile app was delivered to the WHO Organization with all the features planned for this phase. The client is quite satisfied. The App has been put to use in multiple regions. We have got good feedback from the users and people who are used to consuming tobacco and want to get rid of the unhealthy habit are using the reliable mobile app to set their goals of ridding themselves from the addiction. Many users have left positive feedback and are looking forward to using the mobile app until they have stopped their habit. They are also recommending the app to the people they think it can help.