

Prototype sections

Paper prototype snippet

Our paper prototype consisted of Four primary features. The first feature was an account creation and information gathering module. It consisted of 4 screens with questions regarding your current smoking habits, followed by your goals and motivations, followed by demographic information. This feature was important because each user needs to have an account, and also because this data allowed us to calculate statistics on the users smoking behavior and provide them and their friends with feedback on their smoking usage and their success with quitting. This kind of data was the basis of our buddy system approach, an approach we adopted through careful research on existing smoking intervention apps. The second feature was the dashboard, which was essentially a home screen, for the user to gauge their performance on fields such as number of days smoke free, cigarettes not smoked, money saved, and life saved. The dashboard also contained a “friends” feed which would update the user on the performance of the friends. We found through our interviews that being able to watch your friends struggle and succeed was an encouraging factor in ones own ability to maintain smoking sobriety. The third and 4th modules were in support of the dashboard. The friends module consisted of a list of the users current cessation buddies which you could click on and see their daily/overall statistics. And the statistics module Showed provided the user with graphical and text based data on their own performance over time. We chose this feature because several of our interviewees made mention of being able to track their own data over time to see their improvement and how this could act as a reminder of all the progress they’ve made. We also found that many successful applications leveraged the use of data and statistics to illustrate the performance of the user.

Final prototype snippet.

Our Final working prototype consisted of the the same 4 primary features as our working prototype with some minor and major alterations in each case. Our account login and creation module consist of 4 information gathering screens where we still collect data on habits, goals and demographics. This feature was essential in gathering information about each user so we could provide an individual experience. Our Dashboard and friends modules Remain the same, though the goal for our statistics page is to allow the user to compare their performance with that of their friends. We had planned on implementing back to back infographics of the users and their friends with graphs, charts, and textual data; however this feature requires more time and data to implement effectively. We did not update much from our paper prototype because we felt that our features were well researched and the user data gathered from our interviews led us to believe that, these would be successful features. Without a longer evaluation past we felt it to be more reasonable to listen to the feedback our our initial user base and application research. Our application was built on the android platform in android studio. Android applications are written in Java with xml for front end designs. Our client code features a sqllite database which stores all of the data on the user and the user’s friends. This local database interacts with the front end to store and produce the relevant data for calculating statistics and so on. The client code used http protocol to communicate over the web to a remote server which acted as the central hub for all our users to connect with one another. This web server was built in python with the bottle.py framework to handle http requests, interact with the central SQL database and issue responses to the various users. We tested and developed primarily on

Nexus 7 tablets and so our designs are optimized for those devices. The design pattern we tried to follow was a model view controller pattern which modularizes the views, the business logic of the application, and the data.

research links:

<http://hdl.handle.net/2142/73661> //primary link

“Why do mobile phone-based smoking cessation interventions struggle and how can we make them more effective?” by Ahmed, Shameem; Sharmin, Moushumi

This paper above is a compilation of roughly 60 relevant research articles.

links from this paper:

<http://www.who.int/mediacentre/factsheets/fs339/en/>

<http://www.cdc.gov/chronicdisease/resources/publications/aag/osh.htm>

<http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2013-e.pdf>

<https://smokefree.gov/apps> //good online resource.