

WeCaN

Smoking Cessation Application

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Persuasive Systems Design (spring 2021)

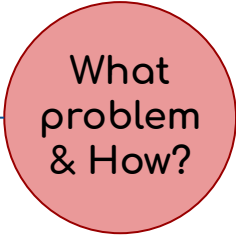
App Idea: WeCaN!



Audience & Goal

Everyone who smokes or has a smoker friend/family, we are here to help you to have a healthier and better life, and save money.

Stop smoking,
With playing some **Games!** And recognize how easy we can stop smoking! Track your performance and get rewards!



What problem & How?



Why us?

Play play and play!
No more advices, Have fun and then cigarettes will be gone!

Value Sensitive Analysis: Stakeholder Analysis

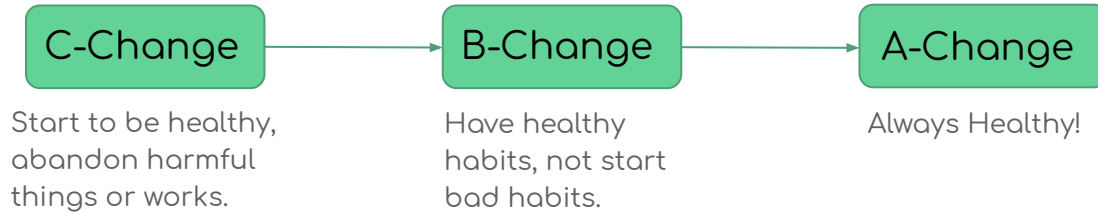
Type	Source	Title	Description	Goal
Direct stakeholders	Source of motivation	End users	Smokers who want to abandon smoking.	<ul style="list-style-type: none">• To have a healthier and better life.• To save money.
Indirect stakeholders		Indirect affected groups	Spouse, Children, Family, Friends, Colleagues, and Society.	To have a better and healthier life with the person who like, live, or work with.
	Sources of power	Directors, Decision makers, and IT experts	<ul style="list-style-type: none">• Project managers set global, permanent, and temporary goals and approaches.• Developers design and improve the app, utilize data for performance measurement.	To help smokers and the society and provide a healthier life.
	Sources of knowledge	Experts and Care providers	Smoke cessation specialists and experts direct and set technical aspects and support users.	To help smokers and the society and provide a healthier life.

Value Sensitive Analysis: Value Analysis

Value	Explanation
Fairness	The app does not ask to stop smoking immediately.
Amusement	The app provide gamified approaches for users to enjoy their journey in smoking cessation.
Encouragement	The app motivates users by how much money they have saved, performance analytics, and number of successful users per day (the users who obtained their daily goal).
Grateful	The app provide rewards for users if they achieve a milestone.
Support	The app connect users to experts or advisors if needed.
Unobtrusiveness	The app does not disturb users by several notifications.
Voluntariness	The app help users to define their own goal and does not ask users to buy any service or feature.
Friendly	The app provide friendly content such as game and successful users' stories, not very scientific articles or instructional contents.

App Domain and Needed Changes

- App Domain: Smoking Cessation (Health Intervention)
- Broadly needed changes in health intervention:



- In WeCaN needed:
 - C-Change to start to abandon smoking.
 - B-Change to quit smoking. (Based on Theory of planned behavior, Self-efficacy, and Goal setting)

O/C Design Matrix: A/B/C Change & F/A/R Outcome

O/C DESIGN MATRIX	C-Change	B-Change	A-Change
F-Outcome	Provide a tip per day to comply the user to have a healthier life.		
A-Outcome	Comply user to not smoke by playing games instead of smoking. Change the background of app.	Show the performance and how much money has been saved.	
R-Outcome	Motivate the user by digital badges and rewards (first days rewards).	Motivate the user by successful users' stories, rewards, showing performance, etc.	"You are the hero!" Recommend to help others.

How to Measure the Behavior or Change?

- We store the user's initial day of abandoning to:
 - To motivate the user after a while.
 - To show the total number of successful users to them.
 - **To measure the change/behavior.**
1. Total number of users who did not smoke after: 1 day, 1 week, 1 month, 6 month, 1 year, and in total.
 2. Users only need to inform the application if they have broken their record. Then, the data would be updated. And, we will always know how many users after how many days/weeks/etc. do not smoke more.
- ▣ Short surveys are available if needed via in-app notification.

PSD Context Analysis: The Intent

Persuader	<p>The university students/researchers, developers, and experts in smoking cessation are the primary persuaders.</p> <p>The application is autogenous to help users to change their behavior by themselves, without the requirement for active participation/session by the supporters/advisors.</p>
Intended Outcome/Change	<ul style="list-style-type: none">• The primary purpose is to alter users' health behavior to abandon smoking to increase society's health (A-Outcome, B-Change).• The secondary aim is to reinforce users' new behavior, which is "Not Smoking Again" to have a healthier life (R-Outcome, B-Change).
Designer bias	<p>The designers who are the researchers at University of Oulu aims to claim their motives which is increasing the health of society, particularly with simple gamified features. Some users may have less familiarity/access with smartphones.</p>

PSD Context Analysis: The Event

Use Context	<p>The problem domain is smoking cessation (health intervention). The app shows how many users stopped smoking or currently passing their cessation duration.</p> <p>Also, it provides rewards, short stories, short and long goals, and some gamified practices such as breaking a cigarette, to help potential users to stop smoking.</p>
User Context	<p>Users monitor their performance, health statistics such as a simple background which is a lung's cartoon image that would change based on the time of cessation, and how much money the user has saved. Users have access to experts' contact information, if needed.</p>
Technology Context	<p>The app is currently aimed to be developed for mobile phone platforms, Android and iOS. It would be developed by the Unity engine that provides the situation to create compatible versions with Web (WebGL) or windows effortlessly.</p>

PSD Context Analysis: The Strategy

Message	The purpose is to motivate and increase confidence to stop smoking. The app provides many features to help users in this path, based on the Theory of planned behavior, Self-efficacy, and Goal setting.
Route	An indirect route (e.g., the lung background) is employed to persuade users to both stop smoking and not smoking again.
Ethical considerations	<ul style="list-style-type: none">• The app would follow the BCSS framework.• It would not force, manipulate, or coerce users.• Users voluntarily employ the app.• It would not annoy users with many notifications and would not get or publish users' personal information.• Stakeholder analysis has been done on the app.

PSD Software Feature Analysis: Primary Task Support

Feature	Implementation
Tailoring	The app indicates daily short stories that can be close to the user's story.
Personalization	The app provides health statistics, amount of saved money, short and long achieved goals, and other features that are relevant to the specific user.
Self-monitoring	Users can see the personal performance, goals, rewards, etc. to monitor themselves.
Simulation	A dynamic background which is a cartoon lung image will change based on the users smoking situation.

PSD Software Feature Analysis: Dialogue Support

Feature	Implementation
Praise	After achieving short and long goals, the app shows a motivational message to the users.
Rewards	The app provides many digital badges for users as rewards. Also, users can define their reward.
Similarity	The app employs a very simple language to communicate with users with common words, like a casual mobile games.
Liking	The app has nice visual features and design to attract users, such as the dynamic background.
Social Role	The app can provide experts' contact information, admins or developers' emails and website for the users, if needed.

PSD Software Feature Analysis: System Credibility Support

Feature	Implementation
Trustworthiness	The app provides unbiased and relevant information in the context of daily short tips for the users.
Real-world Feel	The app indicates detailed developers' information and contacts in "Contact Us" section.

PSD Software Feature Analysis: Social Support

Feature	Implementation
Social Facilitation	The app shows the number of currently active users and how many of them achieved successfully daily, weekly, monthly goals or completely abandoned smoking to motivate them.
Recognition	The app provides short stories of people who abandoned smoking successfully for other users.

The Design of WeCaN (Final version powered by Figma)

First Impression (Login, Forgot Password, and Sign up):

The prototype is available [here](#).



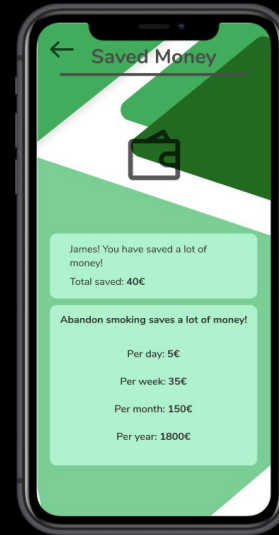
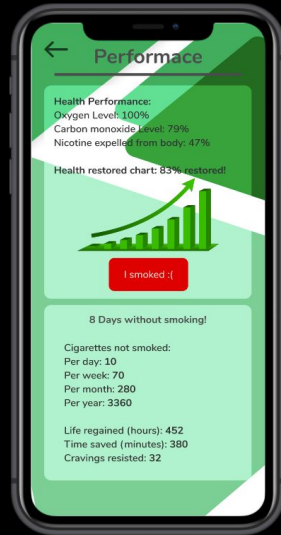
The Design of WeCaN (Final version powered by Figma)

- Main Screen (Simulation, Liking)
- Contact info (Social Role, Real-world Feel, Liking)
- User profile and edit (Social Facilitation, Liking)



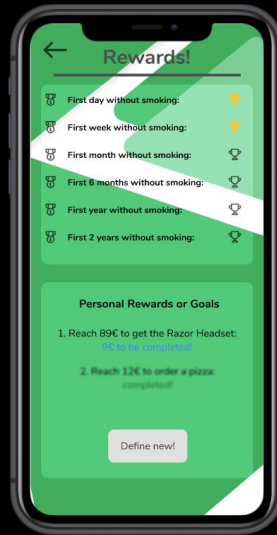
The Design of WeCaN (Final version powered by Figma)

- User performance (Personalization, Self-monitoring, Liking)
- Saved money (Personalization, Self-monitoring, Liking)



The Design of WeCaN (Final version powered by Figma)

- Rewards and Goals (Personalization, Self-monitoring, Rewards, Liking)
- Daily Tips and Stories (Tailoring, Self-monitoring, Trustworthiness, Recognition, Liking)



The Design of WeCaN (Final version powered by Figma)

Craving resist or Help the lung (Praise, Similarity, Liking, Simulation)



A Takeaway Message...

- After obtaining a fairly good level in theoretical concepts of Persuasive System Design, we dived deep to a completely practical project to learn comprehensively crucial aspects of PSD.
- I always would like to help the world to be a better place to live. Now, here we are! I have an application that can help many people. Also, during this course, I learned how to employ my knowledge and skills to help other. What is better than this?
- Harri and Nataliya, Thanks for your all efforts and help!