A Prototype of Non-smoking Aid Application Based On Features and User Interfaces to Support People with Low Vision

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INTRODUCTION

- The smartphone penetration rate for disabilities is 65.4%
- This indicates that 41% of people with visual impairment are accompanied by difficulties surveying the difficulty of using smartphones.
- 44.2% answers "the environment for access to necessary information is not ready." Next, 30.2% were "most services focused on non-disabled people"
- Smoking rate of disabled people is 18.7%, non-disabled people is 22.6%
- They need an application for people with low vision

INITIAL PROTOTYPE ₹ 100% ■ •••• Carrier 🕏 1:20 PM •••• Carrier 🖘 Changes in body start 2019. 08. 12 65% Non-smoking 20 minutes Your blood pressure and pulse return to normal. **NO SMOKING DAY 33** Deal with withdrawal symptoms Non-smoking 2 Hours Keep smoking for 12 hours Nicotine in the blood disappears.

Figure 1. Screenshots of Application Prototype

CONCLUSION

- We propose a prototype based on features and UIs to support people with low vision for quitting smoking.
- On the main screen, daily goals were placed at the center to increase motivation.

 Also, instead of scrolling, We made it possible to sweep the records of the day.
- Second sections that will allow you to sweep through health information for quitting time.
- We aim to develop UIs based on symptoms by installing various features of the low vision application for smoking cessation.
- We plan to make the application considering the symptoms of blind spot, night blindness, corneal opacity, etc.in the field of vision other than the two symptoms.

Smoking assertion application

- 1) Setting goals and strengthening smoker's daily goal
 - It can strengthen smoker motivation to quit smoking
- 2) Information about health change
- 3) Adjusting the placement of characters and feature
 - Central vision is phenomenon in which appears black at center.
 - Peripheral is a phenomenon where edges are not clearly visible.

RESEARCH QUESTION

- RQ1: What are the features for basic smoking cessation?
- RQ2: What are the UI considerations for low vision?

Application User Interfaces

- 1) Many characters do not appear on one screen
 - -People with low vision have a narrow vision than non-disabled people
- 2) Low vision users are difficult to read using scrolling
 - -Using sweep than a scrolling
- 3) Adjusting the color in the blindness setting



