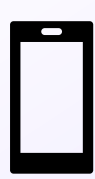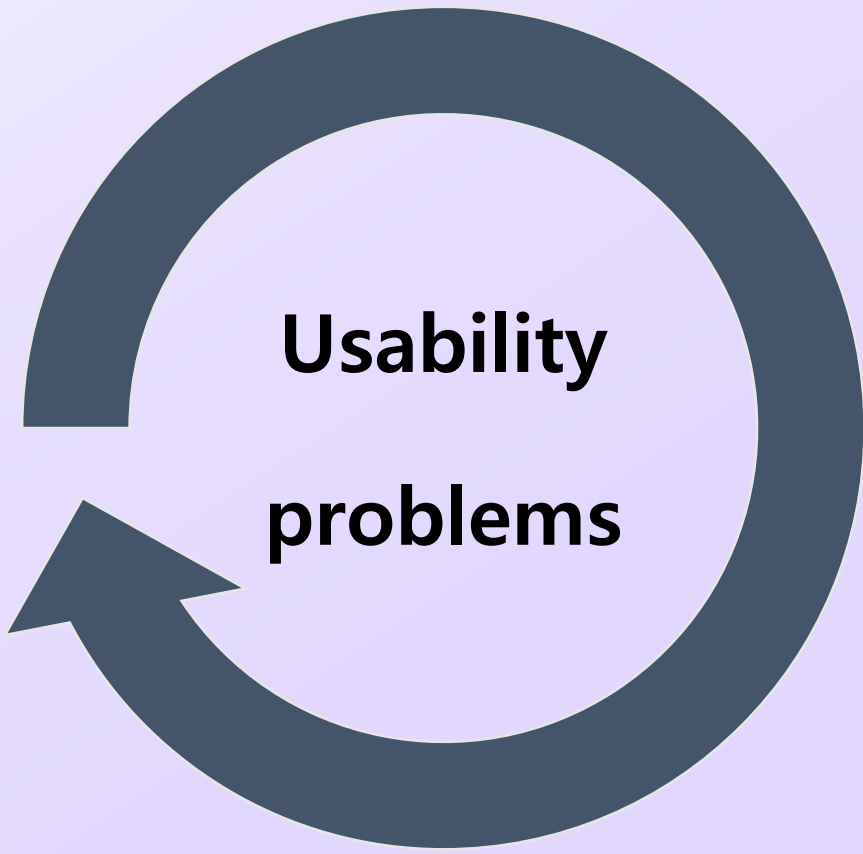# Developing Smart Campus Application

Four Five 뽀빠이 / Team 05

21300543 Seungyoo Lee,21700475 Huichan Yu, 21800720 Hyojung Chun, 21800795 Juwon Hong
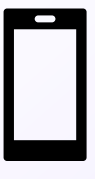
Topic & Background

: Redesigning the "Smart Campus(스마트캠퍼스)" app structure
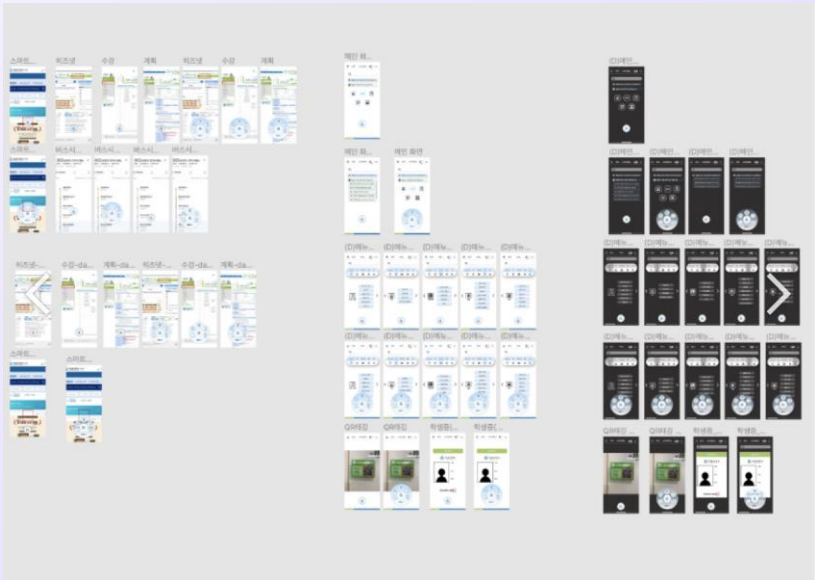
Usability problems

- Discoverability
- Simplicity
- Flexibility
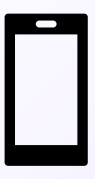- Consistency

Purpose

1. Correction that causes cognitive errors (human error)
2. Adding a new function that considers the usability problems

<Figma_Overview>

Conclusion

Contribution

- Collecting 20 Handong students' opinions, finding problems of previous version of Smart Campus Application and proposing redesigned prototype and asking feedback and satisfaction level.

Limitation

- The design of prototype was more intuitive but as people adapted to the new design, it took more time and eye fatigue was higher in the eye tracker
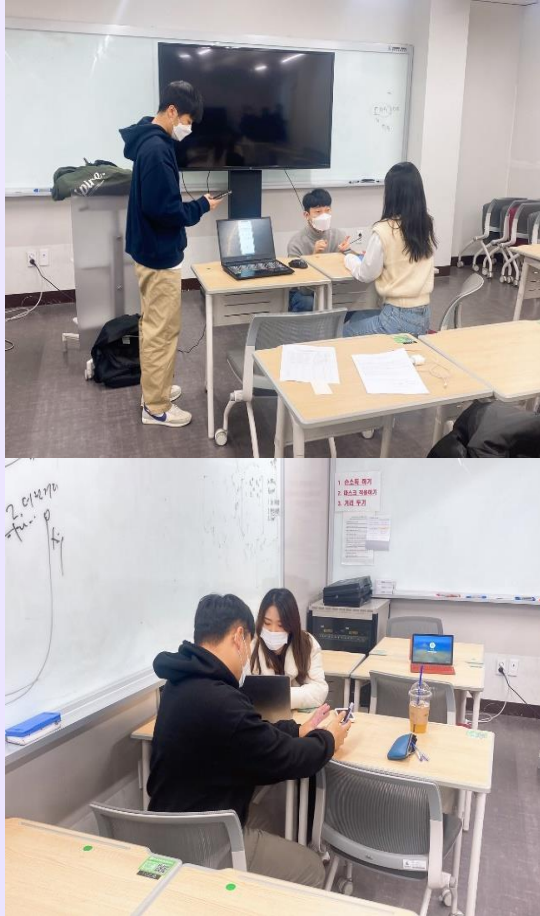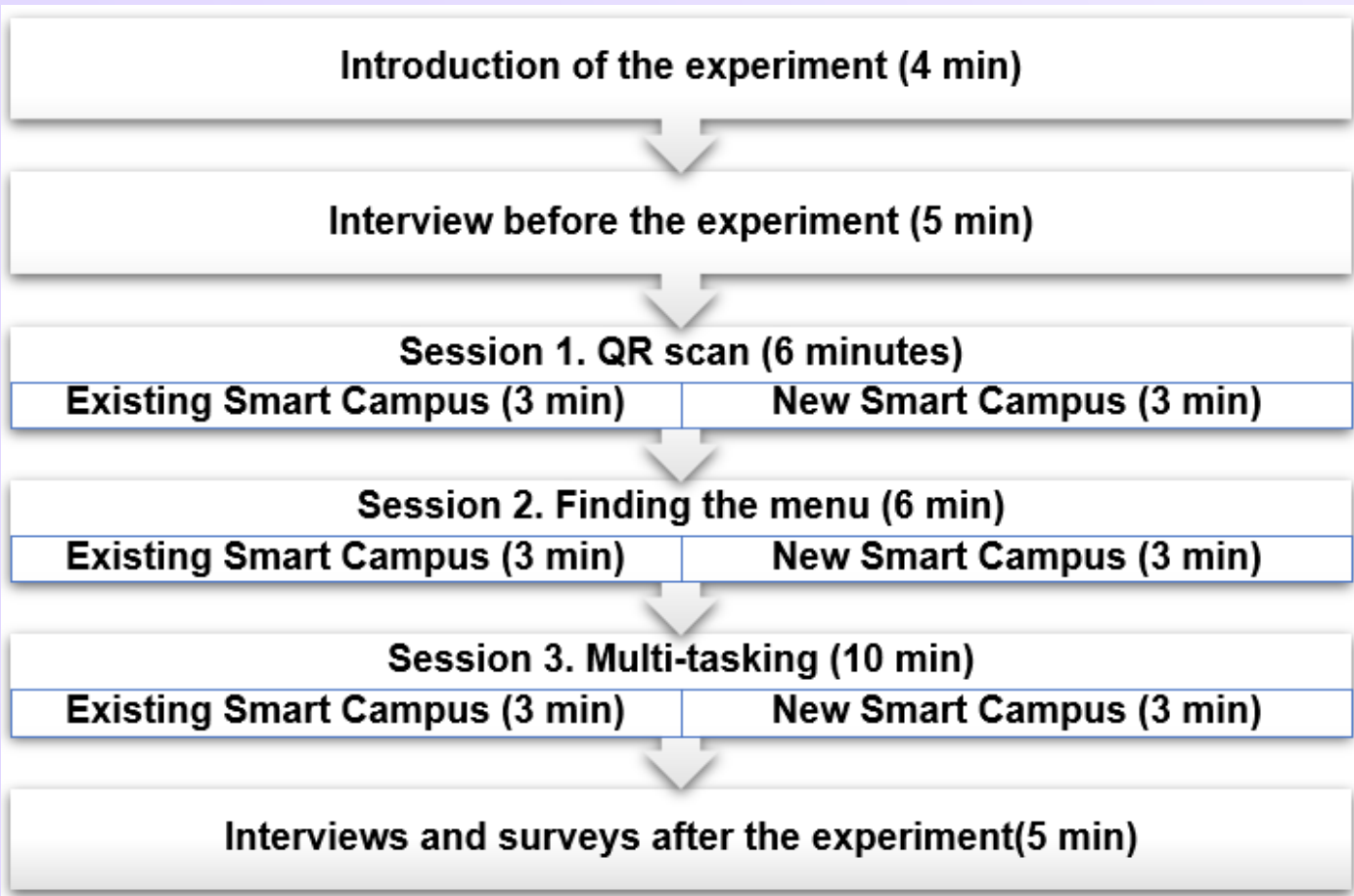- Accuracy of Eye tracker was low

Expected Further Studies

- Provide detailed information of Icons for students who want intuitive information structure
- Reduce the number of functions that students do not use
- When Smart Campus Application linked to Hisnet/Library provide appropriate Crawling
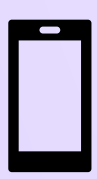
Experiments (User Test)

- **Participants :** 20 people who use Smart Campus application

  1) Natural sciences : 8 people

 2) Liberal arts: 8 people

  3) Mixed: 4 people

- **Procedure**

Introduction of the experiment (4 min)

Interview before the experiment (5 min)

Session 1. QR scan (6 minutes)

Existing Smart Campus (3 min)	New Smart Campus (3 min)

Session 2. Finding the menu (6 min)

Existing Smart Campus (3 min)	New Smart Campus (3 min)

Session 3. Multi-tasking (10 min)

Existing Smart Campus (3 min)	New Smart Campus (3 min)

Interviews and surveys after the experiment(5 min)

- **Measures**

  1) Quantitative: Time checking, Eye tracker, Survey

  2) Qualitative: Pre-Post Interview

- **Analysis**

  1) **Quantitative Analysis**

  < Usability test chart >

  1. Time on task

실험 결과

이전 앱과의 시간 차이

2. Satisfaction

사용자 설문 평가 만족도
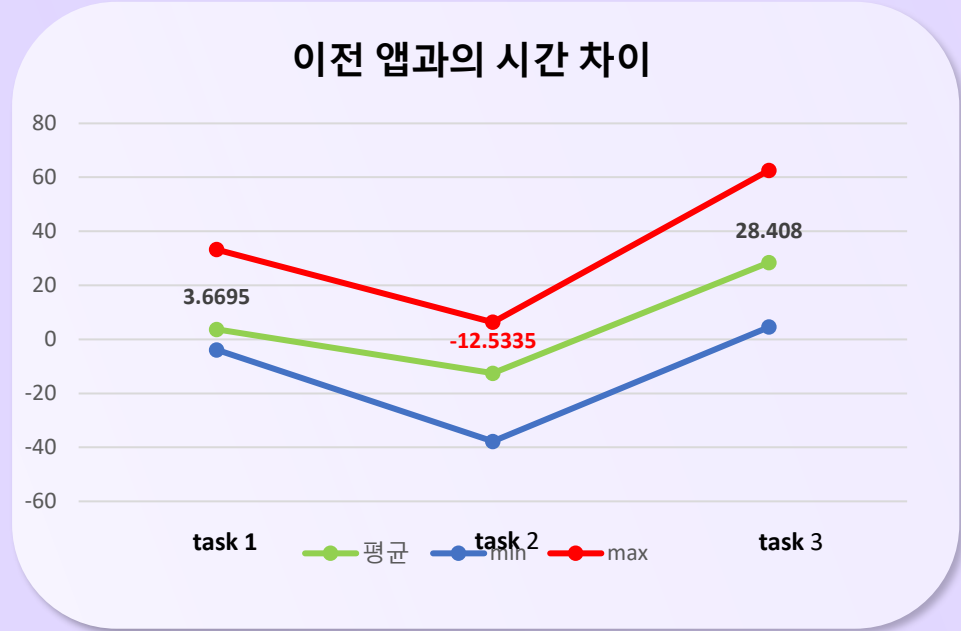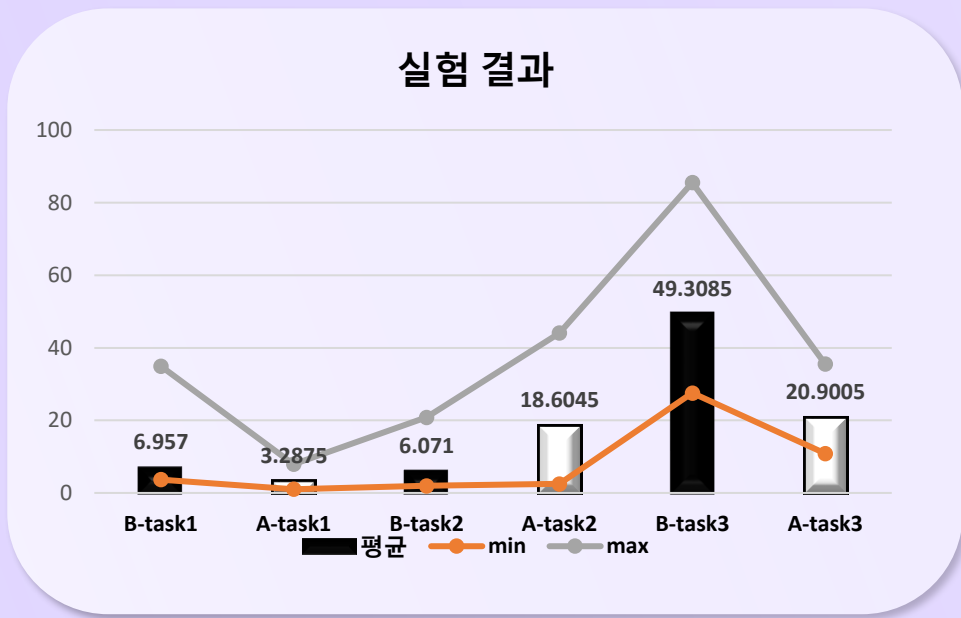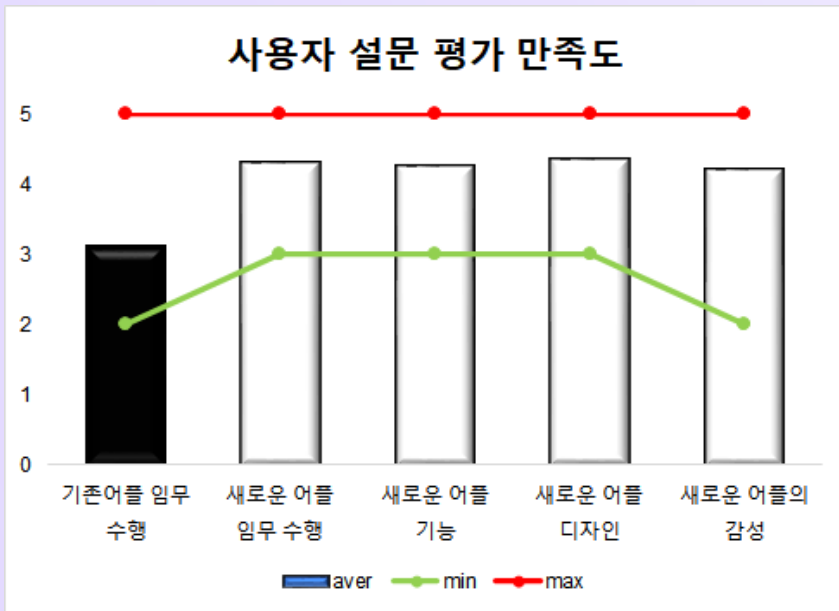
< Eye-Tracker Data >

Previous Ver. *Redesigned Ver.*

2) **Qualitative Analysis**

Good
1. Able to customize quick menu ➡ **Useful**
2. Intuitive design ➡ **Accessibility & Discoverability**
3. Category classification ➡ **Efficiency**
4. Dark mode ➡ **Relieves eye fatigue**

Bad
1. Need detailed Information of icon
2. Still too many functions
3. Crawling doesn't work when it linked to Hisnet/Library
4. Large size of Quick menu