

1. Application Proposal



Revolutionary Online Education Platform for School using Real-Time Eye Tracking Software

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01. BACKGROUND



*Real-time Video Classes are prevalent due to **COVID-19***

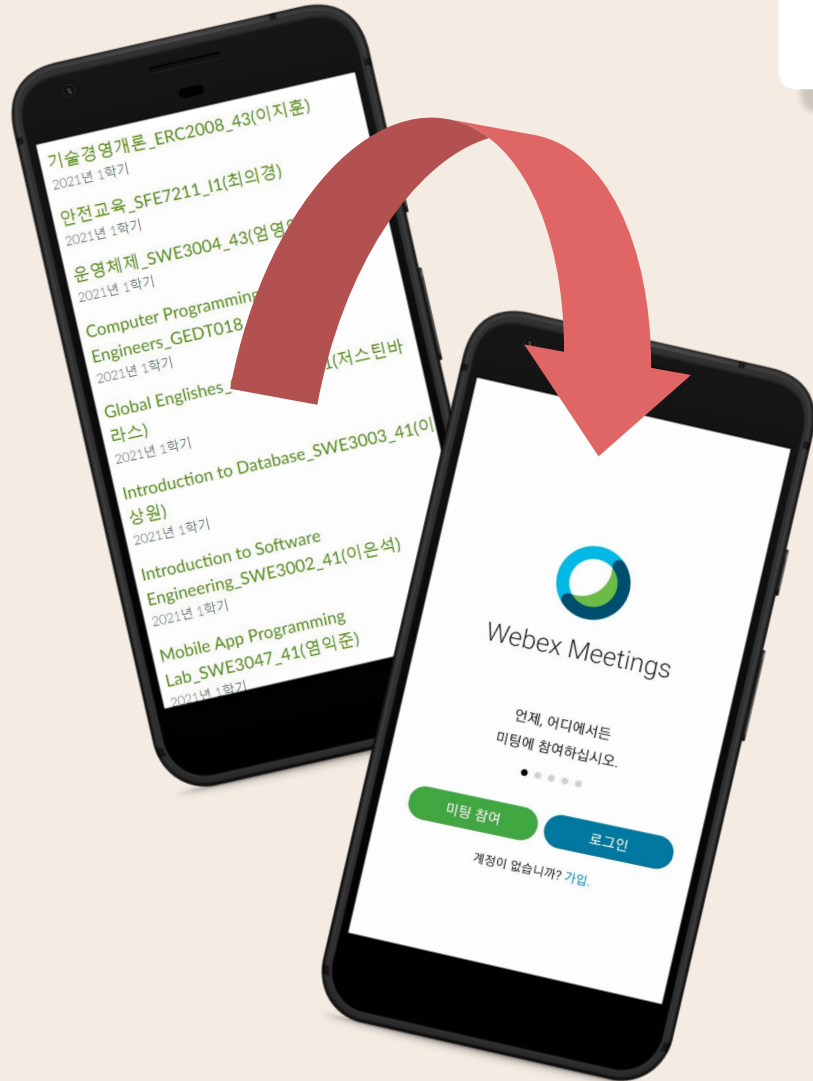
Problem



*It is difficult to check
students' concentration...*

How does the professor know that students are concentrating on the class?

Problem



I'm so annoying to find the Webex meeting room number for each class..



02. PROJECT OVERVIEW

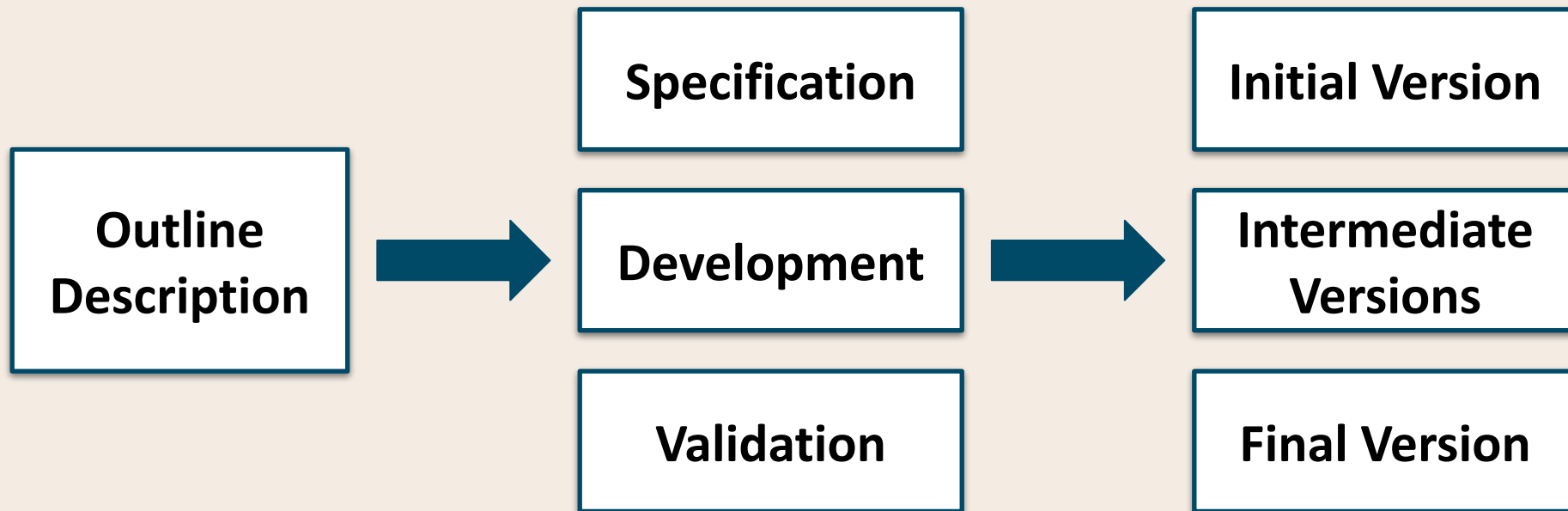
Goals



integrate online meeting
& online course

check student's attention in real-time
online lecture and get reports

Development Model



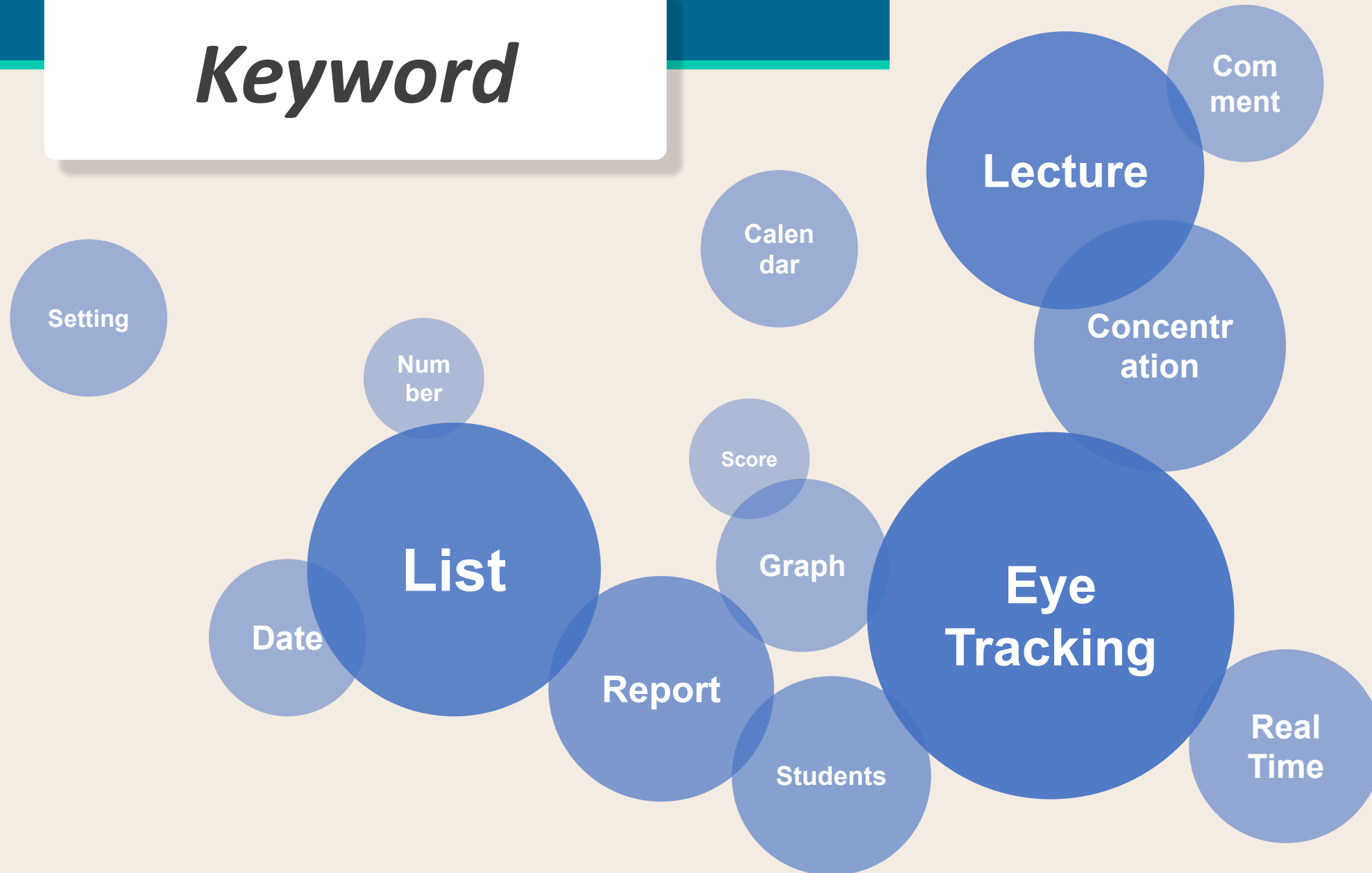
use **incremental development model** for constant feedback and revision

Schedule

Development Schedule	
Proposal Document	4/4
Requirement Specification	4/25
Outline Description	4/30
Initial Version Development	5/7
Final Version Development	5/14
Design Specification	5/16
Test Specification	5/30

03. DESIGN CONCEPT

Keyword



**Main
Page**

Selection List
Class List(Scroll)
Concentration Score
Schedule

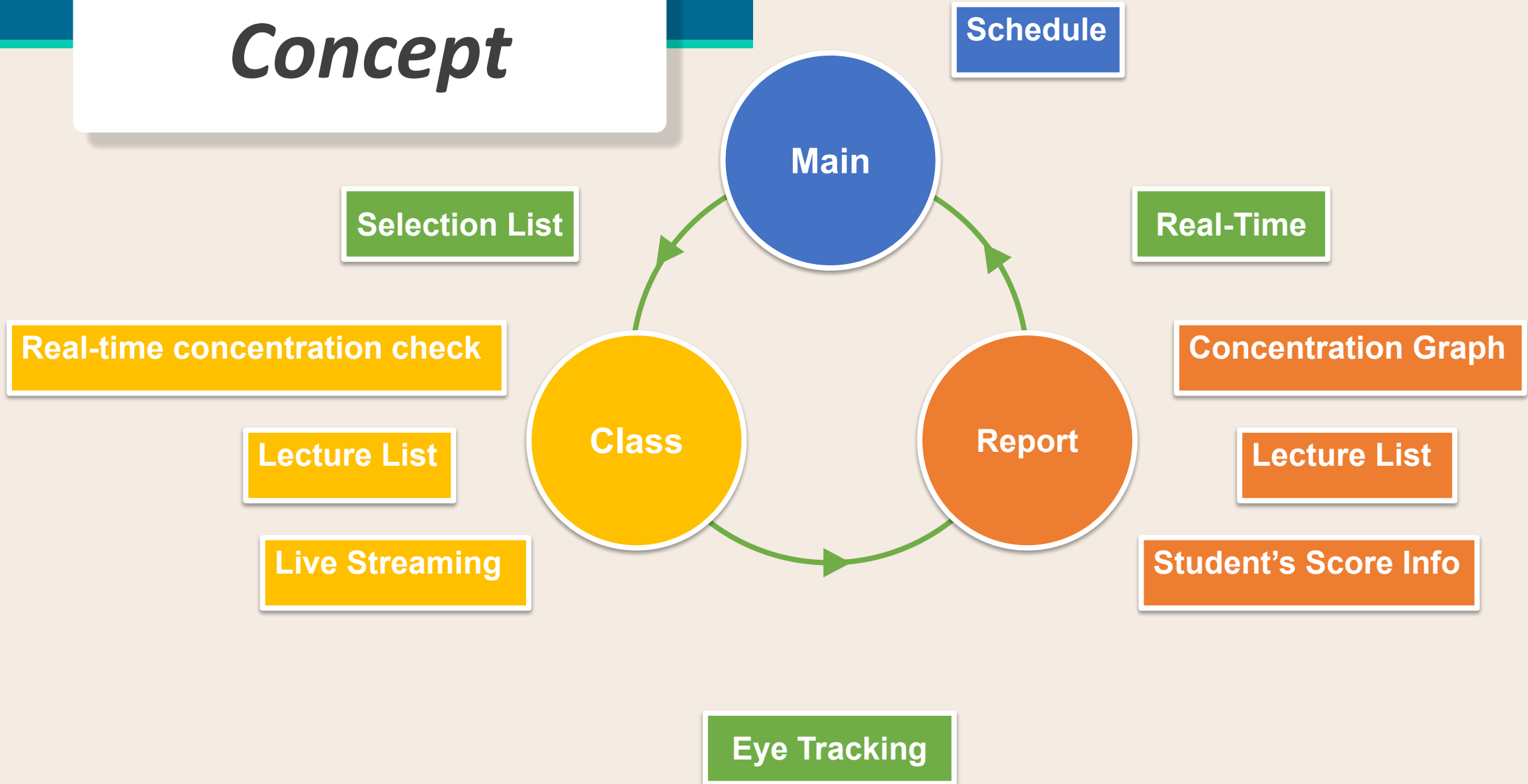
**Class
List**

Lecture List
Live Streaming
Real-time concentration check

**Class
Report**

Concentration Graph
Lecture List(Scroll)
Each Student's Score Info

Concept



UI/Ux design_(Main)



Professor

(Selection List)
Class List
Class Report
Notices
Setting

수업 목록

SW 프로그래밍 YCS1002
시간 | 월 5 / 목 6, 7
수강인원 | 76명

논리와 비판적 사고 PHI2532
시간 | 수 2, 3 / 금 2
수강인원 | 76명

Lecture List(Scroll)

Concentration by class

Schedule

일정 9월 24일

월	화	수	목	금	토	일
1	2	3	4	5	6	
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

UI/Ux design (Class List)



Professor



내 수업 목록



수업별 레포트



공지사항



마이 페이지

Lecture List and

SW 프로그래밍 YCS1002

시간 | 월 5 / 목 6, 7

수강인원 | 76명

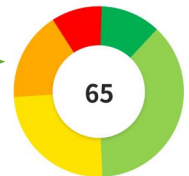
Lecture
Date
Number of student

Click
next
Page

Lecture

Concentration of
student by real-time

Overall
concentration
by
real-time



UI/Ux design (Class Report)



Professor



내 수업 목록



수업별 레포트



공지사항



마이 페이지

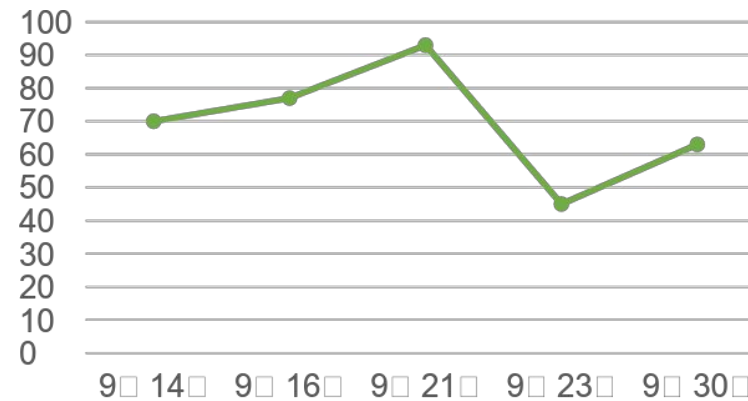
Real-time Concentration Report

SW 프로그래밍 YCS1002
시간 | 월 5 / 목 6, 7
수강인원 | 76명

Lecture

Lecture

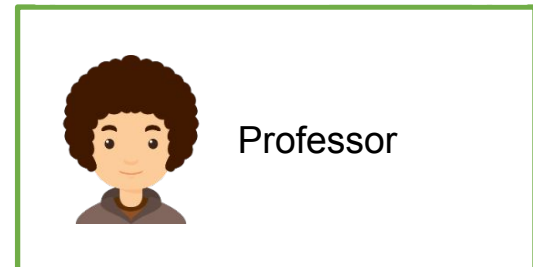
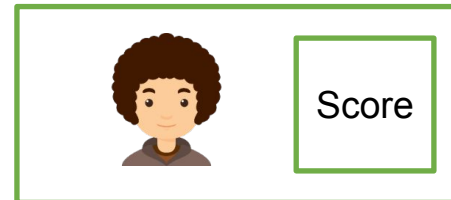
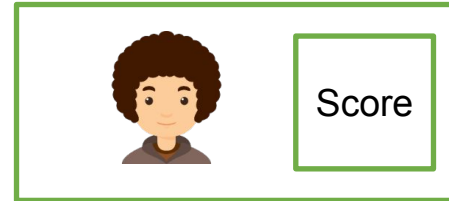
Average of concentration



Feedback
And
Comment
By
Student

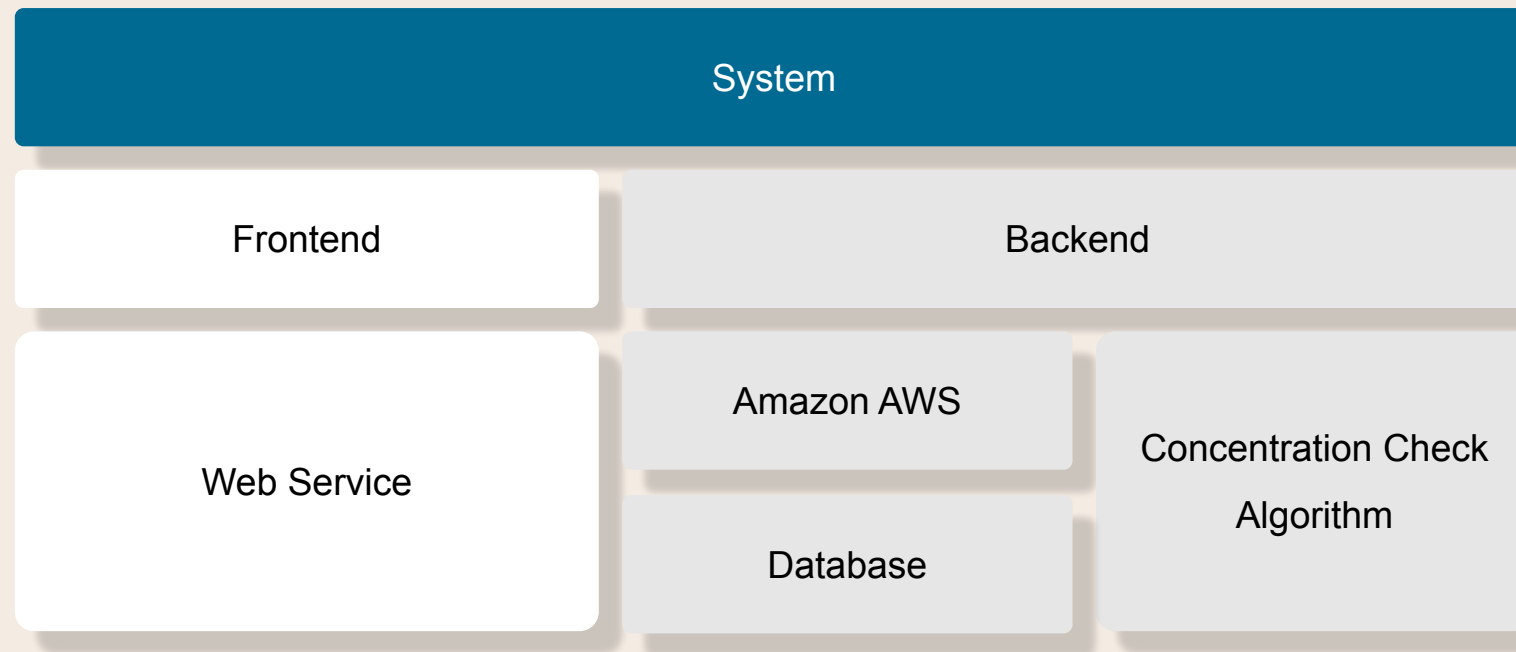
UI/Ux design (Streaming)

Live Streaming



04. DEVELOPMENT

Structure



Frontend



Java Server pages
standard technology for
dynamic, data-driven pages



php
general-purpose scripting language



HTML
standard markup language

Backend



Amazon aws
Amazon cloud for web services



Oracle & Mysql
Backend database systems



Concentration
check
via real-time survey & eye tracking

05. EFFECT & BENEFITS

Current System

기술경영개론_ERC2008_43(이지훈)
2021년 1학기

안전교육_SFE7211_11(최의경)
2021년 1학기

운영체제_SWE3004_43(엄영익)
2021년 1학기

Computer Programming for
Engineers_GEDT018_41(등국홍)
2021년 1학기

Global Englishes_GEDG034_41(저스틴바
라스)
2021년 1학기

Introduction to Database_SWE3003_41(이
상원)
2021년 1학기

Introduction to Software
Engineering_SWE3002_41(이은석)
2021년 1학기

Mobile App Programming
Lab_SWE3047_41(엄익준)
2021년 1학기



Regarding class hours and progress method : webex (access number: 578 343 115)

이은석(LEE EUNSEOK)

모든 섹션

Dear students,

This class, conducted by online flipped learning, is held in the form of "online storage class" + "online real-time streaming class" until covid-19 is stabilized.

Take an online preclass in advance and solve Q&A questions. Please discuss the questions within the team in advance in this process.

TAs will maybe check the team activities.

(Before team formation, each person should solve the problem by oneself)

Online real-time streaming class is conducted through webex (access number: 578 343 115).

Classes run from 3:00 for 75 minutes.

이 공지사항에는 댓글을 작성할 수 없습니다.



미팅 참여하기 ①

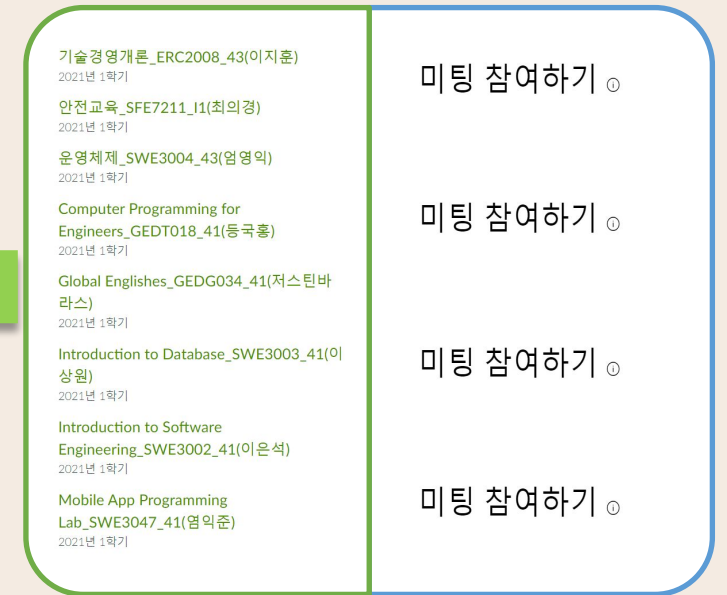
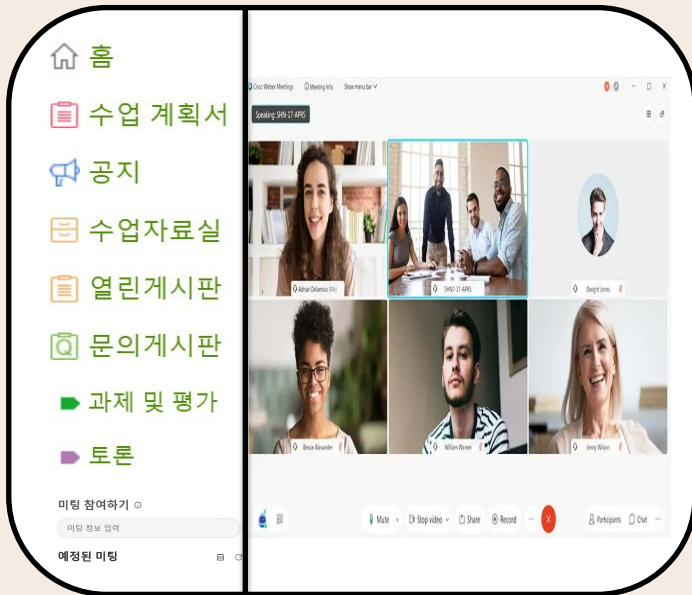
미팅 정보 입력

Asynchronized
icampus and webEx

Need to manage icampus and
webEx separately

Need meeting room number
for each classes

Improved System



Manage synchronized
icampus and webEx together

Provide quiz and class
references directly

Easily access to live class

Current System



It is difficult to interrupt class and ask question



Cannot check students' understanding of class



Webcam is the only way to check students



It is not enough to check concentration of students

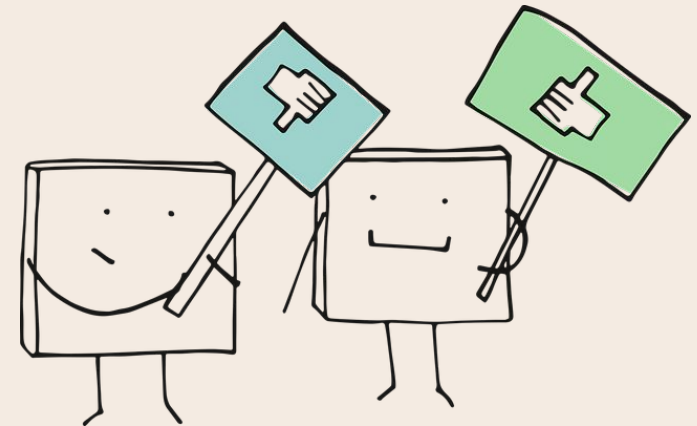
Improved System



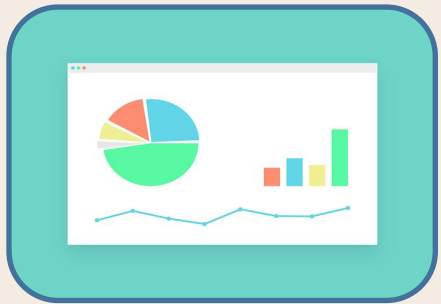
Understanding of students
is measured by survey



Professor can check
understanding of students



Professor can get
feedback of his class



Concentration of students
is measured in real time



Professor can check
concentration of students



THANK YOU :)