SUMMAREYES

AN ONLINE MEETING APPLICATION BY KAFADABITIRME

KAFADA BİTİRME MEMBERS

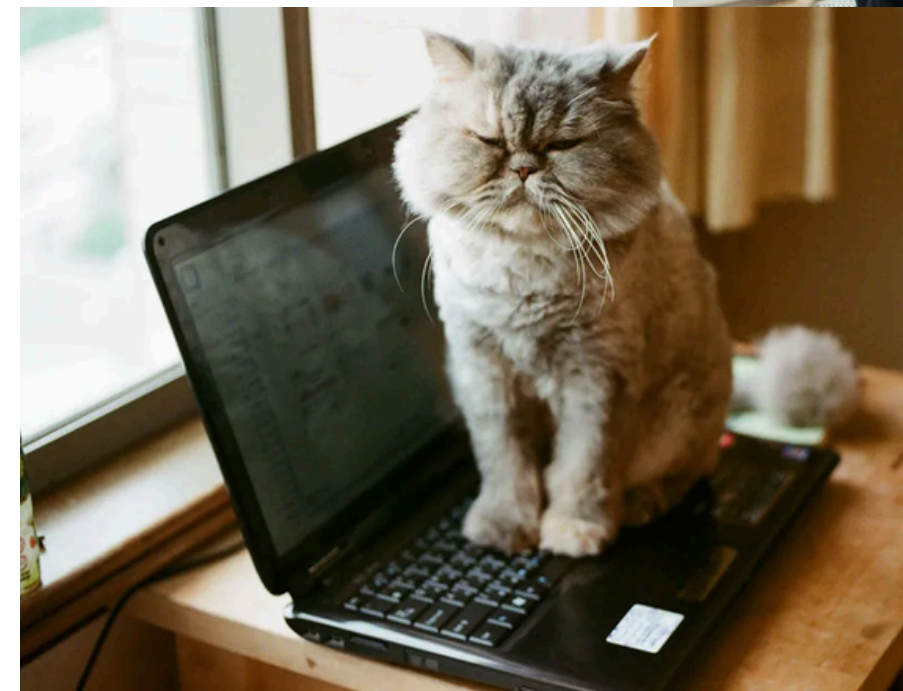|	
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INN. EXPERT	Cem Çimenbiçer

COURSE INSTRUCTORS

Atakan Erdem

Mert Bıçakçı

AN OVERVIEW
OF OUR PROJECT

SummarEyes is an online meeting platform that uses AI technologies to analyze the engagement level of the participant, offering personalized meeting summaries to participants to make sure no information stays missed!

It also provides meeting feedbacks to the hosts to let them inform what parts of the meeting couldn't reach the participants.
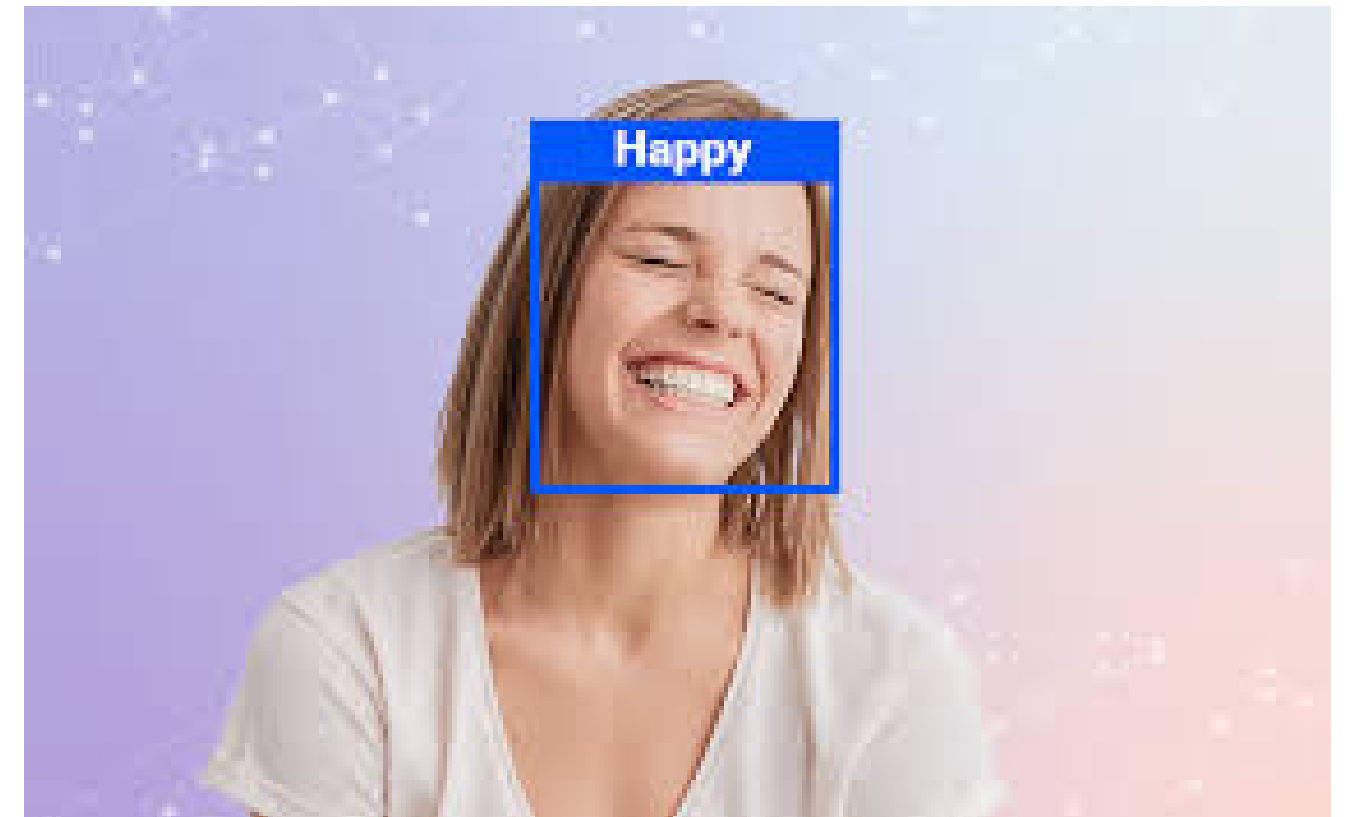
MAIN PROBLEM

- After Covid the remote workers and online lectures became part of our life.
- Surrounded by lots of distractions.
- Results in low engagement/ concentration.

SOLUTION
OF OUR PROJECT

- Concentration analysis with emotion detection and gaze/eye tracking

- Personalized summary of low-concentrated parts

- Feedback for presenter

NOVELTY ASPECT
OF OUR PROJECT

- Zoom creates summaries of the meetings.
- Microsoft Teams offers meeting transcripts.
- Cisco Webex has attention analysis.

TARGET GROUP
OF OUR PROJECT

- Company employees
- Students
- Individual consumers

PRIVACY ASPECT
OF OUR PROJECT

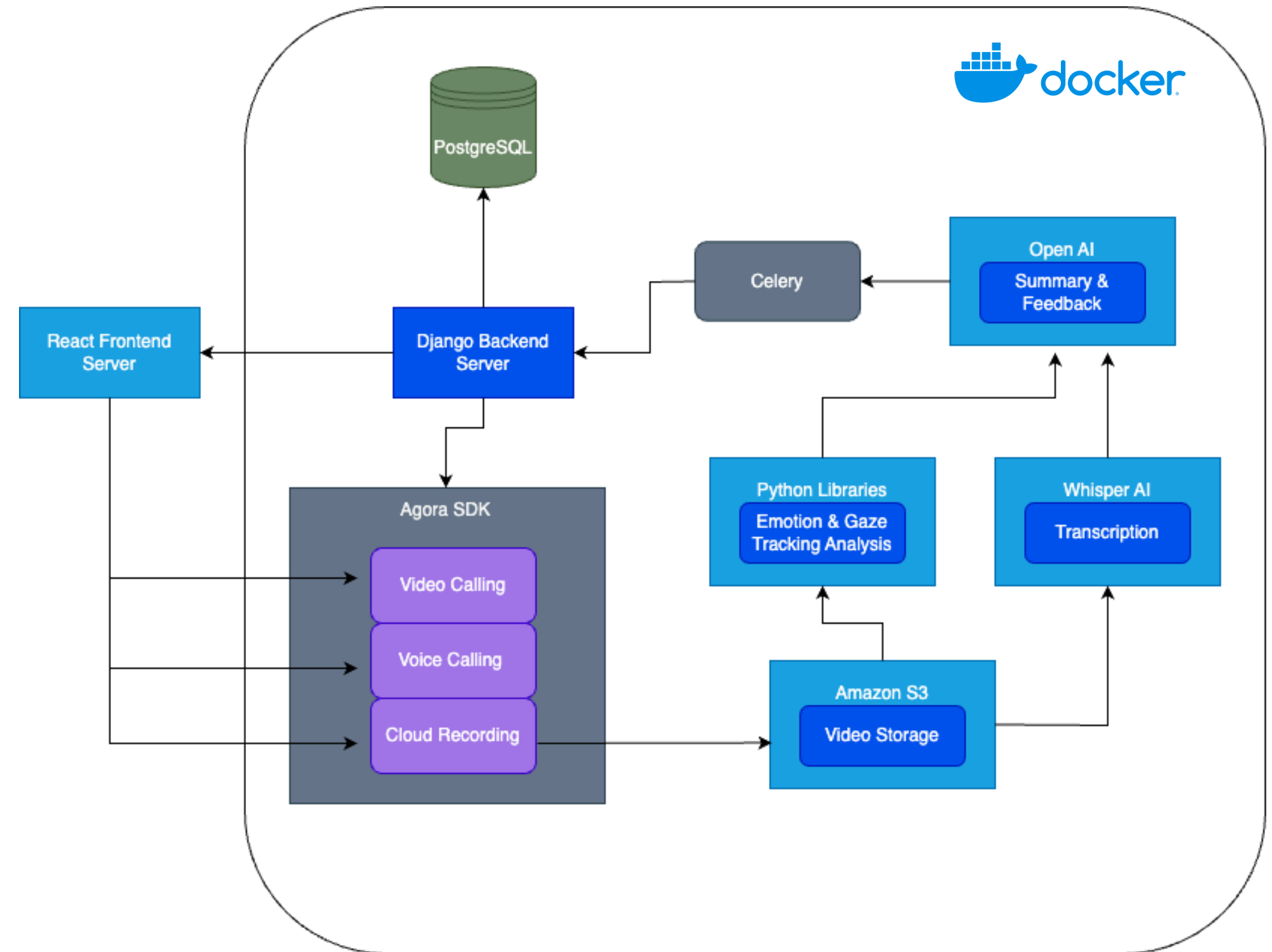- Removal of the saved videos from the cloud.
- User consent!

...lhost:3000 şunu yapmak istiyor: ✕

🎥 Kameralarınızı kullanma

🎤 Mikrofonlarınızı kullanma

İzin ver   Engelle

Notice ✕

Your video will be recorded during this meeting. The recording will not be used for any purpose other than generating a customized summary. It will be secured and deleted after the summary is generated. Please ensure your camera is on to get a clear customized summary.

Do you want to continue?

Continue   Cancel

Camera Off

You should turn your camera on to get a customized summary according to your attention level.

OK

SYSTEM
ARCHITECTURE
OF OUR PROJECT

HOW DO WE CALCULATE CONCENTRATION SCORES?
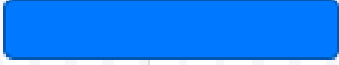
Table 1. Dominant Emotions and their corresponding Weights

Dominant Emotion	Emotion Weight
Neutral	0.9
Happy	0.6
Surprised	0.6
Sad	0.3
Disgust	0.2
Anger	0.25
Scared	0.3

$$\text{if } c > 0.5 \text{ then}$$
$$a = 100 \text{ (i.e., Focused)}$$
$$\text{else } a = 0 \text{ (i.e., Distracted)},$$

Table 1 represents Dominant Emotions and their corresponding Weights. The resulting Concentration Index (CI) is determined by multiplying the Dominant Emotion Probability (DEP) value by the corresponding Emotion Weight (EW), according to Table 1, expressed by equation 1: $CI = DEP \times EW$

Sharma, P., Joshi, S., Gautam, S., Maharjan, S., Khanal, S. R., Reis, M. C., Barroso, J., & Filipe, V. M. d. J. (2019). Student Engagement Detection Using Emotion Analysis, Eye Tracking and Head Movement with Machine Learning. arXiv preprint arXiv:1909.12913. https://doi.org/10.48550/arXiv.1909.12913

PROGRESS

ID	Name				
		2023		**2024**	
		Q3	**Q4**	**Q1**	**Q2**	**Q3**
30	Research				
31	Weekly Meetings				
1	Backend				
5	Frontend				
6	Concentration Analysis				
7	Summarization				
29	Tests				

PROJECT
DIVISION OF WORK

Burcu Kaplan
Backend development & Database deployment

Deniz Gökçen
Backend development & Database deployment

Gökhan Tekin
Frontend development & Machine learning

Hazal Buluş
Frontend development

Kürşad Güzelkaya
Machine learning

LET'S PROCEED WITH OUR DEMO