Fast attendance

Made by Алға Қазақстан

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Link to the github repository

Hello! We are Team Алға Қазақстан, and we would like to present our progress in the project.

Face detection

For our face detection functionality, we leveraged the power of OpenCV official github repo. We didn't reinvent the wheel; instead, we sourced a reliable face detection model from OpenCV's official GitHub repository. This library consistently delivers accurate results in face detection techniques. To see our implementation in action, please refer to the detect.py file. If you're interested in real-world examples, we've documented them in the face_detection.ipynb notebook.

Face recognition

To recognize faces, we opted for the ResNet50 model. In order to validate our progress, we employed the LFWPeople dataset. You can explore our findings and results in the face_recognition.ipynb notebook.

Web application

For the development of our web application, we chose to work with the Streamlit library. Presently, our application features two pages: a welcoming homepage and a registration page. On the registration page, users can input their Innopolis email and perform facial scans to register themselves in the system. It's important to note that, at this stage, we are working on the functionality of adding scanned data to a database, which is not yet implemented. For more detailed insights into our web application, please refer to the application.py file.