



Go-Digital : “Anticipation of post-COVID changes in education systems: ROLE OF ICT”

NSDAI on UBTCLOUD
(FACERE platform on the UBTCLOUD for anti cheating and supervising)

Cavin Shin, NSDevil



Can't implement the face-to-face based UBT in the COVID-19 pandemic.



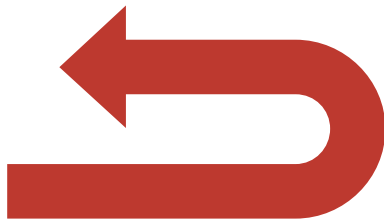
934 students from five school of medicine in Korea, did a final exam with UBT technology at the Inje university on June, 2013.

Piloting in S.Korea

Coming 6th-April, over 80 public schools in Daegu, S.Korea will start daily quiz/exam based on UBT which is cooperate NSD with KERIS/Ministry of education in S.Korea. Especially we consider to enhance/support it for the better education effect on on-line education. Also hope to analyze to effect of the method.

Piloting in S.Korea

From 16th-Mar, Chinju national university of education and National medical University of Kyungsang were starting on-line education based on UBLCLOUD as a standard platform for their all students.

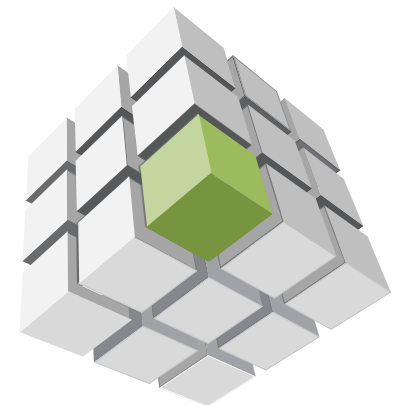
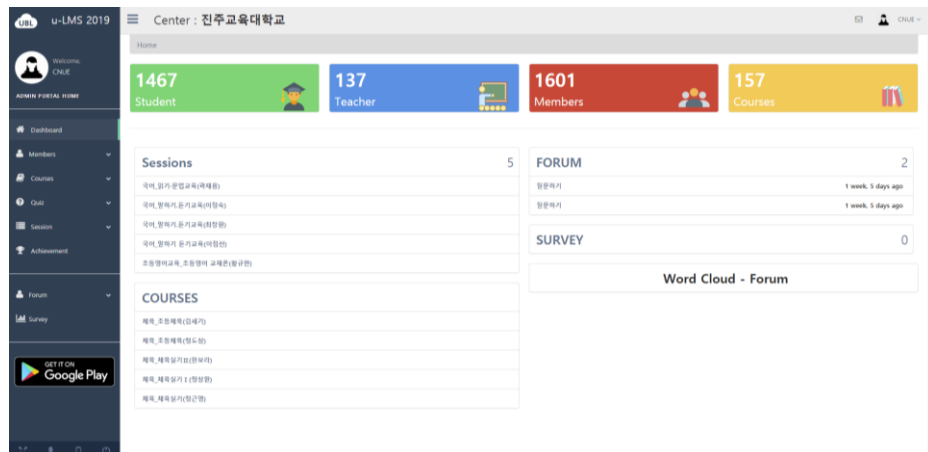


After education, how can they evaluate?
Is the exist exam method secure?
Trustable?

Answer is "NO"

Need other method even everybody use different exam method.

UBT CLOUD with AI is necessary to solve the problem.



Concept

After online education, assessment is necessary to evaluate the performance of online education, and also the assessment is one part of regular course in every educational organization. However How can we solve the problem which student takes an exam at home without any supervisor.

Can we trust the result of exam based on online, student standalone taking exam?

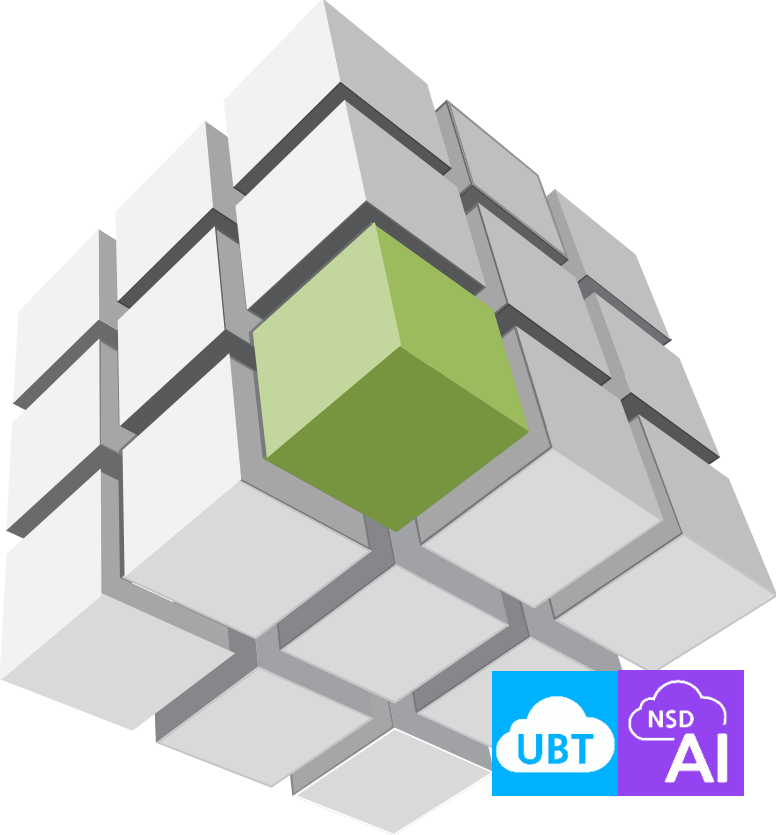
Online assessment platform – UBTCLOUD (PC/MOBILE/TABLET)



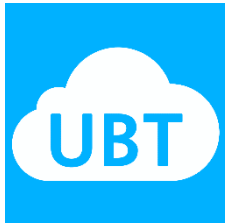
NSDAI – FACE RECOGNITION / FACE MOTION RECOGNITION – Keeping Trust



RESULT ANALYSIS – EDUCATIONAL THEORY



UBT CLOUD.me



Ubiquitous-based test on the NSD Global cloud

which support powerful test contents delivery functions, contents and sources sharing on on-line, off-line methods, easy to develop testing contents, and managing all testing resources on the cloud.

“ **Test**
/development
/allocation
/delivery
/sharing
/management ”

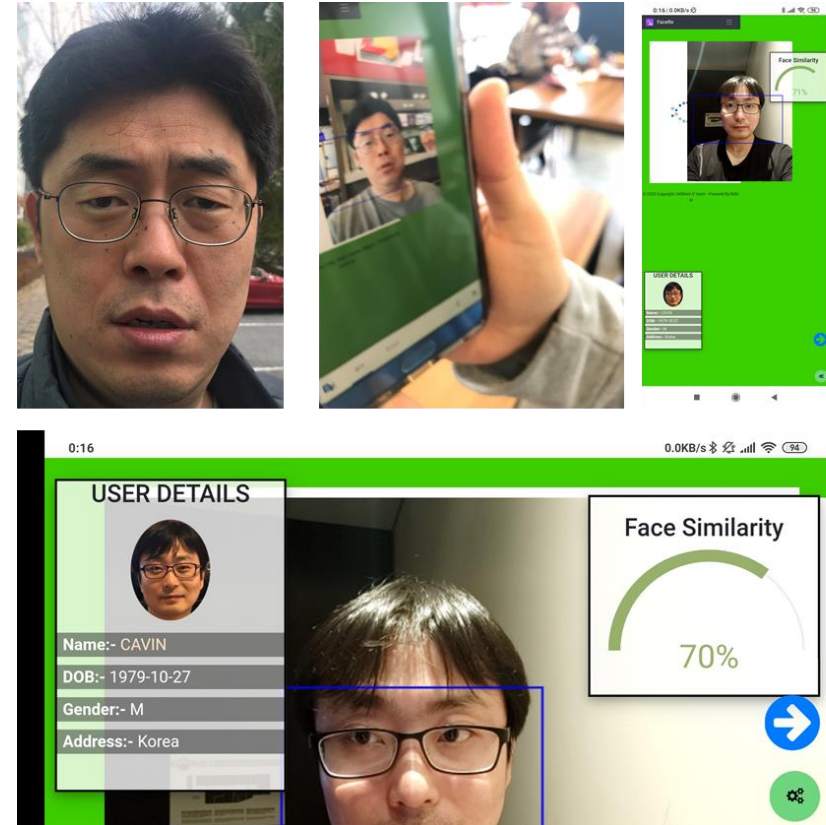
NSDAI platform



Face recognition functions on the NSD-AI platform

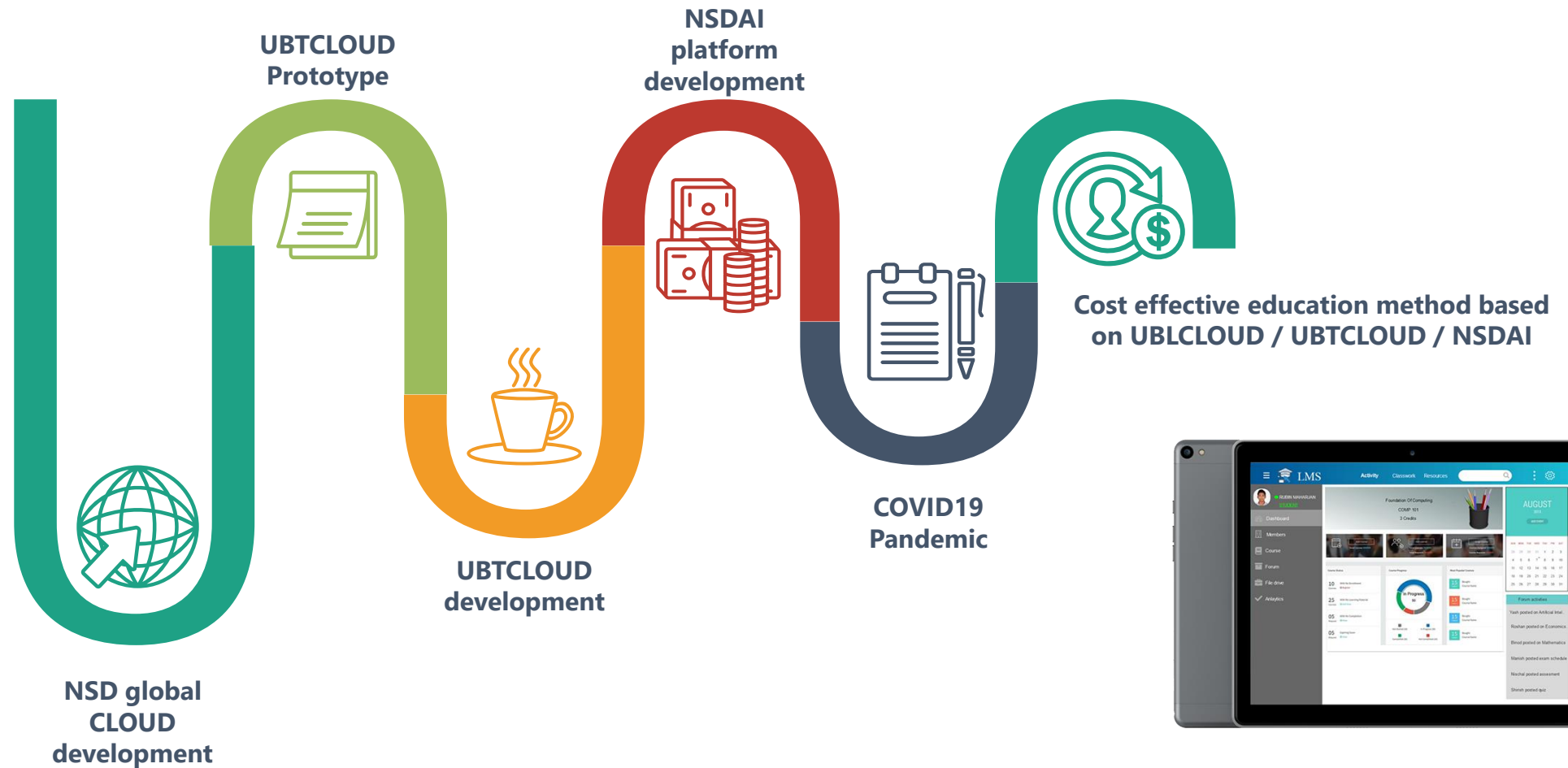
which developed under the research and development for the face recognition.

This platform is developing to adopt several part in UBL and UBT platform.



Our Agenda

it's about creating the new trustable online assessment method so people keep the educational activity after COVID19 pandemic.



Goal



UBTCLOUD APP

ANDROID APP
Background FACE RE Function



NSDAI facere platform

Face recognition function
- Face management
- API for APP



UBTCLOUD BACKEND/FRONTEND

Frontend Web-based UBT
Backend system



NSD Global cloud

NSD Global cloud Korea region infrastructure
NSD Global cloud Indonesia region infrastructure

Goal – User experience



1. User registration

2. Learning

Name	Age	Sex	DOB	Passwd	Registration Date
...

3. Code creation

QR-ID for Cavin

Cavin (M)

DOB: Oct 27, 1979

4. UBTAPP / WEB

- Login with code/Passwd
- Login with ID/Passwd

5. Supervisor check

- If under 50% acc
- Over 50% acc > pass

5. UBTAPP / WEB

- Exam/Test

6. UBTAPP / WEB

- During exam/test, NSDAI running in background to check the candidate status

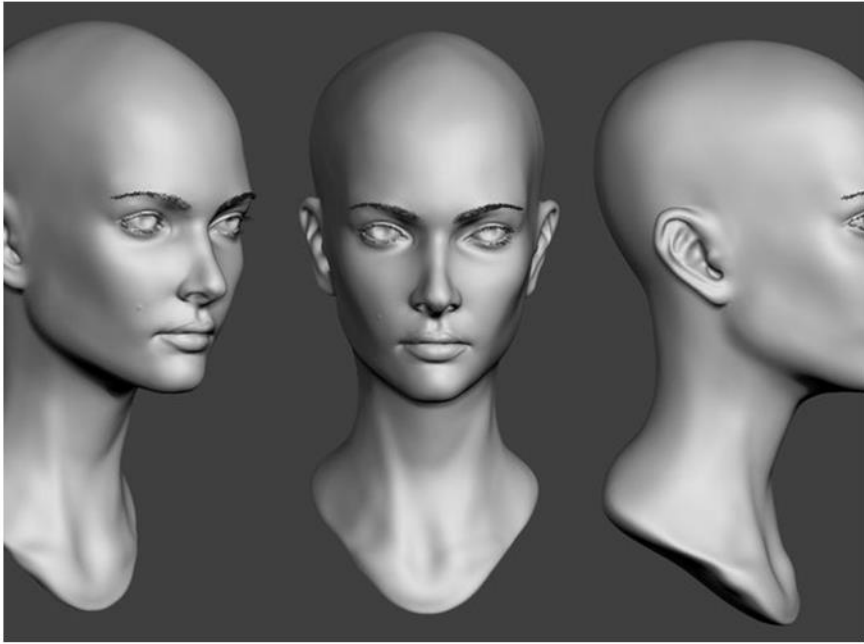
7. UBTAPP / WEB

- Pattern development
 - Cheat
 - Normal
 - Warning
 - Neutral

8. UBTCLOUD

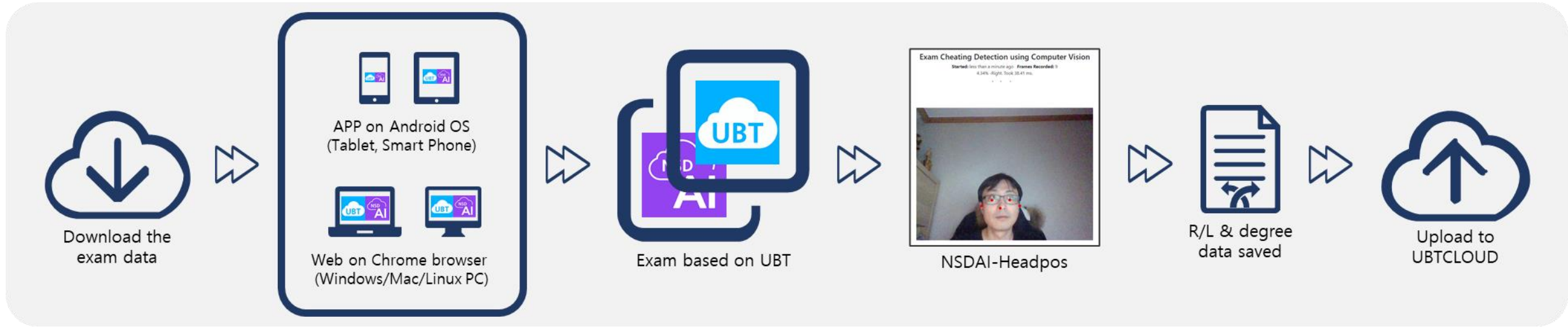
- Exam finish
- Result analysis
- Report creation with facere result on the exam/test

The Reverse analysis on 3D module for UBTCLOUD.ME

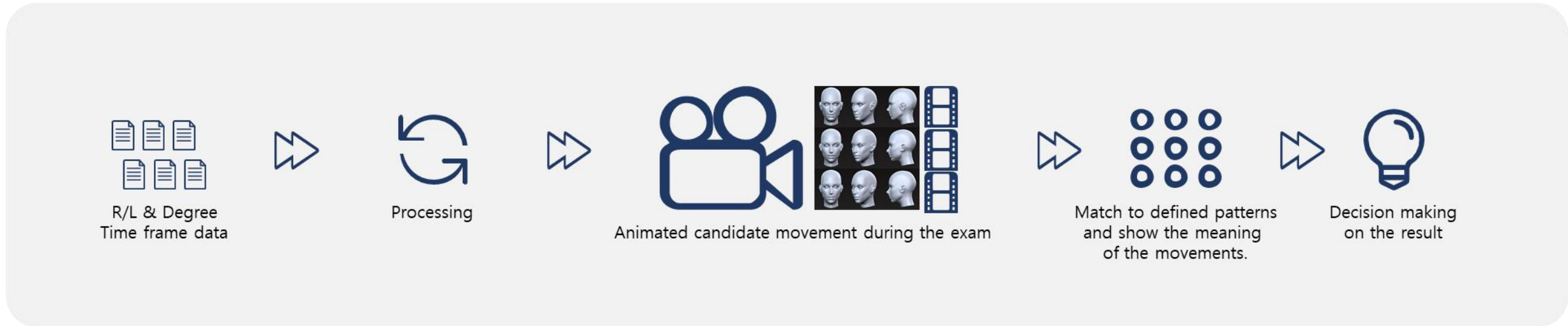


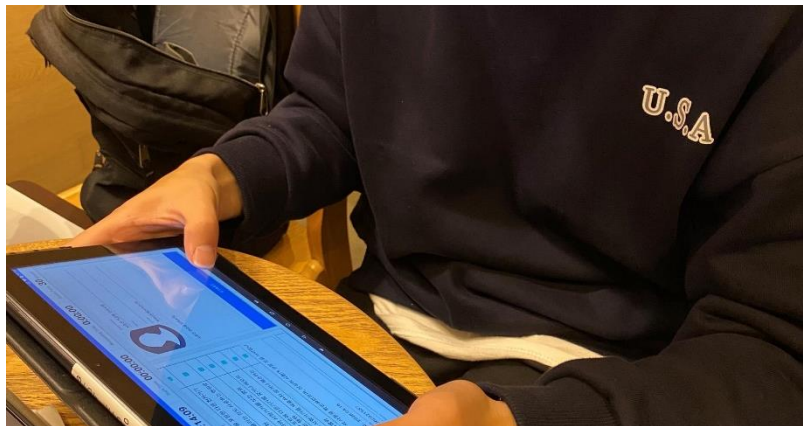
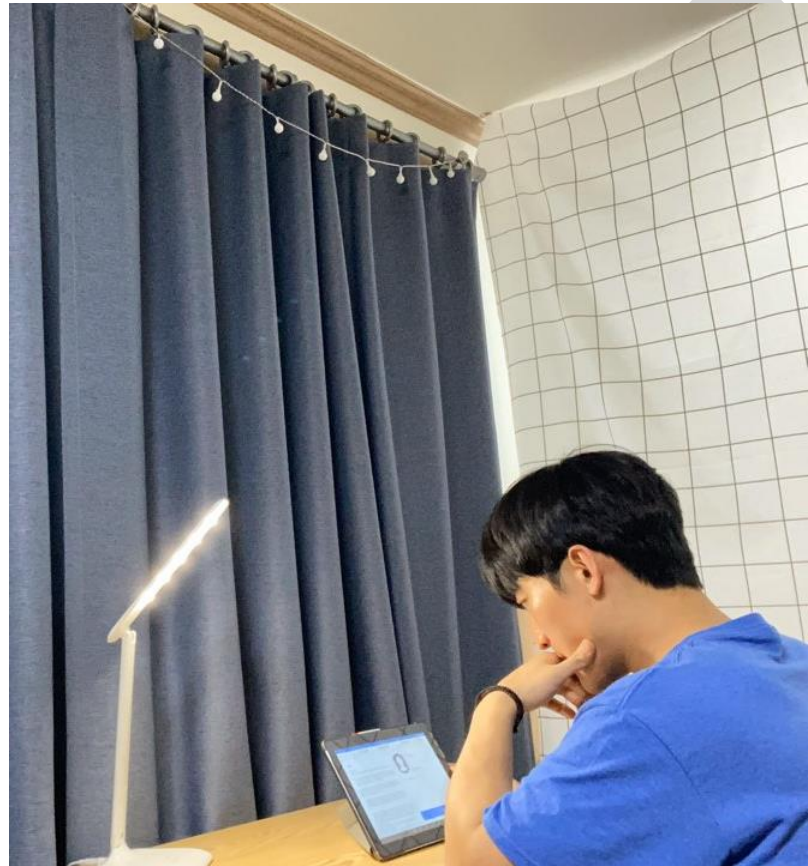
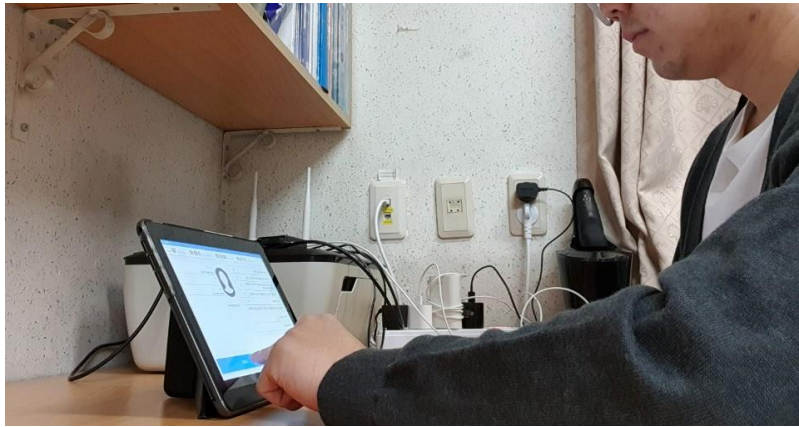
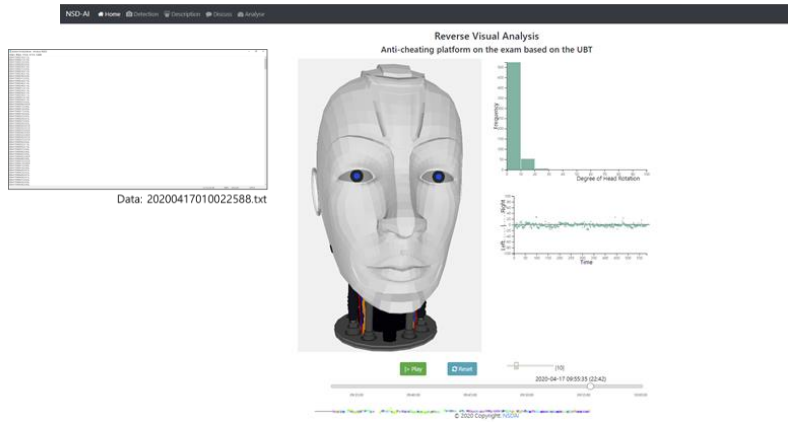
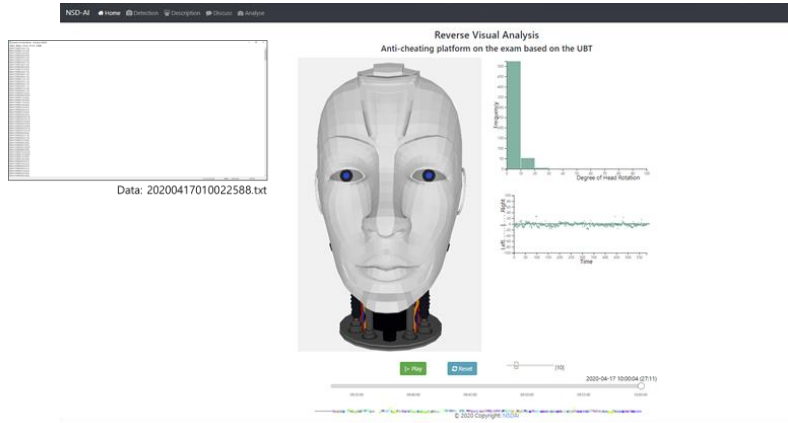
Working process

- EXAM : NSDAI on the UBTCLOUD



- Reverse analysis of the exam based on NSDAI on the UBTCLOUD





Piloting in S.Korea.



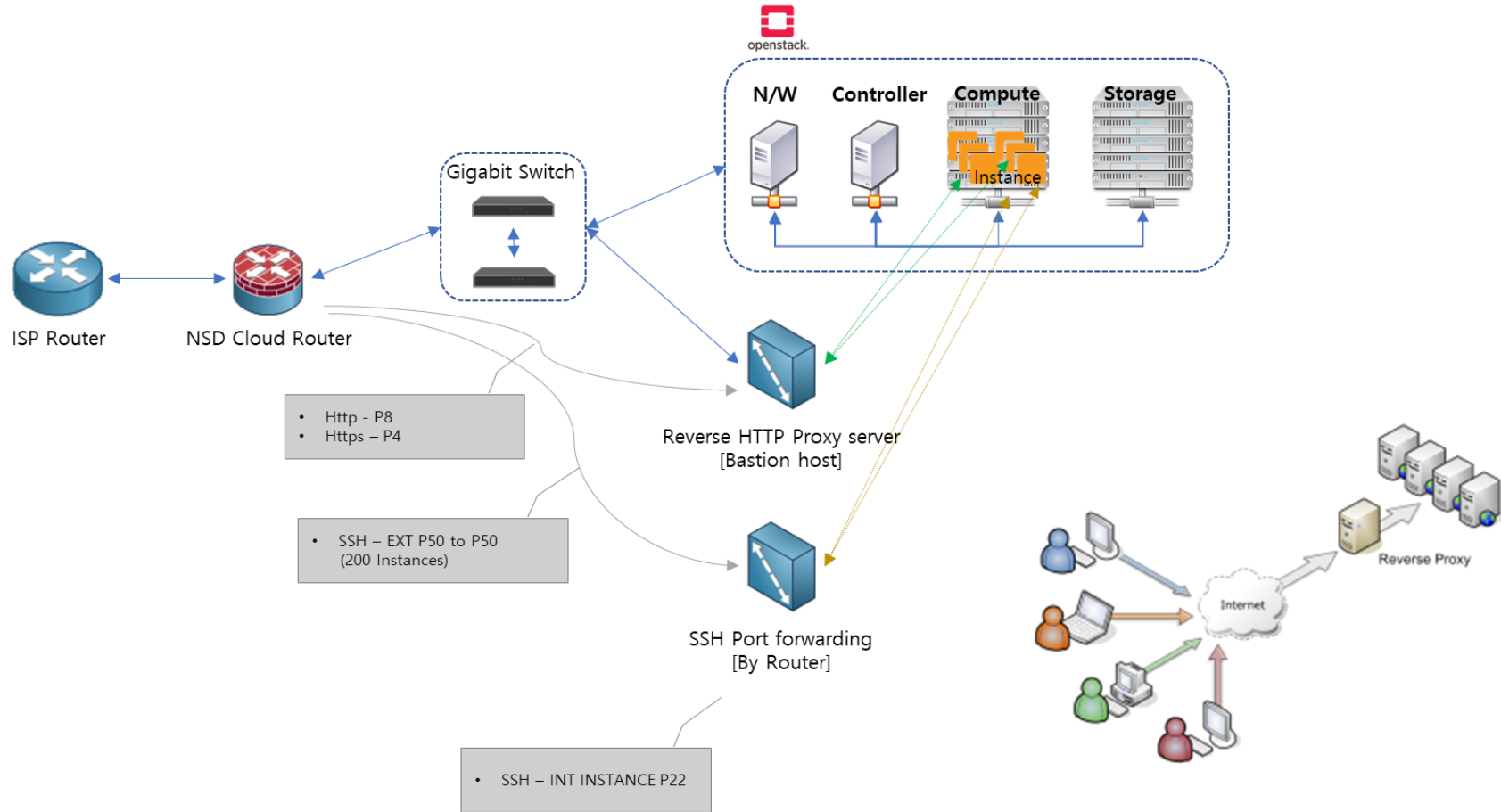
The infrastructure

Cloud infrastructure for UBT & UBL, NSD-AI

The cloud systems located in S.Korea, Mongolia, Indonesia.

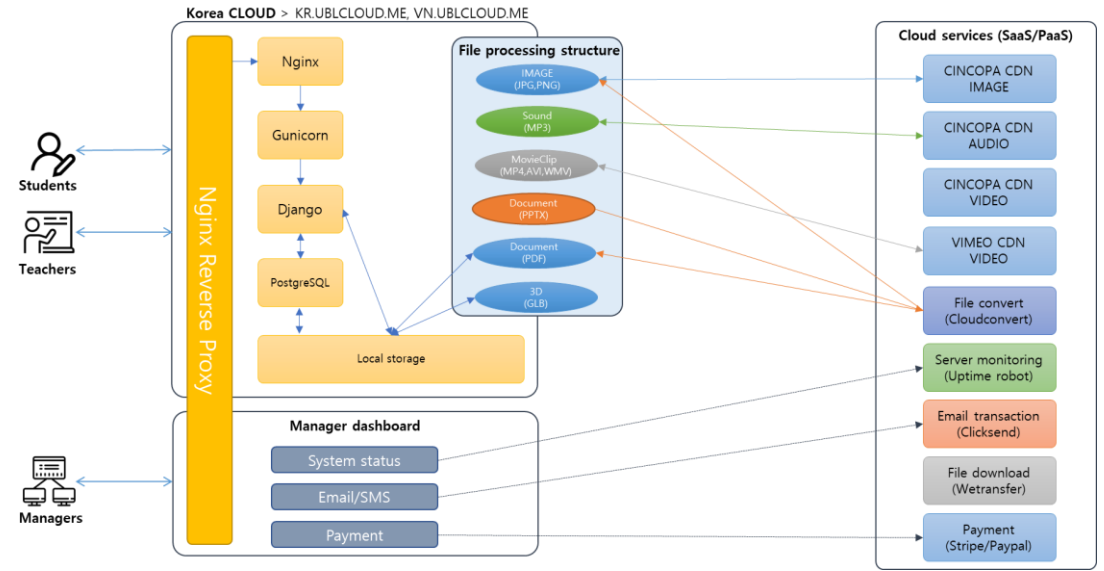
1. Private cloud for educational purpose.
2. Collaborate to operate the clouds with several organizations under Project EEO BULT.
3. S.Korea: NSD-Crucialtec-Septentrions OU
4. Indonesia: NSD-PEP-UNPAS-Septentrions OU
5. Mongolia: NSD-MEXIM consulting LLC-Septentrions OU

Infrastructure and service overview

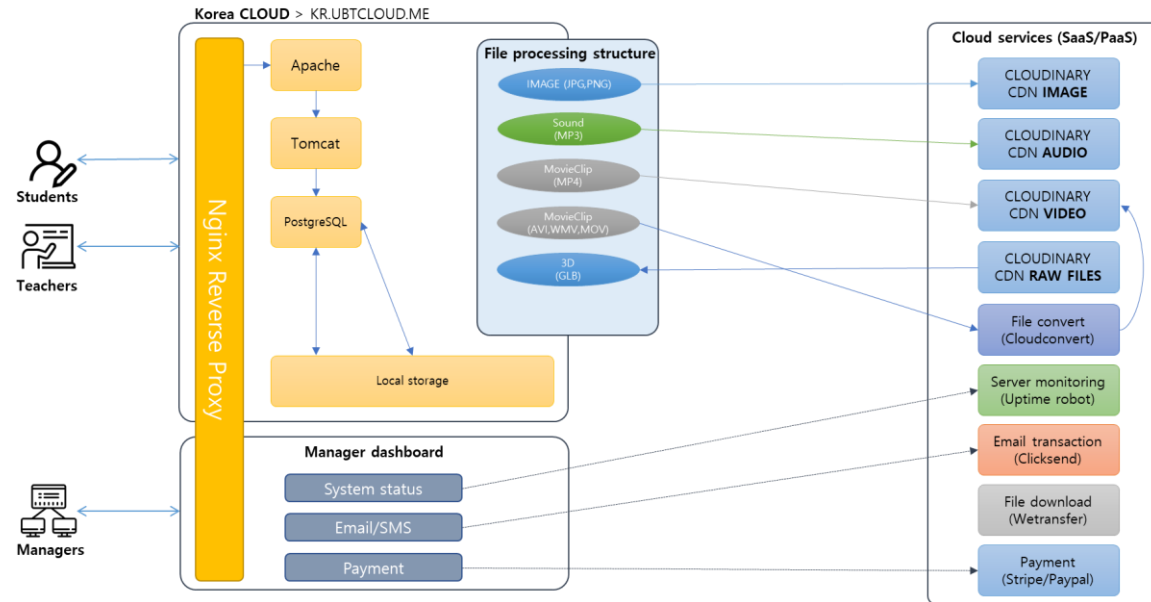


Infrastructure and service overview

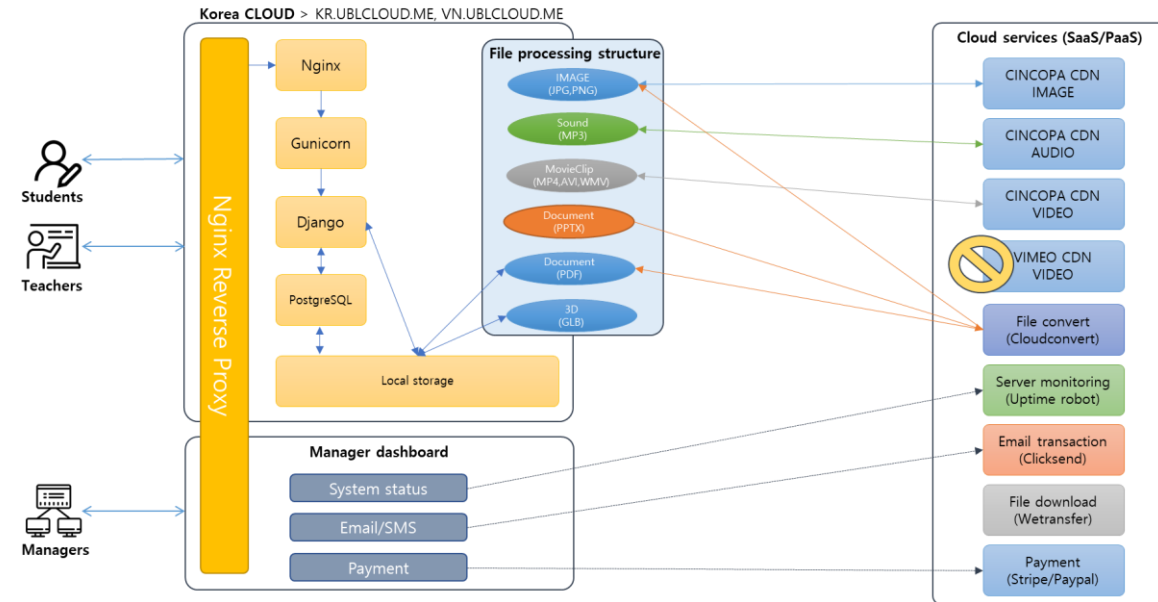
UBLCLLOUD in **S.Korea** : Service topology



UBTCLLOUD in **S.Korea** : Service topology



UBLCLLOUD in **Indonesia** : Service topology





The exam

Since April of 2020.

Pilot exam but it is real exam in real field.

1. S.Korea: Seoul National University school of dentistry, Chinju national university of education, Yonsei University public health college.
2. Indonesia: UNPAS and 9 univ.
3. Mongolia: High schools, NUM MS
4. Philippines: DMMMSU
5. Vietnam: HUE UMP
6. Nepal: Schools in Sindhuli



Thank you.

<http://facebook.com/nsdubt>



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