



# DigiEduHack Solution Palestine - DigiEduHack 2020 Challenge: Palestine - DigiEduHack 2020 Challenge 2020

## DigEdu\_Proctoring Exam

### DigEdu\_Proctoring Exam

DigEdu\_Proctoring is online proctoring Exam which is plugin with moodle, and it can be transferred to other source LMS. It uses identification methods and AI algorithms based on eye detection to guarantee the best level of security and privacy. Encryption method is also used to solve internet issue

### Team: BZU\_DigEdu

#### Team members

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## Solution Details

### Solution description

[What is the solution about]

- Proctoring Exam.
- Prevent cheating in online exams.
- Monitor multiple Students at a time
- Prevent impersonation on a continuous basis throughout the period of the exam.
- Smarter Exam.

[What are the users targeted]

- All teachers and students.
- Official examination applicants, such as TOEFL, GRE, ILETS, etc.

[Outline some of the characteristics of the solution]

- Monitoring electronic exams remotely using identification methods and artificial intelligence algorithms for video matching and image processing. (focusing on eyes movement detection).
- Encrypting Exam on a local server before it reaches the test station to solve internet issues.

## **Solution context**

[What is the problem you are facing]

- Cheating Predictor: students tend to cheat if the exam online.
- Internet Connectivity: home internet is not reliable.
- Culture Context: students prefer not to use cameras because culture issues.
- Security: students can give their log in information to author to take the exam.
- Credibility: teacher face problems when evaluating the students.

[What is the challenge you are solving]

- How to make sure that the student is one who is seating and taking the exam.
- If the internet became slow or disconnected, the exam is not effected.

## **Solution target group**

[Present you core target group in terms of their characteristics]

- Universities, Schools, Academic Institution, and Training Centers.

[Try to present a very specific persona]

- Teachers and Students of Universities, Schools Educational Institutes, and Training Centers who are using the distance learning.
- Open Universities.
- They suffer lack of funding, and they don't have the resource to build their own systems.

[This will also be your early adopters that will rush to use your solution]

- Universities, Academic Institution, and Training Centers.

## **Solution impact**

[What is the impact on your users' practices that you expect with this solution?]

- Friendly, and easy to use
- A good, and real Measuring for the students' capabilities, knowledge and skills.
- Easy access for Exam.
- Safe and secure
- Achieving Justice between Students

[What is the impact on the educational process?]

- Providing direct and immediate feedback for student .
- Improving student performance .
- Reducing the time and effort of the teacher .
- Encouraging high-order thinking

[What is the wider societal impact that you see your solution having?]

- Academic Institutions have access to secure system for online education that is affordable.
- Being able to accurately determine the student's level .
- Integrity of Online Exam = Integrity of Physical Exam.
- Obtain a fair examination system for students 'rights.
- Get rid of fraud cases.
- Adopting the system in the future without any concerns.
- Better society does not cheat.
- Academic Institutions have access to secure system online education.

### **Solution tweet text**

Digi Edu Proctoring Exam is plugin and work with Moodle, and it can be transferred to other sources LMS. It uses identification methods and AI algorithms focusing on eyes detection to guarantees the best level of security and privacy. In addition it helps to solve internet issues

### **Solution innovativeness**

[Why is your solution innovative?]

- Since It uses modern technologies and use artificial intelligence and machine learning (Eye Tracking and Detection) .
- It relies on encryption and local network architecture to solve the internet connectivity.

[Are there other similar solutions?]

Yes, but they don't work with Moodle LMS.

For example, Mercer| Mettl, PSI Service LLC, ProctorU, Examity, Proctorio, and Talview.

[How's your solution better?]

Such available softwares work independent of Moodle, but our solution will be part of Moodle.

### **Solution transferability**

[Can the solution be transferred in other contexts, or is it specific for your target group?]

Yes, it can be transferred to other open source learning management system.

[Can the solution be implemented across different platforms?]

Yes, such as sakailms and other platforms

<https://www.sakailms.org>

## **Solution sustainability**

[What kind of business models do you see for the solution?]

- Freemium model : It is free to use up to certain level.

[How's the solution going to be financially viable?]

- Large institution have to pay for license, and depend on number of students, courses, and exams.

## **Solution team work**

We enjoy working in a team environment. We work well with others and value their presence and contributions when working on collaborative projects. After all, we all need to be able to work together to succeed. We also very approachable and always willing to help and support our coworkers when needed. Therefore, We prefer to continue work as a team in future.

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