



DigiEduHack Solution Vancouver - Innovate to Educate Challenge: Vancouver - Innovate to Educate Challenge 2020

DodgerDodge: Innovate the Effectiveness of the Examination

AI to the Rescue

Our solution is a review or support system assisted by AI models and algorithms, where students have the opportunity to answer written questions orally in a video format, thus reducing the chances of fraud as well as the length of the correction.

Team: DodgerDodge

Team members

Eszter, Horváth; Gergő, Tóth

Members roles and background

About us:

Our team consists of two members. We are both students of ELTE IK's Program Developer course in Budapest. Eszter is currently doing her Bsc degree and I do my Msc. Eszter is responsible for the project management and business planning, while I provide the technology background.

Eszter:

I've been working in the project management and consulting field for more than two years. I've had the opportunity to help out Startups and larger companies, financial institutions as well. I am familiar with both the student's and educator's side as my father was a high school teacher and I've also been

tutoring other students before.

Gergő:

I have been working with SAP development for about two years and during this time I was lucky enough to participate in several successful projects at various large companies. In addition, I am involved in several AI-related research and projects at the university and other projects are in the near future.

Contact details

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Solution Details

Solution description

We want to provide a video software for test taking that could even become an integral part of education in the future.

Our application would work as follows:

1. The instructor would have the option to create the test by mapping the questions or using AI to generate it from a document,
2. Students will receive the test at a designated time, where they would answer each of the questions in a video,
3. For the stored videos, the AI would create a text file based on the responses and then grade that text file as well. Classified tests are ultimately judged by the instructor.

The usefulness of the outlined program could be judged primarily from the reduction in teachers' time dedicated for revision and test preparation. Furthermore, removing this burden from teachers would give them more time for actual teaching and helping students, also for research and project work at university level.

Solution context

Fortunately, we had the opportunity to talk to several educators in Hungary, and here the difficulty of controlling independent and decent work from the student's side seems to be the biggest problem in primary and secondary education. One of the interviewees has foreign acquaintances, mainly other educators, with the same obstacles.

It is easy to cheat during exams where students do not have to appear in a video (another tool, book, notes). However, if the exam occurs in live video chat format, it could take several hours for the teacher to evaluate every student.

Another consequence is, especially during a pandemic, that students do not have the opportunity to express themselves orally.

In higher education, too, the above mentioned problems are present and another problem arises as well. As a result of the scams, cheating students get better results and their credit index improves, causing other students, who prepare fairly, to be at a disadvantage in terms of scholarships.

Solution target group

With our solution, we want to give teachers a tool that makes it possible for them to audit multiple people in parallel, and because our AI models can also do the assessment, the teacher only has to judge AI's decision, saving a lot of time and energy.

Solution impact

The most important measure in lower education is the time saved for teachers, in higher education it can be quantified in other ways, because the more time we save for teachers, the more they can work on research, which is beneficial for universities.

Solution tweet text

If you are a teacher what would you do if you can have more free time? /DodgerDodge/

Solution innovativeness

The specialty of our solution lies in the fact that we want to knead together existing solutions. We want to use the latest AI results, a Video Streaming app and an Examination program combined.

Our competitors typically use one or two of the above mentioned three components.

Solution transferability

Since the basic idea started with transferring an existing interviewing method used in HR to education, the concept can be exported to this market as well.

Other opportunities lie in institutions where examinations no longer exist and students have to do project work.

Solution sustainability

We first teach our algorithms the English language, and then as we progress we want to scale this and add more languages to our repertoire, with a global expansion goal, but as we know, not all countries have the same type of education. There are countries where the examination system is non-existent, in this case our application could be used for a Peer-to-Peer control system. This would mean that each student's projects would be evaluated by an AI and each student would check another student's project as well, in the end, a student's grade would be given by the average of the

correctness of the evaluation made by the given student, the assessments made by other students and the AI.

Solution team work

We both experience the difficulties of online education on a daily basis so we feel a strong motivation to improve this form of education. At first we progressed slowly, then as we got to know each other's abilities and each other better, it became easier and easier for us to work together and progress with the tasks.

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