# **REBUS.AI**



# A new platform for students to improved their exercises skills

### Main Problems

- Are you a Student?
  - How many times have you had to do the same 10 exercises over and over again because you didn't have any others?
- Are you a Teacher?
  - Are you tired of your annoying students always asking for new exercises?

## **Our Solution**

- New platform
- For students and teachers
- The teacher can upload course material
- Students can learn about the subject
- Student can also generate new exercises



## Impact

- Increase students preparation
- Higher university ranking
- Less stress and higher self-confidence on the subject
- Less stress also for the teacher

## Sustainability

- Considered 800 questions per subject in a year for 3K students
- Cost for questions = 108\$
- Cost for answers = 2400\$
- Median run on NVIDIA T1 of llms, installation and support team > 3K
- Scalable
- No need for mass use of ai in the long run

## **Future Work**

- Competitions in platform among students
- Check slides in site
- ► For new subjects we generate fresh questions

Demo?

### **DIGIEDUHACK SOLUTION CANVAS**

Title of the solution:	RebusAI
Challenge addressed:	

Please describe your solution, its main elements and objectives as

milestones, resources required and eventual barriers foreseen. What

is your final product/service/tool/activity? How could the solution be

used to enhance digital education in the your challenge area? How

"An innovative platform designed to foster a stronger connection between

students and educators while streamlining the creation of study materials.

including a wide array of exercises. Notably, it offers the automatic generation

of exercises tailored to specific subject matters, as well as versatile evaluation

methods, encompassing peer reviews and teacher assessments. Furthermore,

each exercise is equipped with direct references to supplementary study

materials, ensuring a comprehensive understanding and enhancing the

could the successof the solution be measured? How will the solution

well as a brief implementation plan with some key overall

provide benefits to the challenge owner?

learning experience for users."

Team name:	RebusAI
Challenge category:	University learning

### Target group

Who is the target group for your solution? Who will this solution affect and how? How will they benefit?

The target of this solution are professors and students. The target group for your solution is primarily students and educators. Students can benefit by having access to a variety of exercises and resources for their coursework. Educators can use this solution to enrich their teaching . It will also affect educational institutions and organizations that provide learning resources.

Benefits:

Students can access a diverse range of exercises and resources. Educators can offer up-to-date and relevant exercises to students. Reduced redundancy in exercise materials, leading to more efficient learning. Improved educational outcomes for students due to relevant exercises. Educational institutions can enhance their reputation by providing modern learning resources.

#### Impact

What is the impact of your solution? How do you measure it?

Enhancing student preparedness, elevating university rankings, reducing stress levels, boosting self-confidence in various subjects, and providing substantial support to teachers and tutors. This support empowers educators with a broader range of examples and exercises. Additionally, it can streamline the process of handling "simpler exercises," allowing educators to allocate more time to assist students with more complex topics. This, in turn, leads to a substantial improvement in knowledge transfer and the development of essential skill sets.

### Describe it in a tweet

Describe your solution in a short catchy way in maximum 280 characters

Struggling to find course exercises? Teachers too busy to create new ones? Enter RebusAI: an academic resource powered by AI, crafting exercises tailored for the class. Teachers can edit/approve exercises for future classes, saving valuable resources.

#### Innovativeness

What makes your solution different and original? Can anything similar be found on themarket? How innovative is it?

What makes your solution innovative is the dynamic and crowdsourced nature of exercise creation and curation. It combines elements of a social platform and an educational resource repository. While there are educational resources available, the crowdsourcing aspect and the ability to adapt to changing educational needs make your solution unique.

### **Transferability**

Can your solution be used in other contexts?

What parts of it can be applied to other context?

Parts of your solution can be applied to other contexts:

The crowdsourcing model can be applied to create resources in other subject

areas such as different courses and, maybe, high schools.

The platform's user interface and experience can be adapted to different types of content sharing.

#### Sustainability

What is your plan for the implementation of the solution and how do you see it in the mid- and long term?

Your plan for the implementation and sustainability of the solution could include

Building a strong community of contributors. Regularly updating exercises to keep them relevant

Establishing partnerships with educational institutions

Ensuring a user-friendly and scalable platform.

Implementing a business model, such as freemium, to fund further development. In the mid- and long-term, your solution can evolve to meet the changing needs of the education sector while itment to quality

maintaining its innovative approach and co

Expenses are described in the slides.

### Team work

Explain why you are the perfect team to develop this work and what are the competencies you all bring in so the solution is developed successfully. How well did you work as a team? Could you continue to work as a team in the future?

In just a day we have been able to work together in a constructive way, communicate effectively together and create a working prototype. We think that if we prepare ourselves more we could be able to do much more together!



What is the problem you are facing? What is the challenge that you are solving?

While participating in a course, we often encounter difficulties in locating suitable exercises. Typically, the available resources are restricted to outdated exams and in-class exercises from previous years. The pool of exercises is finite, and many of them may have become obsolete over time.