GROUP NAME: TEC.INNOVING EDUCATION

NAME OF THE SOLUTION: CREATING AN IMMERSIVE WORLD IN VIRTUAL REALITY FOR AN ACADEMIC PURPOSE

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Problematic

When we argue about evaluation at a higher level, which from theoretical positions and current educational models are positioned based on the assumptions of practical rationality with the search for quality and academic excellence, which is not always strengthened from of the processes developed in face-to-face classrooms, where priority is given to technical rationality; Academic training is provided oriented towards subsequent work performance that involves solving problems in different areas, which is why it is supported that the evaluation of learning should favor practical issues that bring students closer to situations specific to their branch of knowledge and allow them to go developing skills, beyond memorizing the content. According to the World Bank (2018), "teachers evaluate students in the classroom every day - formally or informally - even in school systems with few resources and poorly managed" (p. 17), the above, It allows us to recognize the importance of the process as it is a continuous and unavoidable task in the classroom; However, the way in which education professionals understand evaluation, as it is their responsibility to guide the process, has direct implications in the way in which they develop it and in the social relationships they exercise with the evaluated students. In this sense, the following lines seek to characterize educational and learning evaluation based on the theoretical assumptions of various authors.

OTHERS:
● Written exams: Written exams are a traditional way of testing students' knowledge. They usually consist of multiple choice, short answer, or essay questions.
● Oral exams: Oral exams are a way to evaluate students' oral expression and argumentative skills. They usually consist of open questions or the presentation of a case.

Solution

Currently, there is a growing number of projects and institutions that use virtual reality in their educational processes (Brown et al., 2020; ODITE, 2019). There is evidence of growing interest on the part of the research community in topics related to virtual reality in the educational field (Aznar et al., 2018; Campos et al., 2019; Radianti et al., 2020). EDUCAUSE research has shown that virtual reality is effective in hands-on learning experiences; based on skills and competencies; and by "enabling the expansion of high-touch learning experiences and cost" (Brown et al., 2020, p. 30). Various authors agree that virtual reality contributes to improving the educational process (Aznar et al., 2018; Campos et al., 2019; Ferreira et al., 2021; López et al., 2019; Piscitelli, 2017). On the other hand, Radianti et al. (2020) point out that virtual reality application developments do not usually consider learning theories. Motivation is another aspect associated with educational experiences with virtual reality (Aznar et al., 2018; Campos et al., 2019; López et al., 2019).

The Immersive Learning Platform with Digital Characters and Artificial Intelligence (AI) to create digital characters and virtual reality (VR) to immerse students in simulated experiences.
This platform has the potential to be applied in various educational disciplines beyond law, providing students with an interactive and immersive learning experience.

This immersive learning platform can be adapted to different areas of knowledge, such as medicine, psychology, history, science, administration, among others. Below are some of the key aspects of this solution:

1. Custom Digital Characters: AI is used to create realistic and compelling digital characters based on text data, allowing different parties involved in simulated cases or educational scenarios to be represented.

2. Virtual Reality Experiences: Students use VR headsets to immerse themselves in educational scenarios, allowing them to interact with digital characters and experience situations in a realistic and conversational way.

3. Observation and Evaluation: Teachers can observe students' performance during the simulations, grading them based on their participation, attention, reasoning, and decision making.

4. Interdisciplinary Learning: The platform can be adapted to different disciplines, making it a versatile tool for learning in a variety of academic fields.

5. Improved Understanding and Soft Skills: Students can better understand concepts and complexities related to their area of study, while developing critical reasoning, decision-making and social competencies skills.

6. Exploration of Social Competencies: In addition to subject-specific knowledge, students can improve their communication, empathy, and teamwork skills by interacting with digital characters and other students in the virtual environment.

Applications

The Immersive Learning platform with Digital Characters could be applied in a wide variety of courses and majors at a university, providing a more interactive and enriching educational experience. Here are examples of how it could be implemented in different disciplines and academic fields:

1. Faculty of Law:

○ Simulated legal cases for law students, where they can interact with digital characters representing clients, judges and lawyers.

○ Training in argumentation and conflict resolution skills.

2. Faculty of Medicine:

○ Medical simulations that allow students to practice virtual diagnoses, treatments and surgeries in a safe environment.

○ Interaction with virtual patients to develop communication and empathy skills.

○ Training in medical emergency situations.

3. Faculty of Psychology:

○ Virtual therapy scenarios where students can interact with digital characters representing patients with various mental disorders.

○ Practice therapeutic and counseling skills in a controlled environment.

○ Evaluation of experimental psychology through simulations of studies and experiments.

4. Faculty of Business and Administration:

○ Simulations of managerial and strategic decision making.

○ Business problem-solving exercises with digital characters representing employees, customers and competitors.

○ Development of leadership and teamwork skills.

5. Faculty of Sciences:

○ Virtual laboratory simulations for scientific practices and experiments.

○ Exploration of scientific concepts and phenomena in realistic environments.

○ Collaboration in interdisciplinary research projects.

6. Faculty of Humanities and Social Sciences:

○ Virtual historical settings that allow students to explore past events and historical figures.

○ Interactive case studies in sociology, anthropology and cultural studies.

○ Training in research and data analysis skills.

7. Faculty of Education:

○ Virtual classroom simulations for future teachers, where they can interact with virtual students and face pedagogical challenges.

○ Practice of teaching strategies and classroom management.

○ Evaluation of pedagogy and the impact of educational decisions.

8. Faculty of Engineering:

○ Design and construction simulations of engineering projects.

○ Training in technical problem solving and project management.

○ Security testing and risk assessment in a virtual environment.

Instructions to the User (teacher)

1. Training with Cases:

Begin the training process by providing the platform with a series of cases relevant to the educational discipline or field of study you will focus on. These cases will serve as a basis to generate simulated situations in which students will interact.

2. Creation of the Virtual Space:

Set up the virtual environment in which the digital characters and students will interact. You can choose to design a virtual space from scratch or use a pre-designed template, depending on your preferences and needs.

3. Creating a Seed Prompt:

Generate a "seed prompt" or initial description that will serve as a starting point for the generation of cases and scenarios. This prompt should include a brief description of the case or situation that you want to simulate, as well as relevant information

about the characters involved and their motivations.

Conclusions

We can classify our business idea as a hybrid model, because it will comply with the configuration and agglomerate the new trends of immersed learning platforms with digital characters in a cutting-edge educational environment in the digital world, adapting it to the institutional needs in our country. to the policies of the Peruvian context, which has taken into account the different demands of our university academic education, which makes it a unique and innovative model that is in permanent mutation.

From the beginning of our project, a human and technological structure was implemented and planned, which had to comply with the service support for law students. This goal was met, but currently the immense world of university careers positioned and that are being born at the forefront in this digital era, we want to demonstrate that technologically, investments continue to be made to support all students, however, the automation of technological support processes such as operational management, has not presented growth. expected. Likewise, a detailed review of the administrative aspects that can be integrated between the university institution and external management support services leads to advances in these tools with artificial intelligence (AI).

Therefore, what we also propose with this implementation in a virtual reality (VR) environment will be optimized for this virtual learning modality that will be able to immerse students in these technological experiences with frame rates and the various audio immersions without much effort. . investment only using an engine from any video game such as Unity, Unreal Engine or PlayCanvas. Therefore, currently it is considered that it is in a position to be evaluated quantitatively for all the indicators that will allow us to obtain the quality parameters that we want to achieve.
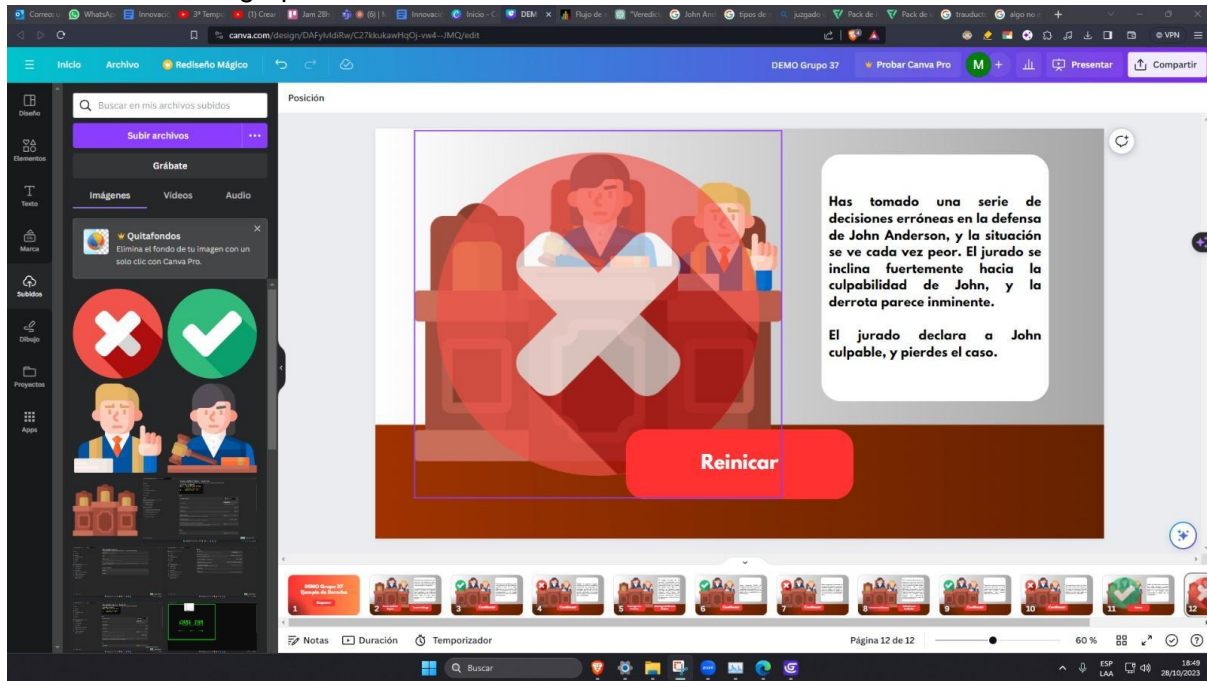
Project Evidence

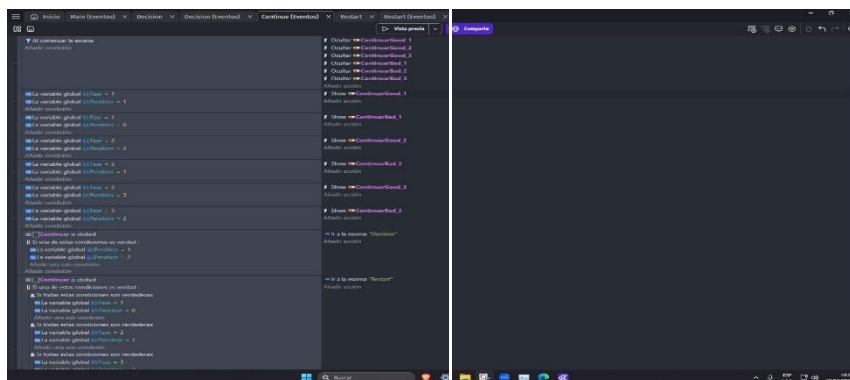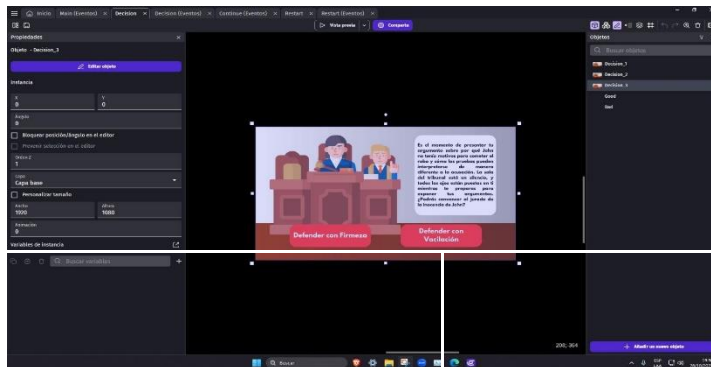1. We define what the project would be.
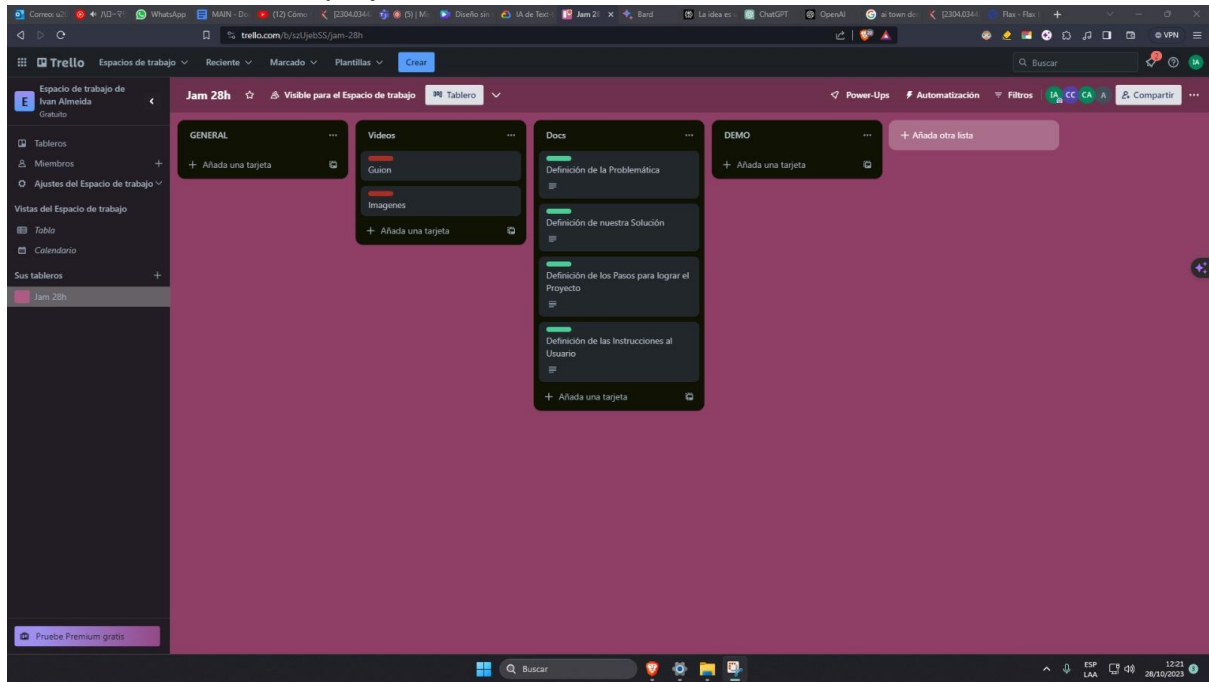
2. We divide the tasks.
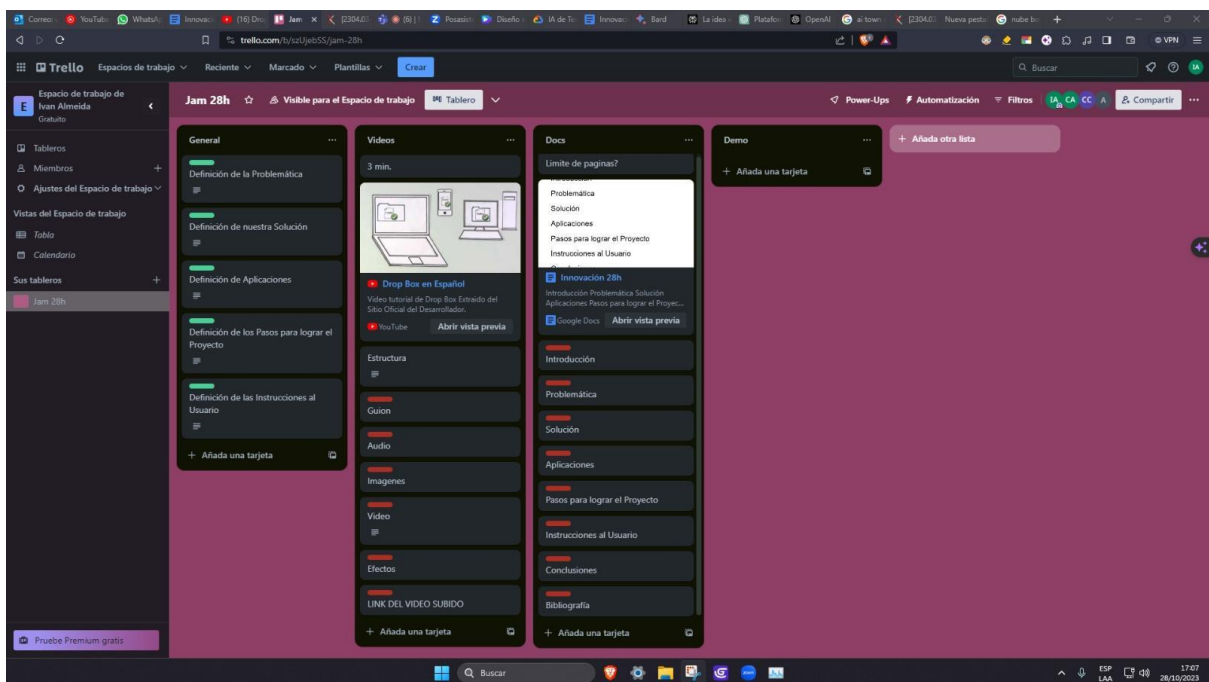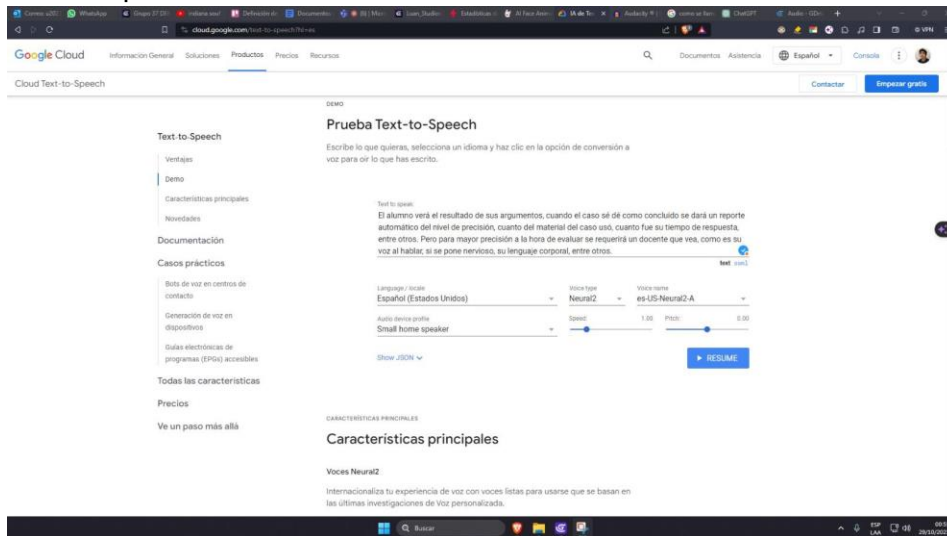
3. We made the graphic resources for the demo.

4. We schedule the demo.

5. We publish the demo.

6. We improved the demo with audio

7, Creation of the explanatory video in canva

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VIDEO LINK (PUT SUBTITLES IN ENGLISH)
https://www.youtube.com/watch?v=2u-dik_ussQ

DEMO LINK
https://gd.games/luan_studios/tec-innoving-education-demo