

"YEAR OF UNITY, PEACE AND DEVELOPMENT"

PERUVIAN UNIVERSITY OF APPLIED SCIENCES



28h INNOVATION MARATHON - DIGI EDU HACK

Proposal for Interaction and Educational Quality in Higher Centers

Team 41 _ Creating:

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Introduction

In this 21st century, higher education regardless of where it is developed continues to overcome several challenges at a global level, since the knowledge of industries is internationalized and globalized. This fact has generated two consequences, the first is the acceleration of all processes and immediacy. resolution of each management, which is why to comply and carry out the above described, science and technology must go hand in hand. Consequently, higher education must make greater demands to advance at the same pace as required by society, industries and the State in general to be sources of development, creativity and problem-solving capacity, thus overcoming obstacles and/or challenges wherever they occur. let's meet

In this sense, the Peruvian University of Applied Sciences (UPC) and Digi Edu Hack are at the forefront of the demands that are requested in these times. Therefore, spaces like the one we find in this Innovation Marathon (28h) are created in the second stage with the purpose of allowing us to be part of the inclusive progress and generator of opportunities that our community requires.

Objectives:

Our main objectives are: Facilitate access to information and the development of knowledge without distinction, through the interaction of augmented reality (AR) and artificial intelligence (AI).

Mission:

Collaborate and guide in the learning process, adaptation and interaction of students to the university world in a friendly manner, at the same time offering the best services for their optimization in times, with the purpose of generating problem-solving capabilities.

Originality: The value of the idea as a solution and the creativity used.

The proposals that we present are framed for use in face-to-face/virtual classrooms, the use of the library and academic services and these are the following:

- Augmented reality in class.
- Artificial intelligence/augmented reality for library and services use academics.

In relation to augmented reality in class, it will lead us to take the courses in a dynamic, interactive and creative way, where knowledge develops and deepens quickly because there will be contact with the object (if required), the problems/cases and the solutions, these will be resolved at the same moment. Example: In the medicine class you can have the human body in augmented reality and this will lead to the location, evaluation, pertinent analysis and a possible solution as required at the real time, in the case of engineering you will have the parts of the project which can be a car or machinery or various processes, this leads to identifying functions, limitations and what is

the productive process/cycle and in the literature class the teacher can be an alias or the same person who is in augmented reality, this will allow the student to interact and resolve their doubts in real time, as in turn the student, if required to present, will be able to use an avatar or your own person in augmented reality to interact and thus present, at the same time there is another modality which is to send the student's questions to the teacher's box, which can be before class or after and the teacher has the freedom to choose the date of answering, this answer will actually be increased in order to verify if the student understood or if he has another difficulty.

Regarding artificial intelligence/augmented reality for the use of libraries and academic services, it is having a friendly avatar that has artificial intelligence, its hours are 24/7, 360 days a year, this service works for the entire academic world in one higher entity whether one is within the university or outside it. When the academic is at the university, he or she can go to the library and interact with the avatar to resolve doubts about a bibliography and can ask for recommendations, what their summaries are and if they are related to authors and if the university has said books or where they can be found. , etc. If the academic is outside the university, they can log in from their phone using their code to chat with their library avatar to make reservations, etc. This service will allow the academic to have fast, reliable and secure information at the moment. In the case of academic services, enter with your code from your mobile phone wherever you are and interact with the avatar to request any academic information in real time.

Effectiveness: The solution must allow the objectives of the challenge to be met.

Both augmented reality and artificial intelligence will be developed in the university's face-to-face and virtual classes, they meet the main objectives of this proposal since through them we can access information interchangeably and this will allow us cognitive development and practical that we will apply it from the university to resolve existing problems in our society.

Augmented reality in the classrooms will provide an enriching experience with both students and teachers that will create a bond of cooperation and organization, this will allow solutions to social and diverse issues to be brought from the beginning of the degree, because the knowledge will be firm and the Creativity will be developed better, in turn the student's doubts will be resolved quickly.

Artificial intelligence and augmented reality in libraries and academic services will allow interaction with an avatar for the entire academic community, this would lead us to obtain reliable, fast and accurate information, in some cases recommendations could be included, this process could be requested in any location and space.

Process: Evidence all the elements that were used to reach the prototype of the final product.

To develop the process, we first have to describe the foreground and background in relation to the face-to-face classes and the bibliographic resources used by the academic.

In the foreground, in higher education we have classes that are conventionally in-person, when using technology these are virtual. However, we consider that they do not fully meet the expectations for the students, having two factors: The interaction is distant or feels distant and this leads to a lack of

participation and remain with academic doubts. As we already know how face-to-face and virtual classes work, we are going to see the processes that are the elements that allow us to have the final product. This is entered through a code from the academic both on your cell phone, computer or this tablet or iPad and it was allow this to have the augmented reality of the different courses or topics indicated in the class.

In the background, in higher education the use of bibliographic alternatives is constantly required, and being an expert as an academic who is achieved over time, you know where to look, how to search and what to look for. However, if you are not an expert or do not have the minimum knowledge, this becomes frustrating, which is why mechanisms are required that provide us with friendly and effective solutions. On the other hand, some requests for academic services are dismissed for providing little or no information when and where it is required. As we already see that the student has difficulties in making use of the bibliographic alternatives, the isi is born, which will be entered through a code so that the avatar called lisi comes out or through the voicemail can provide us with information so that we can have the appropriate information and proceed to solve the issues that we have covered according to the courses.

Quality: The solution must reflect quality; just because it is free or low-cost, it does not lose quality.

In the solutions of the proposals presented, it complies with a quality plan by having two elements that are quality standards and quality management. Firstly, in relation to quality standards, the proposal is described as having functionality and practicality, which will make it friendly to the entire academic world. Secondly, the proposal complies with quality management because we already have the necessary resources to develop the proposal; Consequently, this would lead us to not generate unnecessary high or unforeseen costs to carry out the project. All of the above will allow us to comply with two necessary elements of the project, which is to have efficiency and effectiveness. It should be added that the two proposals have the quality characteristics mentioned, this will allow the entire academic public to access it in an easy, practical, friendly and economical way.

Viability: The solution must be feasible and sustainable over time

These two proposals are viable and sustainable over time because the resources are already within the universities, the only thing that would be left is in the case of reality.

augmented reality to carry out a training process for both the academic and the teacher to proceed to develop augmented reality and these are used within the resources that we already have, which are our cell phones, our computers or our iPads or our tablets.

In the case of library services, there would have to be a database that the librarians themselves will provide so that the request for information can be developed efficiently and effectively through the lisi avatar that will be provided 24/7, 360 days a year.

In relation to academic services, the database is also provided by the academic services area with the purpose of implementing The avatar lisi with all the information to provide the academic in real time with the required information, achieving optimization of times.

Photos and videos





Links: https://youtu.be/pVxoIMKzDpc?si=8OrwjHwwSUSI8_TW