DIGIEDUHACK SOLUTION CANVAS

Title of the solution:.. Conversational AI for Enhanced Learning Experiences

Team name:.......................... TeachGPT

Challenge addressed:........................... Learning Experiences

Challenge category:... Emerging Technologies for Education

Describe it in a tweet:
Describe your solution in a short catchy way in maximum 280 characters

Our advanced educational solution utilizes conversational AI to create personalized instructional assistants. By integrating student and teacher data, tailored explanations and feedback are provided. This individualized approach fosters skill refinement, critical thinking, and inclusivity, ultimately enhancing academic outcomes and creating an inclusive learning environment.

DIGI EDU HACK 2023

Solution description:
Please describe your solution. What is your final product/service/tool/activity? How could the solution be used to enhance digital education in the your challenge area? How could the success of the solution be measured? How will the solution provide benefits to the challenge owner?

Our proposed solution addresses the pressing need for personalized and effective educational support. By deploying cutting-edge conversational AI, we aim to create instructional assistants that cater to individual learning styles and needs.We aim to fully integrated each students and teachers data from the application into the machine learning process to build the algorithms.

This means students will receive tailored explanations for difficult concepts. Same assignment given by the teachers, will result different instructions by the AI for each student. The AI-based feedback system will provide precise critiques on writing, enabling students to refine their skills iteratively.

Additionally, the support for targeted prompts will foster critical thinking and inquiry, driving a deeper understanding of the subject matter. The provision of customized learning for students with disabilities and language translation services ensures inclusivity and equal access to education. Our solution empowers learners, bridging gaps in comprehension and proficiency, ultimately improving academic outcomes and fostering a more inclusive learning environment.

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

In the current educational landscape, the demand for personalized and adaptive learning experiences has never been more evident. Traditional teaching methods struggle to meet the diverse needs of students, often resulting in knowledge and skills gap and disengagement.

With the advent of AI-powered conversational systems, we have an unprecedented opportunity to revolutionize the way education is delivered.
The ubiquity of technology in today's classrooms and homes provides a fertile ground for the implementation of our solution. Moreover, the global nature of education calls for solutions that transcend language barriers and accommodate diverse learning abilities.

By leveraging AI, we tap into a powerful tool that has the potential to bridge these gaps, providing a level playing field for all learners, regardless of their background or learning style.

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

The tutor app designed for learners across diverse age groups : kids, teenagers, adults, and business professionals will significantly impact their learning. For kids and teenagers, the app will provide a user-friendly interactive platform along with gamification. Adults seeking to learn a new language will benefit from the app's flexibility, enabling them to personalize their learning pace and content, fitting into their busy schedules.Furthermore, the app will cater to business professionals addressing their need for practical language skills crucial for professional communication. By offering modules focused on a variety of domains. Overall the app will optimize language learning by catering to a wide-range of ages providing tailored and efficient learning experiences, ultimately empowering learners with valuable language skills indispensable in today's globalized business landscape.

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

Our AI-driven educational solution is a game-changer in today's learning landscape. It addresses the pressing need for personalized and effective support, revolutionizing education delivery.

By leveraging cutting-edge technology, we create instructional assistants that cater to individual learning styles and needs, bridging gaps in comprehension and proficiency. This means students receive tailored explanations and feedback, resulting in improved academic outcomes and a more inclusive learning environment.

Furthermore, our dedication to inclusivity through customized learning for students with disabilities and translation services for English language learners demonstrates a forward-thinking mindset, ensuring that education is accessible to all.

Through this project, we are not only embracing innovation but also driving a positive transformation in the educational landscape, setting a new standard for inclusive and effective learning experiences. Our solution empowers learners, fosters a deeper understanding of subject matter, and ultimately improves academic outcomes. This is a paradigm shift in how we approach learning support, setting a new standard for inclusive and effective education.

Innovativeness:
What makes your solution different and original? Can anything similar be found on the market? How innovative is it?

Our project stands at the forefront of educational innovation by harnessing the capabilities of advanced AI technology. The integration of conversational AI to serve as instructional assistants represents a paradigm shift in how we approach learning support. This novel application of AI empowers students to take control of their own educational journey, providing them with on-demand, personalized explanations and feedback. The inclusion of prompts to stimulate critical thinking is a pioneering approach to foster inquiry-based learning.Additionally, our solution's dedication to inclusivity through customized learning for students with disabilities and translation services for English language learners demonstrates a forward-thinking mindset, ensuring that education is accessible to all.

Transferability :
Can your solution be used in other contexts?
What parts of it can be applied to other context?

Our AI-driven educational solution offers a level of adaptability that extends beyond language learning, making it applicable across diverse educational contexts. Its versatility enables seamless integration into subjects like math, history, and more, enriching education across multiple disciplines. Moreover, the AI's assistance can be integrated into existing learning management systems (LMS) supported by educational institutions, enhancing the overall learning experience. Overall, the adaptability of our AI-driven solution ensures its potential to revolutionize education and improve learning outcomes in various academic disciplines.

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

Our AI-powered educational solution holds the potential for further enhancement in several key areas. Firstly, by incorporating additional data on pronunciation and dialectal variations, we can significantly expand the available resources for improving speech articulation. This enrichment will empower learners with a more comprehensive understanding of phonetics. Additionally, the AI's assistance can seamlessly integrate into existing Learning Management Systems (LMS) supported by Higher Education Institutions (HEIs), enriching the overall learning experience for students. This holistic approach ensures our AI solution remains at the forefront of educational innovation.

Team work:
How well did you work as a team? Could you continue to work as a team in the future?

This customized AI assistant will expand the trajectories of student collaboration enacting affordances for small or large classroom discussions, focusing on prosodic features including intonation, stress, and rhythm. During collaborative activities, students could deploy the AI assistance to engage in conversations, solicit explicit feedback and support pronunciation on output generated during discussions of specific areas, including pronunciation, fluency, grammar, vocabular, collocation etc.The AI can assess their pronunciation and offer customizable feedback and support to improve their articulation, prosody, vocabulary, collocation etc.

European Commission