Sait

What's the most vital ability necessary to receive an education?

Sait is a ML-based virtual reality app that enables 300,000,000 people to read and write without stress and headache. We transpose a common remedy for stressful reading into a whole new realm of digital eye-tracking and spectacular objects.

Team: Argonautica

Team members

Giorgi Chilaia, Giorgi Butbaia, Giorgi Kvantrishvili, Giorgi Chanturia

Members roles and background

Giorgi Chilaia

Role: Product Owner, Presenter
Background: Entrepreneur, founder of first Georgian e-learning platform, Nebula.ge; Director of "Supernova" knowledge olympiads.

Giorgi Butbaia

Role: Software Engineer Worked on the software development for a VR application on iOS
Background: Software Engineer, Student at Free University Tbilisi.

Giorgi Kvantrishvili

Role: Optical Researcher
Background: Physicist, MPhys at RWTH Aachen University, Narrator and Translator at Khan Academy, Co-author of Reasoning course at Nebula.ge

Giorgi Chanturia

Role: Optical Engineer Researched plane projections
Background: Physicist, MPhys at Bonn University. Author of Physics online course at Nebula.ge, Physics lecturer at Free University Tbilisi

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Solution Details

Solution description

All educational skills - analysis, synthesis and information comprehension are founded on our brain's ability to read and write freely and comfortably. 10% of the world population receives headaches, stress and sore eyes while working with text. Binocular dysfunction limits education of more than 300 million around the globe.

Luckily, binocular dysfunction is highly treatable - schoolchildren who do "pen pushups", witness significant improvement at reading and text comprehension. Some young patients report a 6-fold increase in learning efficiency after full treatment.

We created a solution that takes the pen pushup exercise in a whole new realm of digital eye-tracking and bizarre creatures.

The app is effortless to use:

1. Simply look at the camera and move the smartphone around your face.
2. Name an object - a sphere, an elephant, a spaceship? The app will render the object of your imagination.
3. Focus on the moving objects, train your ocular muscles

Our machine-learning algorithm tracks eye-movement and finds areas where the eyes fail to cooperate. This is done by matching the users' eye-movement image sequence with that of a perfectly healthy one.

Solution impact can be measured in two dimensions: amount of people impacted and quality of impact provided. We will measure total time spent in the application, total installations and bounce rate. Our inbuilt functionality allows us to measure users progress by comparing initial sight area to the up-to-date sight area.

Solution context

One in ten people get headaches and emotional stress while learning, resulting in loss of motivation and lowered learning efficiency. Our solution addresses the underlying problem for these students. We address the essential problem on which educational abilities such as text analysis and subject comprehension are founded.

300 million people around the globe, who have trouble concentrating when reading and writing - schoolchildren, sportsmen or adults who'd like to read more freely and comfortably.

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Solution target group

300 million people around the globe, who have trouble concentrating when reading and writing - schoolchildren, sportsmen or adults who'd like to read more freely and comfortably.

Solution impact

The app will bring impact to learners of various types - schoolchildren, students and sportsmen, just to name a few.

Since Sait is a smartphone application, instead of visiting a medical centre and paying to use a stationary device, students can do fun exercises anywhere simply using their phone and something like a Google Cardboard.

Solution tweet text

A smart virtual reality app that gives you sharingan for reading.

Solution innovativeness

The app can be engaging for all ages, having a wide range of possibilities for the types of virtual objects used and offering exercises of different complexities. Everything is controlled by voice command.

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Solution transferability

Aside from text comprehension, Sait can aid professional training of sportsmen. Baseball players, basketballers and shooters, just to name a few, rely on their perceptual precision. This foundational skill, also perceived as a talent, serves development of skills such as reaction speed and target-shooting precision.

Solution sustainability

Our team is working on the mobile application - Sait Lite. We are working together with the local ophthalmological centre - "First State Clinic of Batumi" to further develop the product. We plan to partner with governmental educational institution to deliver the app to the market.

Solution team work

Argonautica is an experienced team, having participated in the NASA Space Apps Challenge, so our teamwork was fine.

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