



DigiEduHack Solution
Palestine - DigiEduHack 2020
Challenge: Palestine - DigiEduHack
2020 Challenge 2020

Qalam app

The digital handwriting exercise book

QALAM is the first handwriting application in MENA region, designed to teach students how to write using a stylus and tablet, helping kids across the world to continue their learning journey at home. Our app has curriculum aligned exercises!

Team: AFKAR

Team members

Amal Hmaid, Doa'a Ghandour, Akram Hmaid,

Members roles and background

- Amal hmaid the CEO of Afkar Team, Computer Engineer, expertise in Tech education, she spent the last ten years building educational software for local and international organizations like UNRWA TV, she has a master degree in Teducation, and She completes a PhD in Educational Technology. **(she is designer Qalam App)**
- Doa'a Ghandour, Computer Engineer, she expertise in game developer. **(she is developer Qalam App)**
- Akram Hmaid, Graphic designer, he expertise in UX/UI game. **(she is UX/UI designer Qalam App)**

Contact details

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Solution Details

Solution description

QALAM is the first Arabic handwriting application, designed to teach students how to write using a stylus and tablet, helping kids across the world to continue their learning journey at home.

Our app has curriculum aligned exercises (National and International)!

we built Review, Revise, Correct, A self-paced, auto-corrective approach which allows students to progress at their own speed and according to their own development.

The application allows more individualization and differentiation of the courses thanks to an innovative approach based on the automatic analysis of the students' productions.

AI Machine learning provides real-time corrective feedback and stores data for future analysis.

Solution context

The education of 110 million children in the Middle East and North Africa was interrupted due to lockdowns and school closures as a result of COVID-19.

Of those children who are in school, half do not master the basic skills of reading, writing and mathematics. So, Six out of 10 children in the region cannot read or understand a simple age-appropriate text at the age 10, or achieve minimum proficiency levels in reading and writing.

[According to what was stated in UNESCO.](#)

So we built QALAM app.

Solution target group

Target group

- Children 5-8 years
- Parent 25-40, married, have children age 5-6, middle income, and have smart devices.
- Educational institutions (UNRWA, Qatan, American school ...)

To increase the number of users, we will focus on activities such as:

- Direct Communication with educational experts and other activities
- ASO (App Store Optimization)
- rank our app in the store and make it easy to found by users
- Social Media: campaigns to reach customers.
- Kids' Influencers: campaigns to reach kids by youtube programs

Solution impact

How can Qalam app help reverse the negative trend of declining school results?

Our solution focuses on improving concentration rather than only on the fun of using a tablet. Concentration helps the learning process which leads to a richer verbal and written vocabulary. A win win situation.

Individual Monitoring: Each stroke is analysed based upon shape, direction, order and line spacing, allowing for accurate assessment for learning.

Personalised Lesson Plans: Teachers can create and customise exercise sequences for individual students and learning groups with the ability to save lesson plans for future use.

Solution tweet text

QALAM is the first handwriting application in MENA region, designed to teach students how to write using a stylus and tablet, helping kids across to continue their learning journey at home. Our app has curriculum aligned exercises!

Solution innovativeness

- Qalam app is digital handwriting solution. The act of writing structures the thought and the mind. Without writing there is no history.
- Recent studies show that the invasive, yet passive consumption of digital technologies is having a negative impact on the intellectual capacity of current and future generations. Schools are not the only entity responsible for this trend, however they can help encourage a positive use of digital technologies.
- Neuroscientific research confirms the connection between motricity and the brain's capacity to acquire information. 'When I write, I concentrate on writing. The more I write, the more the cognitive function in the brain associated with the assimilation of information is stimulated'.
- The Qalam app allows more individualization and differentiation of the courses thanks to an innovative approach based on the automatic analysis of the students' productions.
- we will develop app using machine learning to give the children more accurate feedback, Interface parents to track their kids' progress reports in exercises, and become even more inclusive.

Solution transferability

- We will work in Qalam app has become even more inclusive as we will prepare a version to help dyspraxic and dysgraphic children through dedicated handwriting exercises and an adapted interface. Health care professionals and teachers.
- This will look at how Arab immigrants can better integrate into their country of adoption usnig ICT-enabled solutions.
- we work to develop games develop read and write skills for kids.

Solution sustainability

In first step we will work at school, Our business model is freemium, we will make the app free to download with free limited content, and if you like full access you should subscribe on one of are our plans, for Qalam at school or Qalam at home.

Qalam at School

Qalam for school is design to teach children between 5-8 years old how to write using a tablet and

stylus. Teachers can enhance their handwriting teaching methods in the classroom with a dedicated space to create lesson plans, monitor individual progress and review each child's work.

Qalam at Home

By extending Qalam app beyond the classroom, children can use the Qalam approach to practice handwriting outside of school. Using a stylus and tablet, a child can continue their learning journey at home or during their spare time.

We will work to Launch of Qalam in the MENA region.

Solution team work

Our Team have more than 20 years of experience in the Tech education field.

- **Amal Hmaid**, the CEO of Afkar Team, Computer Engineer, expertince in Tech education, she spent the last ten years building educational software for local and international organizations like UNRWA TV, she have amaster degree in Teceducation, and She completes a PhD in Educational Technology.
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