DigiEduHack Solution
Saint Petersburg - ITMO DigiEduHack
Challenge: Gamification in education

Digilit: educational mobile game

Mobile game for digital literacy improvement

Our game helps middle-school students to improve their digital literacy skills via interesting narrative and responsive interaction. With the help of game elements and an atmosphere of an exciting quest, school students can acquire the basic digital competencies.

Team: T.O.A.S.T.

Team members

Trofim Kremen, Oleg Lavrov, Artem Anisimov, Stella Moslem, Temirlan Dzodziev

Members roles and background

We all are Master students from ITMO University. Our study program is Smart city digital technology.

1. Trofim Kremen - Master of Ceremonies
2. Oleg Lavrov - UX Designer
3. Artem Anisimov - Game Designer/Scriptwriter
4. Stella Moslem - Concept Manager
5. Temirlan Dzodziev - Fullstack Developer

Contact details

ks.krushinskaya@gmail.com

Solution Details

Solution description

The result of our collaboration is **a game with elements of narrative learning** in the single-player mode and **a quiz** for checking learning achievements in a multi-player competition. Players improve their digital literacy through completing single-player situations, which their characters live through. During the quiz part, players will not only try to win but also to get enough points to complete the module. Players can achieve three types of goals based on their actions and earn in-game currency that can be spent on hints for single-player stories. Players get the statistics of their actions and recommendations for completing tasks. The game prototype was designed with the help of Figma instrument for collaborative development of program interfaces.

Solution context

The main challenge for our team is increasing the involvement of Z generation students in learning the basics of digital literacy.

Digitalization brings not only opportunities but risks as well. It's highly important to use those benefits consciously, to know the rules, and to be able to distinguish fair players from notoriously fake and dangerous ones. According to Krish Chetty, Li Wenwei, Jaya Josie, prof Ben Shenglin "Bridging the digital divide: measuring digital literacy" research, 44% of teenagers have no knowledge how generally applicable programs are working, and 42% don't follow the news about new technologies and are rarely interested in tech novelties.

To reach out to Z generation representatives it is important to understand that the material should be presented **brightly, gamified, and interactively.**

Solution target group

Our target group is 10-16 y.o. students. Using our approach, representatives of the target group can learn about certain patterns of behavior in particular situations related to digital literacy avoiding traditional learning methods. Moreover, the game experience might spark learners' interest in particular topics related to digital literacy.

Solution impact

Students, who use our product, will gain new knowledge in the field of digital literacy, where traditional educational institutions often fail to provide necessary skills. However, digital literacy as the ability to find, evaluate, and present information via different media is increasingly important in today's labor market. The game makes digital literacy training more accessible to learners and equips them with better skills for their professional future. Digilit is our small contribution to the training of skilled workers for the digital economy.

Solution tweet text

A mobile application for middle-school students designed for improving their financial and digital literacy by means of narrative learning based on making decisions influencing the story and testing students through a multiplayer competitive game.

Solution innovativeness

The approach of using narrative learning or quizzes in education cannot be considered innovative. However, merging both genres in our solution allows us to rebalance strengths and weaknesses by smoothing negative effects of both separate genres.

Solution transferability

Our solution is adaptable for a variety of fields of study taking into account the fact that it is based on solving situational tasks.

Solution sustainability

Expanding boundaries and broadening the demographic can be realized in three ways. One of them is creating courses for students of any age, both children and grown-ups. The second way is adding more diverse learning tracks covering different aspects of digital literacy.
And the third one is the development of the project portability to other platforms.

Solution team work

Our team worked as one. At the end of the day, team members managed to adjust to each other’s pace and achieve the common goal.