RUSSIA
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CHILD AND YOUTH DEVELOPMENT ECOSYSTEM - SIMUL

SAKHA JUNIOR SCIENCE ACADEMY

INTRODUCTION

In the modern world, information technology has become an integral part of our lives. That is why our team, with the support of the Trust Fund for Future Generations of the Republic of Sakha (Yakutia), the Sakha Youth Science Academy and Information Technology Lyceum #24 in Neryungri, decided to develop a whole educational ecosystem that helps students interact with each other and sign up for various events, conferences and competitions
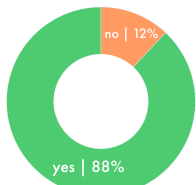
PROJECT TASKS

1. Analyse problem;
2. Design an application;
3. Choose technology stack;
4. Develop the website;
5. Testintg and polishing;
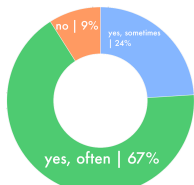6. Publish the solution.

RESEARCH

In the life of our team we experienced lack of a unified online platform to support events and their effective organization in the territory of the Republic of Sakha. To approve existence of that problem we asked mr. Albert Nikonorov to make a social poll in text channel of Sakha Junior Science Academy, and results shows that yes, many of us have trouble with current

no | 12%
yes | 88%

no | 9%   yes, sometimes | 24%
yes, often | 67%

Do you think that the event search systems (meetings, conferences, etc.) that are now available have limited functionality and could be even better?

Have you ever missed various competitions and conferences because at some point you missed information about its dates?
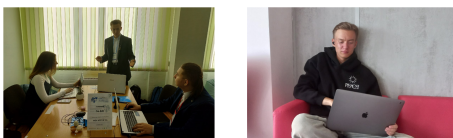
no   yes, sometimes   yes

We had a meeting with mr.Sergey Deminov, the Director of Scientific Society of Students «Intellect of 21st century», and he believes that this problem is very relevant: «It's sometimes impossible to realize, except that you have to stay up nights to analyze all this»
Further, we consulted with dr. Vasily Pavlov, mr. Vladimir Egorov and Varvara Vasilyeva and received recommendations about projects

After that, we started working on the project. We began by discussing the research results
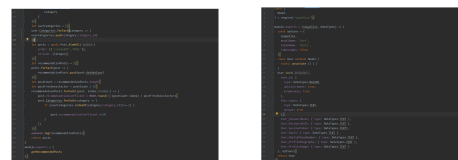
DEVELOPMENT

The idea came to us a long time ago, but we began to implement it during the hackathon «My Profession IT 2022». We chose the case of the Trust Fund of Future Generations and worked on the terms of reference, but after the competition was over, we approached the fund directly and began to cooperate

To create an ecosystem, we chose to develop an online service with the ability to expand for mobile phones, and so we decided to make a web application with its own API. The frontend is written in VueJS, Nuxt and TailWindCSS.
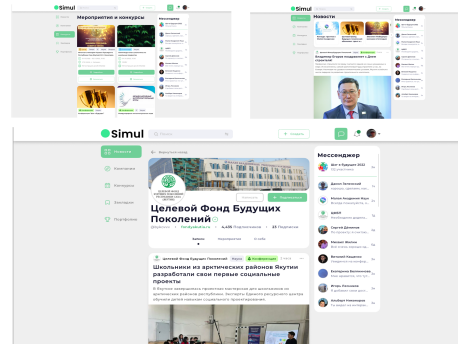
The backend is developed using NodeJS, ExpressJS. Additionally SocketIO was used to make application more responsive for users

The i18n library is connected and built in, it will allow us to configure the translation system and the ability to select the language. Now, system supports Russian, Yakut and English languages

DESIGN AND STYLE

The audience of the end product is extensive, so the work with the interaction experience is very detailed: all parts of the project follow market trends. It consists of simplifying user interaction with the product, easy-to-understand interface, and adaptability for different types of devices(pc, smartphone, laptop, tablet and etc)

In the future we plan to create a fast and simple and app. Also we are exploring ways to improve the user experience

TESTING AND POLISHING

At the very beginning, our team put forward a hypothesis: creating a web application that would combine all existing systems, help companies organize an event, and make it much easier for students to find and analyze relevant information would solve the problem described, and to make sure that everything goes well, we need to test our work and make the final edits.
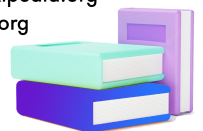
And so at the moment we are preparing the system for the largest conference in our country "Step into the Future" on the Simul platform. We are helped by Sakha Junior Scicnce Academy and Trust fund of Future Generations

CONCLUSION

In conclusion, We want to say, that in the near future we will try our best to publish our solution and answer maken hypothesis. Also we have plans in supporting application in the long term, expdanding existing functional using experience of new users, making a mobile phone app for more responsive feel

LIST OF LITERATURE

1. Vue.js: Up and Running: Building Accessible and Performant Web Apps / Callum Macrae / 2018
2. Grid Systems in Graphic Design / Josef Müller-Brockmann / 1996
3. Website https://ru.wikipedia.org
4. Website https://vuejs.org

SPECIAL THANKS