

**HACKATHON: NEW EXPERIENCE AND OPPORTUNITY
FOR STUDENTS**

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Abstract: The history of the origin of the hackathon, changes in its semantic content over time were discussed in the article. The description of hackathons was given, the main stages of this event were highlighted. Particular attention was paid to the possibility of hackathons for IT students.

Keywords: hackathon, teamwork.

**ХАКАТОН: НОВЫЙ ОПЫТ И
ВОЗМОЖНОСТИ ДЛЯ СТУДЕНТОВ**

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Аннотация: В статье рассматриваются история возникновения хакатона, изменение его смыслового содержания с течением времени. Приведено

описание проведения хакатонов, выделены основные этапы этого мероприятия. Акцентировано особое внимание на возможности проведения хакатонов для студентов IT специальностей.

Ключевые слова: хакатон, командная работа.

The word hackathon is a combination of the words "hack" and "marathon," where hack means: experimental and creative problemsolving using a game approach, and marathon refers to the duration of the event. Hackathon has its origins in hardware and software engineering, but today the concept is successfully used in other industries to create innovative solutions.

Participants work in small groups in an environment where creative thinking is encouraged, leading to new concepts, prototypes and amazing innovative ideas.

Each hackathon can be conducted differently. It depends on the topic, its duration, the offered activities, and the timing.

A hackathon provides the opportunity to focus on a specific problem, identify a need, and develop several solutions that can be implemented in a short time. In addition, the diversity of teams makes it possible to approach a problem from different angles and perspectives. Thus, the problem solving is achieved in a non-traditional way in a rather quick way.

Typically, hackathons proceed according to the following scenario:

- at the beginning of the event or before it, the organizers set a certain task for the participants: to come up with an idea, create an application, improve the technology and so on;

- participants join in groups of up to 5 people and try to find a solution;

- the team is assigned a mentor, an expert who can answer questions or give advice;

- at the end, each team presents the finished result to the jury and defends it (this process is called pitching);

- the jury evaluates the teams' work and announces the winners.

In 2021 the first hackathon for the students of the specialty "Infocommunication Technologies" was organized and held by the company, a resident of the High Technology Park, together with the Department of Infocommunication Technologies of BSUIR.

Due to the number of registered teams and the unfavorable epidemiological environment in order to conduct the hackathon, a web service providing secure, scalable computing resources in the cloud was used (fig.).

Employees of the IT company supervised the tasks and provided assistance both face-to-face and through a web service. Thanks to this, participants could quickly receive feedback.

In the first event, third-year students demonstrated their skills in backend development. In the second event, first-year and second-year students of the specialty "Infocommunication Technologies" competed with each other: they tried their hand at frontend development.



Fig. Interaction of participants using a web service

Based on the results, the winning teams were determined.

Third-year students shared their impressions of the hackathon.

Roman Saiko: "It was my first event of this kind and hopefully not my last. We were given a task to accomplish in a team of three. We had to work hard, as there wasn't much time. At first we were unsuccessful, but teamwork and spirit of cooperation brought us to the first place. After we completed the task, we had the opportunity to talk to company employees, learn about possible internships and employment. I believe that such events provide an opportunity to try your hand at solving interesting problems, learn about your strengths and weaknesses, and acquire teamwork skills. I am sure that each of us gained invaluable experience and got great emotions. In the future I would like to participate in such events more".

Alexei Soroka: "No one from my team has participated in such events yet. The first difficulty was to understand the task itself and the choice of programming language (we settled on Python, as the most convenient for such cases). Well, then the classic chain of code problems, bugs and other technical and moral issues. We did not expect to win, since we carried out the task "at a relaxed pace". While we were waiting for the results, we talked to the company's employees, learned about the openings and opportunities available at the company. The hackathon allowed us to practice teamwork skills, as well as the skill to solve problems quickly. I would

be glad to participate in an event like this again (if I am lucky, I will participate in the same team)".

In fact, students can benefit a lot from hackathons:

1. Career opportunities. This is a great chance for students to show their abilities in business and get an invitation from an IT company.

2. Teamwork training. At a hackathon, teamwork is considered the key to success. Such events are the best way to improve teamwork skills and find the right solutions in critical situations. Hackathons are useful for introverts as well, as they help them overcome stiffness and learn to work as a team.

3. Appreciable prizes and project support. Hackathon winners receive worthy prizes, and sometimes support for the projects they develop.

4. Professional growth. Working in a team, participants test their abilities. At the hackathon participants increase their level of knowledge, gain invaluable experience, exchange ideas, get advice from professionals, can watch how they work, and learn from them non-standard methods of solving problems.

5. Networking. Hackathon is an appropriate opportunity to expand the circle of useful acquaintances, to make contacts with other specialists, mentors, organizers, jury members. All this can turn into benefits for the participant: simple advice, a job offer, a joint project or investment.

6. An opportunity to have fun and enjoy the drive. Hackathon combines the spirit of unity and collaboration with the spirit of excitement and competition. In the process of working on the task participants enjoy the drive, as they want to come to the finish line with the most unconventional solution. Inexpressible atmosphere is memorable for a long time and generates a desire to become a part of similar event again.