Hackathon Event Report

PROTOTYPE 112

17.11.2023

Content

1 Executive Summary

The Hackathon, organized with the aim of fostering innovation and technological development, brought together a vibrant community of thinkers, creators, and problem-solvers. This event saw the participation of over 39 enthusiastic students from the Gjin Gazulli Professional School in Pristina, all united by a common passion for technology and innovation.

The primary purpose of this Hackathon was to address community-specific challenges through technology and innovate in the field of ICT. Over the course of two days, participants were engaged in intense brainstorming, coding, and designing, culminating in the creation of a wide array of groundbreaking projects.

One of the standout achievements of this event was the presentation of the mobile application 'Hackathon-Prototype 112'. This application, aimed at improving emergency response systems, exemplified the Hackathon's goal of harnessing technology for societal benefit.

For the successful implementation of the Hackathon, a unique aspect of our approach was the involvement of external mentors and experts. This decision was made to ensure that participants, especially the 39 students from "Gjin Gazulli" Professional School, had access to professional guidance and industry insights throughout the event.

2 Introduction

The 112 Emergency App Hackathon, convened on November 16 and 17, 2023, represented a landmark initiative aimed at enhancing the infrastructure of public safety communication. This two-day event united a spectrum of participants, including students, industry professionals, and technology enthusiasts, in a collaborative effort to address one of the most pressing challenges in public safety: the optimization of emergency response mechanisms.

Over the duration of the Hackathon, the assembled teams embarked on a journey of innovation, engaging in a cycle of brainstorming, design, and development, culminating in the creation of the 112 Emergency App. This application was conceived as a transformative solution to facilitate rapid and efficient communication in times of crisis.

Beyond the technical accomplishments, the Hackathon underscored the participants' commitment to leveraging technology for societal benefit. This report not only chronicles a significant achievement in emergency response technology but also serves as an inspiring blueprint for future innovation-driven endeavors. The 112 Emergency App Hackathon, held 17.11.2023, was a convergence of brilliant minds, innovative ideas, and a shared commitment to enhance emergency communication systems.

3 Preparation and Organization

3.1 Venue Selection

The venue was carefully chosen to ensure it met the necessary technological and logistical requirements. Key in this process was the involvement of students from "Gjin Gazulli" Professional School, who were handpicked by their teachers for their expertise in IT. These students provided valuable insights into the technical capabilities needed for the Hackathon, ensuring the chosen venue was well-equipped for the event.

3.2 The structure of the event, timeline and agenda

The Hackathon, centered around the theme of emergency response communication, was meticulously organized to foster an environment of collaboration, innovation, and learning. The event spanned over the course of two days, starting at 8:00 AM and concluding at 4:00 PM. Below is a breakdown of the two day's hackathon structure:

Day I	
08:00 AM - 08:20 AM: **Opening Session**	Introduction and Welcome Address. Overview of the Hackathon's purpose, with an emphasis on collaboration and participation. Explanation of the day's structure and objectives.
08:20 AM - 09:20 AM **Scenario Analysis and Brainstorming**	Interactive discussion on emergency scenarios and project requirements. Encouragement of open discussions and idea sharing among all participants.
09:30 AM - 10:00 AM **Networking & Team Building Coffee Break**	Short break for coffee and relaxation. Opportunity for participants to network and exchange ideas.
10:00 AM - 12:00 PM **Collaborative Workshop for Design and Planning**	Group activity for sketching application designs and structures. Focus on collaboration and peer learning.
12:00 PM - 01:30 PM **Lunch and Networking with consultation with Mentors**	Time for a break with consultations and coaching with mentors / key experts from the field and instructors.
01:00 PM - 02:30 PM **Group Development Session**	Beginning of coding process in App Lab in a collaborative environment. Emphasis on learning from each other and working together to overcome challenges.
02:30 PM - 02:45 PM **Energizing Break**	
02:45 PM - 04:00 PM **Ongoing Collaborative Development**	Further coding with a focus on peer support and learning.

Day II	
08:00 AM - 11:30 AM: **Opening Session**	Working in teams in all three directions: GUI Desing Use Case Refinements Coding Presentation
11:30 AM - 12:30 PM **Lunch Break and discussion**	Discussions and exchange in teams with professors and experts from industry
12:30 AM – 15:00 PM **Preparation for presentations**	Preparation for presentation of work Storybooks scripts writing Rehears for presentation
15:00 PM - 16:00 PM **Final Presentation in front of the large audience**	Final Presentation in front of: - Prime minister of Kosovo – H.E. Mr. Kurti, - Deputy Minister of MESTI – Mr. Kelmendi, - Director of Vocational Education Department of MESTI – Mr. Nitaj, - Industry experts and company representatives and over 30 distinguished guests
16:00 PM - 17:00 PM **Closing Ceremony**	Cocktails and photo shooting ceremony

4 Hackathon event details

4.1 Participants

Demographics of the participants: The Hackathon proudly hosted 39 participants, comprising a diverse mix of students from various backgrounds. These participants were from the "Gjin Gazulli" Professional School, known for its strong emphasis on ICT and technology education.

6 out 39 participants were female students, which over represents the female students, since the number of female students in this school is less than 10%:

Name Surname	
Adisa Buqani	Endrit Tahiri
Agon Berisha	Erblina Statovci
Albi Gjocaj	Erdi Muliqi
Albion Maqani	Erdin Shala
Amar Dermaku	Erijon Dermaku
Andi Xhemaili	Erion Berisha
Arbi Pacolli	Erudit Hajrizi
Arbnor Beka	Frida Jusufi
Ares Mustafa	Judon Pestisha
Arianit Rrustemi	Leotrim Sylejmani
Bardhyl Misimi	Lorik Daku
Bleonid Berisha	Lorik Gashi
Bora Shukriu	Loris Gashi
Diart Hoxha	Mikena Baftiu
Diell Kuleta	Oniks Hoti
Dion Begaj	Riad Islami
Dion Konjuhi	Rinor Rrahimi
Elerta Berisha	Rron Terziu
Elion Krasniqi	Lorik Daku
Endi Mustafa	

Number of teams and their compositions: The participants were organized into four distinct groups. This team structure was designed to foster collaboration and leverage the diverse skill sets of each member. Each group was composed of students with complementary abilities, ensuring a balanced mix of talents and perspectives within each team.

The array of skills and expertise among the participants was impressive and varied. Key areas of expertise included:

- Software Development: Proficiency in coding, application development, and software engineering.

- Digital Design: Skills in graphic design, UI/UX design, and digital media creation.

- Data Analysis: Competence in handling and analysing data, essential for developing data-driven solutions.

- Problem-Solving: Strong analytical and critical thinking skills, crucial for tackling the challenges posed during the Hackathon.

4.2   Mentors from the ICT companies

Our project mentors, listed below, played a crucial role in guiding the team and ensuring the success of the initiative:

Name Surname	Company
Avni Bixhaku	XponentL Data
Drilon Jaha	XponentL Data
Festina Aliu	XponentL Data

4.3   The teachers who supervised and advised the students

The inspiring educators listed below played a pivotal role in guiding our student teams to remarkable achievements at the recent hackathon. Their commitment to fostering innovation and problem-solving, made possible by the generous support of donors like you, has propelled these young minds towards a brighter future. This emphasizes the teachers' impact on the students' success and directly thanks the donors for their contribution.

Name Surname	School
Enkela Vula	Gjin Gazulli
Fjoralba Veliu	Gjin Gazulli
Liburna Demiqi	Gjin Gazulli
Mimoza Pacolli	Gjin Gazulli
Teuta Kosumi	Gjin Gazulli
Valbonë Dragusha	Gjin Gazulli

4.4   Staff in support of the Hackathon development

The success of this hackathon wouldn't have been possible without the unwavering dedication and tireless efforts of our SHPIK staff. Their expertise, logistical support, and unwavering enthusiasm were the foundation upon which this event thrived.

Name Surname	Companie
Bekim Kasumi	SHPIK
Dajt Gjonbalaj	SHPIK
Diellza Shllaku	SHPIK
Engji Goga	SHPIK

4.5   Project Implementation and Tools Used in the Hackathon

A significant feature of this Hackathon was the use of Code.org's App Lab by the students to develop their projects. This choice of platform played a crucial role in the realization of the challenge, allowing participants to harness their coding skills in a practical, real-world scenario.

The App Lab provided an accessible, user-friendly environment for the students to code, test, and deploy their applications. Its intuitive interface and robust features made it an ideal choice for young developers.

The platform was instrumental in helping students bring their innovative ideas to life, allowing them to create functional prototypes and applications with ease.

The challenge was structured around the capabilities of the App Lab, encouraging students to explore its full potential. The tasks were designed to be compatible with the tools and features offered by the platform.

The use of App Lab also facilitated a uniform platform for all participants, ensuring a level playing field and ease of collaboration among different teams.

Outcomes:

Hacking the Future with Figma, Code, and Collaboration:

This Hackathon wasn't just about lines of code, it was about transforming ideas into tangible realities. The key ingredients? Imagination, Code.org's App Lab for building the logic, and Figma for crafting stunning and intuitive user interfaces.

Design Meets Development:

Figma served as the digital canvas where young developers brought their visions to life. Its user-friendly interface and powerful design tools empowered them to create sleek, functional, and engaging graphical user interfaces (GUIs) seamlessly integrated with their App Lab creations. Figma bridged the gap between code and design, fostering a truly holistic development experience.

Prototyping Perfection:

With Figma's prototyping features, students could instantly test their designs, see their applications come to life, and iterate with lightning speed. This interactive loop fueled a cycle of creative refinement, allowing them to polish their GUIs and ensure a seamless user experience. Figma let them experience their creations before a single line of code was written in App Lab.

Figma's collaborative functionalities fostered a dynamic environment where teams could work together in real-time. Designers and developers could brainstorm layouts, share design components, and iterate on GUIs simultaneously, fostering a spirit of creative synergy. This collaborative approach not only saved time but also enriched the process, leading to truly innovative and cohesive digital experiences.

From Imagination to Applause:

This Hackathon was more than just coding challenges and lines of HTML/Css/Java. It was about empowering students to unlock their full potential as creators, marrying their technical skills with artistic vision. By harnessing the combined power of Code.org's App Lab, Figma, and a spirit of collaboration, they transformed their dreams into fully functional applications, ready to impress judges and audiences alike.

Future Implications and Potential Developments:

- The success of the Hackathon has opened avenues for future events and programs, with potential for more advanced challenges and continued collaboration with educational institutions like "Gjin Gazulli" Professional School.

- Some projects demonstrated potential for real-world application and further development, indicating the possibility of ongoing support or incubation for promising prototypes.

5 Presentation Ceremony

The prestigious presentation ceremony took place on November 17, 2023, and was graced by the presence of the Prime Minister of Kosovo, H.E. Mr. Albin Kurti, Deputy Vice Minister of Education Science, Technology and Innovation (MESTI), Mr. Taulant Kelmendi, Director of the Department for Vocational Education of MESTI, Mr. Lah Nitaj, as well as over 30 distinguished guests from the ICT business sector, school directors, and teachers. The participation of these esteemed officials underscored the significance and recognition of the Hackathon event at the national level.

The students presented their prototype with a live demonstration, showcasing the functionality and potential impact of the application. The presentation was met with positive feedback from the attendees, noting the application's relevance and potential for real-world implementation.

The presentations showcased various aspects of the applications developed during the Hackathon, including design, functionality, and innovative features. Emphasis was placed on how these applications could contribute to technological advancements and address real-world problems.

The Prime Minister actively engaged with the student presentations, showing keen interest in the technological innovations and potential impacts of the applications. His presence added a significant level of encouragement and recognition to the young developers.

The Prime Minister also delivered remarks, emphasizing the importance of technology in the nation's future and commending the students for their hard work and creativity.

5.1 Certificates

Certificates were awarded to each participant, signifying their successful involvement and contribution to the Hackathon. These certificates serve as a testament to their newly acquired skills and experience in technology and innovation.

Special recognition was given to outstanding projects or individuals who demonstrated exceptional skill, creativity, or collaboration during the event.

HACKATHON CERTIFICATE

THIS CERTIFICATE IS AWARDED TO:

In recognition of your outstanding contribution and innovative coding skills
in the creation of the app '112' during the Hackathon event using code.org.

Bekim Kasumi
Executive Director, SHPIK

17.11.2023
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Bujar Gjocaj
School Principal of SHML "Gjin Gazulli"

HACKATHON MENTOR CERTIFICATE

THIS CERTIFICATE IS AWARDED TO:

In gratitude for your exceptional mentorship and the pivotal expertise
provided in steering the development of the '112' app, enriching the
Hackathon experience for all participants through code.org.

Bekim Kasumi
Executive Director, SHPIK

17.11.2023
Data

Bujar Gjocaj
School Principal of SHML "Gjin Gazulli"

5.2 Photo during the Hackathon