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Education for
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The Inclusive Entrepreneurship Hackathon Guide

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Welcome to our INDEED Inclusive Entrepreneurship Hackathon Guide!

With the Inclusive Digital Pedagogy Toolbox, the Digital Pedagogy Online Learning Course, and, finally, this **Inclusive Entrepreneurship Hackathon Guide**, the project helps educators improve their own digital competencies.

> " The **INDEED project** is a response to the Covid-19 Pandemic, which negatively affected Europe's Small to Medium Enterprises and start-ups. The project targets Entrepreneurship Educators (EEs) and VET trainers, lecturers, and mentors, as they play a crucial role in transferring knowledge and skills to the next generation of entrepreneurs and innovators. "

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Introduction

The Learning Objectives for the Entrepreneurship Hackathon Guide Users:

Understand what a Hackathon is

Be able to use inclusive entrepreneurship techniques and tools in their own teaching

Apply aspects of hackathons to their own teaching strategies

The Inclusive Entrepreneurship Hackathon Guide introduces educators to the concept of a hackathon as an innovative pedagogic approach, especially in a digital space. Further, it provides tools and directions for practical application and implementation of a hackathon. Although hackathons are a common tool in the technology sector, they are an innovative approach for entrepreneurship education.

Hackathons facilitate creative problem solving and testing of solutions. The educational benefit of participating in hackathons is based on testing/implementing knowledge and skills rather than simply finding a creative solution. With INDEED's Hackathon Guide, educators, mentors, and students are included in updating and innovating learning strategies. This ensures that creativity and innovation are reinforced through contact with real-life application and do not remain merely theoretical.

02

Hackathons: General Information

A HackerEarth analysis of over 1,000 hackathons indicates that the United States, followed by India and the U.K., hold the most hackathons per year. The majority of these events (about half) are hosted by private companies, but universities actually host about 30% of hackathons!

In this section, we will present the **What, Who, and Why** of hackathons. What exactly is a hackathon? Who is involved in hackathons? And why should you consider organizing a hackathon?

Image 1. Taken from Hansa Hack 2023, a hackathon hosted by ACEEU in January 2023, with collaborative teams placed on separate tables.

Hackathons are cooperative and collaborative:

A hackathon is an innovative means for people to think of fresh ideas "to solve a problem, create a prototype for a new product, or research a new service."

All participants work on a common problem or goal and learn from mentors, judges, and each other to develop solutions.

They are also diverse, drawing on the knowledge, skills, and ideas from people from various backgrounds and experiences.

Image 2. Taken during Hansa Hack 2023, an event hosted by ACEEU in January 2023.

Concept – What?

The term 'hackathon' is a combination of the words hack, in association to exploratory programming and marathon which indicates a long race-like event. These events usually start with brief introductory presentation about the goals and objectives of the event, the design challenges, introduce the sponsors and hosts of the event, the schedule of the event and finally the prize of the event.

Hackathons also time-bound and typically run from 12-48 hours. Since their timespan is shorter than traditional innovation tools, hackathons are well-suited to problem-solve changing demands in the technology and business fields. The teams involved in hackathons can be complete strangers from different fields, experience levels, interests, countries, etc., or they could be from the same office or school and the hackathon could function as a fun team-building exercise.

While there is no conclusive definition as to what constitutes a hackathon, which is inclusive of all hackathon-like events, these events are generally problem-focused, with teams of small groups working together to develop a final product which is aimed at 'solving' the problem.

Originally, these events have been of interest to computer programmers, engineers and designers often with tech-centric themes or challenges. Over the years, they have been used in a wide variety of scenarios and purposes such networking, solving challenges in education and accelerating innovation.

Roles – Who?

There are four main groups of people involved in hackathons. The various groups working together is what sets hackathons apart from, simply, a team working on a problem and trying to finish it in a certain amount of time. The randomly assigned teams work together for the first time to solve a problem, the mentors provide timely and expert advice and sometimes offer direction or mediation, and the judges who review the results from all teams and decide on the best or most promising solution at the event itself allows for closure and a chance for participants to get immediate feedback on their products/solutions and presentations. The organizer is significant as they facilitate and direct the entire event, allowing other groups to focus on their own role and not worry about logistics.

1   PARTICIPANTS

A minimum viable team is comprised of a "hipster" (this person is the designer or innovator), a "hacker" (this person will build or develop the product, solution, etc.), and a "hustler" (this person is responsible for communicating the product or solution to the audience and judges in a pitch or presentation at the end of the hackathon).

The roles within the team can be flexible with everyone helping with each stage, but it can be helpful to have specific responsibilities.

Hackathon mentors are those with experience in monitoring, facilitating and supporting participants during a hackathon.

Often, hackathon mentors volunteer their time to help hackathon teams have more meaningful experiences and aid the process of idea development.

Some of the dimensions in the role of the mentor are as cheerleaders, connectors, and contributors,

Cheerleader

In this aspect, the role of the mentor is to encourage participants to try new ideas and help them push their boundaries in terms of developing new unique solutions. In this role, the role of the mentors is to focus on maintaining the motivation and drive of the participants.

Connector

In this aspect of being a mentor, it is important identify the specific issues faced by participant teams and connect them towards certain resources such as tutorials and other online documentation or if time is too much of constraint to connect them to further resources, it would still be essential to connect them to possible ways to come around any issue they are stuck in, or in other words it would be necessary to help them see a way out of their obstacles without directly providing the solutions.

Contributor

In this element of being a mentor, it is important to not contribute the solution, rather to contribute the human touch that is needed to help the participant identify the solution on their own and contribute to identifying the next steps together so that the process of development continues and they are not stuck in an obstacle.

3   JUDGES

Judges should have experience in whatever the theme of the hackathon is, or at the very least have decent business acumen. Judges' main responsibility is on the last day of the hackathon, where they will listen to each team's pitch and analyze the content according to a pre-defined judging rubric. There should be an uneven number of judges to facilitate voting.

4   ORGANIZERS

Organizer(s) develop the structure of the event and ensure everything runs smoothly. They are responsible for advertising and getting participants to register for the event, finding mentors and judges, and facilitating the hackathon.
During the hackathon, at least one person from the organizing team needs to be available to field participant concerns and reports of improper behavior. This person will work with security (if present) and/or law enforcement (if necessary) to deal with the issue.

Optionally, the organizer can also find a motivational speaker, trainers for workshops, sponsors who may want to present about their company and even recruit at the event, and/or security or health and safety professionals. These optional roles depend on the format of the hackathon, type of venue, and the number of participants.

Benefits – Why?

Hackathons cost time, money, and energy, so why bother?

- helps companies, participants, mentors and judges stay familiar with current technologies. Also, it helps them learn different benefits of and uses for various technologies

- public perception = sheds progressive and innovative light on companies who organize and participate in hackathons, so it is beneficial for companies to send their employees to mentor or judge at hackathons, or even just to sponsor or conduct workshops

- Collaboration with diverse groups of people – not only with those who have similar skills (allowing you to develop skills you already have), but people with completely different skills and expertise from whom you can learn new skills

- Networking! Hackathons provide the perfect opportunity to meet and be seen by people in a particular industry. Not only is it beneficial to network with fellow hackathon participants (at a minimum your team members, but also people from other teams at different points during the event), but meeting with the mentors and showing the judges what your skillsets are can also be a boon for your career. Also, sometimes there are corporate sponsors of hackathons who attend the final presentations. This is a great opportunity to get your name out there.

- Bulk up your C.V. Not only does participating in a hackathon increase your skills, but it also shows potential employers that you are interested in continuously learning.

- Practical experience. Learn new technologies, practice pitching ideas, problem-solve and fix bugs

- They are a new way of looking at problems and anyone who participates can be proud of what they accomplished during the hackathon.

Experience

Victor Tienda who co-organized a railway industry thematic hackathon together with the University of Malaga spoke of his own experience and how he felt that it benefited both students as well as the organizers since both parties have gains from better ties between universities and industry. For the hackathon, they had railway corporations as sponsors for the event which was important not only for handing out the prizes, but also the fact that students were able to interact with key stakeholders was a key selling point to attract more participants.

There are also benefits to organizing/hosting a hackathon:

- "Create and test ideas rapidly" and "increase collaboration" among staff, especially across different teams and departments. You can also see which ideas merit more testing and which ones should be scrapped. It is again a safe, controlled environment for people to bring their boldest and craziest ideas without fear of failure.

- Good PR = hosting or organizing a hackathon adds "progressive, innovative, digitally-savvy" to your company or institution's image. The hackathon itself also generates plenty of marketing material for social media, etc. and widens your audience, creating buzz about your business among participants and their networks.

03

Organizing a Hackathon

Each hackathon format has its own advantages and disadvantages. Choosing to conduct a hackathon online, in-person, or a combination of the two, will also affect the cost, size, and timing of the event.

Online, Hybrid, or Face-to-Face?
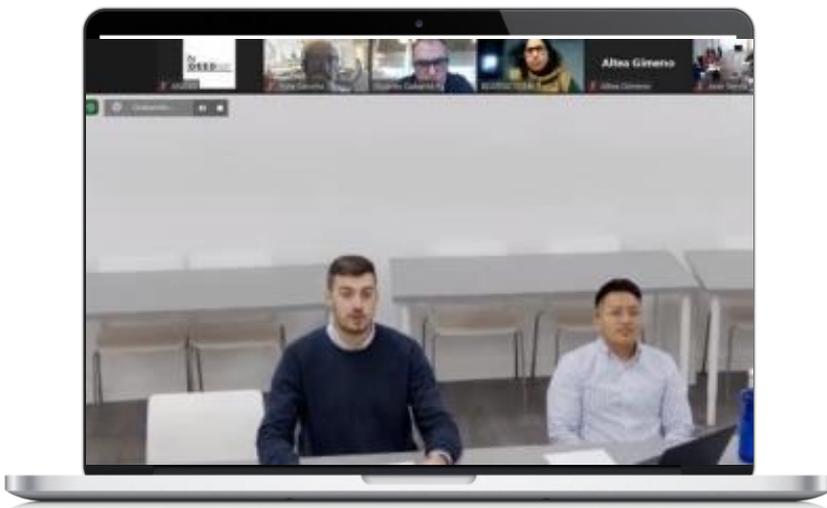
Online hackathons, for example, have lower or no costs for transportation, venue, onsite staff, catering, etc. Further, the lack of geographic limitations means the participants represent a "larger and more diverse audience" and also increases the reach via social media. Online hackathons have more time flexibility.

*The images are examples of a hybrid Hackathon. The images taken are from the Hackathon hosted by ANCES in January 2023 for their hackathon titled **Thon Thon.***

The winners of the hackathon – TEAM Burgos
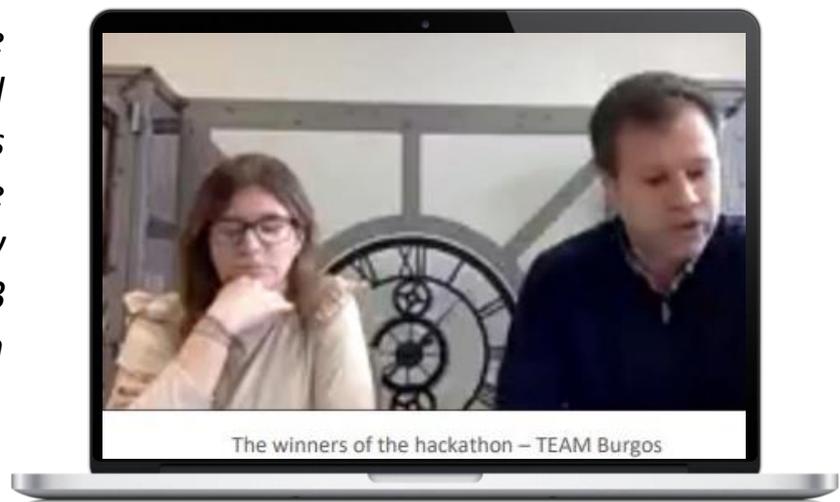
Hybrid hackathons have a mix of benefits from both online and face-to-face. Commonly, the hybrid hackathon begins with an online ideation/planning phase and the second part of the hackathon is held in-person. Hybrid hackathons also have more time flexibility, thanks to the online phase. The in-person aspect increases engagement, especially with regards to mentoring and team interaction. Meanwhile, face-to-face hackathons facilitate hands-on learning and communication between teams and mentors.

It is important to create an agenda and make it available so everyone knows what they need to deliver at certain times, as well as when breaks (or food and refreshments!) are expected.

Furthermore, making sure the arrangements of the tables, the banners, a whiteboard for scoping ideas, paper and pens should be provided in the case of an in-person hackathon.

PLANNING A HACKTAHON

Planning "Pre-Hack Phase"

In the planning phase, organizers need to determine the purpose of the hackathon and define the problem(s). It is also important to think of possible solutions to the problem, which will not only help organizers find a theme, but also help decide on the target audience for the hackathon. The expected deliverables and criteria for success help determine who to target – do participants need to know how to code or have engineering skills? *(Note: Not all participants will need to have the same knowledge and skills, but this nevertheless affects who will be targeted and what channels to use.)*

The participant profile will also affect timing and venue. If the target audience is professionals, the hackathon will need to take place outside of normal work hours. If the target audience includes minors, legal concerns, like curfew, will need to be considered. Similarly, the number of participants will either determine or be determined by the venue's capacity. Something else to consider is whether this event will be public or private?

Lastly, a code or rules of conduct should be readily available for interested participants. These guidelines establish clear rules and expectations, as well as inform participants of any consequences for misconduct. Look at codes of conduct for other hackathons or even other events to come up with a set of guidelines. (Tip: Make acknowledgement of the Code of Conduct mandatory for registering for the hackathon to ensure all participants agree to it. It is also a good idea to refer again to these guidelines during the opening remarks as a reminder to everyone involved.)

There needs to be someone participants can contact in case they have concerns or need to report any improper behavior. Contact information for the person responsible should be made available. All reports should be kept private and dealt with as quickly as possible.

FAQs are also important for not only reducing the workload of organizers, who may be asked the same questions many times, but also for ensuring that participants and potential participants are given the same answers to questions. The FAQs can be anticipated ahead of time or continuously updated as actual questions are sent in by potential participants.

Hackathons are about creative problem-solving, but there first must be a problem to solve. Indeed, the first steps for hosting a hackathon are to decide the purpose or goal, define the problem participants will need to solve, and set the theme/sub-themes (i.e., energy, AI, blockchain, service innovation, etc.). The possible solutions to the problem help to determine the theme or sub-theme.

Example Covid-19 related business problems that could be solved during a hackathon are:

1. Shift in consumer behavior to online commerce.
2. Adapting office environments to the changing needs/expectations of employees.
3. Security breaches with more and more business conducted online.
4. How to address the cost/training for needed digital skills.

PARTICIPANT PROFILE

The participant profiles regarding educational and professional background would depend on the topic, theme or challenge of the hackathon. Therefore, the recruiting strategy and ideas for dissemination would be subject to the theme chosen. While hackathons have become alternate venues to complement the learning process where both students and practitioners alike can be engaged, it is important to keep in mind that often the culture around hackathons is not always welcoming for everyone. The atmosphere around hackathons is often promoted as one for extremely tech advanced or 'nerdy' people and can create an environment that is not inclusive of underrepresented minorities if the host of such an event is not careful.

DIVERSITY

Hackathons are event which make use of open communication and collaboration, therefore, measures should be taken to avoid the creation of a hostile environment which does not value ideas from those representing cultural, social and sexual minorities such as the LGBTQIA+ communities.

For example, it is possible that having a narrow focus for a particular hackathon can bring together participants who would like to collaborate based on a common goal. On the other hand, a broad theme could be used to attract more diverse participant profiles

04

Advertising

Targeting your audience for a hackathon isn't always easy. Even the most widely known organisations and biggest brands can sometimes find it difficult, as sometimes the communities that you wish to target (such as educators, learners, VET organisations and universities) can be difficult to reach.

One of the best things that you can do to ensure that your hackathon is a success is to create a powerful promotional plan that will help the news of your event to reach as many of the right people as possible. For an organiser, the worst thing that can happen to your hackathon is that it is a flop- you might not have gotten enough participants, people might have forgotten to show up or for the work that was done during the event to disappear once the hackathon is over.

If made correctly, your promotional plan can work for you in the background, generating hype and excitement while you continue with the planning. Here are eight ways to help you to create a bulletproof advertising strategy that will help to ensure that your hackathon is as successful as possible.

Think about the following when it comes down to your potential audience for a hackathon:

Demographics are a form of marketing segmentation that identifies the makeup of your audience and dividing this into a few audience groups. For example, you may wish to separate your advertising to the age of participants, profession, location or socioeconomic background.

Motivation, that is what do people get from participating in your hackathon, and why would they want to participate in your hackathon? By advertising the perks of attending your hackathon, you will likely attract people who are interested in attending and participating a hackathon.

How your target audience spends their time online. This is important as it will highlight where the most likely participants are. Things to think about for this is which social media platforms do they use, what are they talking about or sharing online, and how active people are on that social media platform.

Press Release:

Send a press release to relevant media houses

The first step in promoting your hackathon is to inform the media about it in the form of a press release. A well-targeted and well-written press release can do wonders for your publicity, but there is a catch- it is important to remember that the journalist reading your press release isn't doing so with the intention of advertising your hackathon for you. The trick is to get them engaged and spread the word of your hackathon through their own audience, ideally spreading the word and getting new people to sign up to your event. The journalist or blogger reading your press release will only share your press release if they think it will be of interest to their own audience.

Things to consider whilst writing a press release is to pay attention to the language you use and ensure that you are talking directly to the community you want to get involved with. here a lot of hackathon organisers can fall into a trap where they spend too much time trying to sell the hackathon to the journalist or blogger reading the press release.

You should adjust the accompanying messaging to suit the media that you are sending your press release to but remember: the most crucial thing is that you're not writing the press release to convince the journalist to share it. You're simply using the press house as a middleman to reach your target audience (their current audience).

Create a social media campaign

Social media can be an extremely effective tool to spread the word of your hackathon and generate hype and interest in the event. Regardless of the social media platform you choose, you should announce your hackathon and call for attendance on there, paying close attention to the platforms which your target audience spends the most time:

Foster engagement on Instagram. Instagram has an extremely active user base which makes it the best platform for generating engagement. Find the hashtags relevant to your hackathon, as well as some general ones like #hackathon and **#openinnovation** and get your employees, team, volunteers and mentors to use them too.

Share behind the scenes footage on a short video tool such as Instagram or TikTok. Instagram is all about Stories and Reels. TikTok is similar in that you can create stories and short videos.

Share the event: Record the whole event using a streaming tool such as IGTV or Facebook Live.

Promote the hackathon to your mentors and sponsors

A fantastic way to promote your hackathon is to utilise the relationship you have with your mentors and sponsors. Your mentors are likely to be experts in their fields, which means they probably have a decent following of their own and an entire network waiting to be tapped into.

Tap into their communities by sharing details of your mentors on your social channels and asking them to share them on their own channels. Try this by sharing a post a day (preferably during the week leading up to the hackathon), and introduce the mentor with the proper introductions, credentials, bios, fun facts, etc.

Try adding a photo and the relevant links (to their website or social media handles). You can do the same with your sponsors. Remember to ask for permission before you do this.

Do you have any friends, colleagues or peers in relevant industries who would be happy to give your hackathon a shout out? Go ahead and ask them to feature your event and share it with their community if it makes sense to connect the two.

05

Evaluation
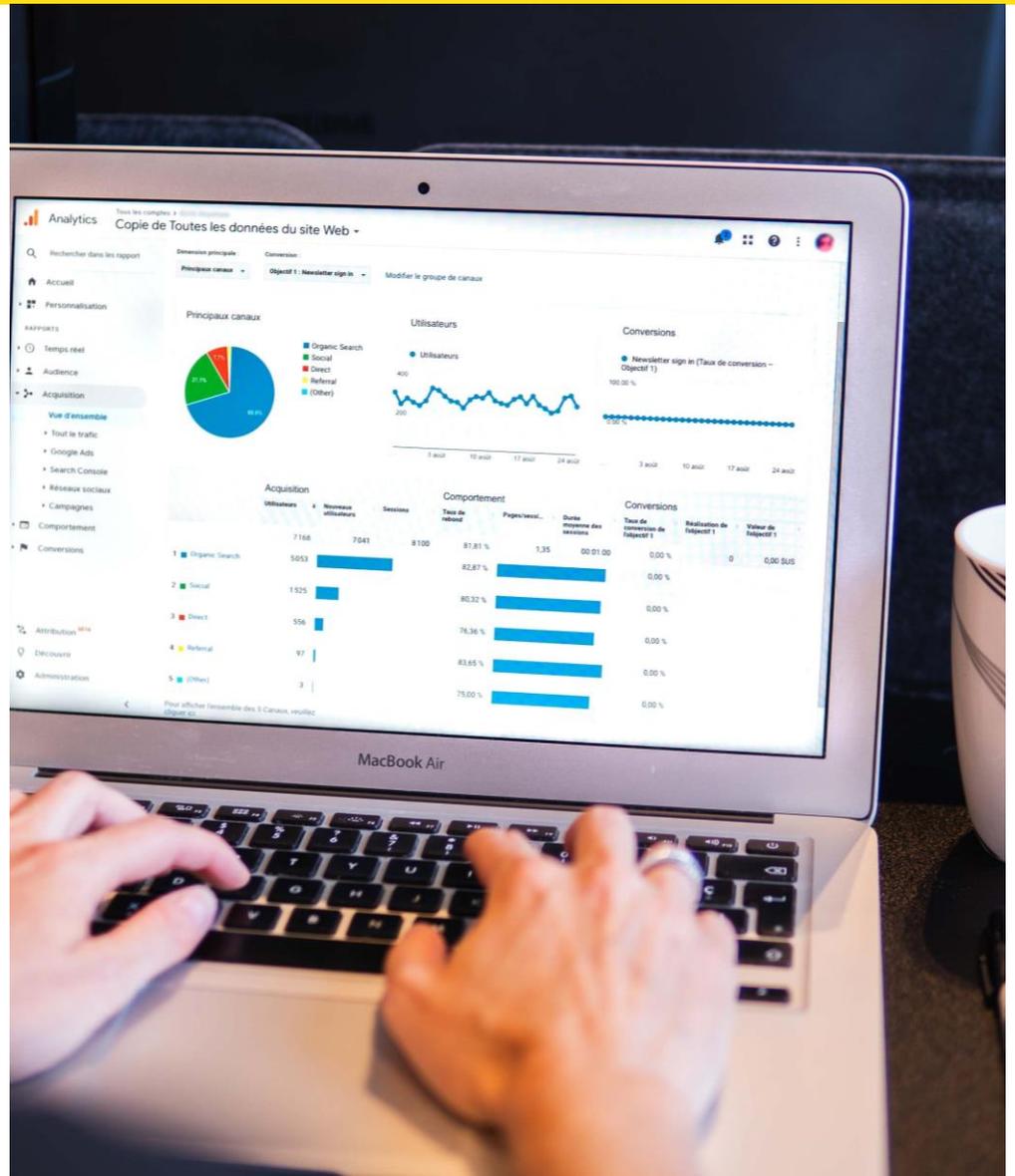
Measure your impact

To make sure that you are making as much of an impact as you can, you need to measure your efforts. This is where a dedicated management platform can come in beneficial.

When you host your hackathon using hackathon software, measuring your efforts becomes easy. You can track your traffic to see where it's coming from, and then use that data to identify what is working well, whilst rethinking what is not working as well.

It's important to remember that it's easy to get wrapped up in a lot of different metrics when you see high website traffic—but if they're not converting into registrations or ideas, it won't help you much. Use this information to help to establish how to attract participants that are more likely to commit to the event.

Having a clear and mapped out understanding of where your conversations are coming from can take your hackathon from average to impactful. Whether you use Google Analytics or Facebook Pixel, you can leave the heavy lifting to the platform and focus on organising a great hackathon.

# Evaluation

Post-Hack Phase and Hackathon Hosting Experience

In an effort to compliment the efforts of consolidating the hackathon guide, the preliminary version of the hackathon guide was evaluated through the launch of the first hackathons which was evaluated through the form of user tests which would measure the innovative solutions proposed in the hackathons, the relationships established, and the impact created in the hackathons. After the events, a questionnaire was shared with all the participants. In the questionnaire, different aspects were analyzed:

Communications/invitations and information's means
Participants involvement (judges, moderator, participants)
Regarding the event -Regarding the solutions (presentation, etc.)
Regarding the sponsor and the reward

As a rule of thumb, to evaluate a hackathon for future participants and future hosts to learn from, it would be a good idea to ask willing participants for feedback either in the form of filling out an online questionnaire or providing video testimonials on what worked and what did not work.

Such records could go a long way in improving the development and dissemination of hackathons to get larger and more diverse groups of people interested in the concept.

This section provides tips from interviews conducted by partners developing the hackathon guide with people who had several experiences taking part in hackathons to offer their best tips:

Create a friendly place to work, including relaxation, e.g., larger cushions, mats, comfortable armchairs with laptop tables, because some people get tired after long work at the table.

Prepare starter packages for mentors with a short biography of teams / participants, challenges, event program.

When evaluating projects, pay more attention to innovation and creativity, because the proposed solutions in my opinion were mostly a duplication of what is already available on the market and well known - so in such a situation the question arises in my head what is the overriding goal of such an event.

Team up with people who you might not normally work with. Different classmates, getting involved with other faculties, and having an interdisciplinary approach. Getting the experiences from a lot of different backgrounds can enable people to work on new ideas, new business models or processes and come up with solutions that may not be apparent when everyone is from the same background.

06

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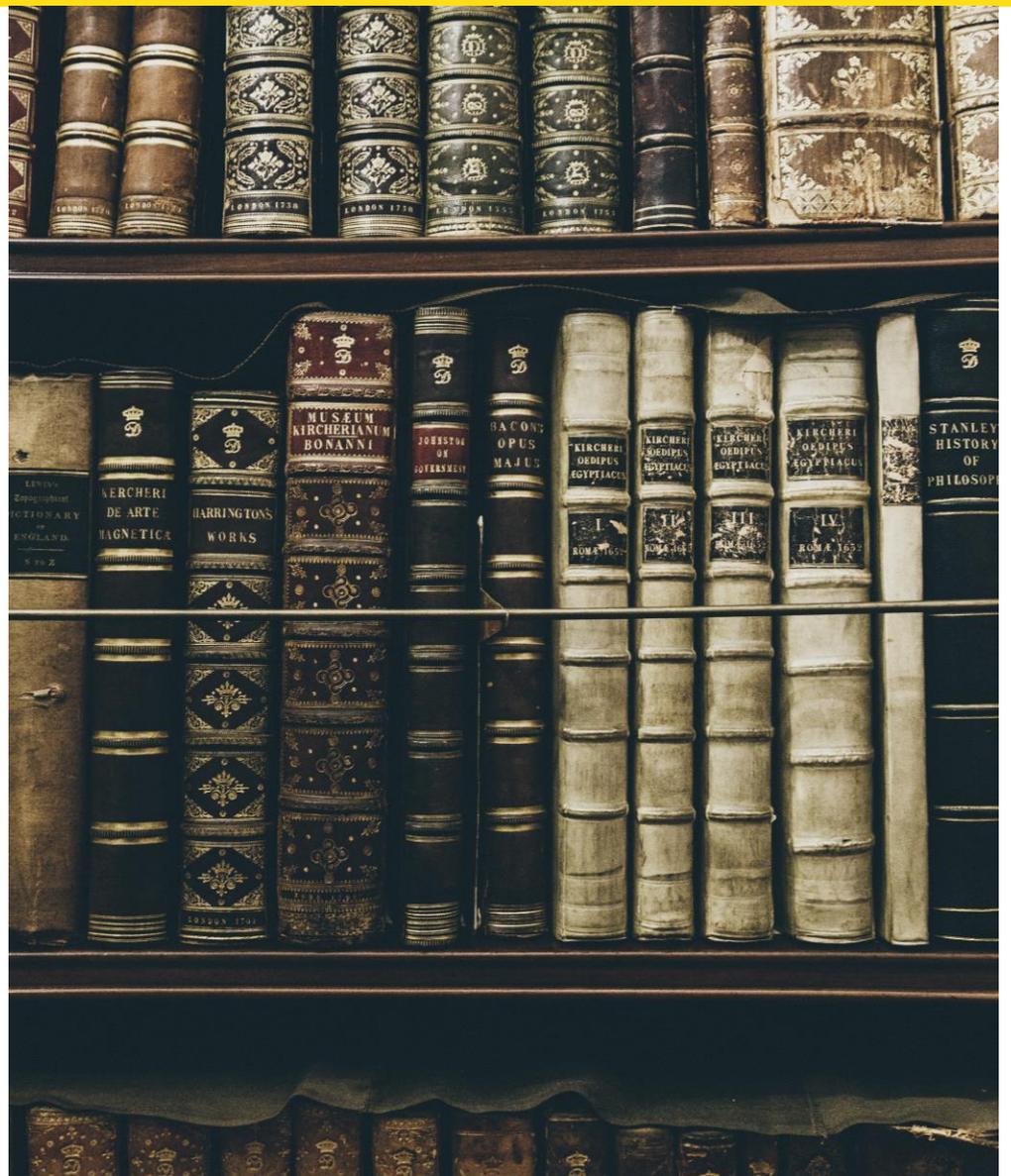
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