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Hack the library

Organizing Aldelphi University Libraries' first hackathon

In the increasingly digital world in which we live, libraries and the concept of libraries are constantly evolving. We continually experiment with technology and create library mobile apps and makerspaces in our quest to find the best ways to meet our patrons' current needs and find relevance in their lives. A new trend in the technology world now makes it easier to tap into fresh ideas, experiment more, and engage our audiences in innovative ways. This is exactly what we did at Adelphi University Libraries, where we organized our first ever student library hackathon.

What is a hackathon?

It seems that nowadays everyone is hacking. The verb *to hack* is no longer just a scary, negative thing one does to steal something. With the advent of hackathons, hacking implies creativity, innovation, remixing, and unorthodox problem solving.

While the dictionary description of the word hasn't changed just yet, it is already used in a variety of fields with a positive connotation, such as *growth hacking* in marketing or in the very term *hackathon.*

The term *hackathon* is quite loosely defined, and there is little to no peer-reviewed research on this recent phenomenon. The best basic definition can actually be found on Wikipedia. It is based on a 2012 *Wired* article about the proliferation of hackathons.[1] A hackathon is "an event, in which computer programmers and others involved in software development and hardware development, including graphic designers, interface de-signers, and project managers, collaborate intensively on software projects in competition with other teams."[2]

We stayed true to this definition at Adelphi. At our inaugural event, we had several groups of students who represented a variety of departments at Adelphi. They all came together to develop library mobile and web software applications over the course of a little under 24 hours. However, nowadays the term is used in a variety of other types of events that follow its basic principles of intense project collaboration and competition. When deciding whether to organize such an event at your library, it is important to explore all the options.

Hackathons are no longer only about software. Hardware hackathons or *makeathons* are increasing in popularity. Intel has a running Internet of Things line of events, which take place every year and aim to make everything around us smart and connected.[3]

There are also *hackfests, codefests, techfests,* and more that seek to solve a specific problem via technology. There are also a variety of "open challenges," where people get together to solve all kinds of non-tech problems from creating new ways to process food to solving transportation issues in a Chinese city.[4]

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-Hack the Library 2015: A report of Adelphi University Libraries' hackathon

At Adelphi University Libraries, we decided that organizing a hackathon would be a perfect opportunity to get new ideas for our mobile app, increase our outreach, and improve our image. Over the course of a year and a half, the library's emerging technologies coordinator and senior instructional media specialist worked together to design and organize our first hackathon.[5] We set up a library task force to assist with planning and sought buy-in from

tion, and participants submitted their ideas to it at the event. A more popular site for such a service is DevPost, which we recommend you use. It also allows for students to build their hacking portfolios, for bragging rights, or even for future job portfolio submissions.

Volunteers and judges are crucial in events like these, and we established contact early with relevant departments, such as graphic design, computer science, and educational technology. This helped us sign on a lot of diverse volunteers and get word-of-mouth advertising to the students. As soon as we knew

Hack the Library 2015 advertisement banner for digital and outdoor signage.

library faculty and administration, as well as university-wide support. We knew that organizing an event like this would require a lot of lead time and considerable joint effort. Not many people were familiar with the hackathon concept when we first started planning, so we had to spend a good amount of time crafting an elevator pitch to educate our colleagues.

Organizing a hackathon involves many components and requires effective project management. At the start of the project, we created a Gantt chart[6] to manage the various aspects of organizing a hackathon. This allowed us to see at a glance when we needed to start certain activities, whose responsibility it was, and what the due dates were. For event management, we used a platform called Hacker League. Students registered for the event there, we uploaded relevant documenta-

we had a growing interest in the community, we drafted a formal, two-page proposal for the event and started seeking funding.

We reached out to some external companies, whose products we planned on using during the event, to the library dean, and to the provost to see if they had money in their budgets. We were not able to secure outside sponsorship, but learned that to be successful in that endeavor, you really need to leverage your network. The majority of our budget came from the university, through the provost's office. Having this budget from the very beginning made planning much easier because it gave us a clearer picture on possibilities for prizes, food, etc.

Students realize hackathons are fantastic learning experiences, but often only while they are participating. Usually, it is the prizes

that draw them in. We had two main prizes at our event—cool technology for first place winners (a Moto 360 smartwatch) and Amazon gift cards for second and third place. We thought students interested in hackathons would be interested in tech-related prizes and used the smartwatch throughout our marketing campaign. When you plan your own event, be careful not to plan prizes too far in advance if they are tech related. If we had ordered smartwatches one year in advance of the event, they would have been obsolete by the time we held it.

We wanted to reward our students for their time and motivate them, so we spent a big chunk of our budget on the prizes.

Free food is another big draw for students at our campus, so we made sure the other big chunk of the budget was spent on that. We ordered pizza at the start of the hackathon, and coffee and snacks were brought in later in the night. For the second day, we had boxed lunches (sandwiches) and coffee. Like many organizations, we were limited to work with our caterer, which used up a lot of our budget. If you are not required to do this, you can keep costs down by ordering pizza and snacks locally.

As soon as we had our budget and plans for prizes and food, we knew we had to book a room and a date for the hackathon. We had to reserve our room a year in advance, and even then we did not get the best date we could. We reserved the "ballroom," one of the largest spaces on campus for the event. Unfortunately, even with that lead-in time, we could only hold the event the Friday/Saturday before the start of the spring break, which was not ideal for student attendance.
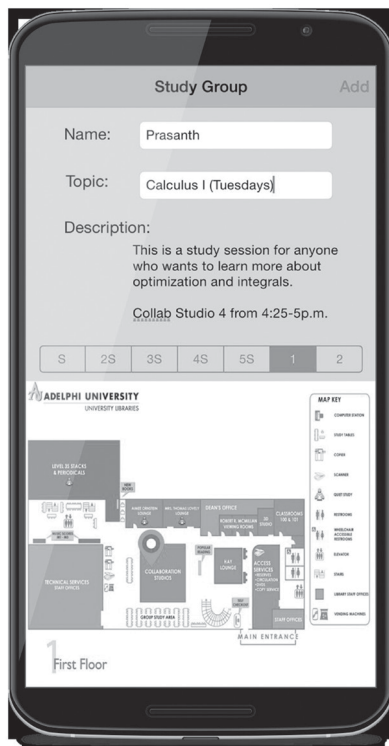

Winning app demo screen.

Initially, almost 100 students expressed interest via email and online form sign-ups. However, the actual event had 32 participants—one third of what we had aimed for. If you can, try to consider dates carefully. Do not schedule the event near exams, major research assignments due dates, holidays, etc. To get a better date, we considered alternate venues on campus, but none were suitable for an event of this type.

After booking our space, we knew that we had to discuss legal and IT considerations almost immediately. We had our university legal department create a waiver that students signed prior to participating in the event. This way, Adelphi would be able to use ideas and apps created by the participants. We also liaised with IT and facilities departments to ensure wifi strength and energy supply were adequate for the hackathon. One difficulty we encountered, for example, was that all the power outlets in the room for our event were connected to only two transformers. Since plugging in a lot of laptops could overload the system, we had to disperse the tables throughout the ballroom. This slightly impeded the collaboration aspect of the event, since students were not as close to each other.

After figuring out your space and tech needs, marketing should be one of the first things you do. Pre-event marketing is critical to ensuring student participation (as well as interest on campus from administrators, faculty, and staff). We did this in various ways. In-house, we had a student intern from the graphic design department, but your library may have a marketing or outreach librarian. The student worked closely with our univer-

sity's marketing department. We also reached out to the graphic design department and had them agree to assign a hackathon branding package assignment to students. We did not go this route in the end because it took a while, but we may do so in future. We advertised on our library website through a rotating banner, used digital signage in the library and around campus, print posters, leaflets, and tent signs.

Make the most of the event even after it has concluded with post-event marketing. This will create hype for hackathons in the coming years and raise the library's image. We created a rotating graphic on the website and had the winning team come to the library to present their app to library staff. However, we were not able to advertise the success of the event as much as we wished.

Conclusion

Hackathons are great events for both participants and organizers. They are fun and can be rewarding beyond the prizes. Hackathons can be more effective than the classroom at facilitating and initiating long-term learning. An event like this forces one to learn things it would have otherwise taken a month to learn. The time pressure, the extreme focus on a particular, practical goal, and the effect of being surrounded by like-minded and similarly motivated individuals, results in an extreme constructivist learning experience. Participants also make new friends and end up meeting people they would have never had the chance to meet otherwise.

At our hackathon, clubs like the Adelphi Games Club had the opportunity to promote their group and teach fellow students how to use game-making software. Some students used what they learned from them in the actual competition. Overall, hackathons are also a great way to contribute to a cause you are passionate about or to further developments in a particular field.

We were very lucky that students at Adelphi's Hack the Library 2015 produced many useful ideas that we can apply at the library. The winning team devised a study group scheduling tool. It allows students to meet like-minded classmates and get help with their studying—no matter where they are located in the library. A student can indicate a field of study and put a pointer on the map to show his or her physical location. We are going to make the winning app part of AU2GO—our university's mobile app. We also gained a better understanding of how students use the library and the issues they have. We received a great deal of positive feedback from both students and volunteers. The library emerged with a better image and an improved understanding from other departments on campus about what we do.

The hackathon has also inspired other similar events on campus. Our information technology department is organizing a makeathon, and the math and computer science club is working on their own mini-hackathon to inspire members. As the field grows, we'll see more and more institutions organize hackathons, and we hope this article inspires you to host a hackathon of your own.

Notes

1. Steven Leckart, "The Hackathon Is On: Pitching and Programming the Next Killer App," *Wired,* March 2012, www.wired.com/2012/02/ff_hackathons/all/1.

2. "Hackathon," Wikipedia, accessed January 17, 2015, https://en.wikipedia.org/wiki/Hackathon.

3. "Internet of Things Conferences and Events," Intel, accessed February 17, 2015, www.intel.com/content/www/us/en/internet-of-things/iot-events.html.

4. "New & Upcoming Hackthons · Devpost," Devpost, accessed November 17, 2015, http://devpost.com/hackathons.

5. Stanislav Bogdanov and Rachel Isaac-Menard, "Adelphi University—Hack the Library 2015," Hacker League, accessed November 17, 2015, https://www.hackerleague.org/hackathons/adelphi-universitys-hack-the-library-2015.

6. "What Is a Gantt Chart?" What Is a Gantt Chart? Gantt Chart Information, History and Software, accessed November 17, 2015, www.gantt.com/. ℤ