Global History Hackathon Playbook 1.1

Practical Guidance for Hosting a Hackathon for the Arts, Humanities, and Social Sciences

OCTOBER 7, 2019

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Introduction

Our project

What happens when you take a format more commonly associated with computer science and technology—the hackathon—and apply it to historical thinking and research design in global history using unique archival and museum collections?

This playbook shares what we learned from our project, *Global History Hackathons: Doing Global History through Local Archives and Museum Collections* (January-June 2019). An inspiring crowd of students and staff took part in *Global History Hackathons.* You can read about some of their creative and intriguing ideas through Twitter (@HistGlobal #GlobalHistHack19) and our event blogs, which are listed in the Bibliography.

We hope this playbook will encourage you to plan and carry out your own hackathons: not just for global history, but also across the arts, humanities, and social sciences.

What to expect

This playbook includes:
- An introduction to the hackathon format
- A description of what we did, how we did it, and what we learned as Global History Hackers
- Practical guidance on planning, facilitating, and hosting your own hackathon
- A "hackathon dimensional model" (Mucha & Clark, 2019)
- Ideas for archivists, curators, learners, researchers, and teachers
- Templates of all the different documents you will need to host a hackathon

A "playbook" is a compilation of best practices, tips, and reflections that can aid in running hackathons. Alternatively, the word "playbook" is used to describe a detailed schedule followed by hackathon organizers to ensure good "flow" during an event. You will find both kinds in this playbook.

Who we are

Project lead and main author of this playbook:

- Hannah-Louise Clark, lecturer, Global Economic and Social History @MedicalMaghrib hannah-louise.clark@glasgow.ac.uk

Project team:

- Maria Economou, Professor of Digital Cultural Heritage
- Sarah Gambell, doctoral candidate, Information Studies @segambell
- Franziska Mucha, doctoral candidate and Marie Curie Fellow, POEM, Information Studies @FranziskaMucha
- Moira Rankin, senior archivist @pandjsmum
- Rachel Rowan, doctoral candidate, Economic and Social History @Rachel_Rowan9
- Lola Sanchez-Jauregui, William Hunter Tercentenary Curator
- Jelmer Vos, lecturer, Global History @jelmer_vos
- Benjamin Thomas White, lecturer, History @rain_later

Figure 1 "Selfie" portrait of Rachel, Hannah, Sarah and Moira

Part 1. What is a hackathon?

Origins

"Hackathon" entered the English language in 1999. The *Oxford English Dictionary* defines a hackathon as "a collaborative computer-programming event, typically lasting several days and involving computer programmers, software developers, and hackers." Hackathons are frequently associated with copious consumption of caffeine and sugar.

"Hacking" in this context means working in teams to physically modify original lines of code or devices with the goal of creating a product or prototype. For instance, Glasgow University Tech Society (GUTS) has been hosting an annual hackathon—described on the society's website as an "amazing, pizza-filled, sleep depriving experience"—since 2013, based on coding and app design.

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Origins of this project

The starting point for *Global History Hackathons* was a conversation between Senior Archivist Moira Rankin and Economic and Social History lecturer Hannah-Louise Clark about ways of supporting global history research at the University of Glasgow. "What about holding a hackathon?" suggested Moira. This suggestion sparked Hannah's 2018 application to the University of Glasgow's Learning & Teaching Development Fund for a pilot series: "Global History Hackathons: Doing Global History through Local Archives and Museum Collections."

A core project team consisting of Hannah-Louise Clark, Sarah Gambell, Franziska Mucha, Rachel Rowan, Jelmer Vos, and Benjamin Thomas White read about different varieties of hackathons and learned from Franziska about her experience with "Coding da Vinci," the first German open cultural data hackathon. Maria Economou and Lola Sanchez-Jauregui formed a parallel "Hunterian Hackathon" team, bringing new dimensions to the project. Ivano Bongiovanni at the Adam Smith Business School shared valuable insights from his own hackathon-related research and practice.

Key characteristics of hackathons

The hackathon format has been taken up in fields beyond computing, including the cultural heritage sector (Coding da Vinci, 2014), business development and marketing (Spaulding & Caimi, 2016), medical and public health education (Kienzler & Fontanesi, 2017), and legal education (Kessel, 2019).

Each hackathon is different, but most will share the following characteristics:
- Intensity, often due to time constraints and the emotion of discovery and creation
- Team-based organisation, bringing together people with different backgrounds and skill sets
- Creativity and problem-solving, typically in a spontaneous and playful way, sometimes called "agile" working
- Attention to users of a product or solution

A note on hacker culture

Hackathons are based on the "hacker culture" that emerged from university computer centres and societies in the 1960s and 70s US. Technology writer Steven Levy (Levy, 1984) identified "six rules of hacking," which included mistrust of authority and pursuit of decentralisation (rule 3) and that "Hackers should be judged by their hacking," not bogus criteria (degrees, age, race, position).

Historians of science and technology have complicated this picture. For instance, Nathan Ensmenger (Ensmenger, 2015) showed how male computer programmers created a masculine professional persona for the technically brilliant "hacker" that excluded women's contributions as programmers. The notion of hacking as "a philosophy of sharing, openness, decentralization" and way of "improv[ing] the world" (Levy 1984) may seem quaint or naïve in an age of "surveillance capitalism" (Zuboff 2018) and the Facebook-Cambridge Analytical Data Scandal.

Hackathons and hackers are part of society and bound to reflect its values. Still, the format has potential to encourage forms of collaboration and creativity that are less hierarchical and more accessible than conventional formats in teaching and research, to stir up new ideas, and promote organisational reflection and change.

Figure 2. Photo by Neil Miller. One of the teams at the Hunterian museum hackathon

Part 2. What is a global history hackathon?

> *"I was drawn to this [global history] hackathon as a technologist - hackathons are common among computer scientists, but I'd never heard of the idea applied to history. I soon realised that the spirit was very much the same: a small team heroically attempting to deliver something impossible in unrealistic time constraints. […] Although those of us at the hackathon were not technologists, our method turned out to be similar, without having received any lecture on what they call 'agile workflow'. I think this goes to show that the hackathon spirit transcends boundaries of discipline or industry." I___, undergraduate student, University of Glasgow*

Applying hackathons to global history

The idea of a hackathon is relatively unfamiliar outside of computing and technology. Students told us that the novelty of the format was part of the appeal of *Global History Hackathons.* Participants were unsure what to expect from a history hackathon (so were we at first!). We tried to take advantage of this lack of preconceptions to provide fun events where students and staff could meet as creative equals.

Global History Hackathons set out to achieve the following objectives:
- Generate enthusiasm for Global History by leveraging Glasgow's unique cultural heritage collections
- Empower students to carry out independent and original research on global history topics
- Promote collaborative approaches to historical learning and research design

We aimed to carry over the intensity, team organisation, creativity, and "user" focus of the original format. This required some adjustments to the typical hackathon format, as shown in Table 1.

Characteristics	Technology hackathon	History hackathon
Goals	Proof-of-concept for a device or application	Proof-of-concept for a history "product" such as a research project, a popularization, museum label or display, public event, etc.
Setting	Lots of plugs/power points, stable internet connection, relevant APIs (application programming interface,) breakout space for brainstorming and snacking	Reading room (archive), lab (museum), classroom or public meeting room (if using digitized materials), separate breakout space for brainstorming and snacking
Process	Writing code, building a device	Researching and designing history
Input	Programming languages, lines of code, devices	Historical datasets, archival documents, material objects (either in original or digitized formats)
Participation	Coders, entrepreneurs, programmers, technologists	Anyone interested in history or the theme of the hackathon
"Users"	A group or institution that can benefit from the device or app	An audience (academic and/or public) that can benefit from the history "product"

Table 1 Typical characteristics of technology hackathons compared with history hackathons

What we did

Initially, *Global History Hackathons* was conceived as a single, full-day event that would bring students together with archivists, curators, and specific collections. We quickly recognised that "hacking" needed to take place onsite in archives and museums, not only to ensure the safety of the collections, but also because the location would add to the experience.

We reached out to four partners based on our own intellectual interests: the Scottish Business Archive, Royal College of Physicians and Surgeons of Glasgow, The Hunterian, and Glasgow Life/Glasgow Museums Resource Centre. Each of these venues hosted one three-hour hackathon.

Subsequently, we held one hackathon using photocopied archival documents from the Scottish Business Archive and University of Strathclyde Archives & Special Collections (1.5 hours) and another two in the University of Glasgow Library with items from Special Collections (2 hours). These events more closely simulated the conditions of regular teaching in seminars and lecture classes, for instance, for undergraduate courses with high enrolments. We also ran or facilitated four research hackathons: one at the Mitchell Library, and three in the University of Glasgow Archives (3 hours) using different collections. Once you start, it is very hard to stop global history hacking.

How we did it

In one strand of the project, we read across theoretical and case study literature on hackathons. In a second strand, we delivered the "global history hackathon" events with our partners. Project team members facilitated each event and acted as "mentors" to participants, supporting them to create their ideas. PGR interns wrote blog post discussing each event in more depth to help generate interest in future events. Links to these posts can be found in the Bibliography.

Two further strands involved use of participant feedback surveys and blocking off time for group reflection and learning after each event. Survey responses and self-reflection informed the procedures followed at each subsequent event: effectively making all participants (undergraduate and postgraduate students, information

studies and heritage professionals, and lecturers) co-creators of global history hackathons as a learning and teaching tool.

What we learned

We found the hackathon to be a flexible and playful format in which to crowdsource ideas, develop a proof-of-concept for a global history project, share and combine different kinds of expertise and knowledge, and build confidence levels and tacit skills in positive environment. We asked participants in our events, "How likely are you to attend a future Global History Hackathon?" and "how likely would you be to recommend a future Global History Hackathon to a friend?" Almost all participants awarded 10 out of 10 available points. We think you will probably love hackathons too.

That said, there is no single way of running a hackathon. How you use the format will depend on your intended goals, participation, data sources or inputs, resources (which include people, time, and space as well as money) as well as choices about how you want the process to unfold.

We learned that clarity of intention and good communication is important to achieving optimal outcomes for everyone involved. Part 3 includes a "hackathon dimensional model" created by Franziska Mucha and Hannah-Louise Clark. The model provides a framework you can use to fix parameters for your hackathon, enable communication with partners and participants, and later evaluate the success of your event.

Global History Hackathons developed its own "global history hacker culture," which we think holds appeal and relevance beyond global history. In a nod to Steven Levy's six rules of hacker culture, we developed five golden rules of our own in Part 7.

Part 3. Practical guidance for planning a hackathon

Event planning checklist

Pre-event	Event	Post-event
☐ Develop the hackathon team ☐ Engage with partners and locations ☐ Set the parameters for your event using the hackathon dimensional model ☐ Invite "mentors" and speakers ☐ Attend to accessibility issues ☐ Advertise and recruit attendees ☐ Define social media policy and hashtag ☐ Plan media consent form ☐ Organise prizes (as needed) ☐ Confirm catering	☐ Set up registration area ☐ Load presentations ☐ Manage speakers ☐ Manage event production activity	☐ Debrief with Hackathon Team ☐ Create social media content and blog posts about the event ☐ Send out feedback surveys ☐ Follow-up with hackers and their projects

Table 2 Event planning checklist

Hackathon dimensional model (Mucha & Clark, 2019)

Scenarios

We have all this data, and no one is using it: what can we do?

I have a problem, but don't have the time, resources, or skills to solve it on my own…

I want to plan a fun event!

How can my students get comfortable working with archives?

We really should do more outreach…

Dimensions

GOALS	INPUT	MODE	PARTICIPATION	FOLLOW-UP
What do you want to achieve?	**What are you hacking?**	**What is the style of the event?**	**Who is involved?**	**What happens afterwards?**

Associated characteristics/decisions

GOALS	INPUT	MODE	PARTICIPATION	FOLLOW-UP
Practical/ Analytical	Open/ Protected	Competitive/ Friendly	Professional/ Amateur	Implementation/ "In the drawer"
Working prototype/ Good idea	Concrete question/ Creative freedom	Time-limited/ Time-rich	Homogenous/ Mixed	Short-term relationship/ Sustainable relationship
Private good/ Public good				

Table 3 Visualization of the Hackathon Dimensional Model

DIMENSION	Associated characteristics	Mostly this	More like this	Equally both	More like this	Mostly this	Associated characteristics
GOALS	Practical	1	2	3	4	5	Analytical
	Working prototype	1	2	3	4	5	Good ideas
	Private good	1	2	3	4	5	Public good
INPUT	Open	1	2	3	4	5	Protected
	Concrete questions	1	2	3	4	5	Creative freedom
MODE	Competitive	1	2	3	4	5	Friendly
	Time-limited	1	2	3	4	5	Time-rich
PARTICIPATION	Professional	1	2	3	4	5	Amateur or enthusiast
	Homogenous	1	2	3	4	5	Mixed
FOLLOW-UP	Implementation	1	2	3	4	5	"In the drawer"
	Short-term relationships	1	2	3	4	5	Sustainable relationships

Table 4 How to use the Hackathon Dimensional Model for decision making

Hackathon dimensional model explainer

Scenarios

There are many reasons to use the hackathon format. In general, the format can be useful to:

- Share data sets or knowledge
- Make use of collections/datasets/objects in new ways
- Gain new insights and perspectives
- Connect with new audiences
- Develop and benefit from others' expertise

Uses and benefits of hackathons for specific groups are discussed in more detail in of the playbook.

Dimensions

Mucha's & Clark's model identifies five major dimensions of planning and evaluating a hackathon: goals, mode, participation, input, and follow-up. The first four dimensions are listed alphabetically: it is not essential to begin with "goals" and work your way through the list. Instead, you might start with an "input"—a dataset that has been underused by scholars or an archival collection that has never been examined from a global history perspective, for example. Perhaps you want to expand "participation" in exhibition-design at your museum, or you are looking for a fun learning activity ("mode")? The hackathon dimensional model can help you decide how to go about this.

Associated characteristics/decisions

Each dimension of the model opens onto opposing pairs of characteristics. Depending on the characteristics you decide to emphasize, your decisions will shape everything from the atmosphere at the event to the outcomes. We used a Likert scale to display associated pairs of characteristics to emphasize that these are not binary choices. Rather, each choice falls somewhere on a continuum.

Why use the Hackathon Dimensional Model?

You might be thinking, this seems very complicated! Our hope is quite the opposite: that the Hackathon Dimensional Model will help you form a clear understanding of the parameters of your hackathon. This may enable you to:

- Communicate effectively with partners and participants, from the planning and recruitment stages through to event delivery and follow-up
- Reflect afterwards, but also throughout, on how far you are achieving your goals, what worked better and what didn't work so well, and what prototypes or cultural changes you want take forward as a result of the hackathon

> *We are looking for beta testers. If you would like to receive bespoke support for planning your own hackathon in return for giving feedback on this playbook and the Hackathon Dimensional Model, please get in touch:* *hannah-louise.clark@glasgow.ac.uk*

Define your goals

What do you want to achieve?

The "goals" dimension of the hackathon dimensional model is designed to help you think about what you want to achieve and how you will measure the success of your event. You may want to develop your goals in consultation with partner organisations or, alternatively, present potential partners with a concrete idea. Practical issues around choice of venue and accessibility are related to goals and are considered in the next section.

Practical/Analytical: this element of the hackathon dimensional model allows you to think about what you want hackers to *do*. Mostly practical hackathons might want hackers to build skills (e.g., in paleography or in handling and interpreting primary sources). Mostly analytical hackathons might involve exploring a theme in a collection (e.g., "medical humanities" in a digital collection of sources) or analyzing reading lists with the aim of decolonizing your department's courses or embedding LGBT+ equality across the curriculum.

Working prototype/Good ideas: this element of the hackathon dimensional model allows you to think about what you want hackers to *produce* by the end of the event. Mostly working prototype would mean that hackers present a product or project that is close to completion or where the steps to completion are known. Mostly good ideas would mean that hackers propose general solutions or ideas that have potential to be taken forward, by them, or others.

Private good/public good: this element of the hackathon dimensional model requires you to think about who *benefits* from your hackathon and how these benefits are distributed. A technology hackathon where the goal is to launch a commercial product clearly falls into the "private good" end of the scale. But what about in hackathons in higher education, particularly in subjects the arts, humanities, or social sciences where there are no obvious commercial spin-offs to ideas? Even in these cases, it is important to reflect on who will "own" the ideas produced by the hackathon and who will be entitled to take them forward, so that you can convey this to participants.

Example goals for the *Global History Hackathons*

We aimed to promote "blue-sky" thinking about global history and to come up with ideas for future teaching resources, student projects, and public outreach. There was a strong skill-building component—helping students feel comfortable walking into Glasgow-based archival and museum collections and handling archival documents or material objects to design global history. We aimed to come up with good ideas for dissertations and popularizations that anyone—even people not attending the events—could potentially take forward. Using the hackathon dimensional model, these events would measure as follows:

- Practical/analytical: equally both
- Mostly good ideas
- Mostly public good

Find partners

Establish good relationships with potential collaborative partners. It can be helpful to approach senior staff at an institution and/or go through networks to find people who are willing to "buy in" to the hackathon. Show them this playbook to get the ball rolling and use the hackathon dimensional model as a talking point.

> **Questions to consider:**
> - What goals does the partner institution have?
> - How might the hackathon help achieve these goals?

Pick a venue

Sometimes a specific venue will be necessary for practical reasons, e.g., archival documents cannot be taken out of the reading room. Sometimes certain venues will be more desirable, e.g., a room that has flexible seating and an area for breaks. At other times, any large public space will suffice.

Questions to consider:

- Will the venue be accessible? If it is not possible to change the venue, what alternative arrangements or adjustments will we make?
- Is there space for rest/refreshment nearby?

Figure 3 Photo by Neil Miller. Members of a hackathon team look at a portrait of an elderly white male professor, The Hunterian Museum

Accessibility

Some of the features that make hackathons fun may also pose problems for accessibility, but the best kind of hackathon is one that works for everyone and promotes the health and wellbeing of all participants. Here are some thoughts on promoting accessibility. If you have other ideas to suggest, we hope you will share them with us @HistGlobal.

Venue and event structure
- Provide information about the space (map of location, information about walking distances, stairs, proximity of toilets)
- Offer a choice of working arrangements
- Encourage participants to move around the room freely and take comfort breaks on their own schedule
- Make information available in advance to increase predictability and control
- Encourage teams to have one volunteer scribe, others to verbalise ideas, so that writing is not essential to participation and enjoyment

Speaking, listening, processing
- Book microphones in advance
- Provide printed copies of introductory comments in advance or on the day

Visual accessibility
- Make event information and printed materials available ahead of time
- Use photo captioning and alt text in all social media
- Consider making support workers available
- Be willing to adjust lighting, as needed

Comfort
- Provide space for relaxation and snacking
- Make sure you have adequate and varied food and drink options to fuel participants' creativity and meet special dietary needs

Define input

What are you hacking?

You may already have a specific "input" in mind for your hackathon when you approach partners, for instance, a dataset, a named archival collection, your department's reading lists. Alternatively, the best results can come from engaging with people at a partnering institution to identify relevant input. Archivists, librarians, and heritage professionals will have knowledge of collections that simply cannot be found in catalogues.

> **Questions to consider with partners:**
> - How open or protected is this data/collection?
> - Are there safety/conservation considerations?
> - What collections would you like to see being used more?

The "input" dimension of the hackathon dimensional model is designed to get you thinking about *what* you will hack and *how* you will hack it:

Open/protected: Will you be working with freely available datasets that can be modified and remixed? Or are you handling fragile and unique artefacts that require protective equipment? If you use the input in a product or project, how do you credit or cite your sources?

Concrete questions/creative freedom: Is there a sequence of questions or activities that hackers should follow to achieve the goals of the hackathon? Or are they free to decide their own working method?

Example inputs for the *Global History Hackathons*

Global History Hackathons set out to do "global history using local archives and museum collections," where local meant, located nearby. We approached partners with the hackathon idea, asked them to suggest collections, and organised field trips to meet curators and view collections first-hand before making the final decision about inputs. Based on the chosen input, we designed the name for the event in consultation with our partners, e.g., "Bugs, Bullets, and Brains" at the Royal College of Physicians and Surgeons of Glasgow to reflect the professional interests

of the people whose personal records we were hacking (mosquito vectors in disease transmission, military medicine, neurosurgery).

On the day of our events, we provided four "challenges" for participants in the form of questions:

1. What global story would you like to tell using these archival/material artefacts?
2. How will you use the catalogue/artefacts to tell this global story?
3. What would make this global story more accessible and usable for you?
4. What would make this global story more accessible and usable for people in the places touched by this story?

Some surveyed participants (3 out of 13 at our first event) would have preferred more targeted questions, while one wanted to be left to their own devices. Most were happy with the level of direction provided. Using the hackathon dimensional model, these events would measure as follows:

- Mostly protected
- More like concrete questions

Choose the mode of your event

What is the style of the event?
The "mode" dimension of the hackathon dimensional model is designed to get you thinking about the *style* and *mood* for your event so that you can set the appropriate tone from the outset.

Competitive/friendly: all hackathons are team-based and collaborative by design, but this element of the hackathon dimensional model reflects the expectations and pressure hackers will feel. What kind of opportunity is this? Is it a competition with prizes or a friendly have-a-go session? Will you provide mentorship or other support to hackers during the event? If prizes will be awarded, who decides, using what criteria?

Time-limited/time-rich: this element of the hackathon dimensional model allows you to set the pace for your event. The time you have available will reflect your resources and goals. Hackathons that aim to produce working prototypes or more substantial ideas may take place over a longer time-frame. A hackathon-type event that takes place over an extended period, e.g., 12 weeks, is sometimes called a "sprint".

Example mode for the *Global History Hackathons*
We aimed to run fun events that would generate enthusiasm for global history and promote collaboration among students, staff, and professionals. Members of the project team facilitated the events but also stepped in to "mentor" teams, by being an audience for their ideas, reminding them of the goals of the event, and signalling transitions between different phases. We thought about offering prizes for the "best" designs but ultimately decided against this, which reduced pressure on participants and costs associated with the events. Because we were only "dipping into" global history projects, our event took place in 1.5-3-hour time blocks. Some hackers wanted to go deeper and told us they would have liked an all-day event. Others found the intensity of the 3-hour events to be sufficiently tiring. Using the hackathon dimensional model, these events would measure as follows:
- Mostly friendly
- Mostly time-limited

Decide participation

Who is involved?

The "participation" dimension of the hackathon dimensional model is designed to help you think about who you want to engage with your hackathon:

Professional/amateur: this element of the hackathon dimensional model spans people with specialist technical training (for instance, palaeographic skills, knowledge of programming languages) versus enthusiasts who bring varied skills and insights to the hackathon and want to "have a go."

Homogenous/mixed: this element of the hackathon dimensional model could describe a wide range of characteristics, e.g., age, gender, geographic origin, education level, professional background, interests.

Example participation for the *Global History Hackathons*

The first *Global History Hackathons* recruited participants through mailing lists, Moodle groups, and direct approaches from team members. As the project gained momentum, we also recruited through Twitter and word-of-mouth. Two hackathons used EventBrite as a recruiting tool. Although the e-invitations gave greater visibility to the event and made it easy to manage communications with attendees, rates of attendance were lower compared with hackathons where participants signed-up in person via email.

Although participation was homogenous in one sense, i.e., mostly University of Glasgow staff and students, it was very mixed in others, i.e., in terms of disciplinary background, interests, and career stage. Using the hackathon dimensional model, these events would measure as follows:
- Equally professional/amateur
- Equally homogenous/mixed

Plan follow-up

What happens afterwards?

The "follow-up" dimension of the hackathon dimensional model is designed to get you thinking about the afterlife of your hackathon and any steps you may need to take to support participants, cement relationships with partners, and achieve your goals for the event.

Implementation/"in the drawer": If the plan is to develop the prototypes/ideas, who will do this, with what support? If the plan is to keep prototypes/ideas in the drawer for future use, how will you record and share the results?

Short-term/sustainable: Will you stay in touch with hackers and your partners? If you are using social media to stay in touch and disseminate information, have you obtained appropriate consent?

Example follow-up for the *Global History Hackathons*

The global history hackers came up with many brilliant ideas, which you can read about in the event blogs by Sarah Gambell and Rachel Rowan:

- Scottish Business History Archive
- Royal College of Physicians and Surgeons Glasgow
- Glasgow Museum Resource Centre
- Hunterian Museum

None of these ideas have yet been implemented: they are "in the drawer" and can be taken out in future by students or staff interested in developing and taking forward the research.

The main output from the *Global History Hackathons* project was the format itself. It has been taken up and "implemented" by other people in successful grant proposals and courses; project members and students have given presentations on hackathons to different publics; and we are disseminating the results through social media via @HistGlobal; #GlobalHistHack19, a website, blog posts, and this playbook.

Because the global history hackers were (mostly) members of the University of Glasgow, the relationships we established vary from short-term (onetime

participants) to sustainable (students now taking courses and researching dissertations with us; new following on our social media account).

Using the hackathon dimensional model, these events would measure as follows:
- Equally implementation/"in the drawer"
- Equally short-term/sustainable

Costs

The main cost involved in hackathons is time. How much time will vary considerably, depending on several variables:

- Size of the planned event
- Status of relationship with partners, e.g., established vs. building from scratch
- Inputs, e.g, familiar vs. unknown collections
- If hiring staff, ease of your local HR procedures and communications

When we first started running *Global History Hackathons*, each 3-hour event involved a team of 1-6 people (exclusive of costs to partner institutions) in the following:

- Communications among team members and partners (1 hour)
- Site visit to partners to establish parameters for event (1 hour)
- Event logistics including recruitment and social media (1 hour)
- Planning event (3 hours)
- On the day (5 hours)
- Follow-up (1 hour)

By the end of the *Global History Hackathons* project, after successful delivering five events, engaging with feedback, and reflecting as a group and with participants, we had refined the format and developed templates of all the different documents needed to host a hackathon. This meant that preparation time was significantly reduced for subsequent events.

Using the "hackathon dimensional model" and playbook is an efficient way to benefit from what we took six months to learn. We hope it will streamline the planning process and communications for your own hackathon.

You can modify our templates in the Playbook library to save time. If you are familiar with the site and input to be hacked, this will also reduce planning time considerably.

Part 4. Practical guidance for facilitating a hackathon

Event facilitation checklist

Pre-event	Event	Post-event
☐ Engage with partners about logistics ☐ Send joining instructions to participants ☐ Create event playbook ☐ Delegate roles for each member of the organisation team, liaise with speakers ☐ Develop concrete questions and/or a creativity template for event, as needed ☐ Assemble "hacking kit," including stationary, food, and other supplies ☐ Prepare presentations containing framing comments and themes ☐ Pre-event meeting with team members and partners	☐ Manage the flow of the event ☐ Manage speakers/ timekeeping ☐ Guide participants with framing questions ☐ Encourage use of social media ☐ Award prizes	☐ Debrief with team members and partners ☐ Create social media content and blog posts about the event ☐ Send out feedback surveys ☐ Follow up with hackers and their projects as required

Circulate joining instructions

We sent joining instructions 1-2 weeks before the event with a small "meet the archive task" involving pre-selection of materials from a list or catalogue. You can find an example of these instructions in the Playbook library.

We provided optional readings in advance of the first hackathon. Subsequently, we decided to keep preparation to a minimum to maintain the impression that this was a fun event and not another form of coursework. Instead, we shared information with participants about how to learn more about specific topics, if they were interested.

Create an event playbook

The event playbook combines the functions of a to-do list, assigns job roles, and gives a detailed schedule for your event, including timings. You can find a sample event playbook and event schedule in the Playbook library.

Our hackathons followed a predictable structure with four phases:

Phase I: Introductions
This is a crucial phase in which participants are introduced, parameters and conditions for the event are established, and expectations are defined.

Introductions at our events included:
- Personal introductions
- Background information on hackathons
- Information about the INPUTS (including reading room regulations)
- Explanation of the GOALS, MODE, and structure of the event

Phase 2: First impressions
Hackers work with the "inputs" (datasets, objects, etc.) individually or in small groups. The level of guidance will depend on whether you have chosen to set concrete questions or mostly give creative freedom to your teams.

Phase 3: Teamwork

Hackers work towards the GOALS (e.g., design a working prototype or generate ideas) in their teams.

Phase 4: Sharing

Hackers share their findings and project ideas. Each hacker can contribute or, if preferred, a deputy can present their prototype on behalf of the team.

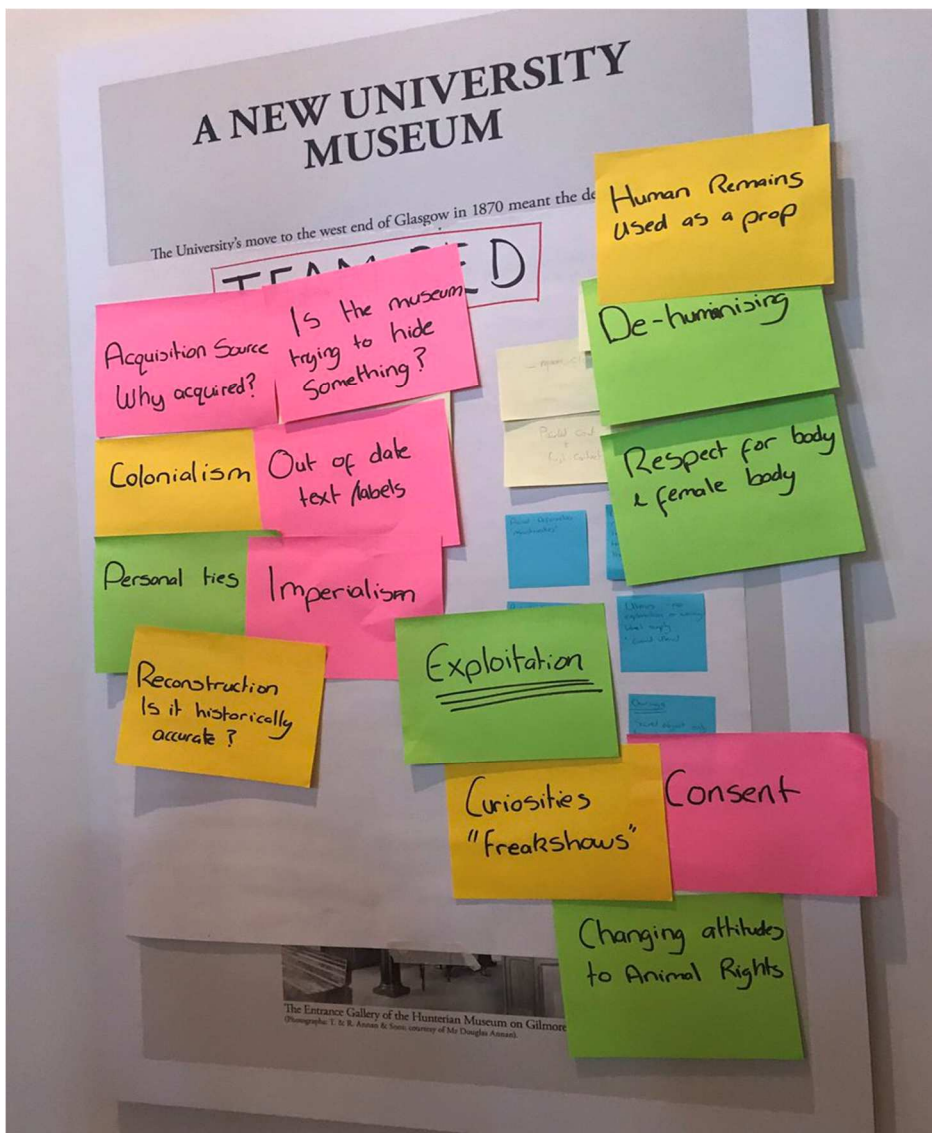*If time is limited, phases 2 and 3 can be combined.*

Figure 4 Photo by Neil Miller. Close up of sticky notes and writing used by a team to brainstorm during a hackathon

Design concrete questions and a creativity template

Depending on the "mode" of your event, you may want to set a "challenge" for participants in the form of concrete questions or guidance. Some of the challenges we set were as follows:

- What global story would you like to tell using these archival/material artefacts? How will you use the catalogue/artefacts to tell this global story? What would make this global story more accessible and usable for you? What would make this global story more accessible and usable for people in the places touched by this story?
- In a team, deliver an idea and "proof-of-concept" related to the Summer School theme. (E.g., a concrete idea for a research article, a grant proposal, a popularization, teaching resource, public event, a podcast... be creative!)

Consider providing a creativity template to guide participation and keep hackers on task. The template increases predictability and control for participants, which can be helpful for people who find group work stressful or uncomfortable. Sample templates are included in the Playbook library.

Get ready

- Prepare a hackathon kit: name tags, poster paper, pens (if permitted in venue), pencils, sticky notes, etc.
- Arrange catering and/or buy food or drink supplies
- Buy prizes if needed
- Send joining instructors and reminders to complete any required preparation
- Establish teams beforehand to save time. Aim for groups with a mixture of backgrounds, gender, and disciplines. Use clothing labels and colour coding to clearly signal membership of groups
- Print event schedule, templates, media consent forms, and any reproduced or copied archival material.

On the day

- Set up room prior to participant arrival, including catering, if used.
- *Time management is key.* We experimented with 3-hour, 2-hour, and 1.5-hour events. All were feasible but, in each case, needed tight organisation. An organiser event playbook helps everyone stay on the same page and makes for better event flow.

Follow-up

Social media

We disseminated the outputs of events via @HistGlobal; #GlobalHistHack19

- PGR interns collected media consent from the participants before the event started to fulfill GDPR requirements.
- Twitter was used to post updates, event photos, and outcomes from the lightning talk phase.
- Engagement with followers enhanced participation and enjoyment at events.

Website

A Global History Hackathons website hosted by Economic and Social History was launched towards the end of the project. In retrospect, it would have been beneficial to be able to direct students towards a website from the beginning.

Blogposts

Each event was written up as a blog post by Sarah Gambell and Rachel Rowan:

- Scottish Business History Archive
- Royal College of Physicians and Surgeons Glasgow
- Glasgow Museum Resource Centre
- Hunterian Museum

Part 5. Practical guidance on hosting a hackathon

In advance

1) Have an open mind.

2) Set clear parameters on which collection/set/amount of records will be explored.

3) Clarify the resource model: clarify costs and funding sources.

4) Contribute essential information to the group joining instructions, e.g., tips on using the catalogue, venue accessibility, handling guide.

5) Set a clear pre-ordering deadline allowing for retrieval time and trouble-shooting.

6) Prepare a handout or captions for the selected items to ensure context is understood. 7. Think about how you will use your available space to maximise discussion but also protect the collection, e.g., Create a safe zone for using sticky notes and coloured pens?

7) Think through supervision of the usage: how many staff will you need to interact with the group and protect the collection?

At the event

1) Give a presentation introducing the collection and housekeeping arrangements.

2) Brief users on use parameters and conditions for the event.

3) Ensure custodial staff are identifiable and well briefed.

4) Assign roles for members of custodial team, e.g., monitoring use and security, advising on catalogue, retrieving additional items required from stack.

5) Be flexible (within your set parameters) to enable the creative process.

Afterwards

1) Carefully check all the items and return them to store.

2) Organise the digitisation of items identified as most useful for the goals of the event.

3) Get feedback from the hack organisers and hackers: did the event meet stated goals?

Indicative staffing needs

based on a 3-hour hackathon with one discrete collection on a single site

1) Clarifying the format and aims - 2 hours
2) Writing event specific materials/selecting items from catalogue - 2 hours
3) Retrieving, preparing and recording documents/objects - 2 hours
4) Specialist condition checking for event - 1 hour (Anything in poor condition will be changed out for alternative or digitised - separate conservation treatment timescales would need to be factored in where required.)
5) Suggested event ratio of 1 staff member to 4 participants for handling original materials - 3 hours per staff member
6) If retrieval of additional documents during the event add additional staff member - 3 hours
7) Returning documents to their locations and associated administration - 3 hours
8) Evaluation - 1 hour

Figure 5 Photo by Hannah-Louise Clark. Assistant curator for Migration Collections Mia Gubbay displays potential items to be hacked at the Glasgow Museums Resource Centre, Nitshill

Part 6. Uses and benefits of hackathons

For archivists and librarians

- Familiarizes potential users and re-engages existing users with services in a carefully structured and supported way.
- Redefines the value of information professionals as co-creators in the teaching and learning environment.
- Optimizes use of catalogues and finding tools.
- Collects valuable user experience data for the design of teaching and learning services.
- Promotes overlooked and underused collections.
- Identifies ideologies embedded in metadata to address bias.
- Evaluates collections from a pedagogical standpoint:
  - How can these collections/datasets be used in a teaching setting?
  - What lessons can be learned from a closer look at the collections?
  - Whose voices and experiences are missing from these collections and how can their absence be compensated for?

> *"This is a great way for us to see the potential in our collections across many disciplines, and can allow students and researchers to find stimulation where they may not have expected it,"*
> *Ross McGregor, Royal College of Physicians and Surgeons of Glasgow.*

For learners

- Bolsters confidence engaging with archives/museum collections.
- Clarity of structure encourages participation.
- Provides active learning environment, building skills in a playful way:
  - Brainstorming and other ideation methods
  - Critical thinking and analysis
  - Effective communication; presenting and pitching ideas
  - Working collaboratively across boundaries of disciplines and hierarchies
- Generates intellectual excitement and enthusiasm for an area of research.
- Enables students to identify unique items that can be incorporated into coursework assignments, including original dissertation topics, in a time- and cost-effective way.

> *"[I]t was good to be in a team with other people who came from different backgrounds, as we all contributed with a different perspective. I also found that it was not as scary as I thought it might be, as I was the only undergraduate on my team, so that was a positive surprise. I think it gave me confidence, because I felt that I could contribute with something – a feeling that I think was facilitated by the make-up of the team and the openness of the questions," T____, undergraduate student, University of Glasgow.*

For museums

- Brings in new audiences and voices in relation to collections, including collections data:
    - Provide easier/expedited public access to certain collections.
    - Promote greater transparency around the provenance of collections.
    - Identify whose voices and experiences are missing from these collections. and how they can be amplified, especially underrepresented demographics.

- Potential for co-creation and even co-curation of the museum:
    - Crowdsource creative ideas for exhibitions.
    - Learn about objects from the communities that produce and use them, now and in the past.
    - Confront curators with the perspectives and motivations of museum users.

"The format was so valuable. With a focus set on examining humans and animals in museum displays, it helped the Hunterian to open up perspectives to the collections and enable genuine dialogue. You could see themes appearing across the groups too. Thanks @HistGlobal!" @Hunterian

For researchers

- Facilitates working across boundaries of discipline and hierarchy
- Opportunity for proof-of concept research:
    - Demonstrate feasibility of a potential solution to a problem or puzzle in the data
    - Develop deeper and broader understandings of the problem
    - Discover scholarly knowledge
    - Bring greater specificity to grant proposal
- Integrate research with teaching and/or public engagement
- Playful format is "beneficial for professional mental health"

> *"One of the most inspiring and refreshing initiatives in team work I've had the pleasure to engage with," Professor Tony Pollard, University of Glasgow.*

For teachers

- Offers a new way to incorporate collections/data sets into undergraduate taught programmes and coursework:
    - Identify priority sources to be digitized for learning and teaching
    - Generate ideas for interesting content to supplement and enhance lectures and seminars (films, podcasts, blogs, project work)

- When used in the classroom:
    - Clarity of hackathon structure encourages student participation
    - Builds skills, employability, and enthusiasm without requiring time-intensive, costly internships that are not accessible to all students
    - Hackathons involving special collections, museums, and other partner organisations break down accessibility barriers, encouraging students to contact these services more easily as they progress through their studies

- When used to aid planning:
    - Generates ideas for Global History modules, summer schools, international teaching partnerships and MOOCs (massive open online courses)
    - Develops potential topics worth further exploration for funded PGR dissertations

> *If you already teach with groupwork, you may be wondering "how is a hackathon different from a seminar?" Characteristics of each format are listed overleaf in Table 5. The main difference between a seminar and hackathon lies in the mode and goals of each format.*

Characteristics	Seminar	Hackathon
Etymology (*OED online*)	Latin _sēminārium_ seed-plot (also figurative). "A piece of ground in which plants are sown (or raised from cuttings, etc.) to be afterwards transplanted"	hack v.[1] "to cut or chop with heavy blows in an irregular or random fashion" + -athon comb. form denotes something carried on for an abnormal length of time
Origins of format	Philology and German universities, now generalized	Originally and chiefly US computer- programming, hacker culture and maker culture, e.g., Tech Model Railroad Club at MIT
Participation	A select group of advanced students pursuing specialist study or original research, under the guidance of a professor	Enthusiasts from a range of different backgrounds with a shared passion for creating new ideas/code/devices, supported by a facilitator(s)
Mode	Individuals ask questions about assigned material, check understanding of a topic by discussing with peers and instructor, articulate independent views. Activities are planned to make best use of the available time.	Teams crowdsource creative, spontaneous solutions to problems or challenges and "pitch" an idea or prototype to an audience/prize jury. Activities take place under time pressure.
Goals	Deeper understanding of a topic, critical awareness of themes and issues	Proof-of-concept for a product/solution demonstrating its potential for engaging users

Table 5 Typical characteristics of a seminar compared with a hackathon

"The event proved very popular with students who enjoyed the format and the clearly structured activities while working with primary sources for the first time. Ideas developed during the hackathon were to be included in an assessment for the entire unit and it proved overall very successful. Especially for our neurodiverse students the clarity of the hackathon structure encouraged them to participate more fully in activities when compared to the classroom-based sessions. For students from Widening Participation background the idea of Special Collections, Archives, or primary source research can sound very daunting at times. However, the hackathon and an introduction to source handling from Robert MacLean helped immensely to bolster the students' confidence and break down accessibly barriers for these students. It will allow them to contact these services more easily as they will find themselves further along in a history degree at a university in Scotland." Aileen Lichtenstein, History, University of Glasgow

Part 7. The Five Golden Rules of Global History Hacking

Rule one: Everyone is a global history hacker

Taking part is about being curious and creative rather than your title, training, or GPA. Expert knowledge or technical ability are highly valued—but so too are fresh perspectives. Hackers gain confidence in expressing their creative ideas within teams and to the group:

> *"I found that it was not as scary as I thought it might be, as I was the only undergraduate on my team, so that was a positive surprise. I think it gave me confidence, because I felt that I could contribute with something – a feeling that I think was facilitated by the make-up of the team and the openness of the questions" (student survey response).*

Rule two: Global history should be accessible

Global history research can be hampered by the cost and difficulty of travel to scattered archives, particularly for people with a disability/chronic health condition, dependents or caring responsibilities, and those facing visa and immigration discrimination. *Global History Hackathons* aimed to empower students to do global history using locally available data and materials, at minimal cost.

> *Surveyed participants reported feeling increased levels of confidence using archives or museum collections after attending a hackathon: an increase of more than double, from 3.28 out of 10 to 6.57 out of 10.*

Rule three: Be hands-on (but follow reading room rules)

Global history hackathons involved teams of people working in museum labs and archive reading rooms where it was not possible to physically modify the artefacts, many of which were fragile. Nevertheless, learning is anchored in handling and thinking with material objects:

> *"The experience of working in a group environment was fantastic. My experience as a historian is of being alone when it comes to primary research and primary sources. This means I am only ever applying the analytical frameworks that I am drawn to in my own research. Hearing what other historians are thinking about as they turn over the same sources expands my knowledge of different ways to look at sources and provides a novel experience of working with primary material in a collegiate environment"* (alumni survey response).

Rule four: Ask, whose voice, whose story is missing? Why?

Global history hackathons aspired to be inclusive of diverse perspectives, from seeking to amplify "hidden voices" in archival documents and metadata, and to identify the structural forces that worked to silence them; to demanding radical transparency around the provenance of museum objects. Students discovered "how unavoidable global history is, how easily local history is linked to wider global consequences and events" (student feedback, "Bugs, bullets, and brains") and built a new appreciation of "global events, exchanges, and structures" from specific sources (student feedback, "Bugs, bullets, and brains"), linking "small details" to "bigger ones" to grasp at global connections (student feedback, "From textiles to tea").

> *"The @HistGlobal Hackathons have brought lots to light […]. Encountering archives I hadn't met before @UofGlasgowASC, taking critical insights through to their conclusion, feeling part of a process, and like my views, everyone's, mattered and were valued,"* Eleanor Capaldi, Learning Enhancement and Academic Development Service, University of Glasgow.

Rule five: Be kind, listen to each other, and try to make the world a better place

> *"[I]t was so immersive, and you wanted to have a voice. You weren't just looking at something to analyse and get an essay out of it. You were having a voice and it wasn't scary to speak in the group"* *(student testimonial).*
>
> *"It was a flurry of excitement as more documents were brought out, hidden details were uncovered, and models were constructed. [...] The discussion and questions which come out of the Hackathon are taken out into the world by the participants [...]. For example, after the Hunterian Hackathon, I ended up posting some of the ideas we received from the day on social media, to see what my followers thought of the discussion. The response was positive and even students who were pursuing subjects like engineering, expressed their admiration of the concept and provided their input"* *(student testimonial).*
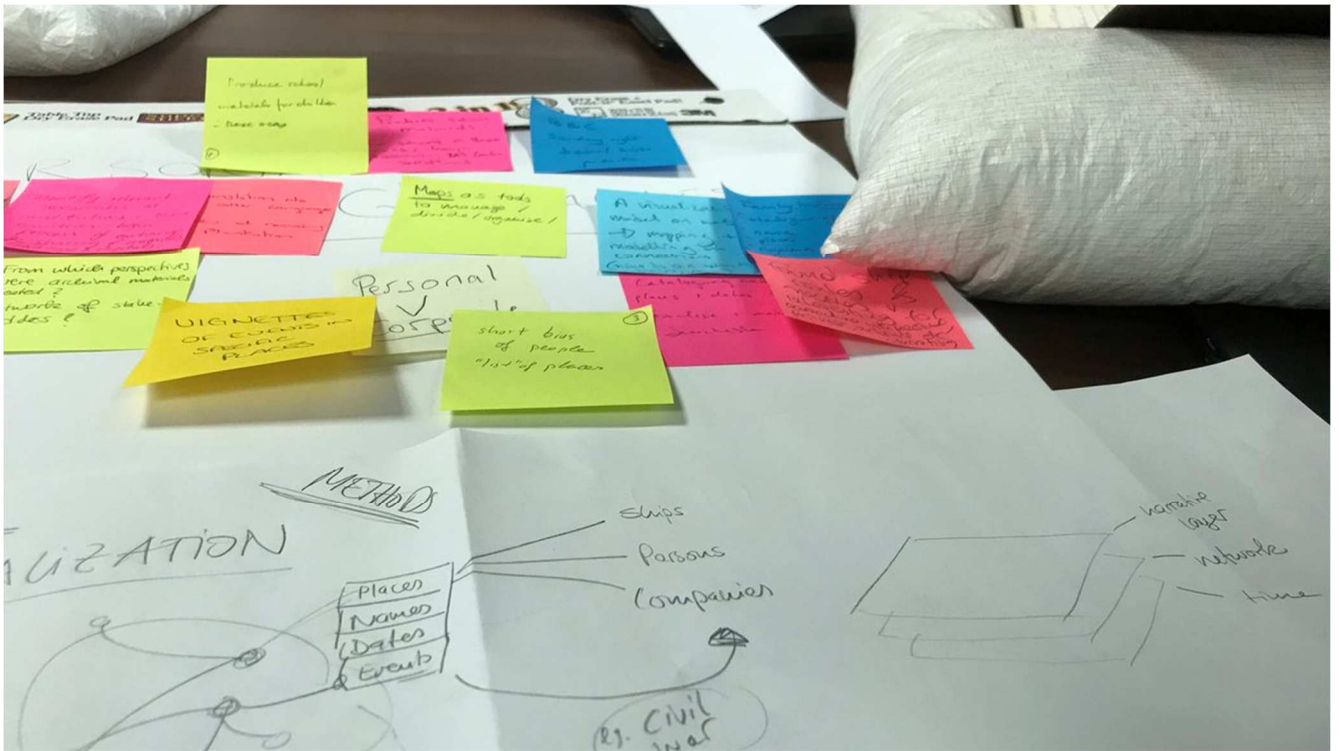
Finally, thank you to every Global History Hacker who joined in. You and your ideas were brilliant, and we loved hacking with you.

Bibliography

Coding da V1nc1. (2014). Retrieved from https://codingdavinci.de/

Calco, M., & Veeck, A. (2015). The Markathon: Adapting the Hackathon Model for an Introductory Marketing Class Project. *Marketing Education Review*, 33-38.

Ensmenger, N. (2015). Beards, Sandals, and Other Signs of Rugged Individualism": Masculine Culture within the Computing Professions. *Osiris*, 38-65.

Gambell, S. (2019). Bugs, Bullets, and Brains: Global History Hacking the Royal College of Physicians and Surgeons of Glasgow. *Heritage Blog*. Retrieved from https://heritageblog.rcpsg.ac.uk/2019/07/31/bugs-bullets-and-brains-global-history-hacking-the-royal-college-of-physicians-and-surgeons-of-glasgow/

Gambell, S. (2019). Examining Humans and Animals in Museum Displays: Global History Hacking the Hunterian Museum. *Global History Hackathons* (project website). Retrieved from https://www.gla.ac.uk/schools/socialpolitical/research/economicsocialhistory/projects/global%20historyhackathons/examining%20humans%20and%20animals%20in%20museum%20displays_%20g/headline_651591_en.html

Global History Hackathons. Retrieved from https://www.gla.ac.uk/schools/socialpolitical/research/economicsocialhistory/projects/global%20historyhackathons/

Grant, A. (2017). *Hackathons: a practical guide.* Retrieved from https://www.carnegieuktrust.org.uk/publications/hackathons-practical-guide/

Hackathon du Bibliothèque nationale de France (2016, 2017, 2018). Retrieved from http://gallicastudio.bnf.fr/Hackathon2018

IoE Student Hackathon Playbook. (2015). Retrieved from https://honim.typepad.com/files/1.0-ioe-student-hackathon-playbook.pdf

Kessel, R. (2019). Pracademic collaboration: Hacking into the future of legal education. *Alternative law journal*, 73-75.

Kienzler, H., & Fontanesi, C. (2017). Learning through Enquiry: a Global Health Hackathon. *Teaching in Higher Education*, 129-142.

Komssi, M., Pichlis, D., Raatikainen, M., Kindstrom, K., & Jarvinen, J. (2015). What are hackathons for? *IEEE Software*, 60-67.

Levy, S. (1984). *Hackers, Heroes of the Computer Revolution.* New York: Nerraw Manijaime/Doubleday.

Mucha, F., & Clark, H.-L. (2019). *Hackathon dimensional model.*

Rowan, R. From Textiles to Tea: Global History Hacking the James Finlay & Co Archives. *University of Glasgow Library Blog*. Retrieved from https://universityofglasgowlibrary.wordpress.com/2019/06/12/from-textiles-to-tea-global-history-hacking-the-james-finlay-co-archives/

Rowan, R. (2019). Old Things, Urgent Narratives: Global History Hacking the Glasgow Museums Resource Centre. *Global History Hackathons* (project website). Retrieved from https://www.gla.ac.uk/schools/socialpolitical/research/economicsocialhistory/projects/global%20historyhackathons/oldthingsurgentnarrativesglobalhistoryhackingtheglasgowmuseumsresourcecentre/headline_659622_en.html

Spaulding, E., & Caimi, G. (2016). Hackathons aren't just for coders. *Harvard Business Review*.

Zuboff, S. (2018). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. London: Profile Books.

File library

Contents

Example joining instructions

Global Business History Hackathon, Scottish Business History Archives
Joining Instructions for 27 August 2019
What is a Global Business History Hackathon?

The *Oxford English Dictionary* defines a hackathon as, "A collaborative computer-programming event, typically lasting several days and involving computer programmers, software developers, and hackers." It also notes the frequent association between hackathons and copious consumption of caffeine and sugar. But hackathons aren't just for coders and technologists, as you are about to find out!

This event has many features in common with conventional hackathons:

- Time limited (2.5 hours)
- Brings together different people with different skill-sets and experiences (you wonderful people!)
- Asks them to experiment and get creative with archival documents (are you excited yet?)
- The goal is to develop proof-of-concept designs

This event builds on the successful University of Glasgow Learning & Teaching Development-funded pilot "Global History Hackathons: Doing Global History through Local Archives and Museum Collections".

Why does a Global Business History Hackathon matter to me?

This event is an opportunity to:

- Experience interdisciplinary approaches to business history in the University of Glasgow archives
- Develop proof-of-concept designs for research and teaching and gain new perspectives on your own research methodology
- Enjoy team spirit and tea breaks
- Learn how to use this format in your own research, teaching, and public engagement—and have a lot of fun in the process
- The best ideas will win prizes!

No previous experience is required. We ask that you complete one straightforward task (see below) by 23 August and bring your curiosity and enthusiasm on the day.

"Meet the Archive" – Please complete this task by 23 August

View the records of John Lean & Sons Ltd:

https://archiveshub.jisc.ac.uk/glaas/archives/b4a91d5f-9d27-3b57-8370-71b22f89ae53

The archive catalogue is best viewed on a desktop screen as it will present split screen navigation panels. But with persistence it can be used on mobile technologies.

Select between 1 and 3 items and send the reference number and description to kiara.king@glasgow.ac.uk as soon as possible and by 23 August at the latest.

E.g. GB 248 UGD 2/9/1 Letterbook: Bombay
GB248 UGD 2/1/2 Private ledger no. 1
GB 248 UGD 2/12/7 Petty cash book

There are no right and wrong selections
There are only things you think may be interesting for a discussion about risk and

resilience in global business history. The items selected, and your reasons for selection, will be discussed on the day. Your selections may or may not be what you were expecting or hoping for—but that is all part of the hackathon experience.
On the day standard archive reading room regulations will apply. Pencils will be provided for notetaking. Digital cameras may be used.
Further information on regulations
https://www.gla.ac.uk/myglasgow/archives/visitorservices/regulations/

Need more help?
Using the Archives Hub catalogue https://archiveshub.jisc.ac.uk/using/
Using Archives: A Guide for the Inexperienced
https://archiveshub.jisc.ac.uk/guides/usingarchives/

University Archives contact

Example event playbook

Playbook for "Business Beyond the Business Cycle: Global Business History Hackathon of the John Lean & Co Records"
Date: Tuesday, 27th August 2019, 2-4.30pm
Location: UGAS, Thurso Street
Instructions for Team

Time	What	Who	Where
N/A	**Preparation:** • Prepare name labels (CM) • Buy biscuits/snacks and prizes (CM) • Assign hackers to teams (HLC and CM) • Print event information and creativity templates (HLC) • Print privacy notices/consent forms (HLC) • Bring material to the archive room-flipcharts, post-its (HLC & CM) • Print reading room regulations and summary of the history of the John Lean & Co records (1 page) (KK)	HLC, KK, CM	Lilybank House and Thurso Street
	Preparation: • Set up materials in work stations (HLC) • Set up snacks in kitchen and display prizes (CM)		Thurso Street
1.50-2pm	**Greeting:** • Greet hackers • Privacy notices/consent forms (HLC)	HLC, KK, CM	
2-2.30pm	**Phase 1: Introductory orientations:** • Welcome and self-introduction (HLC) • Self-introduction and housekeeping (KK) • Introduction to a history hackathon and aim, proof-of-concept (HLC) • Introduction to collection (KK)	Timekeeper, tweeter: CM Presenters: HLC, KK	Internal arrangement: Teams positioned at 4 corners of the table?

1

	• Overview of the phases of the event for the next 2.5 hours. Challenge: In a team, design a proof-of-concept for *crises, resilience and risk management* (concrete idea for a research project, popularization, class, public event). • I will be tweeting and taking pictures that we will use in the way you have indicated for us in the consent form. (HLC) **Phase 2: Personal impressions of selected documents** *** Tea break to pitch ideas *** **Phase 3: Teamwork with requested archival documents** **Phase 4: Elevator pitch** All by 4.30pm!!		
2.30-3pm	**Phase 2: Personal impressions**	Tweeter and timekeeper: HLC Moderators: HLC, KK, CM and other archivists	Pre-ordered items placed on side table for hackers to collect
3-4pm	**Phase 3: Team Work** N.B.: During the team work phase we can float between groups. Our job is to encourage hackers and provoke the creative process.	Tweeter and timekeeper: HLC Moderators: HLC, KK, CM and other archivists	
4-4.20pm	**Phase 4: Sharing** **Elevator Pitch! No longer than 5 minutes per group (with a timer)** Present your idea to the others and make a suggestion what you think the next steps would be to develop this idea	Timekeeper: HLC	
4.20-4.30pm	**Wrap-Up and Prize-giving**		

2

Example event schedule 1

Royal College of Physicians and Surgeons of Glasgow
Global History Hackathon
Bugs, Bullets and Brains
Tuesday April 16, 1.00-4.00pm

PHASE ONE: INTRODUCTORY ORIENTATIONS (45 minutes)

Introduction to RCPSG (Ross McGregor)

Introduction to Hackathons (Franziska Mucha)

Introduction to global history (Hannah-Louise Clark)

Meet and greet your team

Let's get hacking!

PHASE TWO: FIRST IMPRESSIONS (15 minutes + 10 minutes tea-break)

Handle the archival materials, objects, and online catalogue individually, in pairs, or as a team to generate responses to the following questions:

- What global story would you like to tell using the RCPSG heritage collections?
- How will you use the catalogue, archival documents, material objects to tell this global story?
- What would make this global story more accessible and usable for you?
- What would make this global story more accessible and usable for people in the places touched by this story? E.g., India, South Africa, Italy, North Africa

You can draw inspiration from your own studies and research interests or simply rely on your own creativity.

To help you ground your ideas, you can record your initial impressions on post-it notes and use the flip chart sheets to draw or write about your global history ideas.

TEA BREAK (10 minutes)

PHASE THREE: TEAMWORK (80 minutes total)

Examine pre-ordered materials, use the catalogue, and request new documents to develop your project idea(s). You can choose to work as a single team or in smaller groups—it's up to you.

PHASE FOUR: SHARING AND FAREWELLS (30 minutes)

SHARE YOUR GLOBAL STORY (5 minutes per group)

Example event schedule 2

Global Business History Hackathon 27 August 2019: John Lean & Sons Records, Scottish Business Archives

Final Challenge

In a team, deliver a "proof-of-concept" related to the Summer School theme. (E.g., a concrete idea for a research article, a grant proposal, a popularization, teaching resource, public event, a podcast… be creative!)

As you explore the archival documents, you can draw inspiration from the theoretical and empirical perspectives you have been introduced to so far—or you can simply rely on your own creativity. This is the moment for your blue-sky thinking.

To help you ground your ideas, create a business model around your concept. What USP will you deliver? Who will be your users? (E.g., funding agency, business community, wider public, students).

Use the flipcharts and sticky notes as a storyboard and draw or write about your concept. You will present to the rest of the room so prepare your points carefully.

Schedule
Phase 1: Introductions (30 minutes)
Phase 2: First Impressions (30 minutes)
Phase 3: Teamwork (1 hour)
Phase 4: Sharing and Wrap Up (30 minutes)

You can take a creative caffeine and sugar break at any time!

#GlobalHistHack19
@HistGlobal
@MedicalMaghrib

Example creativity template 1

Franziska Mucha developed the first creativity template for our hackathon with The Hunterian. We liked it so much that creativity templates have become an integral element of the hackathon experience.
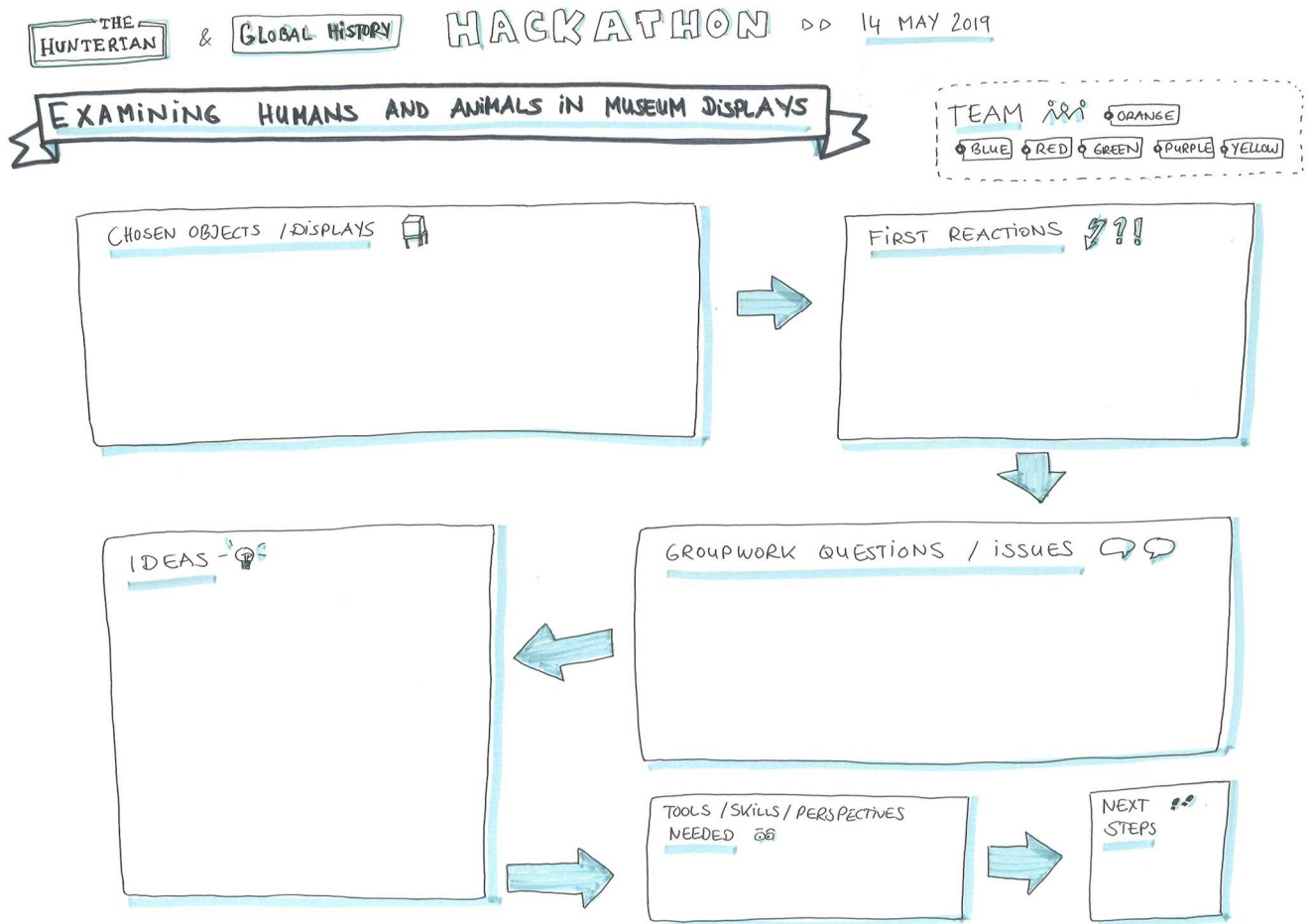
Example creativity template 2

This template by Hannah-Louise Clark featured in a 1-hour "mini-hackathon" that took place over lunch: the template doubled as a place setting!

Example creativity template 3

Aileen Lichtenstein developed this template for a 2-hr session with special collections as part of UofG's Widening Participation Global History Summer School.

HACKATHON

TEAM:

GIVEN OBJECT/ TEXT:

GLOBAL STORIES:

FIRST REACTIONS/ IDEAS CLUSTER:

SHARE YOUR STORY:

Example Information Sheet

Information Sheet for Global Business History Hackathon 27 August 2019

The Global Business History Hackathon taking place on 27 August 2019 at the Scottish Business Archives is part of the event series "Global History Hackathons" and
the research project "Global History Hackathons: Doing Global History Through Local Archives and Museum Collections" at the University of Glasgow.

1. What are the aims of the "Global History Hackathons: Doing Global History Through Local Archives and Museum Collections" research project?

This research aims to explore how hackathons can be used to accelerate proof-of-concept research and integrate research and teaching in the humanities and social sciences.

2. Who is doing the research?

The research is led by Dr Hannah-Louise Clark, lecturer in Global Economic and Social History at the University of Glasgow.

3. How will I be asked to provide data?

You will be asked to take part in one or more of the activities described below. These activities are designed to collect qualitative and quantitative evaluation data:

- Taking part in a hackathon (creative workshop) in archives
- Observation of your interaction in the hackathon
- Analysis of material co-created in the hackathon
- Completing a questionnaire

Data from these activities will be recorded by the researcher on paper, online (by digital data entry), by audio or video recording, by photography, and/or screen capture. Your permission for this will be sought before data collection begins through signing the Consent Form. Your participation is voluntary and no compensation – economic or of any other sought – will be provided.

4. Will my participation be confidential?

You will have the opportunity to remain anonymous in this research project and you can specify your preferred form of identification on the Consent Form. When involved in online data collection, you will be informed before the system starts logging your data. At no time will you be asked to enter your real name or any other identifying information, unless you explicitly give your consent. Non-anonymous data will not be made available outside of the research team to any individual unless you explicitly give your consent. Non-anonymous data that is already published (e.g. on social media platforms) will be treated with respect to its original context.

5. What will happen to my data?

Raw data will be accessed by Dr Hannah-Louise Clark and will not be shared with third parties, unless you explicitly give your consent. Processed data may be included in the project outputs, such as on websites, blogs and other form of media, publicity and final reports of the Global History Hackathons project and the University of Glasgow. These could include:

- presentations across the University at which we discuss the Global History Hackathons;
- presentations about the project to people external to the University;
- publications submitted to learning and teaching journals;
- guidelines available online and in paper to University staff to inform course design, in either numerical or anonymized quote form.

Data collection will be done in compliance with article 8 in the Charter of Fundamental Rights of the European Union.

6. Who owns my data?

You have the right to access your data at any time by contacting the researcher. The University of Glasgow is committed to the principle of data protection by design and default and will collect a minimum amount of data necessary for the project.
The University of Glasgow will hold copyright over any publications, presentations, productions, videos, photographs, recordings, and other forms of media and publicity derived from this research and will provide open access where possible.
For all co-created or user generated material creative commons licenses will be aimed for in consultation with participants.

7. How will my data be stored?

Data will be securely stored at the approved, password-protected University of Glasgow cloud storage solution OneDrive for Business (for more information, see https://www.gla.ac.uk/myglasgow/it/office365/onedriveforbusiness/). Physical data, such as audio or video recordings, questionnaires and transcriptions, will be stored in locked rooms at the University of Glasgow. Copies of the data will also be stored electronically on both password-protected hard drives and the OneDrive for Business account.

Data may be transferred internationally, as one of the University of Glasgow cloud storage solution is OneDrive for Business. This is approved for storing all type of University data and stores data in the EU (for more information, see https://www.gla.ac.uk/myglasgow/it/office365/onedriveforbusiness/).

Data will be retained in the University's data repository for a period of ten years after completion of the research project, starting in 2021, as it is data of long-term value.

The University is committed to ensuring that data derived from publicly funded research is made available to other organizations and individuals. In the Consent Form you can indicate your support for open science with consenting to make an anonymized version of your data available in a trusted repository (e.g. university's repository Enlighten: Research Data or Zenodo, etc….)

8. On what basis is my data being processed?

Under the General Data Protection Regulation (GDPR) the University has to identify a legal basis for processing personal data and, where appropriate, an additional condition for processing special category data. In line with our charter which states that we advance learning and knowledge by teaching and research, the University processes personal data for research purposes under Article 6 (1) (e) of the GDPR: Processing is necessary for the performance of a task carried out in the public interest.

Special category data is processed under Article 9 (2) (j): Processing is necessary for archiving purposes in the public interest, or scientific and historical research purposes or statistical purposes.

Research will only be undertaken where ethical approval has been obtained, where there is a clear public interest and where appropriate safeguards have been put in place to protect data. In line with ethical expectations and in order to comply with common law duty of confidentiality, we will seek your consent to participate where appropriate. This consent will not, however, be our legal basis for processing your data under the GDPR.

9. Can I withdraw from the project?

Your participation is voluntary and you can choose to withdraw from the research project at any point without consequence by contacting the researcher, even after your data have been collected. Should you wish to withdraw, all references to your data can be removed at your request and the data will be destroyed.

10. What are my rights in relation to my data & how can I report a complaint?

Under GDPR, you have a general right of access to your data, a right to rectification, erasure, restriction, objection or portability, and a right to withdrawal. Please note, not all rights, apply where data is processed purely for research purposes. For further information see:

https://www.gla.ac.uk/myglasgow/dpfoioffice/gdpr/contact/

11. Who should I contact if I have questions?

Should you have any questions or concerns about the research or your contribution to it, please contact Hannah-Louise Clark, hannah-louise.clark@glasgow.ac.uk

Example informed consent form

Informed Consent Form for Global Business History Hackathon 27 August 2019

Please read and tick <u>all the boxes below</u> to indicate your agreement:

I have read and understood the project Information Sheet and have had the opportunity to ask questions about the research and my participation	
I voluntarily agree to take part in this research project	
The procedures regarding confidentiality (e.g., use of names, pseudonyms, anonymisation of data) have been clearly explained to me	
I agree for the data collected by the researcher and/or produced by me during the research activities (hereafter called my data) to be used to inform the project's findings and publicity	
I understand that my data is of long-term value for academic research and will be retained in secure storage of the university for a period of ten years, starting 2021, under the conditions of anonymity I define below	
I understand that I may withdraw at any time without consequence	

Condition of anonymity

Please choose <u>only one</u> as appropriate:

[ ] I would like my name used and understand what I have said or written as part of this study as well as video, photo or audio records will be used in reports, presentations and other form of outputs so that anything I have contributed to this project can be recognised.

OR

[ ] I want to stay anonymous in this project and ask you to use an alternative name for me. I understand that I may still be recognised in visual or audio records.

(Write alternative name here) _____

OR

[ ] I do not want my name or an alternative name used in this research project and understand that my identity will be altered/obscured in photo, video and audio records.

Re-Use of research data
Please choose only one as appropriate:

[ ] I consent that an anonymised version of my data can be made publicly available on trusted research data repositories for other people to re-use.
OR
[ ] I do not give consent to sharing an anonymised version of my data on publicly accessible repositories.

License for co-created material
Please choose only one as appropriate:

[ ] I consent that my co-created material from a workshop session (e.g., audio feature, creative writing, video statement…) can be published with the open license CC-BY-SA 4.0 to allow sharing and reuse. I understand that this contribution can contain elements that relate to my identity.
OR
[ ] Please use my co-created material only for content analysis and treat it with the same conditions as the other research data described above.

Participant name (block capitals) _____

Participant signature _____

Date: