[The Hack Day Manifesto](http://hackdaymanifesto.com/" \o "The Hack Day Manifesto)

So you’re organising a hack day or hackathon? Here are some basic requirements to make your event a success, and avoid the common pitfalls that could otherwise ruin it. If you cannot provide any of the following, make it clear to guests before registration. Attendees are generally forgiving when clear communication is given. These are only guidelines, but exist to help you run a hack day in the easiest possible way.

Announcing the event

Once you know when and how your event will take place, you’ll want to tell the world about it. At a bare minimum, you should decide on a canonical place where all public information about the event lives - this might be a dedicated web site, an event on an existing event online service or some other place which is publicly accessible.

RegistrationOptional

If you require your attendees to register, make it clear what information is required for signing up and what the deadline for the registration is. If there’s a maximum number of attendees the venue can handle, communicate how the selection process works and when/how people will be notified if they’ve been granted attendance or not.

If there’s a waiting list for the event, make sure to explain how it works.

Most registration forms lets applicants enter name, contact details and food preferences/allergies (if applicable). Depending on your event and your venue, you might want to ask for additional information - this manifesto lists a few other topics which might make sense to add to the registration form.

There are also a number of things you probably should not ask for, like gender, religious preferences etc.

Venue

Location

The venue should be relatively easy for people from outside of town to locate, with good public transport links. If it’s difficult to reach, try to provide alternative means of transportation, such as coaches to/from local transport hubs throughout the event. Provide a full address, and if necessary, additional instructions to all attendees well in advance of the event.

Include instructions/contacts/getting in arrangements, too (i.e., what do to at reception/security desks).

Print big signs that will guide your attendees to the venue (and in some case inside the venue).

Accessibility

Hack day venues should be accessible to everyone: at a bare minimum, there should be step-free access to all common parts of the building. If an attendee is blind or deaf, they should be able to participate too. Make sure your event signup forms mention accessibility and ask what accommodations might be needed.

Insurance

Does your venue have the relevant insurance? Are guests’ belongings protected in case of fire or theft? If not, you should make them aware of the risks so they can take extra precautions.

Do you, as an organizer have adequate insurance?

Security

Attendees will often be bringing a lot of expensive kit: laptops, tablets, etc. Make sure they have some security. If the venue does not have some form of lockers, can you run a cloakroom system?

Secure sites and photo ID

Are the rooms going to be available to non-attendees? Work out whether you are running a secure site and whether people need to bring photo ID; if so, tell them when they sign up and remind them close to the event date. For some people, showing photo ID may be a deal breaker. Not everyone will have ‘government issued ID’, either. Providing proof of address may be hard for some.

Dates

Weekend or Not?

Most hack days are held at the weekend as this allows people to attend without taking time off work. If you are planning a hack day that begins on a Friday, remember that this may limit the number of people willing to travel after work.

Checking for clashes

One of the most frustrating things for attendees to see is two similar events on the same day in the same area. To avoid this, check places like[Lanyrd](http://www.lanyrd.com/) and [Eventbrite](http://eventbrite.com/), and ask on twitter “anything going on in X on X”. Remember that people may be travelling long distances for hack days, so even if an event is a few hundred miles away, you are still diluting your potental audience.

Overnight Events

Sleeping provision

If attendees are staying overnight, then a separate (dark, quiet) area should be available away from the hacking should people decide to sleep. If possible, this should be several areas potentially including dedicated areas, for example male/female/mixed, minors (+chaperones?), snorer/non-snorer, night-owls/early birds.

ShowersOptional

Despite the stereotypes, most geeks like to keep clean. Only a few venues are able to provide showers - but if you can, you should. Make sure you tell attendees well in advance so they can bring towels and toiletries.

Network

Your 4MB DSL isn’t enough

Hack days have special requirements: don’t just trust anyone who tells you that “it’ll be fine”. Think about the networking issues, and verify that they work for the kind of capacity you are going to have. People from the venue or their commercial partner will tell you all sorts of things you want to hear but keep in the back of your mind that they may not have any clue what they are talking about. Given the importance of network access, if you are operating a commercial event consider requiring network performance as part of your contract with venues and suppliers.

Rock solid WiFi

Many commercial WiFi providers plan for much lower use than actually occurs at hack days. The network should be capable of handling at least 4 devices per attendee.

Minimal firewalling

As a minimum: ports used for SSH (22), DNS (53 — TCP & UDP), VPN (47, 500, 1701, 1723, 5500), HTTP (80), NTP (123 — UDP), HTTPS (443), Submission (587), IMAPS (993), MSN Messenger (1863), CVS (2401), Subversion (3690), XMPP/Jabber (5222), IRC (6665-9), and Git (9418), must be open and accessible, without the need of proxy servers, and preferably without perimeter-level malware &c checks.

Subnet / DHCP capacity

Subnet and DHCP server must have capacity for allocating 6 IPv4 (and optionally, IPv6) addresses (preferably a /29) per hacker.

If NAT is not used, attendees should be informed in advance.

WiFi security

Use WPA2 security over an open WiFi network, to offer some basic protection against the monitoring of other users’ network traffic.

No device isolation

Attendees should be reminded that when connected to the network, their devices may be accessible to all other devices on the network so they would be wise to secure them.

Organisers should make it clear that they absolve themselves of liability for any intrusion or damage caused over the network. Attendees will want to share resources with other attendees (version control, for example) but while it would be wise for them to do so in a controlled manner it is ultimately up to each individual to be responsible for the security of their own devices, connected or otherwise.

Attendees should be encouraged/advised to run their own firewalls, too, remembering that IPv6 exists.

IP Whitelisting

For events with 150 attendees or more, you will need to contact organisations such as Twitter, Google, and Freenode in advance to inform them of the increased number of connections from your IP range; they may have an existing process that you should use.

In many cases, rate-limiting is handled by authentication, not IP address (ranges).

For Freenode, email [iline@freenode.net](mailto:iline@freenode.net) with dates, expected number of attendees and IP addresses if possible.

QoS and Monitoring

Traffic shaping and monitoring should be employed to help prevent a few users abusing the connection to the detriment of all others.

DPI should not be used.

Ethernet to the ChairOptional

In case of WiFi collapse (or if you can’t provide adequate WiFi at all) you should have ethernet available at the chairs. Have at least fast ethernet feeding into a gigabit backbone arranged in an (extended) star topology. If you go ethernet-only, announce this up-front. Regardless if you provide cables or attendees bring their own, you should have a big pile of spare cables at the venue.

Single subnetOptional

Both wifi and ethernet should share a single subnet, allowing devices to communicate regardless of how they are connected to the network.

Power

Power sockets

You will need a minimum of 1.5 power sockets available for every seat. That’s a minimum; many attendees will bring two, three, or more devices that require separate power. Have spare cables available. Make sure you have access to the fuses of all used power circuits.

Portable Appliance Testing

As stated above, your attendees will be bringing two, three, or more devices making full PATs for every device an impossible endeavour. But if you are providing a lot of power strips it can be worth getting them tested.

Isolated power for hardware hacksOptional

Isolating the power for those doing hardware hacks is generally a good idea, don’t let one soldering iron knock out the entire venues power.

Sustenance

Dietary requirements

Not everyone in the technical community is hypercarnivorous. Be sure to check with your attendees for dietary requirements: food allergies, vegetarians, vegans and people with dietary restrictions. Make provisions to ensure they are provided for equally. If you’re on a budget, prioritise allergies and vegan alternatives; the vegan alternative will satisfy most non-allergy based requirements.

Breakfast

If your event starts before 11am you should provide breakfast to attendees, either continental or cooked.

Lunch

You should provide a lunch for each day of the event, this should consist at least of sandwiches (or suitable alternatives for gluten intolerant folk).

Dinner

If your event runs later than 6pm or overnight you should provide attendees with a proper evening meal, not sandwiches or snacks (and not everybody likes/eats pizza).

Overnight

If your event runs through the night, you should arrange for food to be available throughout the night, either by periodically refreshing it or supplying something that can still be eaten after it has gone cold.

Drinks

A selection of coffee, green and black tea (plus milks, sugars), energy drinks, caffeinated and non-caffeinated soft drinks, juices and water should be freely available to attendees throughout the event.

Snacks

Chocolate, sweets, biscuits, fruit, crisps, etc. should be freely available to attendees throughout the event. Try to ensure there are healthy options too.

Alcohol

Should be served as if you are the owner of your local bar because, in fact, you are. Check licensing rules with the venue, including where and when alcohol can be served and consumed and what time you need to stop serving. If you have underage attendees, make sure they’re not served alcohol. Penalties for failing to do this could range from a fine to imprisonment for the person providing alcohol and loss of licence for the venue.

APIs / Datasets

Presentations

Presentations by API and dataset providers should be kept to a minimum, try to make it a quick introduction involving the company name, the type of data / platform they have, and who to speak to for more information. Have technical - not marketing - people give the presentation as they will be asked technical questions, both on stage and during the rest of the event.

Working APIs

The APIs pitched to attendees should be checked in advance by someone technical to confirm that they are suitable, work, and are of a high enough quality.

Multiple clients

All APIs should provide client libraries in at least three of the major languages unless there is good reason for them not to (such as the target platform only supporting a single language).

(And if you haven’t got the client libraries written, maybe you need an internal hack day to write them!)

Clean datasets

Datasets provided for use in the hack day should, where possible, be checked in advance by someone technical to ensure they are well structured and in a sensible format (CSV, XML, JSON, RDF etc., rather than Excel spreadsheets and PDFs).

Thorough documentation

All APIs and datasets should have thorough documentation, detailing format, any codes or abbreviations, as well as the underlying assumptions and business logic of what it represents. The documentation should be checked by someone technical before announcing the API.

Local downloads

Datasets – especially large datasets – should be available over the network from local servers without the need for registration, and where possible available on USB keys for even faster transfer.

Make data explorable

Try and ensure that large datasets are accompanied by smaller sample files so attendees can check them for suitability and write parsers using a small number of records before downloading and importing multi-gigabyte files.

API Keys

If an API requires an key to use it, then make sure that someone is on site and able to authorize the requests quickly, and with as little fuss as possible.

Licensing

Get clear licensing information from API and dataset providers ahead of time, and communicate those licences clearly to the attendees, remembering that those in the technical community often have strong opinions about open licences for data and code.

Longevity

Attendees are often averse to building on top of platforms and datasets that could disappear or will incur usage fees after an event, try to avoid companies making resources available only for the duration of the event and communicate clearly the risk of building on top of any alpha or beta APIs.

Local API testbedsOptional

Where possible test servers for the APIs should be setup on the local network, this allows development to continue in the event of internet failure, and also isolates the live API’s from the increased usage the hack day will cause.

Demos

Hack submissions

If possible, have a shared, public listing of the hacks that have been submitted. This helps the judges, the attendees and bloggers/journalists who are covering the event. You can use Google Docs, Etherpad or a wiki. Several Hackday bespoke applications exist, too. Make sure that all attendees have write access and can concurrently edit. Plan for the hack listing to stay around as a historical record.

Time limit

Each demo should be given a fixed time limit, standard times are 60, 90, 180, and 300 seconds. Tell presenters ahead of time, let them know how much time remains (either half time cards or an on-screen count down), and don’t let them run over.

Clear expectations

Try and communicate clear expectations for the demos to all attendees from the beginning of the event. Some attendees will become frustrated when they see others demo-ing paper prototypes or Photoshop mockups when they believed a working implementation was required. If hacks do not meet these base requirements, they should not be able to win a prize.

Audience vote

If you have an “audience choice” prize, someone will attempt to game the system, either technically or by running an obnoxious “vote for me” campaign. Keep the prize for it relatively small, and give attendees a one-time token (a code on the reverse of their pass for large events, or a physical item for smaller ones) in order to vote.

Judge previewsOptional

If possible, let the judges meet all the teams for a few minutes, a couple of hours before the presentations. This means people don’t need to cram their whole idea in 60 seconds, but instead can demo the product to their peers knowing the judges understand how technically awesome their product is. This also allows for judges to fully inspect if a product was actually implemented, or is just a bunch of screenshots - and how technically advanced their project is.

Audio / Video

Support

There should be staff on hand to help users set-up quickly for their demos, such as connecting to the projector. If the equipment at the venue allows it, have one demo presenting while the next is setting up.

Video connectors

For the demos, either have a set of adapters handy for (Apple Mac) Mini DisplayPort, VGA, DVI, and HDMI video outputs, or make sure attendees know the projector’s inputs ahead of time so they can make sure they have the relevant adapters.

Projector info

Information on projector resolution, contrast, etc should be provided to attendees and speakers ahead of the event.

Hardware and mobile hacks

If mobile or hardware hacks are expected, equipment to demonstrate them on the device should be present. Have a camera feed or visualiser available on the big screen. State ahead of time if that’ll be provided, to allow these to be demoed adequately.

Prizes

Not every hack day needs prizes

Some people go to hack days to learn, or to play. Having one team go home with enormous prizes and many other teams go home with nothing may sour the end of the event. Make sure it’s not all about the money/toys.

Prizes per team member

Prizes must be divisible to encourage teamwork: it is very hard to slice an iPod into three bits. If you wish to give away physical goods there should be enough that they may be given to each member of a reasonably sized team.

Available on the day

Prizes should be on site on the day of judging and ready to be handed to attendees as the winners of the various prize categories are announced. Attendees should not need to claim a physical prize after the event unless said prize is dependent on winner. If the prize is not available on the day, clear printed instructions on how to claim must be provided instead.

No cost to claim

Attendees should not be required to pay a subscription or sign a contract in order to claim or make use of their prize. Requiring prizewinners to do so is likely to induce negative feelings in the winner towards the company providing the prize and the hack day organisers.

Avoid service prizes

Discounts and credit for an API, face time with a company’s CEO, or development resources to continue a hack make for poor prizes (with obvious exceptions such as of companies offering music/video streaming services or online stores) and are likely to just disappoint the winning team. When organizations/individuals wish to pursue further development of a hack they should speak to the winning team separately.

Atmosphere and attitudes

Don’t make people feel unwelcome

Avoid sexism and other discriminatory language or attitudes. Don’t make any assumptions about your attendees. Get someone who is demographically very different from you to check your marketing material through to see if it makes sense and isn’t offensive to someone who doesn’t share your background.

Do not charge attendees

If developers are willing to donate their time – which could otherwise be used for paid work or hanging out with family and friends – they should not be charged for tickets. It shows a complete disrespect for the value of their time, and is likely to leave a bad feeling towards the organisers and sponsors. The developers are providing the sponsors a service in testing and showing the possibility of their APIs, data, products and services.

Intellectual property

The intellectual property rights of hacks produced at the event should belong to the attendees, and not to the organisers, sponsors, or partners, with the obvious exception of (a) hack days based around the further development of an open source project, or (b) commercially run hacks.

Intellectual property can be a big issue; it is best to make expectations clear in advance, both to developers and to sponsors or data providers.

What are you after?

Have some idea what counts as success, but don’t be too tight: people will surprise you! Some hack days are specifically focused on one language or tool, others on a theme, while others are meant for a particular open source project or problem that needs solving. The point of the event will inform how you do marketing, judging and many other aspects of the event.

This is not a rock concert!

Some hack days have hired bands or other entertainment. This is usually a bad idea. People are at the event to hack, and hacking requires extended periods of concentration. You don’t need silence, but if you are thinking about putting on entertainment you may not understand exactly what the point of a hack day is. If you do insist on putting noisy entertainment on, don’t be surprised if the people actually trying to build things go and hide in the lobby to carry on with what they are doing.

Emergency plans

Make sure you have a plan for attendees who are injured, fall ill or suffer any other emergencies. Have at least one designated first aider on call. Make sure you know where the first aid box is, and check it’s appropriately stocked. Know the procedures for calling an ambulance, sounding the fire alarm, evacuation point, and logging incidents in the venue. Make sure attendees know who to turn to for help; a phone number, a few bright crew shirts and a central crew desk or wardrobe go a long way. A central point of contact will also help you deal with inevitable electric, network, venue- or food-related questions.

Handling problematic people

It’s unlikely that you’ll have to throw someone out, but just in case know what the procedures are, what you’re legally able to do and what kind of misbehaviour would actually trigger ejection. Some events have instituted safe space and anti-harassment policies due to widely reported incidents of sexual harassment.

Keep your crew safe too

Working at a hack day, as a volunteer or otherwise, can be a stressful and demanding job. Make sure your crew are safe, happy and well-fed throughout, and that you’ve got enough staff to cope with emergencies or unexpected dropouts!

Finally, remember to have fun!

If you follow all these guidelines, prepare well in advance, and get plenty of rest before the big day, you’ll maximize your odds of having an event that’s not just successful, but enjoyable as well. Good luck!