Co(re)creation:
designing the next civic hack

/ dribdat collective // v.2.2 /// 12.2021

This paper describes an open source web tool that is used to manage challenges, resources and bootstraps, build teams, and promote fair conditions at hackathons in a simple user interface. Use **dribdat** to track progress, expose all relevant design notes, documentation, data and code, and connect the many aspects of the experience of exploring civic tech problems together hands-on.

This open document is accessible at dribdat.cc/proposal

① dribdat for an **executive summary.**

Using dribdat, we develop and showcase projects at collaborative events, most commonly at hackathons: a popular event format for tinkering and innovation in teams. Emerging from the civic tech movement, where open access to data and knowledge is applied to hold public institutions accountable, dribdat started as a tool for organizers and participants. We created dribdat to ensure that people's contributions are verifiable, and that the 'executive summary' of their output gets published using modern web standards, to be ideally discoverable, readable and reproducible.

Hackathons are also considered to be a type of focus group, where platforms get tested, skills transferred, and horizontal insights accelerated by an open exchange of knowledge. This is an established venue to network, explore potential career paths while keenly evaluating prospective candidates or partners. Enabling better time management and coordination, teamwork supported by dribdat should help to build a community of practice, lowering the barriers to entry for contributing creatively to NGOs, research, government, tech platforms or start-ups.
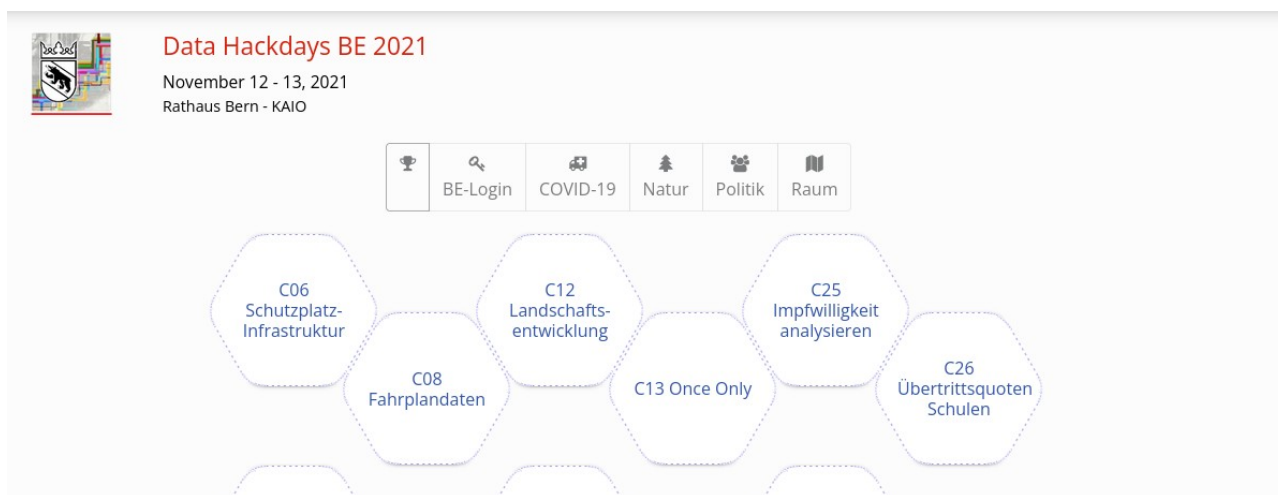

When citizens engage to hack on projects such as monitoring the environment or validating public accounts, digital civil society initiatives emerge. The shared premise is that open source code and openly designed hardware can be used to rapidly prototype the real-world potential and impact of ideas or "challenges". Such events are then more than just a trendy way to find a job: they become venues for energetic collaboration, channeling civic engagement and technical experiments within an open, socialized setting. In contributing to such events, the participants engage to intensively generate data, take opportunities to be active for diverse causes in pragmatic ways. It is important that the platform they use reflects these purposes in its construction and philosophy.

Sep 13, 2015 – Dec 23, 2021

Contributions: Commits ▾

Contributions to main, excluding merge commits and bot accounts
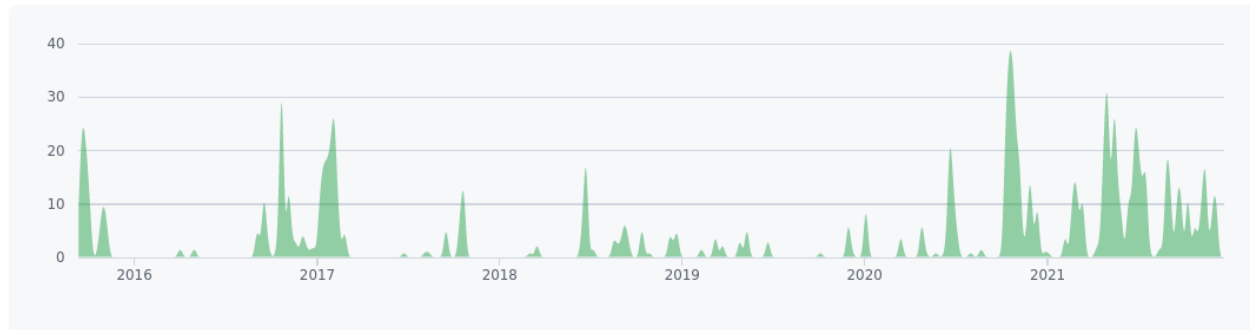
With the experience of organizing many such meetings with other tools, including wikis, collaboration platforms, and other hackathon software, we are using dribdat today to streamline efforts and encode best practices across many communities. The name of dribdat is inspired by *dribbling* in basketball and other sports, with a hat tip to Dribbble, an online community for graphic design, and the Dat protocol for peer-to-peer data sharing.

In the following sections we dive deeper into what exactly makes dribdat tick.

U.S. Navy photo by Photographer's Mate 2nd Class Damon J. Moritz - Public Domain

② dribdat for splendid **collaboration.**

<mark>Designed to help participants and organizers to have a great time and focus on the essentials, dribdat features timekeeping and progress tracking dashboards to make it easier to form teams, sustain the energy in the room or online event, and keep the focus on driving ideas forward.</mark>

The open source code of dribdat is accessible for free (under the MIT license), with instructions for self-hosting the platform anywhere that Python runs - which is, basically, anywhere. We are making it easier to deploy on popular platforms using package management and containers. With a running application, you can set up your first hackathon. Future events can run on the same site.

On the front page you can see the featured upcoming event, as well as any future and past events. A short description is followed by a link to the event home page, as well as a second-by-second countdown of time remaining until the start or the finish line (once started). *Projects*, *Challenges* and *Resources* are shown in the event screen. Here you can learn about topics, find datasets, get schedules or directions, and any other vital information that the organizers have provided.

Before the event begins it is possible to *Share a challenge*, which can be organized by *Category*. People who are interested in a challenge can approach the initiator in person or via contact channels to express their support. Once the event has started, you can form a team by clicking the *Join* button, taking over a challenge and boosting it, or selecting *Start project* to begin afresh when open challenges are permitted. Dribdat's dashboard helps to keep track of remaning time and all your registered teams.

> ## Looks like you are new to this - welcome!
>
> **Start a Hackathon**
>
> Open source under the MIT license.   About D R I 👍 👍 A T   Issues

③ dribdat a connection to your **results.**

Open web technologies and open data standards are at the core of dribdat. The teams are free to work as they please: keeping up with every twist and turn in the online collaboration landscape, we try to nurture supportive communities sharing the best brainstorming, prototyping and code sharing tools, helping to ensure we can plug in and generate data from any preferred platforms.

Typically, hackathons need some kind of publishing workflow that collects data from the team in a series of forms. We have often encountered this to be a laborious process that steals valuable time from teams and organizers while introducing bias and latency. Project aggregation is facilitated by the ability to start a project on the basis of data from a coding platform, a chat channel, or an open web resource.

No 'copypasta' needed: projects created in a compatible repository - such as GitHub, GitLab, Bitbucket - or supported wikis, such as Etherpad, DokuWiki, Google Docs, … - can be synchronized so that documentation can take place, and *continue to happen in a distributed way*, using standard formats such as the *README* files preferred in open source.

Users may also use short Twitter-like posts with Markdown formatting to document their project, and we are working on simpler, more direct ways to capture insight into participant activity – such as dridbot, a Slack integration that allows updating projects directly within a team channel.

Dribdat is requesting permission to access the Opendata.ch Slack workspace
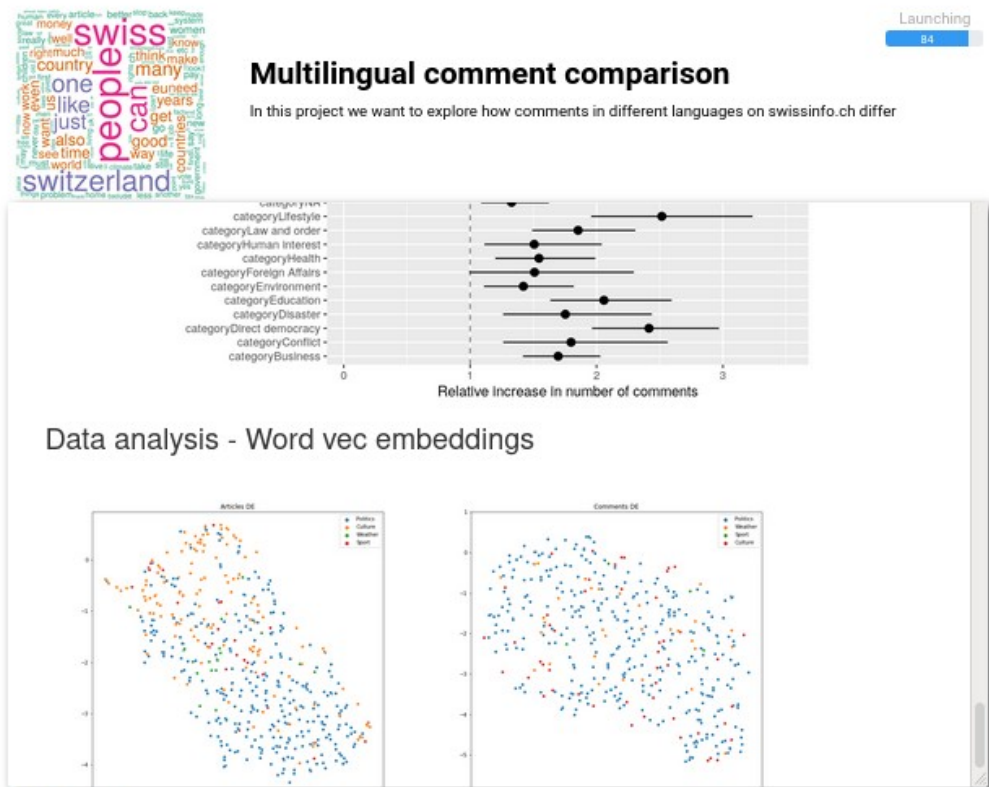
What will Dribdat be able to view?

👤   Content and info about you   ▸

Cancel   Allow

Swiss Broadcasting Corporation / #swihack 2020

Opendata.ch / Open Farming Hackdays 2021

④

dribdat by reducing friction in **collaboration.**

Participants can subscribe to a challenge or join a project once someone has started it, and immediately gain access to improving the content. Their public profile gets linked to the project, and their activities – posted messages (also known as "dribs"), progress reports, code commits, etc. – can all be tracked alongside those of their team-members in the project's log. Only be engaging in this way can their team climb through the normalizing progress stages of the event.

This kind of tooling has potential to be used in a variety of formats – from Agile Scrum sprints, to Design Thinking workshops, and Rapid Prototyping in the industry: everywhere that time is of the essence, and a scrappy, "can-do" attitude reflective of the hacker ethic encourages better results, while enabling more venues for civic hacking and open data sharing. We are therefore working to build dribdat into a powerful tool for tracking performance and recognizing contribution – for example, by supporting real-time collaboration in CodiMD and Jupyter notebooks embedded directly in the project, to minimize the friction of on-boarding contributors.
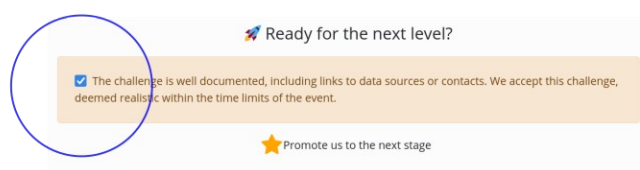
1. Join your team's challenge

2. Choose "Post to Project"

3. Tick the checkbox if you're Ready!

The data exports, APIs, and dashboards of dribdat allow organizers to at a glance see how all their teams rank both during and after the event. We support several ways of extracting real-time statistics for insight on the pulse of the hackathon, pointing to improvements and providing motivational data-points as content. Fundamental to all of this is the experience of the hackathon participant, their ability to represent their team, to be aware of what's happening in the wider event, document their efforts, and present the results on time.
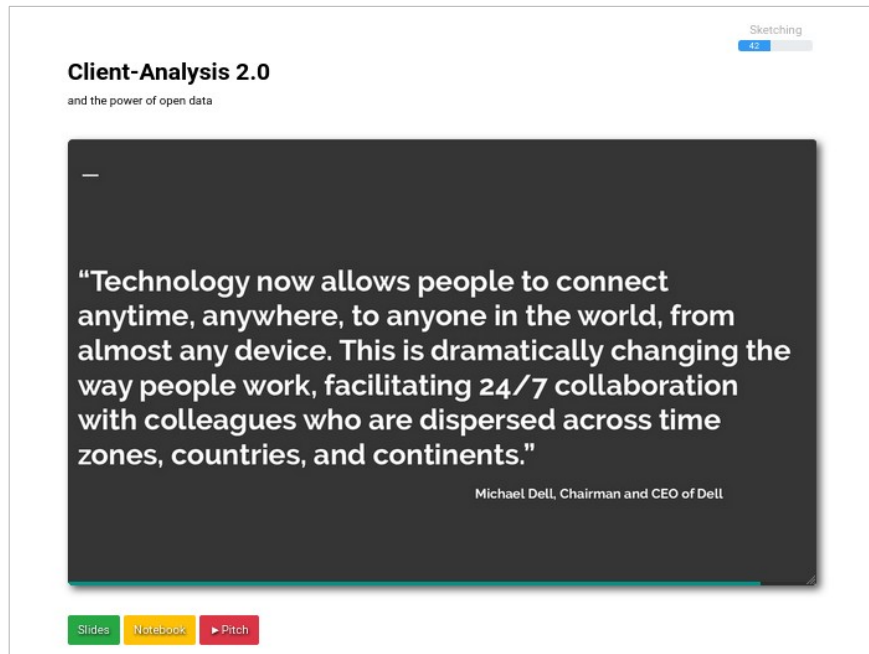
Opendata.ch / Energy Data Hackdays 2020
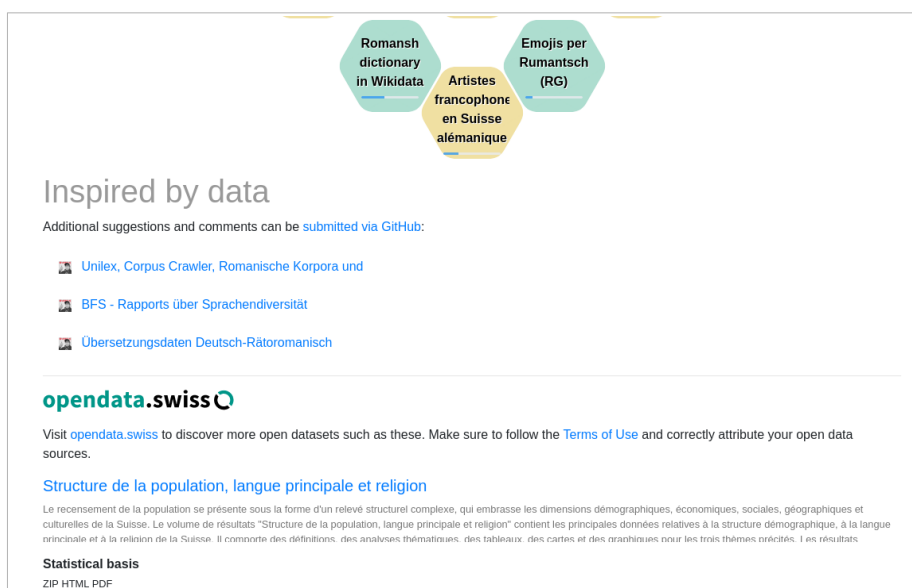
⑤ dribdat for assuring **interoperability.**

<mark>This is not just a metaphor: this platform is a digital glue between a plethora of tools and processes that are being deployed in the civic tech community, enabling quick and painless deployment and support of hackathons. Tools like dribdat are important instruments in facilitating concentrated social change-making that is digitally sustainable.</mark>

Several innovations on this level are baked into the core of dribdat: support for Frictionless Data, the "open-source toolkit that brings simplicity and gracefulness to the data experience" (frictionlessdata.io) which we use to accelerate the process of unpacking and exploring open information sources in the crucial early research & experimentation phases of a hackathon.

We have created and promoted an open schema for publishing hackathon results: `hackathon.json` - a simple, readable text file at the root of any dribdat instance. Along with Data Package export, and compliance for Schema.org and Open Graph standards, we strive to ensure that hackathon publications are picked up by search crawlers and easily federated.

For event organizers, our backend allows quick browsing and export of project data: in document form for evaluation by jury, or in CSV or JSON formats for external workflow. Spammy or invalid entries can be easily hidden or cleaned up. With OAuth 2 support, user profile administration can go through an external, enterprise-scale provider such as GitHub or Slack. We can generally support integration with any kind of data platform or collaboration tool through embedding or APIs. We can work with event management software, even other hackathon platforms, if you need to mix and match features: dribdat is intended to be part of an ecosystem of compatible Internet tools.

Forum Helveticum / Plurilingualism Hackathon 2018

⑥ dribdat is being **excellent to each other.**

This project was built in the tradition of creative and ethical hacking. We combined best practices in using wikis, issue tracking, and content management systems, and created the basic framework of the application at a hackathon in 2015. Since then, we have battle-tested it at many events with thousands of people. And the people have spoken to us about what they want from the experience.

In the first years of service, dribdat has supported dozens of events around Switzerland, becoming the official hackathon platform of Opendata.ch - the Swiss chapter Open Knowledge - and its working groups, the Open Network Infrastructure Association - whose members are core technical contributors to dribdat, DINAcon - the largest annual Swiss conference for digital sustainability, DayOne - an association organizing patient-centric Health Hacks, and other valued pioneers.

One of the most important areas of feedback from our participants has been to understand what information should be made as visible as possible, to benefit our users despite the time pressure: these are a clear and readable Code of Conduct, Terms of Participation, and starter guides. Dribdat comes with support for the Hack Code of Conduct and Creative Commons licenses out of the box. We have built in a 7-step process inspired by the School of Data Pipeline, that we recommend for attractive and efficient data expeditions and hackathons. Around these it is possible to set up a Resource area with recommended tools, datasets, or brainstorming instruments, and all the content can be customized to fit other patterns and methods.

Independently developed at the grassroots, behind the scenes of this project are compacted qualities of what we believe entails good collaboration: a supportive atmosphere that proliferates diversity and tolerance, clearly stated goals, community support and progressive guidelines. Inclusive co-creation with better design and algorithms is an area of active development, currently the focus of research collaborations, upcoming publications, and development proposals.

All attendees, sponsors, partners, volunteers and staff at our hackathon are required to agree with the Hack Code of Conduct. Organisers will enforce this code throughout the event. We expect cooperation from all participants to ensure a safe environment for everybody. For more details on how the event is run, see the Guidelines on our wiki.

The standard footer deployed with a dribdat instance.
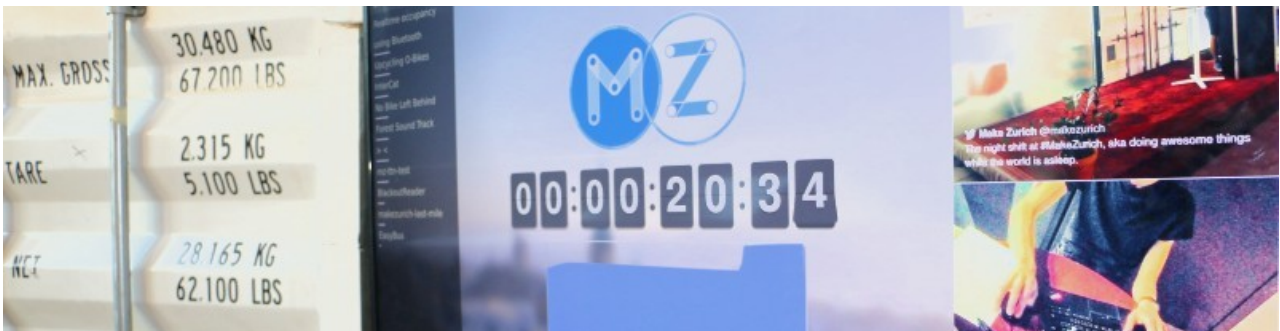
Open Network Infrastructure Association / MakeZurich

⑦ dribdat is not **all the things.**

Dribdat has a minimal built-in **user profile**, allowing the use of an anonymous username and disposable e-mail address to log in. Collecting personally identifiable information is not the goal of the project: facilitating recognition in a privacy-protecting way is. We have OAuth 2 support and suggest using tools like Slack or GitHub for managing user authentication, or asking users to create profiles in the community platform that you integrate with dribdat - like the open source Discourse forum software. You could also recommend "CV builder" platforms like LinkedIn or Stack Overflow to conveniently promote everyone's hackathon experiences. Nevertheless, the ability to display people's accomplishments in an interesting way remains an area of improvement.

Dribdat does not feature a **form builder**. We have left the project structure open ended, allowing organizers and teams to define how people can engage as contributors or testers. This is certainly part of the challenge of succeeding with promoting a hackathon idea, but also a major area of improvement to assist beginners and encourage active participation through questionnaires and templates. While it is possible to include this in the "Getting Started" guide shown to teams, we are working on designs for enhancing this, as we see many organizers set up separate online forms for registration, collecting feedback, or asking specific questions to the teams.

Tip: at some hackathons, like the hacknight challenge pictured here, we follow an easy-moderate-advanced structure ("ski pistes") in their task descriptions. Other events set up a template which forces project teams to think about this issue.


{ hacknight challenges }

Find out about the Fairphone Open project, deploy and compile a local build of the operating system into an Android Emulator - or if you have an actual Fairphone (or a cooperative friend), try to install a custom build on the device.

Use the Build instructions to get the source and put together your own local build of Fairphone OS. See if you can put the DINAcon logo into the lock screen, or make some other modification - use your imagination!

Visit the Fairphone Bugtracker to see the most actively discussed and developed issues, and contribute to the conversation - make a bug patch or address a feature request at the HACKnight!

While featuring a robust and mobile-ready user interface, the overall **User Experience** is rather underwhelming. Our project has not yet the benefit of a dedicated effort in UX engineering, and at the moment caters perhaps more to the needs of organizers who wish to facilitate a smooth event, than to the more diverse needs of hackathon participants. If it is to be desired that an application is more in the foreground and engaged with by users, then it needs to be an enjoyable and mutually beneficial process. We have started the [backboard](#) project in response to requests for a smoother user interface for participants, based on a next-generation client/server [architecture](#) developed by a student group, and aim to make progress on this soon.

In running hackathons, we are used to relying on a bunch of **complementary tools**. The organizing teams often use spreadsheets and calendars to make drafts and detailed plans. Clearly, the goal should not be to replace all of this with a new "[15th competing standard](#)", and integration with wikis and docs is already at the heart of the offering. The issue is focusing on the core needs and fitting dribdat correctly as a part of the workflow. Charting this and making sense of priorities is an effort started with several organizations to try to nail down a product strategy for dribdat.

At this time, **commercial support** for dribdat is an issue. The code base has developed organically using crowdsourced requirements. So far there is no broadly available Platform as a Service or a service provider running instances on demand. We believe there is a market for this and are happy to talk to any IT company who would be willing to put some thought into this. We are also connected to newer attempts to build a scalable operating system for hackathons, such as through [VersusVirus](#). While setting up a small dribdat instance is easy and should be enough for a few teams to getting started, the organizers of large events typically rely on multiple content and communication platforms. Look for vendors who have experience with Python and Bootstrap, and get advice on how best to plug dribdat into your infrastructure and software architecture.
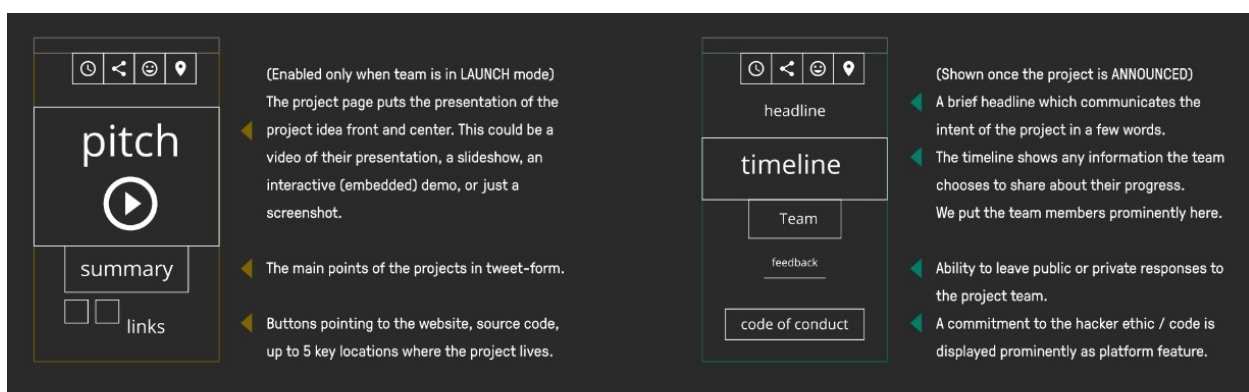
Tip: visit the dribdat [design repository](#) to get supplementary documentation and wireframes.

In a nutshell, dribdat…

- … has had 1'182 commits made by 9 contributors representing 8'596 lines of code
- … is mostly written in Python with a low number of source code comments
- … has a well established, mature codebase maintained by a small development team

  with increasing Y-O-Y commits
- … took an estimated 2 years of effort (COCOMO model)

  starting with its first commit in September, 2015

  ending with its most recent commit 1 days ago

Generated at openhub.net/p/dribdat

⑧ dribdat is **always be closing.**

Our maintainers are involved in standardization, integration and research efforts. Alternative versions and new designs are being promoted through an open code organization, and it is possible to support the work through a transparently funded OpenCollective project.

A project rooted in open data standards and emerging technologies for open networks, dribdat can run as a cloud service, as an on-premises self-hosted solution, or even on a dedicated hardware device for ease of deployment.

The easiest way to try dribdat is to sign up for an upcoming event, and to use our platforms as participant. You can visit the home page to get links to example deployments, instructions on how to set up your own server and start your own events. If you need help or advice with any of this, or would like to contribute to the project in some way, please get in touch via dribdat@datalets.ch or through any of these links below.

Thank you for reading! Your feedback is very welcome: the latest version of this document can be found on GitHub. Discussion threads are open in various community channels.

Homepage   dribdat.cc

Funding   opencollective.com/dribdat

Blog   opencollective.com/dribdat/updates

Sources   github.com/dribdat

Bug tracker   github.com/dribdat/dribdat/issues

Twitter   @dribdat

On the following pages are reference deployments with background details.

Energy & Climate Hack

User: Swisspower, Opendata.ch

Application: https://hack.opendata.ch/event/36

Discussion: https://forum.opendata.ch/t/31-8-1-9-energy-climate-hack/783

Integrations: Slack, Google Drive, GitHub

The open data community at the front-lines of a digital response to the COVID-19 pandemic.

#covid19mon

User: Canton of Zürich

Application: https://db.schoolofdata.ch/event/7

Discussion: https://forum.opendata.ch/t/18-3-1-year-of-covid19mon/757

Integrations: Mattermost, GitHub
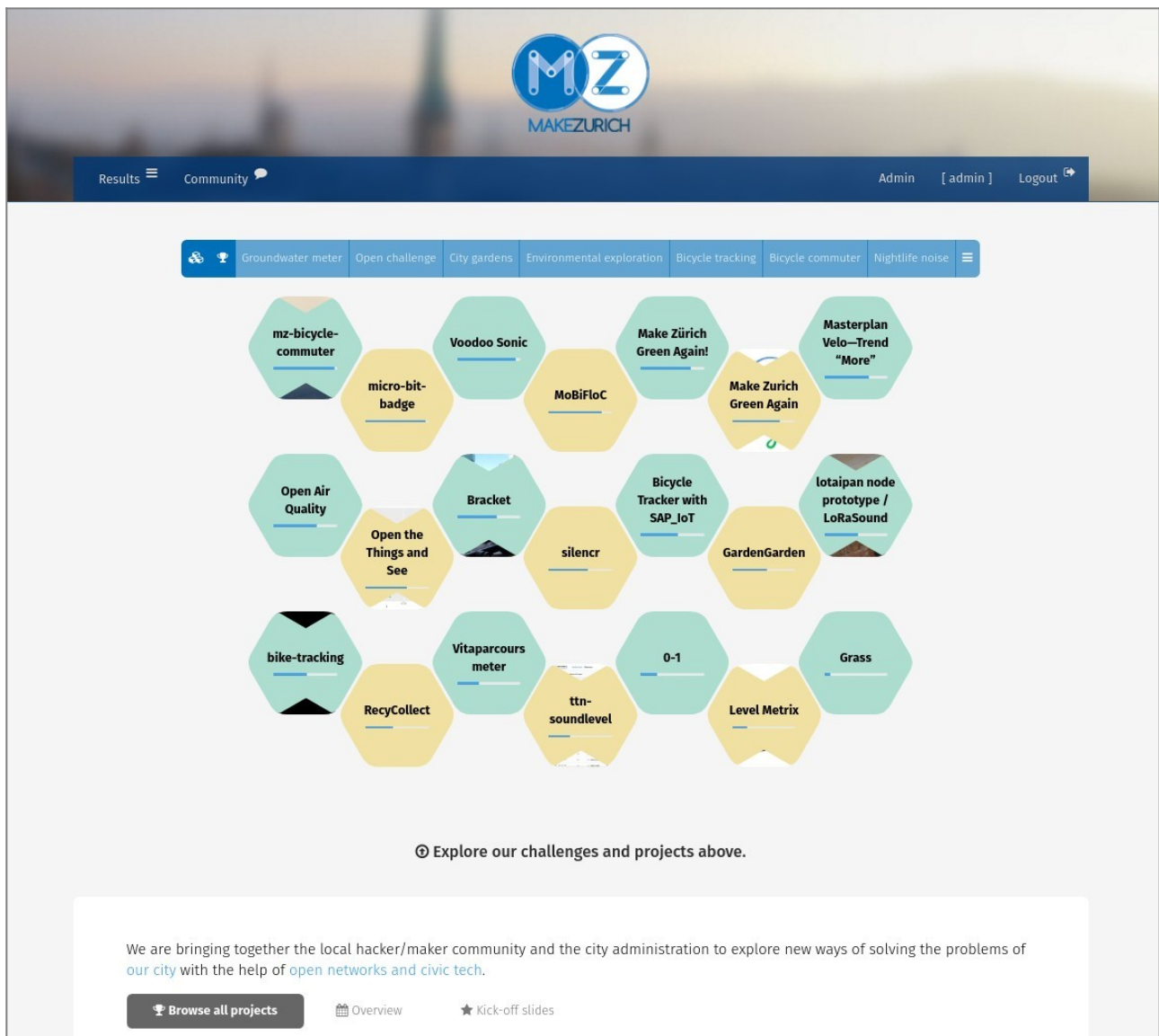
The community of interest around the Internet of Things is at the core of dribdat.

MakeZurich

User: Open Network Infrastructure Association

Application: http://now.makezurich.ch/

Discussion: https://forum.schoolofdata.ch/t/22-30-6-makezurich-2018

Integrations: Slack, GitHub, The Things Network

Open Data Hackdays

User: Opendata.ch - Swiss Chapter of Open Knowledge

Application: http://hack.opendata.ch/

Discussion: https://blog.datalets.ch/039/

Integrations: Datacentral, CKAN, Discourse, GitHub, Slack

In 2016 dribdat became the official platform of Opendata.ch hackathons.
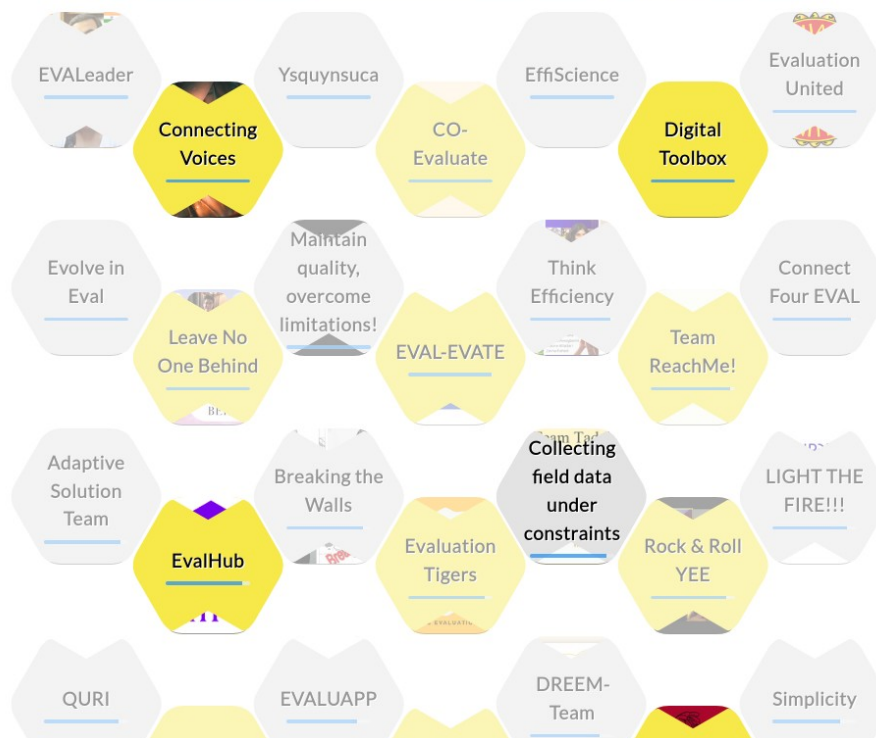
Evaluation Hackathon

User: International Program for Development Evaluation Training

Application: https://evalhack.org/

Discussion: https://opencollective.com/dribdat/updates/a-season-of-hackathons

Integrations: Slack, Disqus, YouTube

SWI swihack — Multilingual Media
February 21 - 22, 2020
Bern

Lost in translation | Made to measure | Multilingual comment comparison | Gamify Language Learning | Multilingual video workflows | Automatic Comment Approval | Crowdsourcing multilingual campaigns

Managing Volunteers in a multilingual Newsroom | Personalized Area | Related Articles | Topic Analyse (Tool for Journalists) | Translating Access to Data | Vivid conversation

Make sure to follow the Terms of Use and always correctly attribute your sources.

SRF DATA   OPEN KNOWLEDGE SWITZERLAND

On Feb. 21 and 22, Switzerland's first Multilingual Media Hackathon took place in Bern at the newsroom of SWI swissinfo.ch, the international service of the Swiss public broadcaster SRG-SSR. **Many thanks to all involved!** There is documentation here, live streamed presentations (YouTube), and commentary on social media (Twitter) to explore. For more details, visit our website.

Multilingual Media Hackathon

User: Swissinfo

Application: https://db.schoolofdata.ch/project/58

Discussion: https://blog.datalets.ch/065/

Integrations: CodiMD, GitHub, YouTube

Climathon Zurich

User: City of Zürich

Application: http://hack.opendata.ch/event/4

Discussion: https://blog.datalets.ch/023/

Integrations: Slack, Hubot (sodabot), GitHub

Image courtesy of [Impact Hub Zürich](#)

The first release of dribdat was designed in cooperation with Swisscom

Internet of Things Hackathon

User: IoT Zürich Community

Application: https://datalets.ch/dribdat/iot-2015/

Discussion: http://blog.utou.ch/2015/an-internet-of-open-things-to-tell-stories/

Integrations: Slack, GitHub, Twitter, Instagram, Heroku, custom hardware