

## CERN ECO ACTIONS CLUB

# Environmental Hackathon



**Introduction & Brainstorming Session**

*Friday, June 18, 2021*

# First some shameless advertising...

- We are an official CERN club formed March 2020
- Currently online:
  - Weekly meetings **Thursdays @ 1pm on discord: [link](#)**
  - 1st wednesday of every month @ 6:30: zero waste show!
- **In-person activities should resume in the fall**
  - CERN community garden + composting
  - Working with La Manivelle/library of things in Geneva
  - Other topics of interest include community outreach/education, self-repair workshops, R1 vegetarian/vegan options, energy consumption, carpooling...
- **New members are welcome!**
  - Members take the lead in projects they are passionate about
  - Join at <https://eco-actions.web.cern.ch/>



# What is a Hackathon?

## Hackathon

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From Wikipedia, the free encyclopedia

A **hackathon** (also known as a **hack day**, **hackfest**, **datathon** or **codefest**; a **portmanteau** of *hacking* *marathon*) is a **design sprint**-like event; often, in which **computer programmers** and others involved in **software development**, including **graphic designers**, **interface designers**, **project managers**, **domain experts**, and others collaborate intensively on **software** projects.

- Participants think of projects dedicated to a given challenge and form teams
- Teams create and present a prototype of their project to be judged
- Winner(s) are teams with the most innovated project(s) that best address the challenge

# The Challenge

## Topic: Accelerating CERN's Circular Economy

Create open source apps, platforms, objects, or communication tools that promote reusability and waste reduction and associated skills in the CERN/Geneva community.

- What is a circular economy?

**“A framework for an economy that is restorative and regenerative by design”**

- A new, sustainable “operating system” for our world
- Your task is to design projects that promote such a system, in the CERN community and beyond

- 1. Design out waste and pollution**
- 2. Keep products and materials in use**
- 3. Regenerate natural systems**

Source: [Ellen MacArthur Foundation](#)

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# Re-thinking progress.



# Organization & Rules



- Your goal: **Create a prototype of your project**
- You will need to **present your project with your team at the end** of the event on Sunday June 27
  - Short set of slides describing the idea and how it works + code/prototype demonstration if applicable
  - It is ok to present your idea, the design and as complete of a prototype as possible.
  - Winners will be **decided democratically** and winning projects will be taken on by the club and seen to completion

# Mattermost Channel

- Communication area for the event
- Each project will have a channel with a link to a ZOOM room
- There is a “Help” channel to ask questions or have a helper join your zoom room
- [Join here](#)

The screenshot shows the Mattermost interface for the 'Town Square' channel. On the left is a sidebar with a search bar 'Find channel', a list of channels including 'Town Square', 'Help', and 'Project 1' through 'Project 5', and a 'DIRECT MESSAGES' section. The main area shows the channel header 'Town Square' with a dropdown and star icon, and a welcome message: 'Welcome to the CERN Eco-Actions Hackathon!'. A 'Today' separator is visible. The message history includes a system message 'You joined the team.' at 7:50 PM, another system message at 7:52 PM stating that '@Melissa Kathryn Quinnan' updated the channel header to the current welcome message, and a message from 'Melissa Kathryn Quinnan' at 7:58 PM. Her message includes an 'Indico' event link and instructions to use zoom rooms from project channels. A yellow highlight covers the system messages and the start of her message. At the bottom, there is a text input field 'Write to Town Square' with a 'Help' link on the right.

# Organization & Rules

- We have **volunteers on the mattermost help channel** who can answer questions or join your team's ZOOM rooms to help with code
  - Our helpers: **Melissa, Mason, Sean, & Guillaume**
  - If you have any other problems that you want addressed privately, please contact me via email: [melissa.quinnan@cern.ch](mailto:melissa.quinnan@cern.ch)
- **Up to ~4 people per team**
  - Teams of fewer are fine!
  - 5 or 6 are ok, but check with the organizers (for example on the mattermost help channel!)
- Please respect intellectual property rules!



# General Event: Saturday-Sunday June 26-27

- **Saturday June 26 @ 10:00-10:30 CERN time: Start of hackathon.**
  - **Teams are finalized.** Each team must **choose a name** and nominate a **contact-person to host the zoom room** for their team. These zoom links will be posted in the project channels on the mattermost at this time.
  - For participants in other time zones or who are otherwise unable to make it at this time: Please post what team you are on in the help section of the mattermost
- **Saturday June 26 10:30 - Sunday June 27 17:00 CERN time: Hackathon Event**
  - Work with your team to **design and prototype your project!**
- **Sunday June 27 17:00-19:00 CERN time: Project Presentations**
  - Teams present projects and we **vote on winners** based on impact, completeness, and creativity

# Our Amazing (and Sustainable) Prizes...

EGGS FROM  
GUILLAUME'S  
ADORABLE CHICKENS!



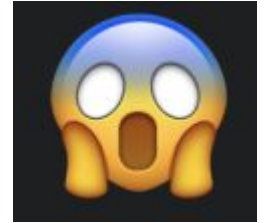
A DESSOUS-DE-PLAT  
MADE OF WINE  
CORKS!



A SMALL PLANT!



AND MORE!



**Most importantly:**

**Your project will become a project/goal of the Eco-Actions club!**

# Examples: Existing Project Ideas

Thanks to those who proposed these ideas when registering!

- An **open source platform for “libraries of things”** to organize item sharing
- **Community tree planting app** or resource
- Website for **data visualization of waste/pollution**
- **Transportation Emission Tracker**: App that calculates the amount of CO2 one uses by tracking movement via accelerometer on their phone. Compares users via a leaderboard
- **Repair Organization Tool**: Develop a tool to organize the support and follow-up of repairs, who is responsible for the repair, ordering parts in progress, repair planning... etc.
- **CERN Coin**: an app that would allow everyone to propose different types of services and ask for services all around a CERN Coin based remuneration, with the goal of creating an economy working with local actors and on a closed loop system promoting sustainability

# Logistics: Brainstorming Session

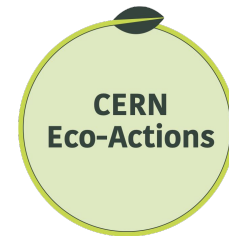
18:00 - 18:15	Presentation	We are almost done!
18:15 - 18:20	Questions & Introductions	What is your name? Where are you from? How did you find out about this event? What environmental activism are you most interested in?
18:20 - 19:00	Open discussion	Describe any ideas you have, and we discuss as a group!
19:00 - 19:15	Breakout Session 1	Join any breakout ZOOM room to start Rooms are labeled with initial project ideas
19:15 - 19:30	Breakout Session 2	Reminder to switch rooms every 15 minutes (But you are encouraged to switch at any time!)
19:30 - 19:45	Breakout Session 3	Try to join other discussions/rooms even if there is a project/team you think you want to work on! Goal: max ~ 4 people per room at any time
19:45 - 20:00	Final Discussion & Review	You have the option to propose projects and join teams ( You can also do this on the mattermost this week)

# Let's do it!

- Time to discuss & join breakout rooms!
- Please [join the mattermost!](#)
- These slides will be posted on the indico event page
- There are backup slides with pre-proposed team members and additional Q&A



18:00 - 18:15	Presentation
18:15 - 18:20	Questions & Introductions
18:20 - 19:00	Open discussion
19:00 - 19:15	Breakout Session 1
19:15 - 19:30	Breakout Session 2
19:30 - 19:45	Breakout Session 3
19:45 - 20:00	Final Discussion & Review





# Proposed Team Members & Projects

- **Library of Things** - Diogo Monteiro, Valentin Volkl
- **Community Trees** - Akanksha Ahuja
- **Data visualization website** - Sean Gasiorowski
- **Transportation emission tracker** - Will Nash
- **CERN Coin** - Hugo Perier
  
- Other mentioned teams:
  - Rishabh Uniyal, Andres Vargas Hernandez
  - Khawla Jaffel, Khouloud Jaffel

# Other Questions & Answers

- **I missed the brainstorming session, can I still participate?**
  - Yes! You can register the week between the brainstorming session and the hackathon weekend and join/propose projects on the mattermost!
- **I came up with a project after today's session - can I still propose it?**
  - Sure, just post on the mattermost channel so other people can see the idea and join your team!
- **Do I have to join a team today?**
  - No, but if you don't have one by Saturday June 26 you will have to join one then.
- **Do I have to commit to the entire 48 hours next weekend for the event?**
  - No, but please communicate with your team what times you will be available



# Other Questions & Answers

- **Can I be on a team by myself?**
  - Yes, one-person teams are fine if you are ok with it!
- **Can I propose a project that is engineering/design rather than programming based?**
  - Yes, just check with the helpers that the project is appropriate
- **Can I propose a project that is related to the environment but does not follow the challenge exactly?**
  - Yes, just check with the helpers that the project is appropriate