Hack the Brain BRAINBOOK

A SHARED MANUAL FOR ORGANISING
HACK THE BRAIN HACKATHONS

A PUBLICATION BY
WAAG SOCIETY

HACK THE BRAIN BRAINBOOK
A shared manual for organising Hack the Brain hackathons

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A BIG THANK YOU TO

All our participants!

AND

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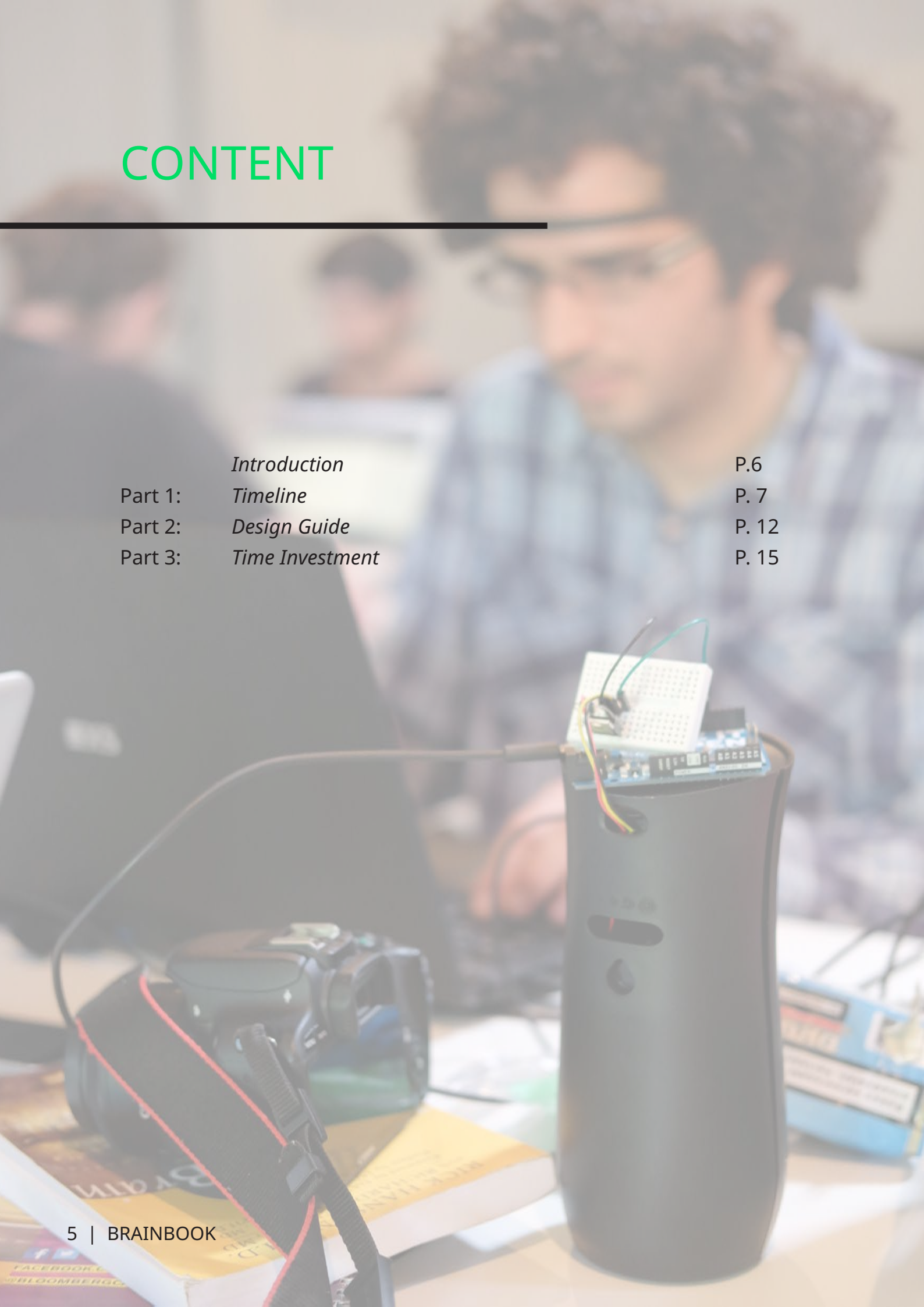
“When you are a Bear of Very Little Brain, and you Think of Things, you find sometimes that a Thing which seemed very Thingish inside you is quite different when it gets out into the open and has other people looking at it.”

— A.A. Milne, Winnie-the-Pooh

CONTENT



INTRODUCTION

If you are planning to organise a Hack the Brian hackathon, then this publication is a great place to start. But what exactely is a hackathon? Some quick Google based research lets us conclude that a lot of things are labelled a hackathon. The fact that a hackathon can be a lot of things is part of what makes it great. In the following pages we attempt to share some insights on what it has taken us at Waag Society to be the coordinating party in organising what we call a three-day Hack the Brain hackathon. Before we continue we will shortly revisit the relevance of the hackathon. We will do so by starting off with a quote.

“I think, therefore I am”

As Descartes made us realise: we have the ability to question, to think and to re-think our ideas. This might even be that which makes us human. But how do we question, think and re-think? Scientists have shown that the grey matter inside our heads plays a big role in this all. Artists continue to stimulate our minds, provoke us with new questions and challenge all our ideas. Then again, none of this would have been possible without the continuous technological improvements the developers in this world make possible. But while these disciplines thrive and make new discoveries; what do we really know?

How many of your questions about the mind have been answered? We encourage scientists, artists and developers to delve into the depths of the details, now and in the foreseeable and far of future. However, we were curious what would happen if these experts in different fields combine their powers and work together to realize their common dreams. The biggest question looking for your answers: What if we could hack the brain?!

We believe this is what a Hack the Brain hackathon should be all about. It should about bringing together different people and perspective. It should be about opening up and democratising technology. If different people are enabled to work on challenges together, their process of co-creation leads to solutions and prototypes that otherwise would have never seen the light of day.

“We think, therefore we hack”

This handbook is meant as a practical guide and it consists of three parts. In the first part we share some insight from parties that have some experience in organising such an event. In the second part we share the amount of work that goes into organising an event like Hack the Brian. For events like hack the Brain we believe in sharing. We therefore also included a third part in which we share some designs with you that enable you to kickstart your event.

Since you are holding this handbook we presume that you are interested in organising a great Hack the Brain hackathon as well. We therefore wish you all the best of luck. Make it a great and inspiring event.

TIMELINE

When organising a Hack the Brain hackathon there are numerous thing that should be done. Quite some of these things are mentioned below. However, the most important advise that we can give is: ”Do not try to do it all by yourself”. Since hacking the Brian is quite a technical endeavour, you must involve expertise about how to calibrate and use the hardware. After getting output from brain activity, you also need to know what this output means. Therefore you will also need expertise on the reading of these brain signals. Without partners that can tell your participants how things work and what is what, you will not be able to host a successful hackathon.

On the following pages we have presented a line. This line only indicates a chronological order in which we suggest you work. We did not specify what the amount of work will be per action for that will greatly depend on the scale and program of the hackathon you are going to organise. However, here and there we did specify a suggested deadline.

We want to emphasise that these actions are not the only things one has to do when organising a hackathon. Organisation of a hackathon involves an enormous amount of communication, meeting, and arranging. We therefore chose to limited ourself to mentioning what we believe are absolute milestones. This chapter will be concluded with some practical point of advice to take into acoount for the hackathon event itself.

It’s a go!
You have decited to organise a hackathon. Great. Lets start as soon as possible to set it up. Note that there is no such thing as starting too early.

Find Local partners:
A hackathon strives to be a multidisciplinary event. That is what makes it great. At the foundation of the hackathon is the organisation that can provide and support the hardware that will be used. You might need to find a party to join for this. Think about the team you will need before you proceed.

Decide on hardware:
There are choices to be made here. Will you be offering one type of hardware, or will you be offering different electroencephalography (EEG) hardware devices to your participants? Which local partner or sponsor is going to help you with this?

Choose a theme:
This is the starting point. Don’t make the theme too specific because that will reduce the creative space available. Don’t make it too broad because that would mean that participants spend a lot of time debating the direction of their concept. If you want to involve artists, stay away from too scientific framing of the theme. If you want to attract scientists, don’t make it too art specific or conceptual. Find the “sweet spot”.

Pick a date:
The most important thing is being able to say when your hackathon is going to take place. You really can't communicate the specific date early enough. In case you also organise a pre-event, make sure to also pick a date for this already. The pre-event should take place between four and eight weeks before the hackathon itself. When the date is picked, be sure to communicate this online. This can be done through an embedded or stand alone event web site.

Reserve the facilities:
Now that the date is set, you should definitively reserve the right spaces and facilities. Keep in mind that people might go off soldering parts for their projects, or sewing suits, making a wooden framework, or... The possibilities are truly endless and depend on the preference and creativity of your participants. A makerspace like a FabLab is therefore a good location for a hackathon.

Local partner meeting 1:
Organise a first pre meeting with local partners: Local partners all bring their specific expertise and motives for participation to the table. It is therefore good to come together to discuss everybody's goals and contribution. In organizing the event, try to keep the motivations of individuals in mind.

Save the Date:
Things are starting to come together now. Next step is to send around a "save the date" to potential participants from your network. If you can already say something about the program then that would be great. Be sure to mention the theme and possibly also the public speakers for the public event.
Also try and get the news out in other ways.

Send invites and open possibilities for subsription:
To host a great event you must know which people to expect. Make sure that you get a good idea of people's backgrounds to make sure that artists, scientists or developers are not under represented. Also keep this in mind when spreading the word / scouting for the event. A well-balanced group of participants will add to the quality of your event.

Publish a program for the Pre-event:
The pre-event does not have to last long. The goal is to get participants to meet each other and to share information on technology and first thoughts on concepts to work on during the later hackathon.

Construct a final public program:
Find interesting speakers that connect to the chosen theme, and that can truly inspire the participants. The goal of having a public event is to inspire participants and to attract a wider audience. The best time to do this is on the first night of the event. This enables participants to converge insights from the presentations in their hackathon projects.

Find a jury for the event:
If you are planning of finalising the hackathon with project presentations and awards you should also find a jury. As with the event itself, it would be great if you could set up a jury that is as multi disciplined as the participants. That also reduces bias in favor of one specific field. If your (project)organisation includes advisory board members then it's definitely a good idea to include these in the jury.

Create and share jury criteria:
For the sake of the theme and direction, it is wise to pre-formulate jury criteria. Sharing this with the jury also creates clarity on what they are asked to do.

Local partner meeting 2:
Just before the pre event it is wise to regroup with your local partners once more. Of course you have kept them informed along the way. However, it is still a good idea to discuss final things like hardware and roles of their representatives at the pre-event and main event.

Host the Pre-event:
Host the pre event and make sure that when it ends, all participants are looking forward to the main event even more. If you have international participants that cannot join the pre-event, you could involve them by setting up a live-stream. This is quite easily done through YouTube

Final productional issues:
If you will be awarding projects in you Hackathon, think of proper awards. Think of a system to monitor the distribution and retrieval of hardware, make sure that the staff is informed, get someone responsible for progress of the program itself, communicate the program to participants, arrange catering, reconfirm speakers, etc. etc.

Hack the Brain

Make sure that participants know **whom the others are** and what they do and can do. By doing so you will support the co-creation of participants that always starts with finding each other. Buttons or name stickers will help.

Make sure that participants not only work but also **document their work**. This can be done on wiki.hackthebrain-hub.com. This website can also be used as a source of information. It is a source of technical information about brainhacking.

When using data, we also have to deal with **privacy issues** in a responsible way. In some cases, filling out consent forms could be good practice.

The most important hackathon activity is hacking. Please make sure that the teams get enough time and space to do so. That means: **Don't distract t**hem and make sure not to disturb the teams with questions all the time.

When you have many participants and organising partners involved, things can get pretty chaotic. Therefore you should always get **one specific person responsible** for progress of the overall program.

Make sure you have a **clear program with a few focal points** such as a plenary opening wherin goals, rules and practicallities are explained. Incorporate moments that guide the process of the hackthon. End with the presentation of all projects.

Make sure you have both **creative and scientific mentors** active during the event that know of each others fields of interest, the differences and synergies. Mentoring is of great importance as it can lead and inspire teams to excellence.

When people are present that do not directly participate in the hackathon, make sure that these **other people have a goal or activity** that contributes to the hackathon as well.

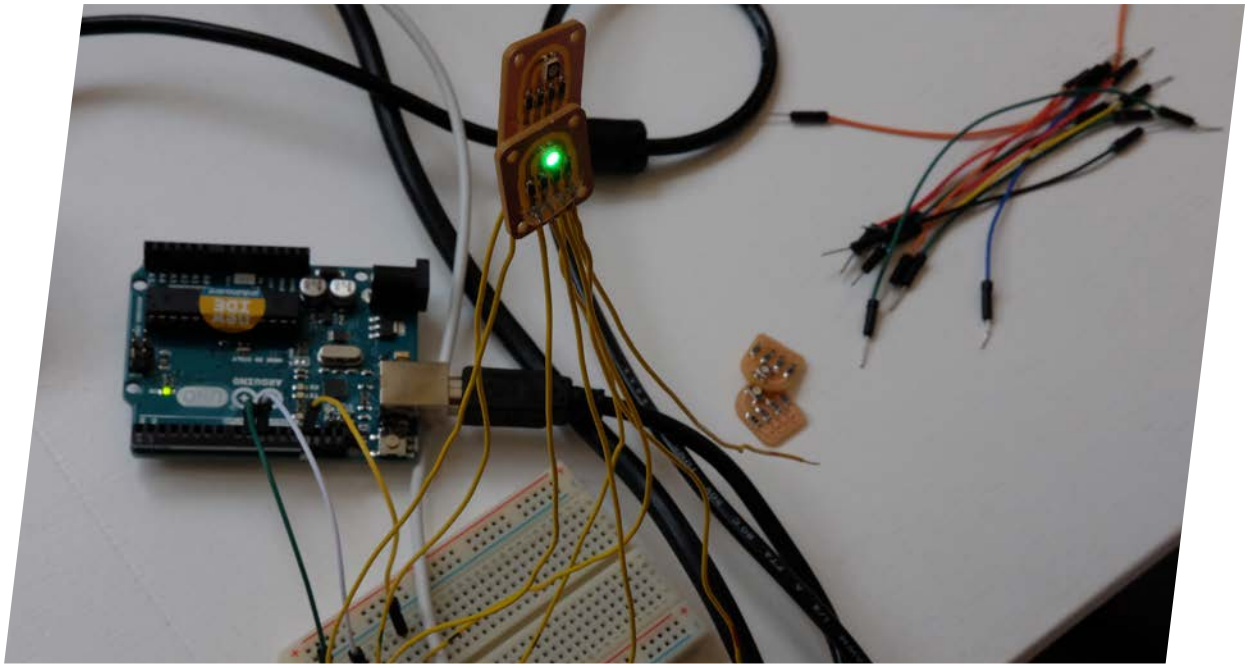
Embrace a **hashtag** for the event itself. In Amsterdam we had #HTB2016. This enables organisers and participants to clearly profile the event online.

If you will be using hardware from different partners, be sure to think of a method for **keeping track of this hardware**. Organise handing out and retrieval. At the end everything has to be returned to the rightful owners.

Make sure you have a **good distribution of techno-savvy, creative and scientific participants,** as the mix creates the most surprizing and strongest projects. The chaos will be productive.

Give teams the **means to sketch and draw** their mutual ideas: flip overs, blackboard, white board windows and once more tell them to document, document, document, document!

Fascilitate continuation of interaction and projects after the hackathon as well. Try to find ways to connect hackthon prototypes and participants to broader industry, science and artistic research.



DESIGN GUIDE

In this part of the handbook you are presented with some optional guidelines. These guidelines provide some suggestions for basic setup of the visual identity of your event. The visual elements below are presented as open branding that is created for you by Total Active Media. Total Active Media is a voluntary partner in Hack the Brain Amsterdam. The vector designs can be extracted from the digital file of this publication.

Concept
The guidelines presented are the starting point for all Hack the Brain (HtB) applied designs. The HtB design is open. The basic elements are designed to be easily adaptable for any HtB project. This booklet explains the correct use of each element and how to make a conscious choice for your specific design.

The visual communication of HtB is centred on contrast.

• The idea behind HtB is a contrast: “In the 17th-century we discovered the body, now we discover the mind.” In the 21st-century surgical instruments have been replaced by imaging techniques, the diseased subjects by the living, and the elite by us.

• Brain hacking is full of contrasts: challenging / doable; philosophical / practical; artistic / scientific; futuristic / business; human / technique; visible / invisible.

• Even the brain has it’s contrasts: feeling / ratio; left / right; man / woman;complex structures / basic elements;

Contrast in design
• Natural vs. hi-tech
• Old vs. new
• Axis left/right

Each design element enforces contrast. To bring out the contrasts the HtB design is sophisticated and simple. This goal should always be kept in mind when implementing and adapting the HtB d sign.

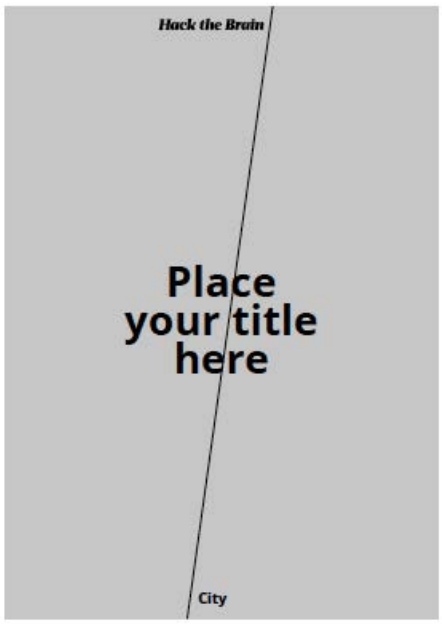
Questions? Get in touch with
wvdhurk@totalactivemedia.nl.

Logotype

The primary logo is a black. It is human, confident and contemporary at the same time. It is sophisticated and simple.

This logo is the basis of the three contrasts recurring in the HtB design:
• The black colour and font style the logo reflects the contrast of natural vs. hi-tech.
• The diagonal created by the 2 background images stress the contrast of the left-right axis.

Hack the Brain



Colour Palette,

Green online
The most important colour in all our communications. It is the accent colour.

Green offline
We need a version that we can adapt to as much printers as possible to guarantee a unity on the outcome.

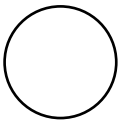
Black or White
In addition to the green shades, black or white are used to reinforce the communication messages.

Dark brown and Light brown
These are background colors.

The colour palette enforces the contrast of natural vs. hi-tech.

Green online
CMYK
RGB 0/222/101
HEX #00de65

Green offline
CMYK 60/0/80/0
RGB 116/185/89
HEX



White
CMYK 0/0/0/0
RGB 255/255/255
HEX #ffffff

Black
CMYK 0/0/0/100
RGB 0/0/0
HEX #000000

Dark Brown
CMYK 47/50/59/46
RGB 102/86/71
HEX #665647

Light Brown
CMYK 18/17/21/1
RGB 0/0/0
HEX #000000

Typography 1

Print & Web
Noto Sans is an open source typeface that you can download on internet.
The fonts style enforces the contrast of old vs. new.

Noto Sans Regular

abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ

Noto Sans Bold

abcdefghijklmnopqrstuvwxyz
ABCDEFGHIJKLMNOPQRSTUVWXYZ

Typography 2: Text hierarchies

The text hierarchies should support the sophisticated and simple HtB design. Here are two examples for the most common uses.

The text hierarchies are necessary to bring out all contrasts.

x

Website	P	body 17px	spacing 23px
	H1	body 60px	spacing 60px
	H2	body 46px	spacing Auto
	H3	body 34px	spacing Auto
	H4	body 29px	spacing Auto
	H5	body 26px	spacing Auto
	H6	body 19px	spacing 26px

TIME INVESTMENT

The advice and design guide in this handbook will definitely help you in organising a hackathon more efficiently. However, organising an event like this will still cost you quite some time. To give you an idea about that Waag Society invested in organising the 2016 hackathon, we included a table on the next page. On this page you can find a specification of roles. Per role we specified how much time was spend on the hackathon per week. Keep in mind that the roles are specific to Waag Society as an organisation. Furthermore we should emphasise that the hours specified below only relate to event staff that is part of Waag Society. Time investment of partners like the Donders institute, Total Active Media, and the University of Twente are not included in this representation of work.

SERVICE COORDINATOR & PRODUCER
These were the people in charge of practical production preparation and execution of the event itself. They took on practical tasks like arranging spaces, and managing specific production budgets that are specified by the project manager.

RESEARCH DIRECTOR
This person was in charge of moderating the public event

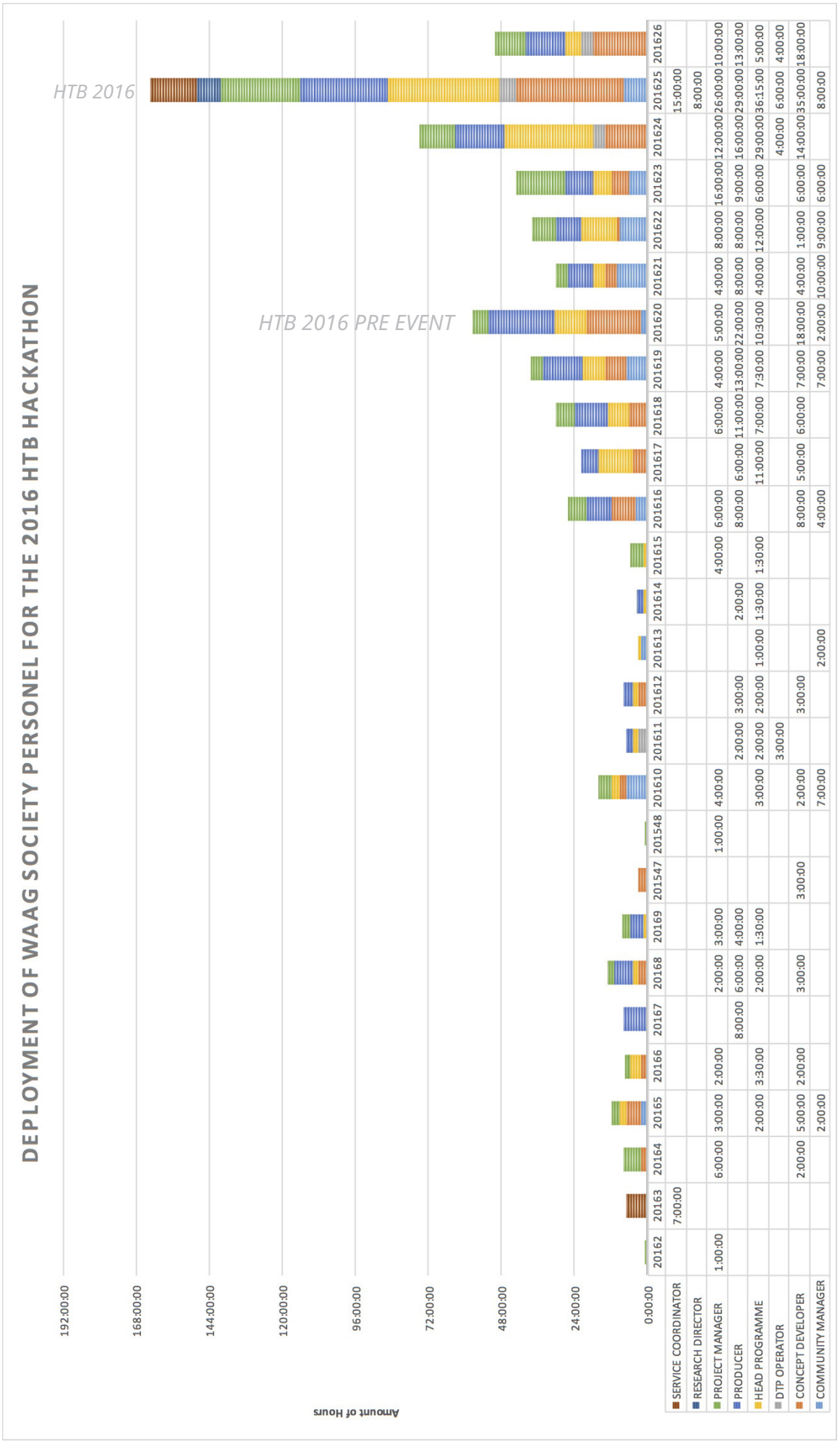
PROJECT MANAGER
The project manager is responsible for the overall project from the perspective of Waag Society. The project manager's main focus is on managing and monitoring expenses for the entire project. Another important task of the project manager is monitoring the outcomes of the project and making sure that these align with the deliverables that the event is aiming produce. Another focus of the project manager is aligning needs and expectations of different stakeholders involved.

HEAD OF PROGRAM
The head of program is focusing on the content of the event. This person is responsible for steering the outcomes towards a result that fits both the research program of the organising body as well as the preference of the financing body or client.

DTP OPERATOR
Is involved for producing publications and artwork for the event itself.

CONCEPT DEVELOPER
Is involved to conceptually create the entire event. Concept developers are focussing on the overall program and set up the event in such a way that goals of different stakeholders can be satisfied, leading to a successful event. Furthermore, concept developers play an active role during the event itself as they support the teams in developing concepts for their individual projects.

COMMUNITY MANAGER
Is involved during the event to connect to the community. The goal of the community member is to disseminate insights about the event to a following community. By doing so we hope to solidify a community around the concept of Hack the Brain hackathon.


DEPLOYMENT OF WAAG SOCIETY PERSONEL FOR THE 2016 HTB HACKATHON
HTB 2016
HTB 2016 PRE EVENT
Amount of Hours
192:00:00
168:00:00
144:00:00
120:00:00
96:00:00
72:00:00
48:00:00
24:00:00
0:00:00
20162 20163 20164 20165 20166 20167 20168 20169 201547 201548 201610 201611 201612 201613 201614 201615 201616 201617 201618 201619 201620 201621 201622 201623 201624 201625 201626
SERVICE COORDINATOR 7:00:00 15:00:00
RESEARCH DIRECTOR 8:00:00
PROJECT MANAGER 1:00:00 6:00:00 3:00:00 2:00:00 2:00:00 3:00:00 1:00:00 4:00:00 4:00:00 6:00:00 6:00:00 6:00:00 4:00:00 5:00:00 4:00:00 8:00:00 16:00:00 12:00:00 26:00:00 10:00:00
PRODUCER 8:00:00 6:00:00 4:00:00 2:00:00 3:00:00 2:00:00 8:00:00 6:00:00 11:00:00 13:00:00 22:00:00 8:00:00 8:00:00 9:00:00 16:00:00 29:00:00 13:00:00
HEAD PROGRAMME 2:00:00 3:30:00 2:00:00 1:30:00 3:00:00 2:00:00 2:00:00 1:00:00 1:30:00 1:30:00 11:00:00 7:00:00 7:30:00 10:30:00 4:00:00 12:00:00 6:00:00 29:00:00 36:15:00 5:00:00
DTP OPERATOR 3:00:00 4:00:00 6:00:00 4:00:00
CONCEPT DEVELOPER 2:00:00 5:00:00 2:00:00 3:00:00 3:00:00 2:00:00 3:00:00 8:00:00 5:00:00 7:00:00 18:00:00 4:00:00 1:00:00 6:00:00 14:00:00 35:00:00 18:00:00
COMMUNITY MANAGER 2:00:00 7:00:00 2:00:00 4:00:00 7:00:00 2:00:00 10:00:00 9:00:00 6:00:00 8:00:00

SANTA LUCIA

T.S.R.ACT

SCIENCE GALLERY

HackTheBrainHub

TU Delft

artshare

UNIVERSITY OF TWENTE.

TOTAL ACTIVE MEDIA

waag society

DONDERS INSTITUTE

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