

Getting started with the WAIR toolkit

The potentials of synthetic biology and technological innovations are, to say the least, awesome. However; the bigger your ambitions, the bigger the uncertainties that arise. Navigating what your research or engineering project might mean in the real world, and how to address that in your project's design, can truly be a daunting task. That's why we have built WAIR, the Wheel of Action, Interaction and Reflection, which is an online and playful tool that supports you when considering societal aspects throughout all phases of your research project. WAIR can bring you and your team a framework and an interactive brainstorming space to structure your team's efforts in these extensive explorations.

Below, you can find everything you need to know to help you get started with the WAIR toolkit.

In case you have any questions or suggestions, please don't hesitate to contact us via email!

Very best,

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The image displays the WAIR toolkit interface, which is organized into several sections:

- Welcome!**: A section with introductory text and a list of icons representing different tool components.
- Working with this tool**: A section explaining the tool's purpose and usage, accompanied by a circular diagram with a central lightbulb icon.
- What are you designing?**: A section for defining the project's goals and scope, featuring a large yellow box and a lightbulb icon.
- WAIR: The Wheel of Action, Interaction and Reflection to future-proof your project**: A central section containing a large circular diagram with a lightbulb icon in the center. The wheel is divided into four quadrants: **Futures** (top), **Needs & Problems** (right), **Safety** (bottom), and **Stake-holders** (left). The center of the wheel is labeled **Alternatives**. Surrounding the wheel are several smaller tool components, including matrices, flowcharts, and diagrams.
- Take a break: playful reflection**: A section at the bottom left with a gear icon and a list of reflection questions.
- Thank you!**: A section at the bottom right with a list of acknowledgments and contact information.

STEP 0. Take a look and decide if this is for you

There are different ways of starting the use of WAIR. You can just dive in and start with STEP 1, or you can take the time together with your team to figure out what you want to use the tool for, how much time you can spend on using it, and how you want to do so. Agreeing on- and setting this intention can greatly benefit your work.

It's good to know that you can freely access the entire tool to hover around the exercises, to decide with your team if this is something for you. Please click [on this link](#) to access the online WAIR tool, where you can take a look at a 'still' template of the brainstorming space with all the exercises that WAIR offers, to help you decide if and how you wish to use WAIR to future-proof your project.

STEP 1. Setting up your personal WAIR tool

WAIR practically is a big interactive brainstorming space for you and your team to think and document your thoughts together. Therefore, you'll need to set up your own WAIR space where you and your team can return to at any point to continue your brainstorm and iterate on your project design.

To set up your own WAIR brainstorming space, there are two options:

Option 1) you can get your own Mural account*, or:

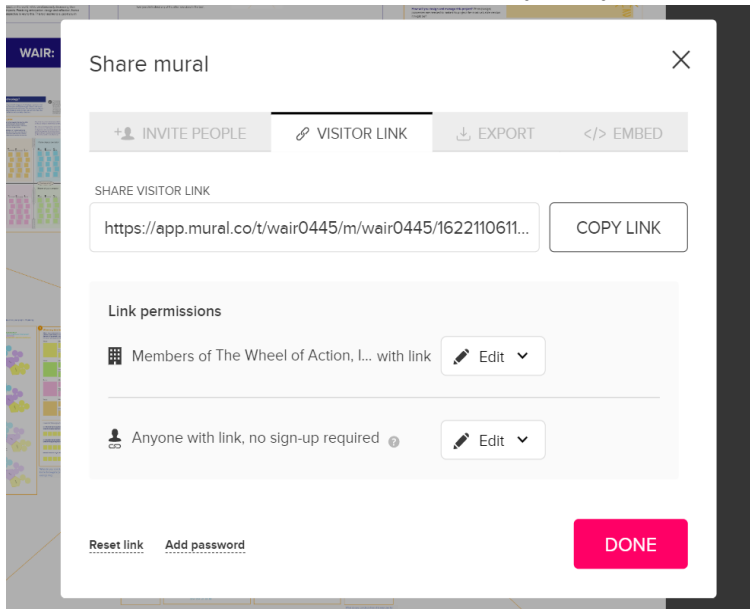
Option 2) you can request us to make a free brainstorming space for you.

*Note: we're hosting WAIR on the platform Mural. This means that for the use of WAIR through option 1, you'll need your own mural account: one account per team. Mural offers a free trial of 30 days, after which you will have to pay 16USD a month or 144USD a year (2021 prices) to keep access to your personal brainstorm canvases as well as the WAIR tool. The benefits of this option are that you're ensured that your project is entirely in a private environment, that you can enjoy other uses of Mural, that you can start up immediately and download your brainstorm canvasses easily. In case you wish to avoid these costs, please follow the instructions of option 2).

Option 1) To get access to WAIR via your own mural account the following steps apply:

- A. Click [on this link](#), which brings you to the template for the WAIR tool.
- B. Hover with your cursor over this screen to the top right of the window. You'll see the button "Start from template". Click this.
- C. Follow the steps to create your own Mural account.
Note: you'll only need one of your team members to create a Mural account (to lower the costs)
- D. Once you've set up your Mural account, you'll find the WAIR tool in your account's canvasses.
- E. Click on the WAIR canvas to open it, give it a fitting name for your team.
- F. Share the canvas with your team members. To do so, click on the pink 'share' button.

- G. A window will open, where you can click on the tab 'visitor link', make sure you select 'edit' in the drop down menu where it says 'anyone with link, no sign-up required'.



- H. Click 'copy link' and share this link with your team members. They can now access the tool at any time, also if you're not online.
- I. Note that after 30 days you'll need to start paying for one the Mural account, otherwise you will lose access to your brainstorming space.

Option 2) To get a free WAIR brainstorming space the following steps apply:

If you, for any reason, wish to not make your own mural account with the associated costs, we can set up a canvas specifically for your team's work.

- A. Please send an email to: p.klaassen@vu.nl; k.d.streekstra@vu.nl with the following information:
Subject: Please create a WAIR space for us!
Text: name of your team/organisation
- B. Give us a couple of working days to set up your WAIR space.
- C. You'll receive your personal URL for your team's brainstorming space.
- D. Share this link with your team to start your brainstorming!
- E. Feel free to close the link and access it again: it will all be saved.

Note: in case you wish to download a PDF or PNG of your filled out WAIR tool, you can either screenshot it, or you can send an email to Pim and Kelly to request a download-link: p.klaassen@vu.nl; k.d.streekstra@vu.nl. Downloading your brainstorming spaces is restricted to account holders.

STEP 2. Getting to know the tool

Yes- it's a big brainstorming space! Please take a moment to get familiar with it.

- A. Notice the outline features on your right hand side: you can click on these to navigate through the tool to the specific exercises you wish to do.
- B. To start off, please navigate to the 'WELCOME' and the "WORKING WITH THIS TOOL" parts to get all the info you need on how to use the tool.

STEP 3. Working with your team on the exercises

Now the real brainstorming starts!

- A. We advise you to begin with the "What are you designing" exercise at the top right in the orange frame.
- B. It's entirely up to you to choose the dimension of interaction you wish to start with and in what order you wish to explore them. The dimensions of interaction are: 'needs and problems'; 'safety'; 'alternatives'; 'stakeholders' and 'future scenarios'. After following the exercises of one of these dimensions, discuss and note your takeaways for your project's design in the middle of WAIR.
- C. After completing any of these exercises, you don't have to regard it as 'finished' or set in stone. Instead, we encourage you to use this tool for an extended period of time throughout your project, and return to it time and again to iterate on exercises or conclusions for your project.
- D. Lastly: WAIR works at its best if you use it together with your team.

We hope you have an inspiring time working on your project with WAIR!