

# How To Dev - Workshop

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## Background

This workshop was created to give project students in celleste-bio the necessary background to get started with the project. It has been opened for all trendlines startup hub as a knowledge share gesture.

Fell free to interrupt in any moment during the day, it is supposed to be an active session and most of the time it will be hands-on keyboard.

## Intro

I called the workshop 'How To Dev' because it is mainly targeted for the software development audience, yet I do think that the ideas behind it is greater and can contribute to wider audience.

This workshop revolves around one common theme and three major enablers to rich the ultimate goal.

The theme is: "Software is messy, especially when distributed"

No one wants to get a bug and hear "but it works on my machine" and the greatest compliment on software is "just works".

The three enablers are:

- Linux
- Git
- Docker

What brakes programs?

Code and Environment

Examples of programs can also be a word document that it's design doesn't look as intended.

To run the exact same program each time we will use version control system.

For reproducible environment we will use containerized environment for encapsulation.

## Linux

- Fill at home in terminal.
- Most in use for computations -> most effective in resources.
- linux philosophy: do one thing and do it well.
- Open source, transparency.
- Common utilities.

## Git

- Git playground.
- Local and Remote.
- Branches.
- Commands add, commit, push.
- Conflict resolution.

## Docker

- Image -> Dockerfile.

- Container -> running instance.
- Commands build, run, exec.