Lernmodul Controller

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Abstract

Explanation of tools that we are using.

Contents

1 Tools

The Lernmodul Controller application uses different tools that may be explained before the installation of the application. This chapter will give you an introduction into the tools that are used and required in this project, as well as an explanation about Kubernetes that is needed to understand how the Lernmodul Controller application is working on the inside.

1.1 Make

Make is used to resolve dependencies during a build process. In this project make is used to have some shortcuts for complex build commands. For example there is a make command to generate the documentation: `make docs`.

1.2 Generating The Documentation

The documentation is written in markdown and converted to a pdf using pandoc. To generate the documentation pandoc and latex are used. Install `pandoc`, `pandoc-citeproc` and a latex environment. [1]

For the replacement of variables there is a lua script installed, so you need to install lua too. [2]

There is a make command to generate the docs: `make docs`.

1.2.1 Commands:

- `$ sudo apt install pandoc pandoc-citeproc make`
- `$ make docs`

1.3 Running Kubernetes

1.4 nohup

If a terminal is closed (for example if you logout), a HUP signal is send to all programs that are running in the terminal. [3] `nohup` is a command that executes a program, with intercepting the HUP signal. That results into the program doesn't exit when you logout. The output of the program is redirected into the file `nohup.out` `nohup` can be used with `&` to start a program in background that continues to run after logout. [4]

1.5 kubectl

`kubectl` is a command line tool that lets you control Kubernetes clusters.

1.6 Kubernetes

1.6.1 Namespaces

2 Installation

To install the program, execute make install.

List of Figures

3 Bibliography

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