

Evaluation

João Lourenço

Contents

1 Reproducible evaluation	1
1.1 How to generate the PDF	1

1 Reproducible evaluation

This document describes how to run the evaluation package, both for the Thesis and for the article.

The evaluation for each project consists of an RMarkdown file, which is configured to output a LaTeX fragment. This fragment cannot be compiled by itself, since it is meant to be used with the `\input{fragment.tex}` command in the respective projects.

For the purpose of reproducibility, the RMarkdown files were changed to output a PDF, and very small adjustments to images' layouts were made. This ensures that the content and conclusions remain the same as the ones in each project, and that the PDF generation time is reduced.

1.1 How to generate the PDF

The best way to generate the desired PDF is by using Docker. This ensures you'll have the correct R version, the correct dependencies, and a working LaTeX environment with all necessary packages. You can always attempt to perform the generation manually if you're feeling brave... but this is highly discouraged.

All you need to do is run the following two commands in the directory of this README file:

```
# The build command takes a while to run - up to 20-30 mins
docker build -t evaluation .
```

```
# If you want the longer Thesis evaluation:
docker run --rm -v ${PWD}:/thesis:report/thesis evaluation thesis/Thesis-Evaluation.Rmd
```

```
# If you want the smaller Article evaluation:
docker run --rm -v ${PWD}:/article:report/article evaluation article/Article-Evaluation.Rmd
```

The output will be found under the respective folders. This was tested with Pop!_OS 21.10, a distribution based on Ubuntu.