The fhjcommon package*

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Abstract

Collection of common macros for the FHJ bundle independent of a chosen document class.

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1 Configuration

1.1 Used Packages

- $_1 \; \langle *\mathsf{package} \rangle$
- 2 \RequirePackage{xstring}
- 3 \RequirePackage{ifthen}
- 4 \RequirePackage{calc}

2 Naming definitions

\FHJ One goal of this package is to provide common naming definitions which can and should be used in all documents which are created in the context of FH JOAN-NEUM. This includes the naming of the university (\FHJ), the study programs and their long and short names.

Study program specifics

\FHJProgram It is assumed that the documents which are generated are created in the context of a given study program Data Science and Artificial Intelligence or IT and Mobile Security. To set the study program for the given document us the macro as following:

 $\P \operatorname{FHJProgram} \{ \langle program - stem \rangle \}$

\FHJProgramLong

We currently support DAT and IMS for $\{\langle program-stem \rangle\}$. and After setting \FHJProgramShort the study program you can use macros which refer to \FHJProgramLong and \FHJProgramShort to get the long and short name of the study program.

\FHJDATLong \FHJIMSShort

For convenience, the macros \FHJDATLong, \FHJDATShort, \FHJIMSLong and \FHJDATShort \FHJIMSShort are provided as direct shortcuts if you ever need to name a study \\fHJIMSLong program or its abbreviation which does not belong to the current document.

Legal declarations 3

Further important macros are the legal declarations which are required to be included in the master thesis. These declarations ensure compliance with the legal requirements of FH JOANNEUM.

\FHJMakeDeclaration

Normally these declarations should be placed on a single page – therefore we run a \cleardoublepage before and after the declaration. The macro \FHJDeclaration is also taking care of the language and will automatically switch to the appropriate language based on the current language setting of the docu-\\fHJDeclarationDE ment. We currently support ngerman and english as languages. The declara-\FHJDeclarationEN tion text itself is defined in both German and English and could be typeset with \FHJDeclarationDE or \FHJDeclarationEN respectively without any page clearing.

Exercises 4

The class provides a set of macros to define exercises and examples for lectures. To be able to create the header you will need to redefine the following macros.

\FH.IClassAbbr

To simplify the generation of the header for exercises we provide a set of macros \FHJClassTerm which can be redefined to customize the appearance of the header.

- \FHJLecturer $_5$ \newcommand{\FHJClassAbbr}{RUL}
 - 6 \newcommand{\FHJClassTerm}{WS 2025-26}
 - 7 \newcommand{\FHJLecturer}{Lisa Musterfrau}

\FHJExHeader

The header is actually generated with the macro \FHJExHeader{\(\lambda exercise \) number $\}$ $\{\langle topic \rangle\}$ which takes two arguments: the exercise number and the topic and my look like this using the macro with \FHJExHeader{1}{\LaTeX} with above default definitions:

RUL (Data Science and Artificial Intelligence) Lisa Musterfrau FH JOANNEUM Exercise 1: LATEX WS 2025-26

^{*}This document corresponds to fhicommon v4.1c, dated 2025-10-03.

\FH.JExHeaderScheduled

Additionally we defined the macro $\FHJExHeaderScheduled{\langle exercise\ number\rangle}{\langle topic\rangle}{\langle date\rangle}$ which takes an additional argument for the date which would produce the following example:

RUL (Data Science and Artificial Intelligence) FH JOANNEUM

Lisa Musterfrau

Exercise 1: LATEX

WS 2025-26

Exercise 1 (LATEX) to be solved till 2025-08-13

Remark: The Exercises have to be handed in on Moodle on the target day until 23:59.

\FHJExExample

To generate the examples themselves you may want to use the macro $\FHJExExample[\langle points \rangle] \{\langle title \rangle\}$ which will generate the following section:

Example 1.1: An amazing challenge! (99 Points)

The section counter will be incremented automatically and the major number is always equal to the exercise number.

\FHJExLLM

We have formulated a default statement for exercises on how to treat LLMs (Large Language Models) in the context of the FHJ. This is not an "official" statement from FHJ - it is more a guideline for students and lecturers on how to approach the topic.

Usage of LLMs: You are permitted to use LLMs (e.g., CoPilot, ChatGPT, aso.) to support your work on the exercises. Please note, however, that the use of LLMs is not allowed during assessments. Ensure that you thoroughly understand your solutions and can reproduce them independently without assistance from LLMs.

Change History

v4.0

General: Initial package version \dots 1