

MASARYKOVA UNIVERZITA
FILOZOFICKÁ FAKULTA
KABINET INFORMAČNÍCH STUDIÍ A KNIHOVNICTVÍ
Obor: Informační studie a knihovnictví



**Studie proveditelnosti
implementace open source
integrovaného knihovního
systému Koha v knihovnách
Masarykovy univerzity**

BAKALÁŘSKÁ DIPLOMOVÁ PRÁCE

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Prohlášení

Prohlašuji, že jsem diplomovou práci vypracoval samostatně s využitím uvedené literatury.

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Poděkování

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1 Introduction

Bakalářská diplomová práce se bude zabývat studií proveditelnosti implementace open source integrovaného knihovního systému Koha v knihovnách Masarykovy univerzity. Aktuálnost problematiky tkví v tom, že společnost Ex Libris, která vyvíjí knihovní systém Aleph, přestává tomuto produktu poskytovat podporu a zároveň vytváří produkt jiný, jenž však funguje výhradně v cloudu. Mimo fakt, že data již nebudou ukládána lokálně, to znamená, že knihovny budou mít menší možnosti úprav a rozšíření své instance systému. Tyto problémy by pak měla vyřešit právě migrace na knihovní systém Koha. Další důvod podporující migraci je fakt, že knihovny platí milionové částky za podporu stávajícího systému, což je oproti open source systémům markantní rozdíl, který lze investovat do smysluplnějších věcí spojených s cíli knihoven, jakožto vzdělávacími, informačními a kulturními institucemi.

2 These are

2.1 the available

2.1.1 sectioning commands.

Paragraphs and

subparagraphs are available as well. Inside the text, you can also use unnumbered lists,

- such as
- this one
 - and they can be nested as well.
 - » You can even turn the bullets into something fancier,
 - § if you so desire.

Numbered lists are

1. very
 - (a) similar

and so are description lists:

Description list A list of terms with a description of each term

The spacing of these lists is geared towards paragraphs of text. For lists of words and phrases, the paralist package offers commands

- that
 - are
 - * better
 - suited
- 1. to
 - (a) this
 - i. kind of
 - A. content.

2. THESE ARE

The `amsthm` package provides the commands necessary for the type-setting of mathematical definitions, theorems, lemmas and proofs.

Theorem 2.1.1. *This is a theorem that offers a profound insight into the mathematical sectioning commands.*

Theorem 2.1.2 (Another theorem). *This is another theorem. Unlike the first one, this theorem has been endowed with a name.*

Lemma 2.1.3. *Let us suppose that $x^2 + y^2 = z^2$. Then*

$$\left\langle u \left| \sum_{i=1}^n F(e_i, v) e_i \right. \right\rangle = F\left(\sum_{i=1}^n \langle e_i | u \rangle e_i, v\right). \quad (2.1)$$

Důkaz. $\nabla^2 f(x, y) = \frac{\partial^2 f}{\partial x^2} + \frac{\partial^2 f}{\partial y^2}$. □

Corrolary 2.1.4. *This is a corrolary.*

Remark. This is a remark.

3 Floats and references

The logo of the Masaryk University is shown in Figure 3.1 and Figure 3.2 at pages 5 and 6. The weather forecast is shown in Table 3.1 at page 6. The following chapter is Chapter 4 and starts at page 7. Items 3, 3b, and 3(c)iv are starred in the following list:

1. some text
2. some other text
3. ★
 - (a) some text
 - (b) ★
 - (c) some other text
 - i. some text
 - ii. some other text
 - iii. yet another piece of text
 - iv. ★
 - (d) yet another piece of text
4. yet another piece of text

If your reference points to a place that has not yet been typeset, the `\ref` command will expand to `??` during the first run of `pdflatex` `bakalarka.tex` and a second run is going to be needed for the references to resolve. With online services – such as Overleaf – this is performed automatically.



Obrázek 3.1: The logo of the Masaryk University at 40 mm



Obrázek 3.2: The logo of the Masaryk University at $\frac{2}{3}$ and $\frac{1}{3}$ of text width

Day	Min Temp	Max Temp	Summary
Monday	13°C	21°C	A clear day with low wind and no adverse current advisories.
Tuesday	11°C	17°C	A trough of low pressure will come from the northwest.
Wednesday	10°C	21°C	Rain will spread to all parts during the morning.

Tabulka 3.1: A weather forecast

4 Mathematical equations

\LaTeX comes pre-packed with the ability to typeset inline equations, such as $e^{ix} = \cos x + i \sin x$, and display equations, such as

$$\mathbf{A}^{-1} = \begin{bmatrix} a & b \\ c & d \end{bmatrix}^{-1} = \frac{1}{\det(\mathbf{A})} \begin{bmatrix} d & -b \\ -c & a \end{bmatrix} = \frac{1}{ad - bc} \begin{bmatrix} d & -b \\ -c & a \end{bmatrix}.$$

\LaTeX defines the automatically numbered equation environment:

$$\gamma Px = PAx = PAP^{-1}Px. \quad (4.1)$$

The package `amsmath` provides several additional environments that can be used to typeset complex equations:

1. An equation can be spread over multiple lines using the `multline` environment:

$$\begin{aligned} a + b + c + d + e + f + b + c + d + e + f + b + c + d + e + f \\ + f + g + h + i + j + k + l + m + n + o + p + q \end{aligned} \quad (4.2)$$

2. Several aligned equations can be typeset using the `align` environment:

$$a + b = c + d \quad (4.3)$$

$$u = v + w + x \quad (4.4)$$

$$i + j + k + l = m \quad (4.5)$$

3. The `alignat` environment is similar to `align`, but it doesn't insert horizontal spaces between the individual columns:

$$a + b + c + d \quad = 0 \quad (4.6)$$

$$e + f + g = 5 \quad (4.7)$$

4. Much like chapter, sections, tables, figures, or list items, equations – such as (4.8) and (My equation) – can also be labeled and referenced:

$$b_{11}x_1 + b_{12}x_2 + b_{13}x_3 \quad = y_1, \quad (4.8)$$

$$b_{21}x_1 + b_{22}x_2 \quad + b_{24}x_4 = y_2. \quad (\text{My equation})$$

4. MATHEMATICAL EQUATIONS

5. The `gather` environment makes it possible to typeset several equations without any alignment:

$$\psi = \psi\psi, \tag{4.9}$$

$$\eta = \eta\eta\eta\eta\eta\eta, \tag{4.10}$$

$$\theta = \theta. \tag{4.11}$$

6. Several cases can be typeset using the `cases` environment:

$$|y| = \begin{cases} y & \text{if } z \geq 0, \\ -y & \text{otherwise.} \end{cases} \tag{4.12}$$

For the complete list of environments and commands, consult the `amsmath` package manual¹.

1. See <http://mirrors.ctan.org/macros/latex/required/amslatex/math/amslldoc.pdf>. The `\url` command is provided by the package `url`.

5 We have several FONTS *at disposal*

The serifed roman font is used for the main body of the text. *Italics are typically used to denote emphasis or quotations.* The teletype font is typically used for source code listings. The **bold**, SMALL-CAPS and sans-serif variants of the base roman font can be used to denote specific types of information.

We can also change the font size, although it is usually not necessary.

A wide variety of mathematical fonts is also available, such as:

$ABC, \mathcal{ABC}, \mathbf{ABC}, \text{ABC}, \text{ABC}, \text{ABC}$

By loading the amsfonts packages, several additional fonts will become available:

$\mathfrak{ABC}, \mathbb{ABC}$

Many other mathematical fonts are available¹.

1. See <http://tex.stackexchange.com/a/58124/70941>.

6 Inserting the bibliography

After loading the `biblatex` package and linking a bibliography database file to the document using the `\addbibresource` command, you can start citing the entries. This is just dummy text [**inbook-full**] lightly sprinkled with citations [**incollection-full**]. Several sources can be cited at once [**whole-collection, manual-minimal, manual-full**]. **inbook-full** was written by **inbook-full** in **inbook-full**. We can also produce **inbook-full** or (**inbook-full, inbook-full**). The full bibliographic citation is: **inbook-full**. We can easily insert a bibliographic citation into the footnote¹.

The `\nocite` command will not generate any output, but it will insert its argument into the bibliography. The `\nocite{*}` command will insert all the records in the bibliography database file into the bibliography. Try uncommenting the command and watch the bibliography section come apart at the seams.

When typesetting the document for the first time, citing a work will expand to [**work**] and the `\printbibliography` command will produce no output. It is now necessary to generate the bibliography by running `biber bakalarka.bcf` from the command line and then by typesetting the document again twice. During the first run, the bibliography section and the citations will be typeset, and in the second run, the bibliography section will appear in the table of contents.

The `biber` command needs to be executed from within the directory, where the \LaTeX source file is located. In Windows, the command line can be opened in a directory by holding down the `[Shift]` key and by clicking the right mouse button while hovering the cursor over a directory. Select the `[Open Command Window Here]` option in the context menu that opens shortly afterwards.

With online services – such as Overleaf – all commands are executed automatically.

1. **inbook-full**.

Literatura

- [1] Mahmoud Khonji, Youssef Iraqi a Andrew Jones. „Phishing Detection: A Literature Survey“. In: *Communications Surveys Tutorials, IEEE* 15.4 (Fourth 2013), s. 2091–2121. ISSN: 1553-877X. URL: <http://dx.doi.org/10.1109/SURV.2013.032213.00009>.
- [2] Steve. Sheng et al. „An empirical analysis of phishing blacklists.“ In: *6th Conference on Email and Anti-Spam, CEAS 2009*. 6th Conference on Email and Anti-Spam, CEAS 2009. Carnegie Mellon University, Engineering a Public Policy, 2009. URL: <http://ceas.cc/2009/papers/ceas2009-paper-32.pdf>.

7 Inserting the index

After using the `\makeindex` macro and loading the `makeidx` package that provides additional indexing commands, index entries can be created by issuing the `\index` command. It is possible to create ranged index entries, which will encompass a span of text. To insert complex typographic material – such as α or \TeX – into the index, you need to specify a text string, which will determine how the entry will be sorted. It is also possible to create hierarchical entries.

After typesetting the document, it is necessary to generate the index by running

```
texindy -I latex -C utf8 -L  $\langle locale \rangle$  bakalarka.idx
```

from the command line, where $\langle locale \rangle$ corresponds to the main locale of your thesis – such as `english`, and then typesetting the document again.

The `texindy` command needs to be executed from within the directory, where the \LaTeX source file is located. In Windows, the command line can be opened in a directory by holding down the `[Shift]` key and by clicking the right mouse button while hovering the cursor over a directory. Select the `[Open Command Window Here]` option in the context menu that opens shortly afterwards.[1]

With online services – such as Overleaf – the commands are executed automatically, although the locale may be erroneously detected, or the `makeindex` tool (which is only able to sort entries that contain digits and letters of the English alphabet) may be used instead of `texindy`. In either case, the index will be ill-sorted. [2]

Seznam literatury

- [1] Mahmoud Khonji, Youssef Iraqi a Andrew Jones. „Phishing Detection: A Literature Survey“. In: *Communications Surveys Tutorials, IEEE* 15.4 (Fourth 2013), s. 2091–2121. ISSN: 1553-877X. URL: <http://dx.doi.org/10.1109/SURV.2013.032213.00009>.
- [2] Steve. Sheng et al. „An empirical analysis of phishing blacklists.“ In: *6th Conference on Email and Anti-Spam, CEAS 2009*. 6th Conference on Email and Anti-Spam, CEAS 2009. Carnegie Mellon University, Engineering a Public Policy, 2009. URL: <http://ceas.cc/2009/papers/ceas2009-paper-32.pdf>.

A An appendix

Here you can insert the appendices of your thesis.