## Technická univerzita v Košiciach Fakulta elektrotechniky a informatiky

# Moja záverečná práca (šablóna)

Bakalárska práca

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Školiteľ: Leslie Lamport Konzultant: Donald E. Knuth

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Autor: Janko Hraško Školiteľ: Leslie Lamport Konzultant: Donald E. Knuth

Dátum: 13. 5. 2016

Kľúčové slová: LATEX, programovanie, sadzba textu

Abstrakt: Lorem ipsum dolor sit amet, consectetuer adipiscing elit.

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Thesis title: My thesis (the skeleton)

Department: Department of Computers and Informatics, Technical Univer-

sity of Košice

Author: Janko Hraško
Supervisor: Leslie Lamport
Tutor: Donald E. Knuth

Date: 13. 5. 2016

Keywords: LATEX, programming, typesetting

Abstract: Hello, here is some text without a meaning. This text should

show what a printed text will look like at this place. If you read this text, you will get no information. Really? Is there no information? Is there a difference between this text and some nonsense like "Huardest gefburn"? Kjift – not at all! A blind text like this gives you information about the selected font, how the letters are written and an impression of the look. This text should contain all letters of the alphabet and it should be written in of the original language. There is no need for special content, but the length of words should

match the language.

Tu vložte zadávací list pomocou príkazu \thesisspec{cesta/k/suboru/so/zadavacim.listom} v preambule dokumentu.

Čestné vyhlásenie	
Vyhlasujem, že som záverečnú prácu vypracov denej odbornej literatúry.	ral(a) samostatne s použitím uve-
Košice, 13.5.2016	Vlastnoručný podpis

#### **Poďakovanie**

Na tomto mieste by som rád poďakoval svojmu vedúcemu práce za jeho čas a odborné vedenie počas riešenia mojej záverečnej práce.

Rovnako by som sa rád poďakoval svojim rodičom a priateľom za ich podporu a povzbudzovanie počas celého môjho štúdia.

V neposlednom rade by som sa rád poďakoval pánom *Donaldovi E. Knuthovi* a *Leslie Lamportovi* za typografický systém L<sup>A</sup>T<sub>E</sub>X, s ktorým som strávil množstvo nezabudnuteľných večerov.

# Obsah

M	otivá	cia		1
1	For	mulácia	a úlohy	2
2	Súv	isiaca p	práca	3
	2.1	Loren	n ipsum	3
	2.2	Aliqu	am eu malesuada urna	3
		2.2.1	Donec vehicula consequat	4
		2.2.2	Nullam in mauris consectetur	4
		2.2.3	Vestibulum tristique elementum varius	6
	2.3	Phase	llus id pretium neque	6
3	Met	odológ	çia	9
4	Imp	lement	tácia	10
5	Dos	iahnut	é výsledky	11
6	Inte	rpretác	cia výsledkov	12
7	Ďal	šia prá	ca	13
8	Záv	er		14
Li	teratı	íra		15
Zo	znan	n skrat	iek	16
Zo	znan	n prílo	h	17

### A Karel Language Reference

18

# Zoznam obrázkov

	T																									_
71	LATEX Friendly Zone																									
<b></b> 1	ETENTITION ZONE	•	•	•	•	•	•	•	•	•	•	•	•	 	•	•	•	•	•	•	•	•	•	•	•	_

# Zoznam tabuliek

2.1	Country list																																	6
<b>-</b> ••	Country mot	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

## Motivácia

## 1 Formulácia úlohy

Text záverečnej práce musí obsahovať kapitolu s formuláciou úlohy resp. úloh riešených v rámci záverečnej práce. V tejto časti autor rozvedie spôsob, akým budú riešené úlohy a tézy formulované v zadaní práce. Taktiež uvedie prehľad podmienok riešenia.

## 2 Súvisiaca práca

#### 2.1 Lorem ipsum

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- Second itemtext
- Last itemtext
- First itemtext
- Second itemtext

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- v knihe Babington, 1993 autor prezentuje naozaj odvážne myšlienky
- nemenej zujímavé výsledky publikuje ďalší autor v článku Adams, 1993
- v konferenčnom príspevku Draper, 1993 sú uvedené tiež zauímavé veci
- LATEX<sup>1</sup> je typografický jazyk

Given a set of numbers, there are elementary methods to compute its Greatest Common Divisor, which is abbreviated GCD. This process is similar to that used for the Least Common Multiple (LCM).

#### 2.2.1 Donec vehicula consequat

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<sup>1</sup>https://www.latex-project.org/



Obr. 2.1: LATEX Friendly Zone

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- 1. First itemtext
- 2. Second itemtext
- 3. Last itemtext
- 4. First itemtext
- 5. Second itemtext

#### 2.2.3 Vestibulum tristique elementum varius

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Country List										
Country Name	ISO ALPHA 2	ISO numeric								
or Area Name	Code	Code	Code							
Afghanistan	AF	AFG	004							
Aland Islands	AX	ALA	248							
Albania	AL	ALB	008							
Algeria	DZ	DZA	012							
American	AS	ASM	016							
Samoa										
Andorra	AD	AND	020							
Angola	AO	AGO	024							

Tabuľka 2.1: Country list

#### 2.3 Phasellus id pretium neque

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## 3 Metodológia

## 4 Implementácia

## 5 Dosiahnuté výsledky

## 6 Interpretácia výsledkov

## 7 Ďalšia práca

## 8 Záver

## Literatúra

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## Zoznam skratiek

**GCD** Greatest Common Divisor.

**LCM** Least Common Multiple.

# Zoznam príloh

Príloha A Karel Language Reference

Príloha B CD médium – záverečná práca v elektronickej podobe,

**Príloha C** Používateľská príručka

**Príloha D** Systémová príručka

## A Karel Language Reference

#### Karel's Primitives

- void movek() Moves *Karel* one intersection forward.
- void turn\_left() Pivots Karel 90 degrees left.
- void pick\_beeper() Takes a beeper from the current intersection and puts it in the beeper bag.
- void put\_beeper() Takes a beeper from the beeper bag and puts it at the current intersection.
- void turn\_on(char\* path) Turns Karel on.
- void turn\_off() Turns Karel off.

#### Karel's Sensors

- int front\_is\_clear() Returns 1 if there is no wall directly in front of *Karel*. 0 if there is.
- int right\_is\_clear() Returns 1 if there is no wall immediately to *Karel's* right. 0 if there is.
- int beepers\_present() Returns 1 if *Karel* is standing at an intersection that has a beeper. 0 otherwise.
- int facing\_north() Returns 1 if *Karel* is facing north. 0 otherwise.
- int beepers\_in\_bag() Returns 1 if there is at least one beeper in *Karel's* beeper bag. 0 if the beeper bag is empty.

## **Misc Functions**

- void set\_step\_delay(int) Sets delay of one Karel's step in miliseconds.
- loop(int) Repeats *Karel's* instruction in a loop.