

Insert here your thesis' task.



CZECH TECHNICAL UNIVERSITY IN PRAGUE  
FACULTY OF INFORMATION TECHNOLOGY  
DEPARTMENT OF SOFTWARE ENGINEERING



Bachelor's thesis

**Open data of Prešov**

*Juraj Šprlák*

Supervisor: Mgr. Jan Starý, Ph.D.

28th February 2018



---

# Acknowledgements

I would like to thank to my



---

# Declaration

I hereby declare that the presented thesis is my own work and that I have cited all sources of information in accordance with the Guideline for adhering to ethical principles when elaborating an academic final thesis.

I acknowledge that my thesis is subject to the rights and obligations stipulated by the Act No. 121/2000 Coll., the Copyright Act, as amended. In accordance with Article 46(6) of the Act, I hereby grant a nonexclusive authorization (license) to utilize this thesis, including any and all computer programs incorporated therein or attached thereto and all corresponding documentation (hereinafter collectively referred to as the “Work”), to any and all persons that wish to utilize the Work. Such persons are entitled to use the Work in any way (including for-profit purposes) that does not detract from its value. This authorization is not limited in terms of time, location and quantity. However, all persons that makes use of the above license shall be obliged to grant a license at least in the same scope as defined above with respect to each and every work that is created (wholly or in part) based on the Work, by modifying the Work, by combining the Work with another work, by including the Work in a collection of works or by adapting the Work (including translation), and at the same time make available the source code of such work at least in a way and scope that are comparable to the way and scope in which the source code of the Work is made available.

In Prague on 28th February 2018

.....

Czech Technical University in Prague

Faculty of Information Technology

© 2018 Juraj Šprlák. All rights reserved.

*This thesis is school work as defined by Copyright Act of the Czech Republic. It has been submitted at Czech Technical University in Prague, Faculty of Information Technology. The thesis is protected by the Copyright Act and its usage without author's permission is prohibited (with exceptions defined by the Copyright Act).*

### **Citation of this thesis**

Šprlák, Juraj. *Open data of Prešov*. Bachelor's thesis. Czech Technical University in Prague, Faculty of Information Technology, 2018.



---

## Abstrakt

V několika větách shrňte obsah a přínos této práce v češtině. Po přečtení abstraktu by se čtenář měl mít čtenář dost informací pro rozhodnutí, zda chce Vaši práci číst.

**Klíčová slova**    Otvorené dáta, štátna správa, webová aplikácia, mesto Prešov, Java

---

## Abstract

Sem doplňte ekvivalent abstraktu Vaší práce v angličtině.

**Keywords**    Open data, state service, web application, Prešov, Java



---

# Contents

Introduction	1
1 Definition of open data	3
2 Analýza a návrh	5
3 Realizace	7
Conclusion	9
Bibliography	11
4 Seznam použitých zkratk	13
5 Obsah přiloženého CD	15



---

## List of Figures



---

# Introduction

Importance of information is great today. Internet helps us in everyday's life to get the information about almost everything almost immediately. Neither the public affairs did not escaped this phenomenon. The society is getting more and more interested in transparency of state government. The idea of Open data was created to satisfy this demand. Publishing fortune of politicians or private companies, state economy data, public procurements, tax declarations and other data on public web servers is a common practice in many developed countries.

Thanks mainly to European Union more and more projects targetting electronisation, systematization and publishing the data are being started also in Slovakia. The idea to publish in machine-readable form all that is not secret (or personal data) it still young and often meets unwillingness or incompetence of public institutions. Some of the main flaws of Slovak open data are their machine-readable structure, inteconnectivity and presentation of the data in the form easily understandable and useful to the citizens. Despite these problems, some progress has been made in this area in recent years and the number of datasets published by state institutions grows every day. Thanks to that there is a growing potential for software developers to create applications for manipulating, inteconnecting, analysing and presenting these data and thus turning them into useful information. This is the main goal of this thesis.

## Open data of Prešov city

Looking at datasets published on the official website of Slovak government - <https://data.gov.sk> one easily discovers, that the most active of all the cities and towns in Slovakia in publishing the data is Prešov. Not only by number of published datasets, but also by quality of the data this city in eastern Slovakia shares the most from its governing with its citizens. These data include all past contracts, invoices, orders and grants of the municipality. That is why these data were chosen for the purpose of this bachelor thesis.

### **Thesis Goals**

The main goal of this thesis is to analyse, interconnect and present the open data of Prešov municipality to demonstrate their value and usefulness for the citizens. Focus is on interconnecting them by logical ties not only to each other, but also to other published open data in Slovakia, e.g., Slovak Business Register. This requires analyses of all published open data in Slovakia. The final product of the thesis is a web application to present the analysed and interconnected data. The goal is to present the application to Prešov city officials and try to convince them to publish and run it on their web servers, so it can serve the public. The thesis also explains the general concept of open data and all the attributes, that such data need to have.



## Definition of open data

”Open data is data that can be freely used, re-used and redistributed by anyone - subject only, at most, to the requirement to attribute and sharealike.”



## **Analýza a návrh**



## CHAPTER 3

---

# Realizace



---

## Conclusion





---

## Bibliography

- [1] Michel Goossens, Frank Mittelbach, and Alexander Samarin. *The L<sup>A</sup>T<sub>E</sub>X Companion*. Addison-Wesley, Reading, Massachusetts, 1993.
- [2] Albert Einstein. *Zur Elektrodynamik bewegter Körper*. (German) [*On the electrodynamics of moving bodies*]. *Annalen der Physik*, 322(10):891–921, 1905.
- [3] Knuth: Computers and Typesetting,  
<http://www-cs-faculty.stanford.edu/~uno/abcde.html>



## Seznam použitých zkratek

**GUI** Graphical user interface

**XML** Extensible markup language



## Obsah přiloženého CD

	readme.txt .....	stručný popis obsahu CD
	exe .....	adresář se spustitelnou formou implementace
	src	
	impl.....	zdrojové kódy implementace
	thesis .....	zdrojová forma práce ve formátu L <sup>A</sup> T <sub>E</sub> X
	text .....	text práce
	thesis.pdf .....	text práce ve formátu PDF
	thesis.ps .....	text práce ve formátu PS