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

Bachelor's thesis

Open data of Prešov

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Acknowledgements

I would like to thank to my

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In Prague on 27th February 2018

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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

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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^AT_EX 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 ^A T _E X
	text	text práce
	thesis.pdf	text práce ve formátu PDF
	thesis.ps	text práce ve formátu PS