BRNO UNIVERSITY OF TECHNOLOGY
FACULTY OF INFORMATION TECHNOLOGY

Bachelor's Thesis Assignment

153877

Institut:	Department of Information Systems (DIFS)
Student:	**Turytsia Oleksandr**
Programme:	Information Technology
Title:	**The Retail Site Location Decision System in Brno**
Category:	Information Systems
Academic year:	2023/24

Assignment:

1. Study Retail Site Location Decision Process. Analyze current approaches.
2. Study GIS and data processing for GIS.
3. Analyze available open data of Brno datahub portal. Analyze the problem of Retail Site Location Decision Process in Brno.
4. Based on the results of the analysis, design system for Retail Site Location Decision Process in Brno which would recommend suitable areas.
5. Implement the designed system.
6. Evaluate the implemented solution. Test its usability.

Literature:

- Huff, D. L. (1964). Defining and estimating a trading area. *Journal of marketing*, *28*(3), 34-38.
- Rosenblatt, M. (1956). Remarks on some nonparametric estimates of a density function. *The annals of mathematical statistics*, 832-837.
- Roig-Tierno, N., Baviera-Puig, A., Buitrago-Vera, J., & Mas-Verdu, F. (2013). The retail site location decision process using GIS and the analytical hierarchy process. *Applied Geography*, *40*, 191-198.
- Saaty, T. L. (1988). *What is the analytic hierarchy process?* (pp. 109-121). Springer Berlin Heidelberg.

Requirements for the semestral defence:
Items 1 to 4.

Detailed formal requirements can be found at https://www.fit.vut.cz/study/theses/

Supervisor:	**Hynek Jiří, Ing., Ph.D.**
Head of Department:	Kolář Dušan, doc. Dr. Ing.
Beginning of work:	1.11.2023
Submission deadline:	16.5.2024
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