

## DIPLOMA THESIS TOPIC DESCRIPTION

Student name: **Péter Makó**  
Registration number:  
Neptun's code: **E8HZ8D**

Title of diploma thesis:

**Development of mobile shopping assistant application**  
**Bevásárlást támogató mobilalkalmazás fejlesztése**

Internal supervisor: **Dániel Kiss**  
External supervisor

Deadline: **15<sup>th</sup> of May, 2024.**

**Topic description:**

Shopping assistant smartphone applications are very popular nowadays, as they can simplify the often exhausting and stressful procedure of purchasing goods, as well as they can help the user to save money by providently planning the shopping and offering personalized discounts.

The goal of this thesis is to design, implement, and test a smartphone application that is able to identify products by their barcodes or QR codes, then, provides the user with a personalized list of the availability and the prices of the products from online sources. By building a profile based on shopping preferences or frequently searched items, the application may suggest stores for the user that minimizes costs or shopping times.

**The diploma thesis should cover:**

- The brief outline of the motivation and the business background of the problem,
- A comprehensive summary of software applications with similar or related purposes, as well as the theoretical background of their design,
- The precise specification and the system design of the smartphone application to be developed
- The documentation of the implementation procedure,
- The thorough summary of the testing scenario, and the test result of the application,
- Discussion of the work and further development possibilities.

Ph.

.....  
Dr. Zoltán Vámosy  
head of institute

Term of limitation: **15<sup>th</sup> of May, 2026.**

The diploma thesis is adequate and can be submitted:

.....  
external supervisor

.....  
internal supervisor