

Óbudai University
John von Neumann Faculty of Informatics
Institute for Cyber-physical Systems

THESIS WORK SPECIFICATION

Name of the student:
Identification number of
the student:
Neptun's code:

Zoltán Kevin Barta
T/006056/FI12904/N
GO10DV

Title of the thesis:

Development and Deployment of a Simple Ecommerce Website
Egy egyszerű webshop fejlesztése és üzembe helyezése

Internal supervisor
External supervisor:

Ernő Rigó

Deadline: **15 May 2024**

Subjects of the final exam: **Computer Architectures**
Cloud service technologies and IT security
specialization

The task:

Developing an ecommerce website which offers a wide range of products. Users have the ability to sign up, log in to their account, buy products and track their orders. Products are priced, categorized and assigned some form of identification (e.g., UUID). The website has a clear and intuitive user interface. Data of the users are stored in a database, along with the information about their orders. Shipping is possible to parcel lockers, postal points and door to door. Besides the core functionalities, additional features could be added such as bookmarking products, filing complaints, etc. The website, the backend code and the database are deployed to a cloud platform, where the appropriate infrastructure is built around them.

The thesis must contain:

- introduction – outlining the spread of e-commerce, its significance and the goals of the thesis project,
- literature review – analyzing existing e-commerce platforms, UI best practices, secure data storage and cloud deployment,
- system design – defining the architecture, front-end/back-end technologies, database schema,
- implementation details – chosen technologies and the reasoning behind them, user interface, core functionalities (registration, login, etc.), optional features and cloud deployment strategy,
- testing and monitoring – testing strategy for functionality, user experience and security, along with evaluation methods for performance and scalability,
- presentation – showcasing the completed e-commerce website and its functionalities,
- evaluation – discussing the testing/evaluation outcomes and the strengths/weaknesses of the system,
- conclusion – summarizing achievements, limitations and future work.



Fleiner K
Dr. habil. Rita Fleiner
head of institute

This specification is valid until: **15 May 2026**
ÓE HKR Section 54, paragraph (10)

I consider the thesis suitable for submission:

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external supervisor

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internal supervisor