Advanced Development Techniques

Intro • Requirements

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Szoftvertervezés és -fejlesztés Intézet
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ÓBUDAI EGYETEM
ÓBUDA UNIVERSITY

Contents

Introduction

About me

ÓE NIK BSc + MSc

PhD yet to be decided :)

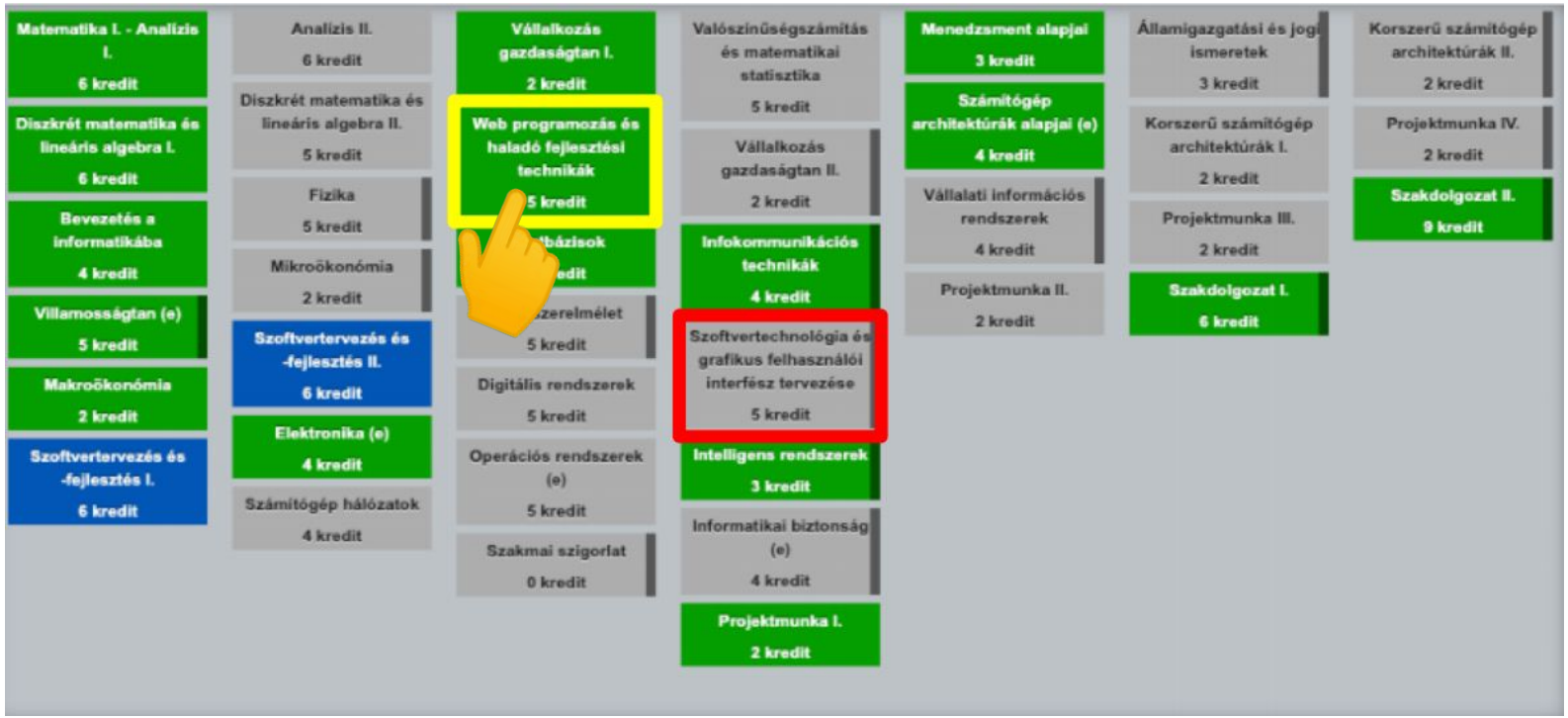
Fields:

- Embedded systems
- ***Web development*** **BSc**
- Desktop development
- Neural networks / machine learning **ÚNKP + MSc**

I’m available in these fields for thesis work supervision, feel free to reach out to me when it’s time.

About the subject

Where are we now?



About the subject

SWDD 1 & 2 ⇒ language independent basics

ADT ⇒ the more advanced and more specific functions of C#

- cons: many-many things only apply to C#, **but**
- pros: the general concept can be found in other languages/frameworks as well

Question of the day: “Is it harder or easier compared to SWDD 1 and 2?”
Answer of the day: “Yes. :)”

Requirements

Requirements

- Lab exam
  - 50% must be reached
  - coding in C# as in the prev. subjects
  - during the 8th week's lab occasion
- Theory exam
  - 50% must be reached
  - written exam where the aim is to understand and explain the different topics from the lectures
  - during the 13th week's lecture occasion
- Project work
  - 50% must be reached
  - creating a complex project in C# where all the learned topics will be used
  - details will be published during the ~4th week of the semester
  - submission: 1st deadline ➔ 13th week; 2nd deadline ➔ 14th week (for fee)
  - presentation to the teacher: 14th week

Retakes (exam)

Cases during the term time:

- if you did not reach 50% on the lab exam ⇒ lab exam retake (no fee)
- if you did not reach 50% on the theory exam ⇒ theory exam retake (no fee)
- if you did not reach 50% on both ⇒ lab and theory exam retake (no fee)

If during the term time you have not reached 50% on the lab part, OR you have not reached 50% on the theory part, OR both ⇒ during the exam period all can be retaken (for extra fee, in the Neptun system you have to make a request).

Retakes (project work)

Cases:

- if you have not created the project work for the 1st deadline OR your teacher have not accepted it for some reason ⇒ you can fix it and submit it for the 2nd deadline (+1 week for extra fee)
- if you have not created the project work for the 2nd deadline OR your teacher have not accepted it for some reason ⇒ during the exam period you can submit it and present it (for extra fee, in the Neptun system you have to make a request).

Missed classes

Accordingly to the TVSZ only 30% of the occasions can be missed. If you have more than 30% of missings you have to be Banned for this subject from the semester in the Neptun system.

It is true for Lectures and Labs as well.

If you are banned (Letiltva) there is no way to complete this subject during this semester, neither in the exam period!

TVSZ: http://uni-obuda.hu/egyetem/szabalyzatok/az-obudai-egyetem-tanulmanyi-es-vizsgaszabalyzata-study-and-examination-regul-0

Schedule

	LECTURE	LAB	PROJECT WORK
1	Intro + Requirements + LINQ + XML	Lambda	
2	DLL + Databases	LINQ + XLINQ	
3	Layering	Reflection + DLL	
4	Git	Code First DB + EF	details will be published
5	NUnit, Moq theory I.	Layered Project Example	
6	NUnit, Moq theory II.	Unit testing	
7	CI/CD	Mock	
8	Data Exchange Protocols	**LAB EXAM**	
9	Parallel I.	API endpoint	
10	Parallel II.	PW code review #1	
11	*-- BREAK --*		PW code review #2 via Teams (if needed)
12	Parallel III.	Thread, Task	
13	extra + **THEORY EXAM**	ThreadSync	deadline #1 Thursday 23:59
14	.NET versions + **THEORY retake**	**LAB retake**	deadline #2 Thursday 23:59 + **PW presentation**

Note that PW presentation can differ a little. Lab teacher will specify as the deadline approaches.

Other notes

Other notes

Important sources:

- https://users.nik.uni-obuda.hu/siposm/ ➜ my personal website
- https://github.com/siposm/ ➜ codes on my GitHub
- https://users.nik.uni-obuda.hu/prog3/ ➜ old website
- https://nikprog.hu/ ➜ new website (work in progress)

Thanks for your attention!

Sipos Miklós

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https://users.nik.uni-obuda.hu/siposm/