



The Written Exam

Department of Computer Science | Software Analysis & Design

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The Assessment in the Course

- Written Exam
 - 50%
 - Will be both in Icelandic and English
 - To pass the course you must pass the final exam (with 4,75 or higher)
 - No helping material allowed in the final exam
- Group assignments
 - 40% (10% each)
- Problem solving projects
 - 10% in total (5 of the highest count)



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The Final Exam will be in DigiExam

- You need to take your own computers with you to the exam
 - If you are using Linux or Ubuntu you need to lend a computer at the university
 - Talk to the technical guys in Sólín before the exam to sign up for a laptop
- You will not be able to browse the internet during the exam
 - You only have access to the exam when DigiExam is open on your computer



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DigiExam Needs to be Installed in Advance

- You need to have DigiExam installed in your computer
 - You can get information here:
https://help.ru.is/index.php?/default_import/Knowledgebase/Article/View/189/0/digiexam---rafrant-profakerfi--digital-exam
- The problem solving classes will be around this
 - You will get guidance on how to install this
 - It will maybe take 30 minutes



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The Construction of the Written Exam

- Last Autumn - the exam has the following structure:
 - 30% multiple choice questions
 - 40% text questions
 - 30% realistic project

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Guidelines for the multiple choice questions:

- Sometimes there were more than one answering option that gave the right answer.
- The questions were marked according to whether one or more answering options were forming the right answer.



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Learning Outcomes

- **Knowledge**
 - Be able to describe
- **Skills**
 - Be able to use
- **Competences**
 - Be able to know when to use and why



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All the material in the course basis for the Exam

- In the projects you are developing the skills and competences
 - The written exam will cover all LO levels, knowledge, skills and competences
- During lectures you are getting knowledge to be able to
 - Describe some of the material (knowledge LO)
 - Use the methods/techniques in the project (skills LO)
 - Develop deep understanding (competences LO)
- Through reading the books you also get additional knowlegde to meet the LOs



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Skills – Being able to use

1. Be able to state requirements, (both functional and non-functional) for a medium sized computer system
 - Including stating measureable usability and UX goals
2. Be able to make paper prototypes and intermedium prototypes of a software system
3. Have developed skills of evaluating in the analysis and design phase.
4. Be able to model the system design using diagrams like state, sequence and class diagrams.
5. Be able to write reports that are understandable for recipients.



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Competences – Describe, use and compare

1. Be able to state the requirements for a software system in a comprehensive manner.
 - Including discussing the difference between functional and non-functional requirements
2. Be able to design user interface software systems according to the needs of users
 - Including discussing why user centred design is important
3. Be able to evaluate prototypes to be able to adapt to system requirements.
 - Using think-aloud method and prototype interviews
4. Be able to set out an analysis and design of a comprehensive manner in the form of reports, prototypes and models
 - Including being able to discuss these various forms, the strengths and weaknesses of each of them



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Knowledge – be able to describe

1. Be familiar with methods for analysing software requirements.
2. Be familiar with methods for designing software.
3. Know basic principles in the design of user interfaces, to be called standards and guidelines for the design of user interfaces.
4. Know the main definitions and characteristics of object oriented modelling and design.
5. Be familiar with different methods of information gathering.
6. Know in what way the design of a computer system or application might succeed or fail because of the diversity of human beings.
7. Be familiar with the main concepts of objective design and programming.
8. Be able to identify the main types of software testing and when these are used.
9. Be able to describe the main concepts for user centred software development such as usability and user experience.



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To prepare for the Exam

- Read thoroughly through the projects and your solutions
 - Read through the feedback you got on the projects
 - Read the slides to learn more about the different methods used in the projects
- Read the book and the slides on the things that you should be able to describe in the exam



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Let's Look at some Examples



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Any Questions



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Overview of this lecture

- Assessment in the Course



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