

Program Systems Development practice

Practice 1
Introduction
Developer tools



Introduction

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Obligation

- Attendance at practices are compulsory
 - How to check: from 3rd to 14th practices mini tests in CooSpace
 - Allowed number of absence: at requirements of mini tests





Structure of practices

- Mini test in 10 minutes (automatic evaluation)
- Teaching new materials, creating examples together
 - The examples will be uploaded after every lab (in CooSpace)
- Solve problems on your own

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Mini tests

- You should fill in the tests in CooSpace (e.g.: single choice, multiple choice, error-correction, etc...)
- ▶ 10 minutes to solve the test
- 4 questions in each test
- The questions comes from the materials from the last practice
- Reach at least **50%** to get a "successful" for one test



Learning through examples

- Learning the new materials in 30 minutes
- Create examples together





Exercises

- Solve problems alone in 50 minutes
- Exercises are all from the new materials
 - Mainly programming
- No obligation, just to earn extra points!!!



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Evaluation of exercises

- ▶ 1st: 4 points
- ▶ 2nd: 3 points
- ▶ 3rd: 2 points
- ▶ 4th: 1 point

```
if (extraPoints ≥ 16) {
examGrade += 1;
```



Compulsory program

- Create a whole project from scratch till the end of the term-time (right before the start of exam period)
- Use Node.js and Angular 2+ technologies
- Work in groups of 2
- ▶ The groups have to show their projects in 10-15 minutes in the last practice
- Topics will be available right before the spring holiday (teams should be formed till there)
 - Max: 50 pts
 - Should be reached: 25 pts (50%)



Minimum requirements to take exam

- > 7/11 successful mini tests (≥ 7 pts)
- At least 50% in the project work (≥ 25 pts) (specifications later)

The mini tests, the project and the extra points for the exercises together determine the final mark.

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Topics of the semester

- 1. Introduction, VS Code
- ▶ 2. Git
- 3. Docker
- ▶ 4. Build tool (Grunt), JS/TS Examples, Asnychronous operations
- 5. NodeJS REST, REST + JS Client
- ▶ 6. REST + AUTH
- ▶ 7. MongoDB + NodeJS
- 8. Spring break No practice!!!
- 9. MongoDB + NodeJS
- 10. Angular
- 11. Angular
- ▶ 12. NetBeans/IDE4J Spring Boot
- ▶ 13. May 1 No practice!!!
- ▶ 14. Hibernate, Spring REST / Spring Security/Transactions
- ▶ 15. Project presentation



Grades and intervals

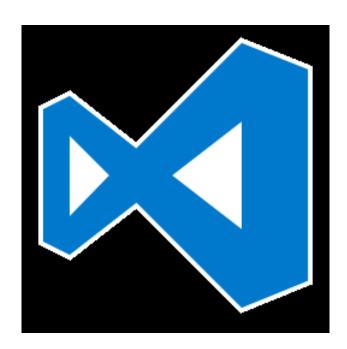
Max: 62 points



Good luck to the whole semester!!!;)



Visual Studio Code







Visual Studio Code

- Powerful source-code editor
- Works on Windows, Linux, Mac
- Built-in support for JavaScript, TypeScript, Node.js
 - Extensions for other languages (C++, C#, Python, PHP, etc...)



Visual Studio Code Extensions

- HTML Snippets
- HTML CSS Class Completion
- GitHistory
- Angular2

