TX00CK90-3001 Application Development Methods

General information

Course Targets

- Project management
 - work in a team and learn the basics for planning, follow-up, and reporting about your project
- User experience design
 - learn to design and test user experience
- English language
 - learn to formulate and deliver project communications efficiently
- Technical
 - get more experience on object-oriented design and programming using Java and selected design patterns
 - learn about client-side programming, responsive web design and Android application development
 - learn about planning and executing unit tests

How?

- Topics introduced with lectures / classroom discussions / self-study
- Individual lab exercises to help apply techniques / concepts in practice
 - Working together with a pair is encouraged, both need to submit the lab solution and pair work must be indicated clearly in the submission
- Project in 4 person teams: design and implement a non-trivial application
 - Project management
 - User experience design
 - Design and implement a Java backend
 - Design and implement a web client
 - Design and implement an Android client
- You will need to pay attention to managing your work
 - Maintain a list of 1) to-do, 2) under work, and 3) finished work items. Use Trello for this.

Grading

-	Weekly exams (held every Monday at 9:00)	20%
-	Lab exercises	10%
-	Project	70%
	- final result	20%
	 project management artifacts 	20%
	- UX design artefacts	20%
	- language	10%

- Min 50% score needs to achieved in each category

Draft schedule

Week	Project management	Ux design	Programming
11.1-15.1	basics, how to make a plan, teams	case description	Java web tutorials, recap on OO
18.1-22.1	finalize plan, version control		IO, sockets, threads, XML, class and sequence diagrams
25.1-29.1	project conflict management	user personas	collections, XML parsing, Javascript, jQuery, unit testing
1.2-5.2	system testing, improvement plan		OO and Java as needed
8.2-12.2			Android
15.219.2	reporting	usability tests	OO and Java as needed
29.2-4.3	acceptance tests; final reports		
7.3-10.3			

Practicalities

Classroom is reserved for us Mon-Thu 9:00 - 16:45

No scheduled meetings on Friday - use that time for project work and self study!

Wednesday morning 9-11 lectures in Big Dry

On Thursday afternoons groups will have scheduled 45min slots from noon until 16:45 for English language tuition

Weekly exam on Monday 9:00

Project is done in 3-4 person groups, please start forming groups as soon as possible

Contact us?

Resmi Gopalakrishnan <u>resmi.gopalakrishnan@metropolia.fi</u> Testing, Java, project

Peter Hjort <u>peter.hjort@metropolia.fi</u>	Java, Android, project
----------------------------------------------	------------------------

Jaana Holvikivi jaana.holvikivi@metropolia.fi project management, ux

Hannu Markkanen <u>hannu.markkanen@metropolia.fi</u> Java, project mgmt

Anne Perälampi <u>anne.peralampi@metropolia.fi</u> English language