Master course (grp. 3): Advanced topics in Computer Science (ATC) - Android Mobile App Programming

Om kurset

uddannelse	Computer Science
Undervisningssprog	English
Kursus starter	28-04-2014
Kursus slutter	28-05-2014
ECTS	7.5

	The course is a practical, workshop-type course. There will be two main parts:

1. in the first part, the course introduces to Android programming, with a focus on developing small apps that use the phone's sensors, such as GPS

2. in the second part of the course, students will form groups, and develop a small app in a self-directed fashion with supervision from the course teacher.

Topics covered include:

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- setting up your computer with the Android SDK - and how to use it for developing Android aps, and run them in an emulator and on an Android mobile.

- states in the the lifecycle of an Android app

- interfacing to the mobile phone's sensors, such as the GPS receiver

- object-oriented programming (in Java)

- event-driven programming

- web application development, including responsive web design, as an alternative to native mobile development

- privacy

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Mobile app programming is an increasingly important area. People and businesses use mobile phones increasingly, even for webbrowsing and many other kinds of tasks, where they previously would use a laptop computer. The course introduces programming for the Android mobile platform, the most widely used mobile platform today. Android programs are a form af Java programs, and it is also a course objective that students get practical experience with Java and object-oriented programming. In addition to programming, the course introduces to broader topics, including user interfaces and privacy challenges on mobile platforms.

forudsætninger	Programming experience. It is also desirable (but not required) to have knowledge of networks and computer architecture (see the computer science course CAN), graphics (see the computer science course IGA) and webbased it-solutions (see the informatics course WA). The required software can be downloaded for free. It is expected that students can borrow Android mobile phones from the university.
Kursusdage	The course is a four week long, highly intensive course. Course days are from the end of April to the and of May.
Eksamenstidspunkt	June 2014.
Vurdering	Will be announced later.
Evaluering	20 min. oral exam based on a written assignment. The written assignment should describe, document and discuss an Andriod app developed by a group of students. Grading based on the 7-stage scale.
litteratur	Will be announced later
Aktivitetsansvarlig	Torben Braüner (torben@ruc.dk)
Kursussekretær	Heidi Lundquist (heilu@ruc.dk)
Underviser	John Patrick Gallagher (jpg@ruc.dk)

STADS stamdata

afløsningsseminar
aktivitetskode : U24038

prøveform : mundtlig	bedømmelse : 7-trinsskala	censur : Ekstern censur