



Red Capes

# Development for Mobile, Wearable and Smart Devices

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Red Capes

## Development for Mobile, Wearable and Smart Devices

- ✓ **Course name:** Development for Mobile, Wearable and Smart Devices
- ✓ **Ladok code:** TDWR29
- ✓ **Credits:** 7.5
- ✓ **Course coordinator:** Linus Rudbeck
- ✓ **Examiner:** Vladimir Tasarov

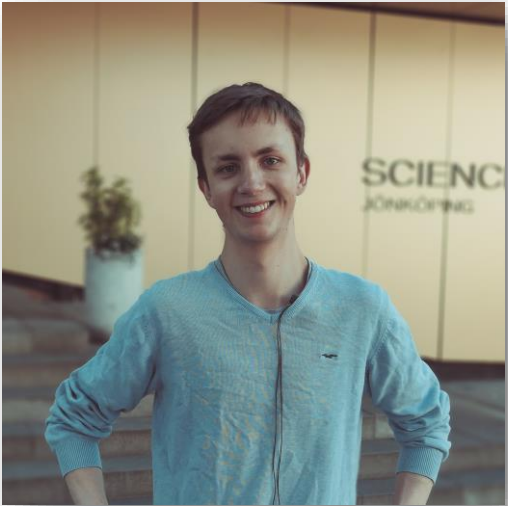


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# Who am I?

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## Linus Rudbeck



- ✓ Running Red Capes
- ✓ CTO
- ✓ Started programming at 15
- ✓ Studied Software development & IT-security at a High School and College level





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# Examiner

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**Vladimir Tarasov**

# Course introduction

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Course administered through Canvas

Course materials available on

<https://ju.redcapes.se/mobile-wearable-smart-devices/>

# Course Prerequisites

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Informatics, Computer Science,  
Computer Engineering, Interaction Design  
90 Credits



Development for Mobile,  
Wearable and Smart Devices  
6 Credits

This course will rely on basic knowledge about

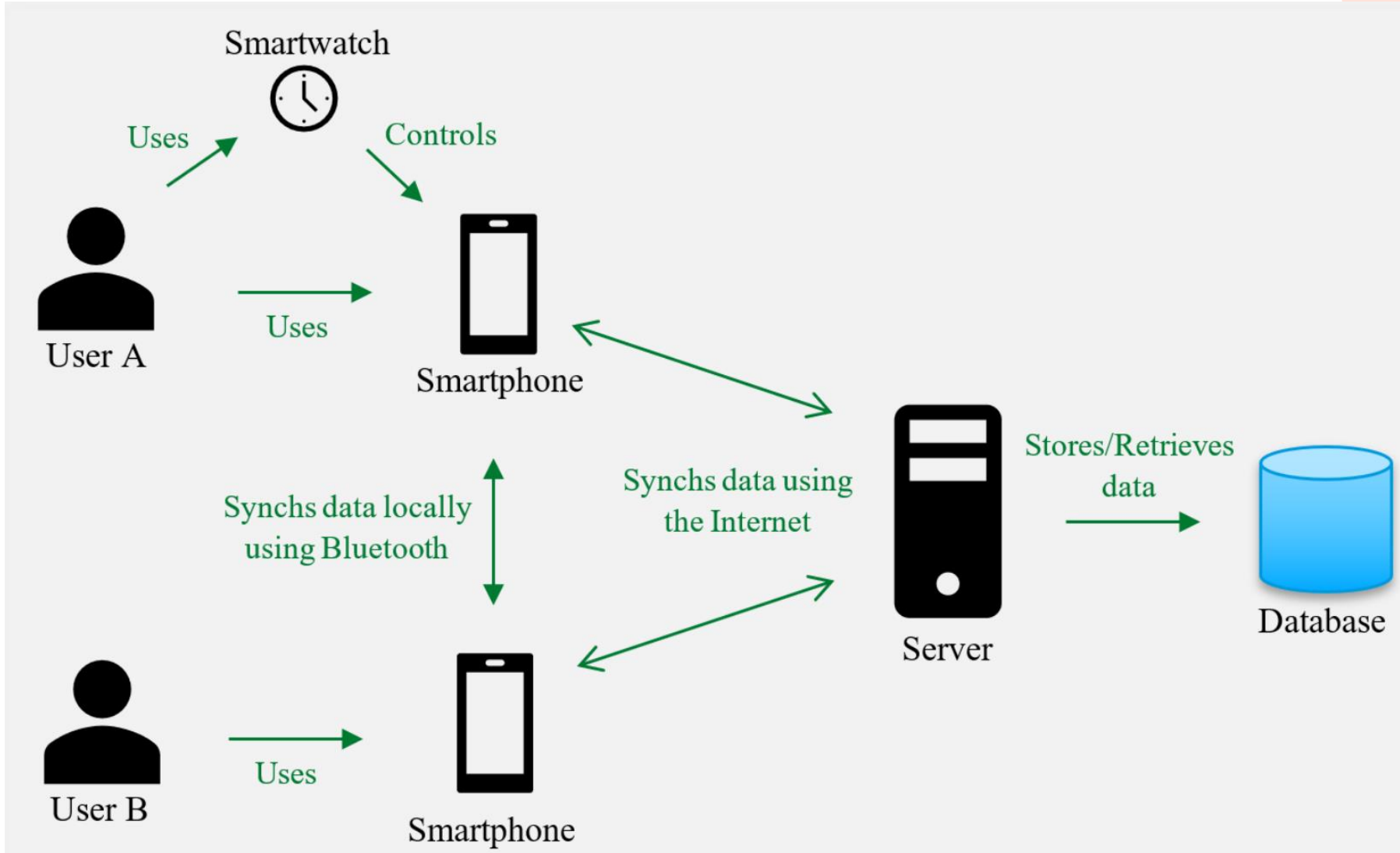
- ✓ HTML
- ✓ Javascript
- ✓ CSS

There are introductory courses on these topics here:

[HTML](#) | [CSS](#) | [Frameworks](#) | [Javascript](#)



# IOT & Application environment





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# Intended Learning Outcomes

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- ✓ Show familiarity with the Internet of Things – the technology of connected devices – and user experience design for it.
- ✓ Display knowledge of principles of development of cross-platform applications for mobile devices.
- ✓ Demonstrate comprehension of user experience design for mobile, wearable and smart devices.
- ✓ Demonstrate skills of object-oriented programming in a scripting language.





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# Intended Learning Outcomes

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- ✓ Demonstrate skills of creating high-fidelity prototypes and wire-frames for mobile devices.
- ✓ Demonstrate the ability to create a crossplatform mobile application.
- ✓ Demonstrate the ability to choose an appropriate design of user experience based on the type of a device

# Weekly Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
08:00	08:00 TAAI9H19- TAIU7H19- TDWR29_H20_T0308- L2 E3231 Lecture 09:45	08:00 TAIU7H19- TDWR29_H20_T0308- L2 E2433 Lab			
09:00					
10:00					
11:00		11:45			
12:00					
13:00		13:00 TAAI9H19- TDWR29_H20_T0308- L1 E2433 Lab			
14:00					
15:00					
16:00		16:45			
17:00					
18:00					
19:00					

- ✓ Lectures are scheduled for release each Monday at 08:00
- ✓ Labs are on Tuesdays
  - ✓ Group 1: 08:00 – 11:45
  - ✓ Group 2: **13:15 – 17:00**
  - ✓ Sign up for on of the groups on Canvas
- ✓ Labs are conducted on campus, *not online*

# Examination

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## Two tests

- ✓ Laboratory Work, 3.5 credits (3/4/5/F).
- ✓ Project Work, 4 credits (3/4/5/F).

These two will be weighted together and determine the final grade.

# Laboratory work

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## Two assignments

- ✓ Create a Vue Native (cross platform) application
- ✓ Communicating with a backend

You need to pass both to pass the test

- ✓ Present your solutions orally at one of the lab sessions

Optional tasks can be completed to collect points

- ✓ Optional tasks award points for higher grades

# Laboratory work

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## Two assignments

- ✓ Create a Vue Native (cross platform) application
- ✓ Communicating with a backend

You need to pass both to pass the test

- ✓ Present your solutions orally at one of the lab sessions

Optional tasks can be completed to collect points

- ✓ Optional tasks award points for higher grades

# Lectures

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## Lecture 1: Introduction

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*Scheduled for publishing 2020-08-26 (delayed 1 day)*

## Lecture 2: Introduction to Vue Native

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*Scheduled for publishing 2020-08-31*

## Lecture 3: Vue Native continued

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*Scheduled for publishing 2020-09-07*

## Lecture 4: Firebase & Smart Devices

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*Scheduled for publishing 2020-09-14*

## Lecture 5: Designing for connected devices

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*Scheduled for publishing 2020-09-21*

## Lecture 6: Designing for connected devices continued

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*Scheduled for publishing 2020-09-28*

## Six lectures in total

- ✓ Introduction
- ✓ Vue Native
- ✓ Firebase
- ✓ Smart / Connected devices
- ✓ Design