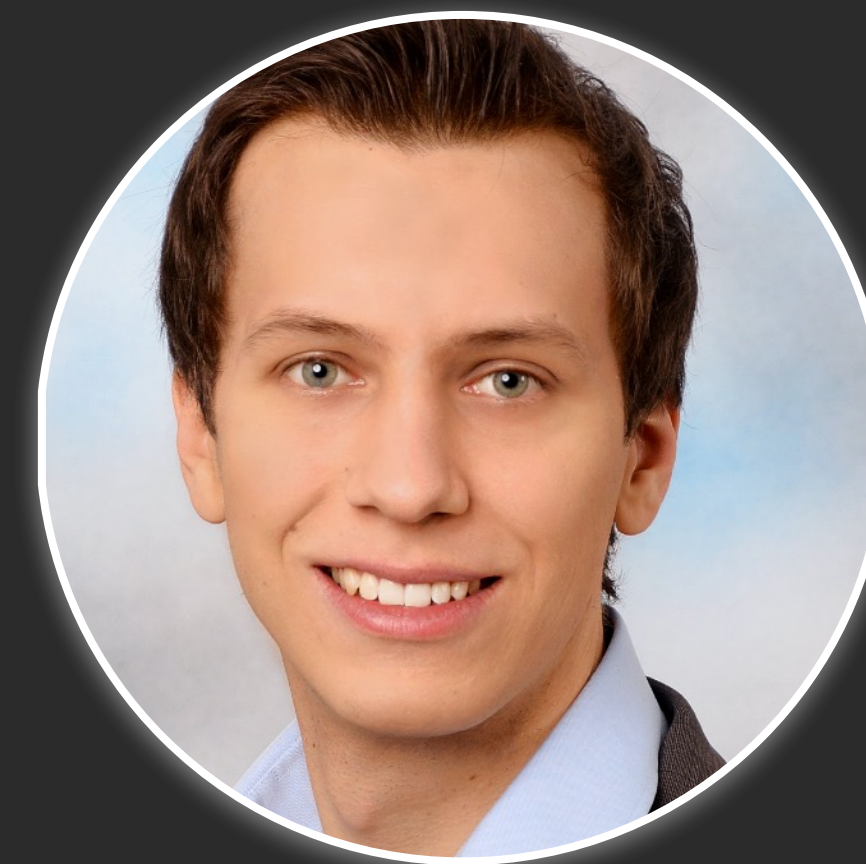Proseminar / Seminar

Teaching iOS

Winter Semester 2019/20 - Info Meeting

Paul Schmiedmayer   Dora Dzvonyar   Dominic Henze

Goals

- Participate as tutor in the introduction courses for the iPraktikum (large-scale practical course)

- Learn how to teach Swift and concepts of advanced Software Engineering to students with varying knowledge

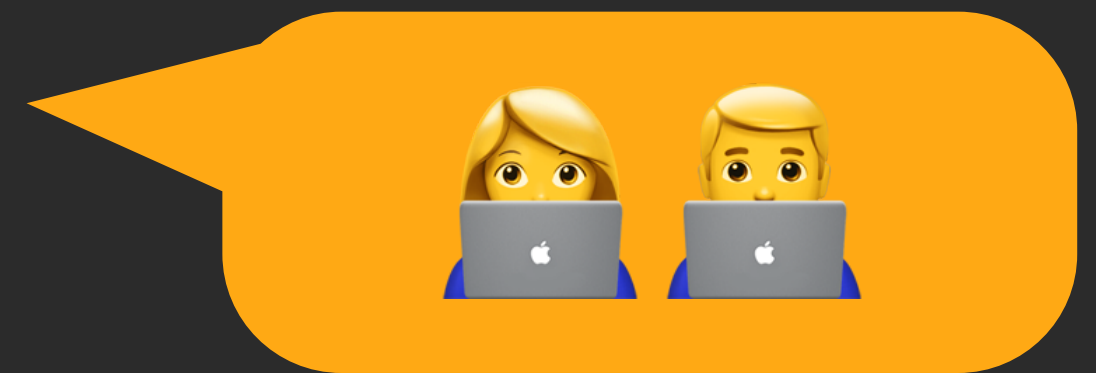- Deepen your knowledge in iOS development

- Have fun 🥳

The Intro Course

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Course Schedule

- Course duration: **October 07-16** (Homework due **October 16**)

- We hold different kinds of sessions

    - Instructors: 8 sessions about Swift, Xcode and iOS development

    - **Tutors: 3 sessions about advanced topics** 👩‍💻👨‍💻

- We keep the Rechnerhalle open 9:00-20:00 for people to complete their exercises

- Learn more about the course <u>here</u>!

Schedule

(Preliminary)

October 2019

	Tue 8	Wed 9	Thu 10	Fri 11	Sat 12	Sun 13	Mon 14	Tue 15	Wed 16
9 AM	9:00 AM Getting Ready	8:30 AM Lab Time	8:30 AM Lab Time	8:30 AM Lab Time			8:30 AM Lab Time	8:30 AM Lab Time	9:00 AM Lab Time
10 AM	10:00 AM Introduction	9:30 AM Swift 2	9:30 AM Swift 3	9:30 AM Swift 4	10:00 PM Lab Time		9:30 AM Tutor Session 1	9:30 AM Tutor Session 3	
11 AM									
Noon	11:30 AM Mac 101								
1 PM	12:30 PM Swift 1	12:30 PM App 2	12:30 PM App 3	12:30 PM App 4			12:30 PM Tutor Session 2	12:30 PM What Now?	
2 PM								1:30 PM Lab Time	
3 PM	3:00 PM App 1	2:30 PM Lab Time	2:30 PM Lab Time	2:30 PM Lab Time			2:30 PM Lab Time		
4 PM									
5 PM	5:00 PM Lab Time								
6 PM									
7 PM									

Our Philosophy

"Tell me and I will forget.

Show me and I will remember.

Involve me and I will understand.

Step back and I will act."

(Chinese Proverb)

Style of the sessions

90 min hands-on presentation

- Students immediately exercise the learned concepts in small in-session exercises (instructor walks them through the code)

- A solution is provided

Homework

- Summarizes the content of the whole presentation

- The students have to solve it on their own

- You correct the exercise solutions and give feedback to the students

What we expect during the course

- **You help run the intro course**

  - You attend all the sessions

  - You support the participants by answering their questions

  - You correct the exercise solutions of a group of "your" students

  - You take turns being present during lab times (9:00-20:00, excl. Sunday)

What we expect during the course

- **Your deliver your own session**

  - Your prepare an own extraordinary presentation & exercise

  - You present the topic in front of all students

Sessions

Instructor topics

- 4 Swift sessions
- 4 App sessions
  - Xcode app
  - Server-side Swift
- "What now?"

We teach the concepts needed in the following App session

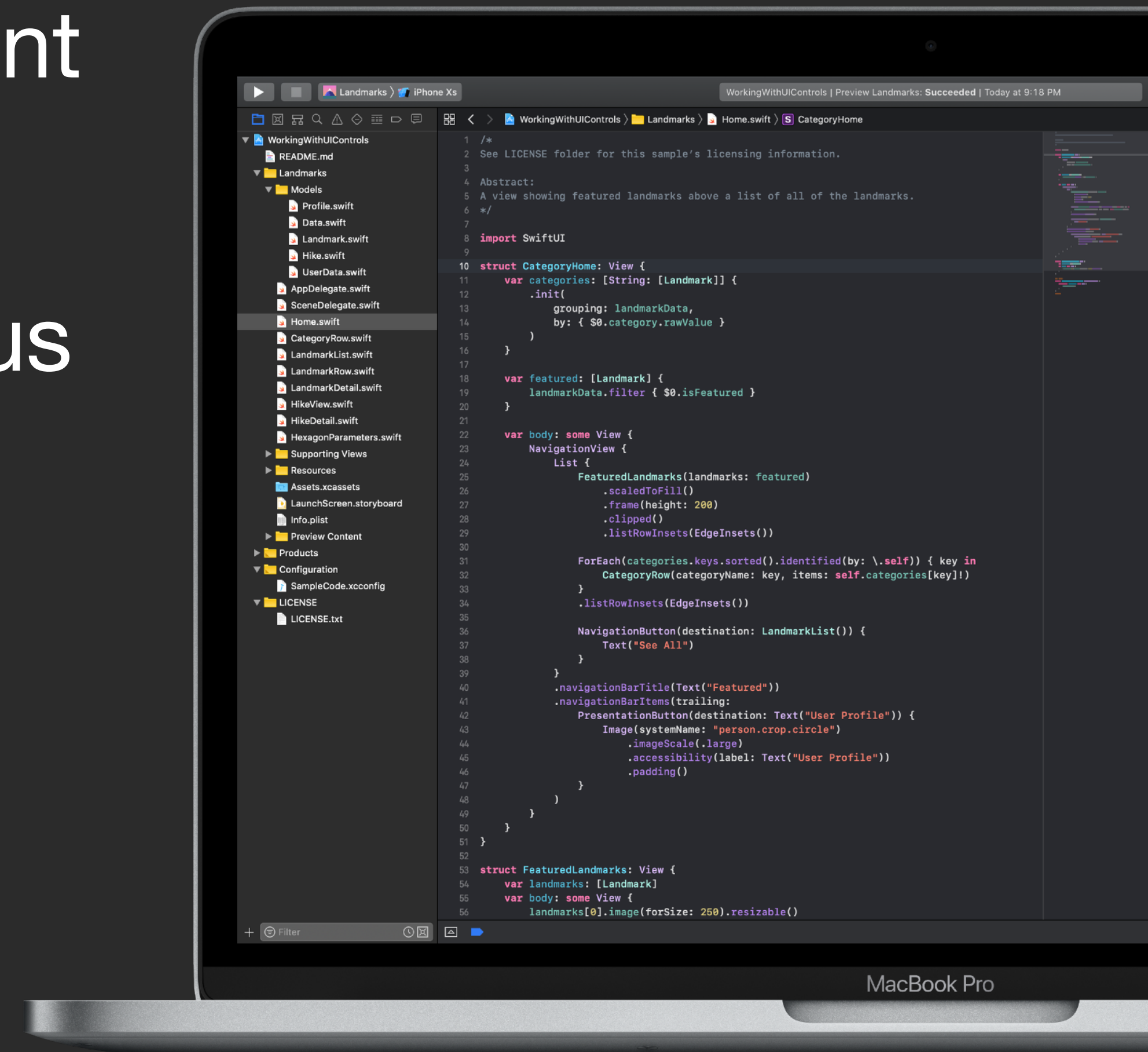Everyone works on the same application throughout the whole course

Possible topics for tutors

- UI Design
- Paradigms in Swift
- … (your ideas)

You either work on the same app, or you design a Playground session

Prerequisites

- You are familiar with the concept of object-oriented languages

- You have experience in iOS development

  - Good knowledge in Swift

  - Experience with Objective-C is a plus

- You are highly motivated to take this course — no other obligations and flexibility during the full duration of the intro course (except repeat exams/obligatory university courses)

Milestones

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- **August 8, 1:00 - 3:00pm:** Kickoff

- **Mid August:** Structure of your Presentation

- **Mid Sepember:** Presentation & Exercise

- **September 30:** Dry Run & Feedback

- **October 07:** Final Slides & Exercise

How we grade

- Presentation (40%)

- Support (30%)

- Exercise correction (30%)

Registration process

1 Express your intention by filling out the form at
https://www1.in.tum.de/teachingios1920
Latest: **July 19 - 2:00pm**

2 We invite you to a personal interview latest one day after
Interviews: **July 23 (9:00-18:00)**

3 After we have accepted you, prioritize the Seminar/Proseminar
"Teaching iOS" in the department's matching system
Latest: **July 24**

Questions?

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