

LE/EECS 4443: Mobile User Interfaces (LAB)

Week 1: Introduction, Logistics, Setup

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Logistics

■ Lab Sections:

- 1 Tuesdays, 5:30p.m. - 7:30 p.m. @ LAS1002B
- 2 Fridays, 3:30p.m. - 5:30 p.m. @ LAS1002

■ Lab Activities:

- 1 Demos (Grading)
- 2 Live Programming Tutorials
- 3 General Question & Answering
- 4 Lecture Recaps

■ Lab Grading:

- 1 Based on correctness and good programming practices (i.e., Documentation)

Preferences & Fine-Tuning

Remark

Have a burning question? Want me to host the lab session differently? Feel free to make suggestions or content contributions via e-mail!

We are finished covering logistics! Lets get started now :)

Installing Android Studio

- 1 Install Android Studio on your local machine and make sure to install the Emulator.

You may watch the Tutorial Video by Professor Castelluci if you want. Do note that your GUI may look different due to updates!

- 2 Start looking at the Android API and build some fun apps!

Preparing to Demo Your Lab

To demo your lab, you will have to deploy your application through:

- 1** Android Emulator
- 2** Physical Hardware Device

Resources to set these up will be provided shortly!!

Course-Specific Resources

- 1 TA Slides, Demos, and the Troubleshooting Document can be accessed here: https://github.com/stoyonaga/EECS4443_W24_Assets/tree/main.
- 2 Professor Fokaefs EECS4443 Program Files can be accessed here: <https://github.com/yorku-ease/EECS4443-Demos>

Lab Demo: Android Emulator

- 1 Installation Guide
- 2 **Note:** Your device must support Virtualization, which must be enabled through BIOS.

Optimal Android Emulator Settings

- 1 Android Studio:** Device Manager → Edit → Show Advanced Settings → **Boot Options: Cold boot**
- 2 Emulated OS:** Settings → System → Developer Options → **Disable Window Animation Scale, Transition Animation Scale, Animator Duration Scale**

Lab Demo: Android Device

- 1 Enable **Developer Options** on your phone
- 2 Enable **USB Debugging**
- 3 Select your Phone in the **Android Device Manager** and Build/Run the program.

Helpful Resources

- 1 Caleb Curry's 4 Hour Introduction to Android Studio
- 2 Android Programming: The Big Nerd Ranch Guide (3rd Edition)
- 3 Android Studio: Keyboard Shortcuts (i.e., AutoComplete)
- 4 Debugging Documentation
- 5 LogCat
- 6 Android Lint

Closing Remarks

Thank You For Your Time!!

Questions?