3D Graphics (3D Grafikus Rendszerek)

TA notes for the 1st Lab. Session

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Overview

Lecture

- On Thursdays
- Slides: on Moodle

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Overview – Lab Sessions

- Every other week, on Fridays *(now)*
- 7 lab sessions
- Each exercise builds upon the previous ones incrementally, but starting code will be provided for later sessions.
- Programming tasks using Kotlin/JS & WebGL
- Initial code on Moodle as a zip file
- Hand in until **next Sunday midnight** on Moodle
  - E.g. March 12. 2023. 23:59 for this lab.

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Overview - Homeworks (Optional but recommended)

- For bonus points
- 5 HWs
- Will be introduced on the lectures
- Similar to Lab sessions, but more open-ended
- Deadline: the next Sunday following a Lab session, where you can ask for directions.
  - approx. 2.5 weeks

Grading & Bonus Points

- 7 labs, 6p for each. ($= 42$p)
- 5 HWs (introduced during lectures), 10p for each ($= 50$p)
- "100%" $= 4L+3HW = 54$p
  - You can reach this **with any combination** of labs and HWs
  - You need $40\% = 22$p for the midterm signature
  - "100%" $\rightarrow$ offered Satisfactory (2) grade[1] on the final exam.
- Each point you get above 54 points, you carry on as final exam points.
  - It's possible to get an Excellent (5) grade just from these points.
- There might be additional opportunities to gain bonus points during the semester.
- As per university regulations, at least **5/7 lab attendance is required** throughout the semester. (This is unrelated from the point system.) $\rightarrow$ be sure to **always sign the attendance sheet**!

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[1] *megajánlott kettes*

Additional Materials / TA notes

These are **complementary** TA notes for the lab sessions, so that I'm not just waving my hand in the air.

For ease of access, find them on http://cg.iit.bme.hu/~barney/3dgr.

Check Moodle for the proper lecture slides and everything else.

Administrative Questions?

1st Lab Session

- Getting comfortable with the setup
- Intro to Kotlin/JS + WebGL
- You can find the initial code on Moodle
  - and also on GitHub: `https://github.com/bobarna/3dgr-labs`

Setting up Gradle

- Pay attention to the version number!
- https://gradle.org/install/
- e.g. on Mac:

  brew install gradle@7
- If you clone https://github.com/bobarna/3dgr-labs, then you can also run the gradlew or the gradlew.bat script, which will pull the correct version of gradle to the gradle folder.

Starting a Webserver, Option 1

- Download (portable) node.js, e.g.
  https://github.com/crazy-max/nodejs-portable/releases/download/2.10.0/nodejs-portable.exe
- Install
- Navigate to project root, then

  ```
  npm install http-server --global
  http-server .
  ```

- Open http://localhost:8080/build/web
  - *Or whatever port is being served.*

Starting a Webserver, Option 2

- In the project root, run
  `python -m http.server 8080`
- Open `http://localhost:8080/build/web`