## PA199 - Advanced Game Development

## Project Setup

## How to set up the framework:

- 1. If working on your own machine, check that you have installed the following:
  - o MS Visual Studio 2019 or later
    - (optional) VS Code can be used as well, but without guarantees.
  - o CMake 3.14 or later.
- 2. Login to faculty gitlab, clone your (empty) PA199 repository.
  - If you can't see the "PA199-[your-surname]" repo on gitlab, contact us we will create it.
  - If working on school machines, we recommend cloning repo into local drive
    C:\Temp as it is way faster than network drives, such as H:\ (especially if 10+ students try to work with network drive at the same time)
- 3. Download "PA199 project template.zip" from IS.
- 4. Unzip the .zip into the repo folder
- 5. Make an initial commit
- 6. Navigate to the "ext" subfolder.
  - Inside the folder there is an "install.txt" file containing a single Git command.
  - Open the terminal (cmd.exe) in the folder and execute there the command in the "install.txt" file.
  - Once the command finishes, close the terminal and return back to the project's root folder.
- 7. Start visual studio, select "Open local folder" and open folder with the project
- 8. Wait for all the magic<sup>1)</sup> to happen ... (about a few minutes)
  - It could take a few (dozens) of seconds before anything will start happening.
  - In the output tab, you should see: "CMake generation started ..." line followed by a lot of "downloading" and other messages.
  - Once finished, you should see: "CMake generation finished." message.
  - In "Error list" you should see 0 error messages (and maybe a few warnings).
- 9. Make a WOW effect ;-)
  - btw, the size of the project folder will bloat to several hundreds of MB.
    Another "wow". And another reason to not use network drive ;-)
- 10. Select "PA199\_project.exe..." as a startup item.
  - NOTE: There are 2 targets. The "install" target creates executables and data inside "dist" directory (under the project's root folder) in the form suitable for a submission to IS (without the source-code though!). The other target is under the Visual Studio's build directory.
- 11. Try to run the project.
  - you should see a console window and graphical window

- In the graphical window you'll see the text: ==YOU WIN==.
- o try to hit "R", "G", "B" keys the window should change background colour.
- 12. There is also a "PA199\_project\_tests.exe..." startup item that you can check.
  - NOTE: It is the executable where you evaluate your unit tests via "gtest". There are two targets. One of them is the "install" again.
- 13. Check the status of the git repository all files generated by VisualStudio should be ignored by GIT. If needed, feel free to adjust .gitignore to your convenience.
- 14. Push project to the git repo.

In case of any problems, questions, etc. ... contact us.

<sup>1) &</sup>quot;Magic's just science that we don't understand yet."