

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:
 - MS Visual Studio 2019 or later or VS Code.
 - 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.

Note: Next 4 steps apply only to Visual Studio. We resolve VS Code in the seminar.

7. Start Visual Studio, select "Open local folder" and open folder with the project
8. Wait for all the magic¹⁾ 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==.
 - 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.

1) *"Magic's just science that we don't understand yet."*

--Arthur C. Clarke