

# Instructions for homework 1

***Due Monday September 16, 2019 before the start of class***

You need to set up a website for this class, where you will put all of your homework assignments. This can be in your CIMS home directory. Instructions for setting that up, if needed, are on the main course page.

More detailed instructions for using the provided interface can be found here:

[https://mrl.nyu.edu/~perlin/courses/fall2019/onboarding\\_week1.pdf](https://mrl.nyu.edu/~perlin/courses/fall2019/onboarding_week1.pdf)

Within that directory, all of your assignments should go in a folder called “graphics”. For example, if your login name is abc123, then your home directory for this course might be:

```
https://cims.nyu.edu/~abc123/graphics/
```

Whatever you decide to use for your website for this course, you need to send me an email, as soon as possible, telling me the URL that you will use. Here are instructions for that email:

- Send me an email to my email address:

```
perlin AT nyu DOT edu
```

- The subject line of your email should be:

```
GRAPHICS
```

- Your email contents should be something like:

```
https://cims.nyu.edu/~abc123/graphics/
```

In your main graphics/ course folder you need an `index.html` file, to which you will add links to all of your homework assignments for this course.

Each assignment should go in a separate folder within your graphics/ folder. The name of this week’s assignment folder should be `hw1`. The one for next week should be called `hw2`, etc. It is important to keep these names consistent, so as not to confuse the graders.

On the main course page, you will see a link to a zip file called `hw1.zip`. Click on this to download it to your computer. Then follow the following instructions:

- Unzip `hw1.zip`. You will now have a folder called `hw1`.
- Within a terminal window, navigate to within the `hw1` folder.
- Type: `install` on UNIX/mac or `install.bat` on Windows
- Start the local server running by typing: `run` on UNIX/mac or `run.bat` on Windows
- In a Web browser (Chrome is probably the most stable) type in the url:

```
http://localhost:3000
```

- You can now edit the fragment shader on the left, to create whatever cool animated patterns you like. Feel free to have fun with it. Remember to click on the “SAVE” button along the bottom to save your work. Alternatively use Command+S / Control+S

Here are some useful keys on the keyboard:

- **Option** key on a Mac / **Alt** key on a PC:
  - Toggle the size of the animated square.
- **Backquote** ` key (just below the esc key on the upper left):
  - Hold down this key while using your mouse to reposition the animated square.
- Alternately, you can directly edit the fragment shader using the text editor of your choice. The location of the fragment shader is:

```
hw1/worlds/week1/shaders/fragment.frag.glsl
```

- When you are satisfied with your homework, you can either 1) create a new zip file and copy it to your website or 2) use git and a service such as Github to copy the files.
- For method 1), use zip to create a new version of zip file `hw1.zip`.
  - Then use a remote copy program to copy this zip file to your website. To do this in Unix, you might type in a terminal window:

```
scp hw1.zip abc123@access.cims.nyu.edu/public-html/graphics/hw1.zip
```

- You should, of course, replace “abc123” above with your own CIMS login name.
- Then log in at CIMS or wherever you are hosting your work for this class.

- Finally, unzip `hw1.zip` at that website.
- For method 2), create a git repo in the project root (contains system and worlds). For those unfamiliar, detailed instructions are provided on the Github website:

<https://help.github.com/en/articles/adding-an-existing-project-to-github-using-the-command-line>

- Once your repo is created, push your files.
- SSH to your website (assuming CIMS), git clone your repo, then pull from it to retrieve the files
- Note: You can also host a course site using Github Pages:  
<https://pages.github.com/> The website structure should be the same, but now you can push/pull directly to this site. If you take this route, please refer to the documentation.