Programming Techniques II
Exercise 2

Task 2.1 Preparation

- add the users *mkoenz*, *drodic*, *dsteiger* and *zintchenko* to your GitLab PT2 repository **as developer** if you want us to be able to leave comments directly in your code
- in order for the challenges to work, make sure your repository Visibility Level is set to **private**

Task 2.2 Penna

- refactor your Penna code base into a directory structure that suits your needs
- add the C++11 improvements you learned about in the lecture
- rename the project to PennaLV and add a bear class to your simulation
- use dynamic polymorphism to put sheep & bears in the same `std::list`

Task 2.3 Challenge (optional)

Write `array_size` outside of the `main` function such that it works in the following program:

```
int main() {
    constexpr uint N = 10; // for arbitrary N
    int a[N];
    constexpr uint size = array_size(a);
    if(size == N)
        return 0; // success
    return 1;     // array_size implementation not correct
}
```

The nicest (above some minimal niceness level) implementation(s) win(s). The submission deadline for this challenge is 30.09.15 at 05:00 in the morning. Notify us via the mailing list (see below) with a link to your uploaded solution on your PT2 repository on GitLab.

Additional Notes:

We created a new mailing list where you can ask questions about the exercise or general programming issues. Other students will not see your question, only the TAs:

pt2_hs15_ta@lists.phys.ethz.ch