Presentatie:

As Liza already mentioned, we also created two programming assignments for the students. The first one is about the proof of work and the second one is about the mining pool. In the first assignment about the proof of work, the students are given a body which they’ll have to implement to create a script which produces a proof of work. Then the students will have a competition in which they all connect to the server and once the server gives a command to the students, all the students create a proof of work and send this to the server. Of course, this is all done automatically. Whoever is the first in constructing a valid proof of work, gets a reward. Then we’ll explain that it will take an extremely long time to mine on your own and that’s it much more lucrative to join a mining pool. This is where the mining pool assignment comes into place. Now the students can adapt the code they wrote for the first assignment to be able to join the mining pool. Again, the students will play a competition. The competition is just very simple. The server again gives a command to the student to start mining. For example, the mining pool needs to find a hash starting with 6 zeros, and the miners are given the challenge to find hashes starting with 4 zeros. Then when the students get the command to start mining, they’ll create valid hashes starting with 4 zeros and they’ll send these hashes to the server. The server then keeps a list of the amount of proof of works each miner sent. We use the slush pool reward strategy to give rewards to the students, which means that each miner gets part of the reward according to the percentage of hashes they contributed. Now we’ll give a demonstration of how both assignments will look like in practice.