# Homework: Intro to Ethereum and Smart Contracts

## Improve the auction contract

Use the Auction contract that we implemented in the lab and add the following functionality:

* Add functionality which requires a minimum bid difference between the highest bid and the new bid. For example: the current bid is 5 the next minimum bid is 10, then 15, 20… etc..
* The value of the bid margin should be included in the constructor
* If someone has place a bid, he can do it again after 1 hour.

## Service marketplace

Create a contract, that:

* Has a method to buy a certain service. The service costs 1 ETH.
* If the money sent are more than 1ETH, the contract will return the extra back.
* The contract confirms that the person bought the service by emitting an event.
* Nobody can buy the service for 2 minutes after someone bought it. Use a custom function modifier for that.
* Use assert and require whenever possible.
* The owner of the contract can withdraw the money once per hour and maximum of 5 ETH at a time.