OT Blockchain
Lab 2

Exercise conceived by Maximilian Schiedermeier

NOTE: The solution to this exercise is provided on moodle. However, please do not consult the solution before attempting the exercise yourself.

You are required to develop an Ethereum decentralized application (dapp) that will simulate the behavior of a cat.

You will begin by writing a smart contract in Solidity that provides the following two functions:

1. function offerYogurt()

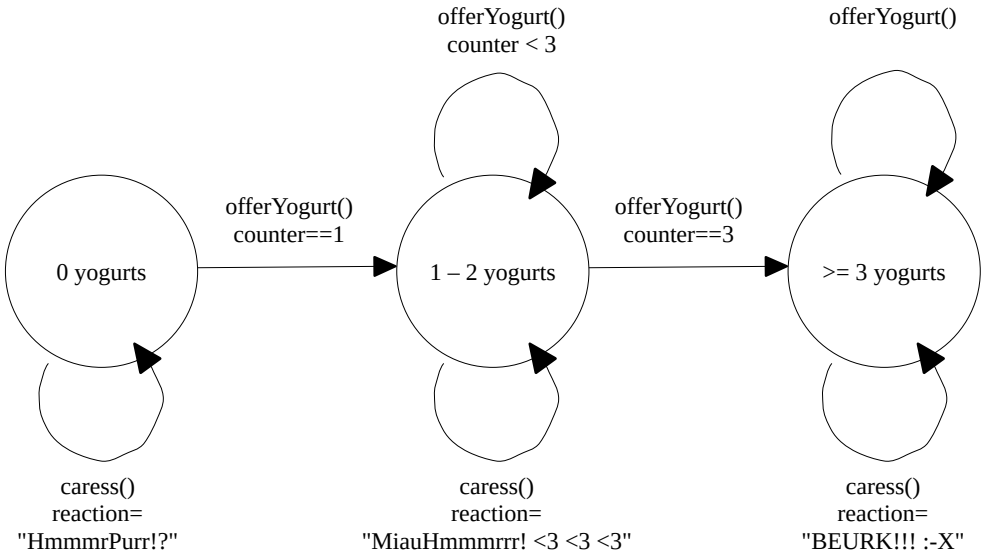
Calling this function will feed one yogurt to the virtual cat.

2. function caress()

This function allows you to caress the cat. The function returns the reaction of the cat as a string. For example, "HmmmrPurr!?", etc. The reaction depends on the number of yogurts that the cat has consumed. The reactions are summarized in the table below.

Number of yogurts consumed	Reaction
0	HmmmrPurr!?
1 – 2	MiauHmmmrrr! <3 <3 <3
>= 3	BEURK!!! :-X

The following state diagram describes the behavior of the cat.



You will then compile the smart contract, generate java wrappers, and deploy the smart contract on your local blockchain.

You will also develop a console based menu to enable the user to call and test the functions of the deployed smart contract.