The vanity name registering system has been managed by associating an ERC1155 token to each vanity name, in this way the transfer and burn mechanism is easily managed.

A token ERC1155 was chosen because it could be useful for operations such as burnBatch and safeBatchTransferFrom, not for the amount of minable tokens, as it is always set to 1. Each token is associated with a struct with information about ownership, expiration date, amount blocked and token id.

The front running is prevented through a commit/reveal mechanism, with the following functions:
- makeCommitment
- commit
- register

The **makeCommitment** function is a view that allows the user to generate the commitment starting from: name, owner and secret

The **commit** function allows you to send and save the commit, the commit has no clear data, so it will not give any information that would allow a third party to front run on it

the **register** function must be executed within minCommitmentAge and maxCommitmentAge.
with this function are sent all the information needed to check the commit message sent previously, also is sent the correct amount of ether and duration (how long you want to register a domain)

The **renew** function allows you to renew a vanity name before expiration, you specify how long you want to renew, and is sent the correct amount to block (again)

the **refundEth** function allows the owner of the token (i.e. the domain) to ask for the refund of the blocked amount. it is necessary to call the function after the expiration of the domain, it cannot be called when the domain is still valid