## WHITE PAPER

# OVER STONES NFTs COLLECTION https://overstones.org

It seems very necessary Necessity of transforming ancient objects and historical artifacts into NFT.

Many historical artifacts are fragile and susceptible to damage from environmental factors, such as light, temperature, humidity and battles. The Nazis ransacked Europe's museums and galleries during World War II. In Libya, historical sites were vandalised, looted and destroyed. The Taliban used high explosives to eradicate virtually every trace of the statues of Buddha at Bamiyan in Afghanistan.

Today, the only truly safe place to preserve our cultural heritage is blockchain. To make our shared culture preservable, we need to make it shareable, and NFTs give us this ability to introduce future generations to the civilization of our ancestors.

Overstones is a NFTcollection of 200 ancient stones (made by man) dating back to the millennium BC each of which is named after one of the cryptocurrencies.

This collection shows a combination of human civilizations in the distant millennia and the blockchain age Which are combined in the form of 200 unique NFTs

The ingredients of these stones are a combination of gold, Silver and Kaolinite And each of these stones are unique and different from each other in terms of weight and volume and engraved cuneiform lines.

overstones, has chosen Polygon chain for its collection because Polygon ,the most widely used Ethereum scaling ecosystem that offers EVM compatibility and an ultimate user experience with fast transactions at near-zero gas fees and adopted by the biggest projects and Community support.

Polygon is the most proven scaling solution in Web3.

Deployment onto EVM without changes in code ,Allows developers to focus on improving code (in Polygon zkEVM) rather than re-writing it.Ethereum security inherited in L2 with the additional benefit of L2 batching for scaling.

Overstones has chosen the ERC1155 standard and multiples for its collection because the monopolization of NFTs historical artifacts, which are considered a world heritage, by one person or one government does not seem logical for many reasons. the community of ancient NFTs holders must be racially diverse with a wide geographical spread as this is the legacy that must be properly passed down to future generations.

Overstones is very obsessive in choosing cryptocurrencies. So far, many authentic and valuable currencies have been named (150 Item) and minted. We intend to reserve some slots for emerging currencies that will prove their worth in the future.Of course, they must have effective functionality in blockchain development, security, a strong community of investors and fans and other related matters.This policy will greatly contribute to the attractiveness of the collection and the credibility of its society

### SMART CONTRACT BeaconProxy.sol

// SPDX-License-Identifier: MIT

pragma solidity >=0.6.0 <0.8.0;

import "./Proxy.sol"; import "../utils/Address.sol"; import "./IBeacon.sol";

/

\* @dev This contract implements a proxy that gets the implementation address for each call from a {UpgradeableBeacon}.

#### \* The beacon address is stored in storage slot

uint256(keccak256('eip1967.proxy.beacon')) - 1

, so that it doesn't

\* conflict with the storage layout of the implementation behind the proxy.

\* \_Available since v3.4.\_

\*/

contract BeaconProxy is Proxy {

\* @dev The storage slot of the UpgradeableBeacon contract which defines the implementation for this proxy.

\* This is bytes32(uint256(keccak256('eip1967.proxy.beacon')) - 1)) and is validated in the constructor.

\*/ bytes32 private constant \_BEACON\_SLOT = 0xa3f0ad74e5423aebfd80d3ef4346578335a9a72aeaee59ff6cb3582b35133d50;

/

\* @dev Initializes the proxy with

beacon

\*

\* If

data

is nonempty, it's used as data in a delegate call to the implementation returned by the beacon. This

\* will typically be an encoded function call, and allows initializating the storage of the proxy like a Solidity

\* constructor.

```
*
   * Requirements:
   * _
beacon
must be a contract with the interface {IBeacon}.
   */
  constructor(address beacon, bytes memory data) public payable {
    assert( BEACON SLOT == bytes32(uint256(keccak256("eip1967.proxy.beacon"))
- 1));
    _setBeacon(beacon, data);
  }
  /
   * @dev Returns the current beacon address.
   */
  function beacon() internal view virtual returns (address beacon) {
    bytes32 slot = _BEACON_SLOT;
    // solhint-disable-next-line no-inline-assembly
    assembly {
       beacon := sload(slot)
    }
  }
  /
   * @dev Returns the current implementation address of the associated beacon.
   */
  function _implementation() internal view virtual override returns (address) {
    return IBeacon( beacon()).implementation();
  }
  1
  * @dev Changes the proxy to use a new beacon.
   *
   * If
data
is nonempty, it's used as data in a delegate call to the implementation returned by the
beacon.
   *
   * Requirements:
   * _
beacon
must be a contract.
   * - The implementation returned by
beacon
```

```
must be a contract.
   */
  function _setBeacon(address beacon, bytes memory data) internal virtual {
     require(
       Address.isContract(beacon),
       "BeaconProxy: beacon is not a contract"
     );
     require(
       Address.isContract(IBeacon(beacon).implementation()),
       "BeaconProxy: beacon implementation is not a contract"
     );
     bytes32 slot = _BEACON_SLOT;
     // solhint-disable-next-line no-inline-assembly
     assembly {
       sstore(slot, beacon)
     }
     if (data.length > 0) {
       Address.functionDelegateCall(_implementation(), data, "BeaconProxy: function
call failed");
     }
  }
}
```

### Address.sol

// SPDX-License-Identifier: MIT

```
pragma solidity >=0.6.2 <0.8.0;
```

```
/* @dev Collection of functions related to the address type
*/
library Address {
    /
    * @dev Returns true if
account
is a contract.
    *
    * [IMPORTANT]
    * ====
    * It is unsafe to assume that an address for which this function returns
    * false is an externally-owned account (EOA) and not a contract.
    *
```

\* Among others,

isContract

will return false for the following

- \* types of addresses:
- \*
- \* an externally-owned account
- \* a contract in construction
- \* an address where a contract will be created
- \* an address where a contract lived, but was destroyed

\* ====

```
*/
```

function isContract(address account) internal view returns (bool) {

- // This method relies on extcodesize, which returns 0 for contracts in
- // construction, since the code is only stored at the end of the
- // constructor execution.

```
uint256 size;
// solhint-disable-next-line no-inline-assembly
assembly { size := extcodesize(account) }
return size > 0;
```

/

}

\* @dev Replacement for Solidity's `transfer`: sends `amount` wei to

```
* `recipient`, forwarding all available gas and reverting on errors.
```

\*

```
* https://eips.ethereum.org/EIPS/eip-1884[EIP1884] increases the gas cost
   * of certain opcodes, possibly making contracts go over the 2300 gas limit
   * imposed by `transfer`, making them unable to receive funds via
   * `transfer`. {sendValue} removes this limitation.
   * https://diligence.consensys.net/posts/2019/09/stop-using-soliditys-transfer-
now/[Learn more].
   * IMPORTANT: because control is transferred to `recipient`, care must be
   * taken to not create reentrancy vulnerabilities. Consider using
   * {ReentrancyGuard} or the
   * https://solidity.readthedocs.io/en/v0.5.11/security-considerations.html#use-the-
checks-effects-interactions-pattern[checks-effects-interactions pattern].
   */
  function sendValue(address payable recipient, uint256 amount) internal {
    require(address(this).balance >= amount, "Address: insufficient balance");
    // solhint-disable-next-line avoid-low-level-calls, avoid-call-value
    (bool success, ) = recipient.call{ value: amount }("");
    require(success, "Address: unable to send value, recipient may have
reverted");
  }
  1
   * @dev Performs a Solidity function call using a low level
call
. A
   * plain`call` is an unsafe replacement for a function call: use this
   * function instead.
   * If
target
reverts with a revert reason, it is bubbled up by this
   * function (like regular Solidity function calls).
   * Returns the raw returned data. To convert to the expected return value,
   * use https://solidity.readthedocs.io/en/latest/units-and-global-
variables.html?highlight=abi.decode#abi-encoding-and-decoding-
functions[`abi.decode`].
   * Requirements:
   * _
target
must be a contract.
   * - calling
```

target with data must not revert.

\* \_Available since v3.1.\_

\*/

function functionCall(address target, bytes memory data) internal returns (bytes memory) {

return functionCall(target, data, "Address: low-level call failed");

}

/

\* @dev Same as {xref-Address-functionCall-address-bytes-}[`functionCall`], but with

\* `errorMessage` as a fallback revert reason when `target` reverts.

\* \_Available since v3.1.\_

\*/

function functionCall(address target, bytes memory data, string memory errorMessage) internal returns (bytes memory) {

return functionCallWithValue(target, data, 0, errorMessage);

```
}
```

```
/ 
* @dev Same as {xref-Address-functionCall-address-bytes-}[
functionCall
],
```

```
* but also transferring
value
```

#### wei to

target

```
* Requirements:
```

\* - the calling contract must have an ETH balance of at least

value

\* - the called Solidity function must be payable

```
* _Available since v3.1._
```

```
*/
```

function functionCallWithValue(address target, bytes memory data, uint256 value) internal returns (bytes memory) {

return functionCallWithValue(target, data, value, "Address: low-level call with value

#### failed");

```
}
```

/

\* @dev Same as {xref-Address-functionCallWithValue-address-bytes-uint256-}[`functionCallWithValue`], but

\* with `errorMessage` as a fallback revert reason when `target` reverts.

\* Available since v3.1.

\*/

function functionCallWithValue(address target, bytes memory data, uint256 value, string memory errorMessage) internal returns (bytes memory) {

```
require(address(this).balance >= value, "Address: insufficient balance for call");
```

```
require(isContract(target), "Address: call to non-contract");
```

```
// solhint-disable-next-line avoid-low-level-calls
(bool success, bytes memory returndata) = target.call{ value: value }(data);
return _verifyCallResult(success, returndata, errorMessage);
```

```
}
```

```
* @dev Same as {xref-Address-functionCall-address-bytes-}[ functionCall
```

],

\* but performing a static call.

```
* _Available since v3.3._
```

```
*/
```

function functionStaticCall(address target, bytes memory data) internal view returns (bytes memory) {

return functionStaticCall(target, data, "Address: low-level static call failed");

}

/ \* @dev Same as {xref-Address-functionCall-address-bytes-string-}[`functionCall`],

\* but performing a static call.

```
* _Available since v3.3._
```

```
*/
```

function functionStaticCall(address target, bytes memory data, string memory errorMessage) internal view returns (bytes memory) {

require(isContract(target), "Address: static call to non-contract");

// solhint-disable-next-line avoid-low-level-calls
(bool success, bytes memory returndata) = target.staticcall(data);

```
return verifyCallResult(success, returndata, errorMessage);
  }
  1
   * @dev Same as {xref-Address-functionCall-address-bytes-}[
functionCall
],
   * but performing a delegate call.
    _Available since v3.4._
   */
  function functionDelegateCall(address target, bytes memory data) internal returns
(bytes memory) {
     return functionDelegateCall(target, data, "Address: low-level delegate call failed");
  }
  /**
   * @dev Same as {xref-Address-functionCall-address-bytes-string-}[
functionCall
],
   * but performing a delegate call.
   * Available since v3.4.
   */
  function functionDelegateCall(address target, bytes memory data, string memory
errorMessage) internal returns (bytes memory) {
     require(isContract(target), "Address: delegate call to non-contract");
     // solhint-disable-next-line avoid-low-level-calls
     (bool success, bytes memory returndata) = target.delegatecall(data);
     return _verifyCallResult(success, returndata, errorMessage);
  }
function verifyCallResult(bool success, bytes memory returndata, string memory
errorMessage) private pure returns(bytes memory) {
    if (success) {
       return returndata;
    } else {
      // Look for revert reason and bubble it up if present
```

if (returndata.length > 0) {

// The easiest way to bubble the revert reason is using memory via assembly

```
// solhint-disable-next-line no-inline-assembly
assembly {
    let returndata_size := mload(returndata)
    revert(add(32, returndata), returndata_size)
```

```
} else {
    revert(errorMessage);
    }
}
```

### Proxy.sol

// SPDX-License-Identifier: MIT

```
pragma solidity >=0.6.0 < 0.8.0;
```

\* @dev This abstract contract provides a fallback function that delegates all calls to another contract using the EVM

\* instruction `delegatecall`. We refer to the second contract as the implementation behind the proxy, and it has to

\* be specified by overriding the virtual {\_implementation} function.

\* Additionally, delegation to the implementation can be triggered manually through the { fallback} function, or to a

\* different contract through the { delegate} function.

\* The success and return data of the delegated call will be returned back to the caller of the proxy.

\*/

#### abstract contract Proxy {

\* @dev Delegates the current call to implementation

\* This function does not return to its internall call site, it will return directly to the external caller.

\*/

function delegate(address implementation) internal virtual {

// solhint-disable-next-line no-inline-assembly

assembly {

// Copy msg.data. We take full control of memory in this inline assembly // block because it will not return to Solidity code. We overwrite the // Solidity scratch pad at memory position 0. calldatacopy(0, 0, calldatasize())

// Call the implementation.

// out and outsize are 0 because we don't know the size yet. let result := delegatecall(gas(), implementation, 0, calldatasize(), 0, 0)

// Copy the returned data. returndatacopy(0, 0, returndatasize())

switch result

```
// delegatecall returns 0 on error.
       case 0 { revert(0, returndatasize()) }
       default { return(0, returndatasize()) }
    }
  }
  /
   * @dev This is a virtual function that should be overriden so it returns the
address to which the fallback function
   * and {_fallback} should delegate.
   */
  function _implementation() internal view virtual returns (address);
  1
   * @dev Delegates the current call to the address returned by
_implementation()
   * This function does not return to its internall call site, it will return directly to the
external caller.
   */
  function _fallback() internal virtual {
     _beforeFallback();
     _delegate(_implementation());
  }
  /
   * @dev Fallback function that delegates calls to the address returned by
` implementation()`. Will run if no other
   * function in the contract matches the call data.
   */
  fallback () external payable virtual {
     _fallback();
  }
  1
   * @dev Fallback function that delegates calls to the address returned by
_implementation()
. Will run if call data
   * is empty.
   */
  receive () external payable virtual {
     _fallback();
  }
  /**
```

\* @dev Hook that is called before falling back to the implementation. Can happen as part of a manual  $\__{\tt fallback}$ 

```
* call, or as part of the Solidity
fallback
or
receive
functions.
    *
    * If overriden should call
super._beforeFallback()
.
    */
    function _beforeFallback() internal virtual {
    }
}
```

### **IBeacon.sol**

```
// SPDX-License-Identifier: MIT
```

```
pragma solidity >=0.6.0 <0.8.0;
```

```
/ * @dev This is the interface that {BeaconProxy} expects of its beacon.
*/
interface IBeacon {
/ * @dev Must return an address that can be used as a delegate call target.
* * {BeaconProxy} will check that this address is a contract.
*/
function implementation() external view returns (address);
}
```

### Settings

```
{
  "remappings": [],
  "optimizer": {
   "enabled": true,
   "runs": 200
  },
  "evmVersion": "istanbul",
  "libraries": {},
  "outputSelection": {
   "*": {
     "*":[
      "evm.bytecode",
      "evm.deployedBytecode",
      "devdoc",
      "userdoc",
      "metadata",
      "abi"
    ]
   }
}
}
```

### **Social Networks**

https://www.linkedin.com/in/overstones

https://www.reddit.com/user/overstones

https://github.com/overstones

https://discord.com/over\_stones

https://twitter.com/over\_stones

https://www.instagram.com/over\_stones

https://t.me/over\_stones

https://medium.com/@metagallery.nft