

ДОДАТОК 1

DragonEye.sol

```
// SPDX-License-Identifier: MIT
pragma solidity ^0.8.9;
```

```
import "@openzeppelin/contracts/token/ERC721/ERC721.sol";
import
"@openzeppelin/contracts/token/ERC721/extensions/ERC721Enumerable.sol";
import
"@openzeppelin/contracts/token/ERC721/extensions/ERC721URIStorage.sol";
import "@openzeppelin/contracts/security/Pausable.sol";
import "@openzeppelin/contracts/access/Ownable.sol";
import "@openzeppelin/contracts/utils/Counters.sol";
```

```
contract DragonEye is ERC721, ERC721Enumerable, ERC721URIStorage,
Pausable, Ownable {
    using Counters for Counters.Counter;
    using Strings for uint256;
```

```
    Counters.Counter private _tokenIdCounter;
```

```
    string baseURI;
    string public baseExtension = ".json";
    uint256 public maxSupply = 100;
    uint256 public maxMintAmount = 3;
```

```
    constructor(string memory _initBaseURI, string memory _name, string memory
_symbol) ERC721(_name, _symbol) {
        setBaseURI(_initBaseURI);
    }
```

```
    function _baseURI() internal view virtual override returns (string memory) {
        return baseURI;
    }
```

```
    function pause() public onlyOwner {
```

```

    _pause();
}

function unpause() public onlyOwner {
    _unpause();
}

function mint(uint256 _mintAmount) public {
    uint256 supply = totalSupply();
    require(_mintAmount > 0);
    require(_mintAmount <= maxMintAmount);
    require(supply + _mintAmount <= maxSupply);

    for (uint256 i = 1; i <= _mintAmount; i++) {
        _safeMint(msg.sender, supply + i);
    }
}

function _beforeTokenTransfer(address from, address to, uint256 tokenId,
uint256 batchSize)
    internal
    whenNotPaused
    override(ERC721, ERC721Enumerable)
{
    super._beforeTokenTransfer(from, to, tokenId, batchSize);
}

function _burn(uint256 tokenId) internal override(ERC721,
ERC721URIStorage) {
    super._burn(tokenId);
}

function tokenURI(uint256 tokenId)
    public
    view
    override(ERC721, ERC721URIStorage)
    returns (string memory)
{
    string memory currentBaseURI = _baseURI();
    return bytes(currentBaseURI).length > 0
}

```

```

        ? string(abi.encodePacked(currentBaseURI, tokenId.toString(),
baseExtension))
        : "";
    }

    function setMaxMintAmount(uint256 _newMaxMintAmount) public onlyOwner
    {
        maxMintAmount = _newMaxMintAmount;
    }

    function setBaseURI(string memory _newBaseURI) public onlyOwner {
        baseURI = _newBaseURI;
    }

    function setBaseExtension(string memory _newBaseExtension) public
onlyOwner {
        baseExtension = _newBaseExtension;
    }

    function supportsInterface(bytes4 interfaceId)
        public
        view
        override(ERC721, ERC721Enumerable)
        returns (bool)
    {
        return super.supportsInterface(interfaceId);
    }
}

```

Migrations.sol

```
// SPDX-License-Identifier: MIT
pragma solidity >=0.4.22 <0.9.0;

contract Migrations {
  address public owner = msg.sender;
  uint public last_completed_migration;

  modifier restricted() {
    require(
      msg.sender == owner,
      "This function is restricted to the contract's owner"
    );
  }

  function setCompleted(uint completed) public restricted {
    last_completed_migration = completed;
  }
}
```

1_initial_migration.js

```
const Migrations = artifacts.require("Migrations");
```

```
module.exports = function (deployer) {  
  deployer.deploy(Migrations);  
};
```

2_deploy_contracts.js

```
const DE = artifacts.require("DragonEye");  
const fs = require('fs');  
const link = fs.readFileSync(".link").toString().trim();
```

```
module.exports = function (deployer) {  
  deployer.deploy(DE, link, "DragonEye", "DE");  
};
```

Deploy.js

```
const { spawn } = require("child_process");

const run = async () => {
  console.log("📄 Deploying and updating contracts...");
  try {
    spawn(
      "truffle migrate --network goerli --reset",
      {
        shell: true,
        stdio: "inherit",
      }
    );
  } catch (e) {
    console.log(e);
  }
};
run();
```

index.html

```
<!DOCTYPE html>
<html>
<head>
  <meta charset="utf-8">
  <title>Minting Page</title>
  <link rel="stylesheet" href="style.css">
  <script
src="https://cdnjs.cloudflare.com/ajax/libs/web3/1.7.4-rc.1/web3.min.js"></script>
</head>
<body bgcolor="black">
  <div class="wave"></div>
  <script type="module" src="web3.js"></script>
  <div class="image-wrap">
    
    <p>How much do you want to mint?</p>
    <input type="text" id="num" size="28" value="1">
  </div class="container">
```

```

<div class="btn" id="mint">
  <div class="shop-now">Mint now</div>
  <div class="snowflake-grid to-left">
    <div class="snowflake-item border-bottom border-right">
      <div class="sub-items border-right border-bottom pull-down">
        <div class="m-w-15 m-h-15 border-right border-bottom
m-3"></div>
      </div>
    </div>
    <div class="snowflake-item border-bottom border-left">
      <div
pull-down-right"
        class="sub-items border-right border-bottom r-90
        >
m-3"></div>
        <div class="m-w-15 m-h-15 border-right border-bottom
        </div>
      </div>
    <div class="snowflake-item border-top border-right">
      <div class="sub-items border-right border-bottom r-270
pull-right">
        <div class="m-w-15 m-h-15 border-right border-bottom
m-3"></div>
        </div>
      </div>
    <div class="snowflake-item border-top border-left">
      <div class="sub-items border-right border-bottom r-180
pull-left">
        <div class="m-w-15 m-h-15 border-right border-bottom
m-3"></div>
        </div>
      </div>
    </div>
  </div>
  <div class="snowflake-grid to-right">
    <div class="snowflake-item border-bottom border-right">
      <div class="sub-items border-right border-bottom pull-down">
        <div class="m-w-15 m-h-15 border-right border-bottom
m-3"></div>
      </div>
    </div>
  </div>

```

```

    <div class="snowflake-item border-bottom border-left">
      <div
        class="sub-items border-right border-bottom r-90
pull-down-right"
        >
          <div class="m-w-15 m-h-15 border-right border-bottom
m-3"></div>
        </div>
      </div>
    <div class="snowflake-item border-top border-right">
      <div class="sub-items border-right border-bottom r-270
pull-right">
        <div class="m-w-15 m-h-15 border-right border-bottom
m-3"></div>
      </div>
    </div>
    <div class="snowflake-item border-top border-left">
      <div class="sub-items border-right border-bottom r-180
pull-left">
        <div class="m-w-15 m-h-15 border-right border-bottom
m-3"></div>
      </div>
    </div>
  </div>
</div>
</div>
</div>
</div>
</div>
</div>

```

```

  <button class="button" id="wallet">

```

```

    <span class="button__text">

```

```

<span>C</span><span>o</span><span>n</span><span>n</span><span>e</span><span>
>c</span><span>t</span><span></span>
</span><span>w</span><span>a</span><span>l</span><span>l</span><span>e
</span><span>t</span>
</span>

```

```

<svg class="button__svg" role="presentational" viewBox="0 0 600 600">

```

```

  <defs>

```

```

    <clipPath id="myClip">

```

```

      <rect x="0" y="0" width="100%" height="50%" />

```



```
</clipPath>
</defs>
<g clip-path="url(#myClip)">
  <g id="money">
    <path
d="M441.9,116.54h-162c-4.66,0-8.49,4.34-8.62,9.83l.85,278.17,178.37,2V126.37
C450.38,120.89,446.56,116.52,441.9,116.54Z" fill="#699e64" stroke="#323c44"
stroke-miterlimit="10" stroke-width="14" />
    <path
d="M424.73,165.49c-10-2.53-17.38-12-17.68-24H316.44c-.09,11.58-7,21.53-16.6
2,23.94-3.24,92-5.54,4.29-5.62,8.21V376.54H430.1V173.71C430.15,169.83,427.9
3,166.43,424.73,165.49Z" fill="#699e64" stroke="#323c44"
stroke-miterlimit="10" stroke-width="14" />
  </g>
  <g id="creditcard">
    <path
d="M372.12,181.59H210.9c-4.64,0-8.45,4.34-8.58,9.83l.85,278.17,177.49,2V191.
42C380.55,185.94,376.75,181.57,372.12,181.59Z" fill="#a76fe2"
stroke="#323c44" stroke-miterlimit="10" stroke-width="14" />
    <path
d="M347.55,261.85H332.22c-3.73,0-6.76-3.58-6.76-8v-35.2c0-4.42,3-8,6.76-8h1
5.33c3.73,0,6.76,3.58,6.76,8v35.2C354.31,258.27,351.28,261.85,347.55,261.85Z"
fill="#ffdc67" />
    <path d="M249.73,183.76h28.85v274.8H249.73Z" fill="#323c44" />
  </g>
  <g id="wallet">
    <path
d="M478,288.23h-337A28.93,28.93,0,0,0,112,317.14V546.2a29,29,0,0,0,28.94,28
.95H478a29,29,0,0,0,28.95-28.94h0v-229A29,29,0,0,0,478,288.23Z"
fill="#a4bdc1" stroke="#323c44" stroke-miterlimit="10" stroke-width="14" />
    <path
d="M512.83,382.71H416.71a28.93,28.93,0,0,0-28.95,28.94h0V467.8a29,29,0,0,0,
28.95,28.95h96.12a19.31,19.31,0,0,0,19.3-19.3V402a19.3,19.3,0,0,0-19.3-19.3Z"
fill="#a4bdc1" stroke="#323c44" stroke-miterlimit="10" stroke-width="14" />
    <path
d="M451.46,435.79v7.88a14.48,14.48,0,1,1-29,0v-7.9a14.48,14.48,0,0,1,29,0Z"
fill="#a4bdc1" stroke="#323c44" stroke-miterlimit="10" stroke-width="14" />
    <path
d="M147.87,541.93V320.84c-.05-13.2,8.25-21.51,21.62-24.27a42.71,42.71,0,0,1,
```

```

7.14-1.321-29.36-.63a67.77,67.77,0,0,0-9.13.45c-13.37,2.75-20.32,12.57-20.27,25.
771.38,221.24c-1.57,15.44,8.15,27.08,25.34,26.1133-.19c-15.9,0-28.78-10.58-28.76
-25.93Z" fill="#7b8f91" />
    <path
d="M148.16,343.22a6,6,0,0,0-6,6v92a6,6,0,0,0,12,0v-92A6,6,0,0,0,148.16,343.22
Z" fill="#323c44" />
    </g>

</svg>
</button>

```

```

<div id="popup" class="popup">
    <div class="popup__body">
        <div class="popup__content">
            <a href="" class="popup__close">X</a>
            <div class="popup__title"><b id='title'>Ошибка</b></div>
            <div class="popup__text"><p id='text'></p></div>
        </div>
    </div>
</div>
</body>
</html>

```

Style.css

```

.image-wrap{
    background: black;
    color: white;
    border-radius: 1em;
    padding: 1em;
    position: absolute;
    top: 50%;
    left: 50%;
    margin-right: -50%;
    transform: translate(-50%, -50%)
}
/* only animate if the device supports hover */
@media (hover: hover) {
    #creditcard {
        /* set start position */

```

```
transform: translateY(110px);
transition: transform 0.1s ease-in-out;
/* set transition for mouse enter & exit */
}
```

```
#money {
  /* set start position */
  transform: translateY(180px);
  transition: transform 0.1s ease-in-out;
  /* set transition for mouse enter & exit */
}
```

```
button:hover #creditcard {
  transform: translateY(0px);
  transition: transform 0.2s ease-in-out;
  /* override transition for mouse enter */
}
```

```
button:hover #money {
  transform: translateY(0px);
  transition: transform 0.3s ease-in-out;
  /* override transition for mouse enter */
}
}
```

```
@keyframes bounce {
  0% {
    transform: translateY(0);
  }
  50% {
    transform: translateY(-0.25rem);
  }
  100% {
    transform: translateY(0);
  }
}
```

```
.button:hover .button__text span {
  transform: translateY(-0.25rem);
  transition: transform .2s ease-in-out;
```

```
}

/* styling */

@import
url("https://fonts.googleapis.com/css2?family=Lato:wght@300;400&display=swap
");

body {
  height: 100vh;
  display: flex;
  align-items: center;
  justify-content: center;
}

.button {
  border: none;
  outline: none;
  background-color: purple;
  padding: 1rem 90px 1rem 2rem;
  position: absolute;
  top: 15px;
  right: 15px;
  border-radius: 8px;
  letter-spacing: 0.7px;
  background-color: #5086bd;
  color: #fff;
  font-size: 21px;
  font-family: "Lato", sans-serif;
  cursor: pointer;
  box-shadow: rgba(0, 9, 61, 0.2) 0px 4px 8px 0px;
}

.button:active {
  transform: translateY(1px);
}

.button__svg {
  position: absolute;
  overflow: visible;
```

```
bottom: 6px;  
right: 0.2rem;  
height: 140%;  
}
```

```
:root {  
  --background-color: #000000;  
  --color: #000000;  
  --light-theme: #ffffff;  
}
```

```
body {  
  font-family: "Mulish", sans-serif;  
  background-color: var(--background-color);  
}
```

```
.container {  
  display: flex;  
  justify-content: center;  
  align-items: center;  
  
  height: 30vh;  
}
```

```
.btn {  
  display: flex;  
  justify-content: center;  
  align-items: center;  
  
  width: 200px;  
  height: 60px;  
  
  background-color: var(--light-theme);  
  cursor: pointer;  
  font-size: 24px;  
  color: var(--color);  
  transition: all 0.3s;  
  position: relative;
```

```
text-align: center;
overflow: hidden;
```

```
border-radius: 5px;
box-shadow: 0 6px 30px -10px rgba(#CCCCCC, 1);
```

```
&:hover {
  transform: translateX(5px) translateY(-7px);
}
}
```

```
.shop-now {
  position: relative;
  .santa-icon {
    position: absolute;
    width: 30px;
    height: 30px;
    top: -17px;
    right: -20px;
    transform: rotate(14deg);
    img {
      width: 100%;
      height: 100%;
    }
  }
}
```

```
.snowflake-grid {
  display: inline-grid;
  grid-template-columns: 1fr 1fr;
  grid-auto-rows: 50px;
  gap: 5px;
```

```
width: 100px;
transform: scale(0.4);
div {
  border-radius: 5px;
}
```

```
.snowflake-item {
```

```
    position: relative;
  }
}
```

```
.to-left {
  position: absolute;
  top: -4px;
  left: -35px;
  animation: swing 3s infinite;
  div {
    animation: flash 3s infinite;
  }
}
```

```
.to-right {
  position: absolute;
  top: -25px;
  right: -35px;
  animation: swing 2.5s infinite;
  div {
    animation: flash 2.5s infinite;
  }
}
```

```
.border-left {
  border-left: 4px solid #e6dada;
}
}
```

```
.border-right {
  border-right: 4px solid #e6dada;
}
}
```

```
.border-bottom {
  border-bottom: 4px solid #e6dada;
}
}
```

```
.border-top {
  border-top: 4px solid #e6dada;
}
}
```

```
.sub-items {  
  height: 28px;  
  width: 28px;  
}
```

```
.m-w-15 {  
  width: 15px;  
}
```

```
.m-h-15 {  
  height: 15px;  
}
```

```
.r-270 {  
  transform: rotate(270deg);  
}
```

```
.r-180 {  
  transform: rotate(180deg);  
}
```

```
.r-90 {  
  transform: rotate(90deg);  
}
```

```
.pull-down {  
  position: absolute;  
  bottom: 5px;  
  right: 5px;  
}
```

```
.pull-down-right {  
  position: absolute;  
  bottom: 5px;  
  left: 5px;  
}
```

```
.pull-right {  
  position: absolute;
```



```
right: 5px;
top: 5px;
}

.pull-left {
position: absolute;
left: 5px;
top: 5px;
}

.m-3 {
margin: 3px;
}

@keyframes swing {
50% {
transform: rotateZ(10deg) scale(0.4);
}
}

@keyframes flash {
50% {
border-color: #485563;
}
}

body {
margin: auto;
font-family: -apple-system, BlinkMacSystemFont, sans-serif;
overflow: auto;
background: linear-gradient(315deg, rgba(101,0,94,1) 3%, rgba(60,132,206,1)
38%, rgba(48,238,226,1) 68%, rgba(255,25,25,1) 98%);
animation: gradient 15s ease infinite;
background-size: 400% 400%;
background-attachment: fixed;
}

@keyframes gradient {
0% {
background-position: 0% 0%;
```

```

    }
    50% {
        background-position: 100% 100%;
    }
    100% {
        background-position: 0% 0%;
    }
}

.wave {
    background: rgb(255 255 255 / 25%);
    border-radius: 1000% 1000% 0 0;
    position: fixed;
    width: 200%;
    height: 12em;
    animation: wave 10s -3s linear infinite;
    transform: translate3d(0, 0, 0);
    opacity: 0.8;
    bottom: 0;
    left: 0;
    z-index: -1;
}

.wave:nth-of-type(2) {
    bottom: -1.25em;
    animation: wave 18s linear reverse infinite;
    opacity: 0.8;
}

.wave:nth-of-type(3) {
    bottom: -2.5em;
    animation: wave 20s -1s reverse infinite;
    opacity: 0.9;
}

@keyframes wave {
    2% {
        transform: translateX(1);
    }
}

```

```
25% {
  transform: translateX(-25%);
}

50% {
  transform: translateX(-50%);
}

75% {
  transform: translateX(-25%);
}

100% {
  transform: translateX(1);
}
}

.popup {
  position: fixed;
  width: 100%;
  height: 100%;
  background-color: rgba(0, 0, 0, 0.8);
  top: 0;
  left: 0;
  opacity: 0;
  visibility: hidden;
}

.popup__body {
  min-height: 100%;
  display: flex;
  align-items: center;
  justify-content: center;
  padding: 30px 10px;
}

.popup__content {
  background-color: #fff;
  color: #000;
  max-width: 800px;
```

```
padding: 30px;
position: relative;
}

.popup__close{
position: absolute;
right: 10px;
top: 10px;
font-size: 20px;
color: #000;
text-decoration: none;

}
```

```
.popup__title{
font-size: 40px;
margin: 0px 0px 1em 0px;

}
```

```
.popup__text{

}
```

Web3.js

```
import myContract from "./json/DragonEye.json" assert { type: "json" };
```

```
window.onload=function(){
var btn = document.getElementById("wallet");
var mintBtn = document.getElementById("mint");
btn.addEventListener("click", connect);
mintBtn.addEventListener("click", mint);
init();
}
```

```
let walletAddress;

let contract;

async function connect() {
  if (window.ethereum) {
    await window.ethereum.request({ method: "eth_requestAccounts" });
    window.web3 = new Web3(window.ethereum);
    const account = web3.eth.accounts;
    //Get the current MetaMask selected/active wallet
    walletAddress = account.givenProvider.selectedAddress;
    console.log(`Wallet: ${walletAddress}`);

  } else {
    document.getElementById('title').innerHTML = "Something went wrong with
your wallet";

    document.getElementById('text').innerHTML = "It seems like you dont have
cryptowallet";

    console.log("No wallet");

    document.getElementById('popup').style.visibility = "visible";
    document.getElementById('popup').style.opacity = "1";
  }
}

const init = async () => {
  const web3 = new Web3(window.ethereum);
```

```

const id = await web3.eth.net.getId();

        contract      =      new      web3.eth.Contract(myContract.abi,
myContract.networks[id].address);
}

async function mint(){
  if(walletAddress == undefined){
    await connect();
  }
  const number = document.getElementById('num').value;
  try{
    await contract.methods.mint(number).send( {from: walletAddress} )
    .then(result=>{
      console.log(result);
      document.getElementById('title').innerHTML = "Congratulations! Your
token:";
      document.getElementById('text').innerHTML = "";
      for (var i = 0; i < number; i++) {
        let id = result.events.Transfer[i].returnValues.tokenId;
        console.log(id);
        document.getElementById('text').innerHTML += "<img
src='https://bafybeigyqifpczmfidzy27lwmnako6bv3nz2eo4znkv52tr53ochrbguzu.ip
fs.nftstorage.link/'+id+'.png' width='220px align='center'>";
      }
      document.getElementById('popup').style.visibility = "visible";
      document.getElementById('popup').style.opacity = "1";

```

```
    })
  } catch(error) {
    document.getElementById('title').innerHTML = "Something went wrong!";
    document.getElementById('text').innerHTML = "It seems like something was
corrupted";
    document.getElementById('popup').style.visibility = "visible";
    document.getElementById('popup').style.opacity = "1";
    console.log(error);
  }
}
```

```
const totalSupply = async () => {
  if(walletAddress === undefined) {
    await connect();
  }
  return await contract.methods.totalSupply().call({from: walletAddress});
}
```