<<Openzepplin library>> contract
ERC721, Ownable, SafeMath ,ReentrancyGuard

is

## <<event>> Minted

- uint256 tokenId
- address beneficiary
- string tokenUri
- address minter

## **CrabNFT contract**

- CrabAttribute[] public crabAttribute
- mapping(uint256 ⇒ address) public creators
- mapping(uint256 ⇒ uint256) tokenIdToCrabIndex
- uint256 public tokenIdPointer
- mint(address, struct, string) external payable: (uint256)
- burn(uint256) external
- exists(uint256) external view: (bool)
- isApproved(uint256, address) public view: (bool)
- \_assertMintingParamsValid(struct, address) pure internal

<<mapping(uint256)>>
\_TokenIDtoAtrributeIndex

## <<struct>> CrabAttribute

- uint256 armour
- uint256 damage
- string class

Battle contract

- sc\_crab: adress
- <<modifier>> CrabOwner
- <<modifier>> ValidPlayer
- <<modifier>> ValidBattleSlot
- <<modifier>> ValidPlayerSlot
- BattlePlayerSlotTokenid: mapping(uint256 ⇒ mapping(address ⇒ mapping(uint256 ⇒ uint256))) public
- BattleGround: mapping(uint256 ⇒ address[2]) public
- Add\_Player(uint256, address[2]) external ValidBattleSlot
- deploy\_crab(uint256, address, uint256, uint256) external ValidPlayer ValidPlayerSlot
- Calculate\_Player\_Point(address) internal: uint256
- Choose\_Winner(uint256) external payable nonReentrant
- FreeBattleGround(uint256, address, uint256) external

<<struct>> CrabAttribute

- uint256 armour
- uint256 damage
- string class

Call Via Address