# 220.https://stackoverflow.com/questions/72256864/how-to-to-prevent-anyone-from-creating-an-smart-contract-nft-linking-to-the-sam

**T:**How to to prevent anyone from creating an smart contract/ NFT linking to the same URI?

**Q:**Below is a min example of a smart contract that allows registering a URI to create an NFT (for ease of argument, this is highly simplified and not doesn't allow any interaction with the contract, that is no one can register their own link, etc.):  
  
pragma solidity ^0.6.0contract ExampleToken {string public name = "example token"string public uri = "http://example-link.com/123examplelink"address public owner\_of\_token = 0x1234567890...}  
  
WARN: THIS PARAGRAPH CONTAINS TAG: [CODE]   
  
Except for being highly simplified, this is how we create NFTs (I am ignoring ERC standards etc.), that is we create a smart contract that allows connecting an address to a link where the file is stored (again, highly simplified, I am not using a mapping or anything).  
  
But how is it ensured that this address truly is the owner of that linked file? Couldn't I just create a second contract that claims a different address is the owner of the same link?

1 **Answer**

**A1:**You could create a mapping to store the URI's  
  
 mapping(string=>bool) private \_usedTokenURIs;  
  
WARN: THIS PARAGRAPH CONTAINS TAG: [CODE]   
  
Then write a function to query this data structure:  
  
function tokenURIExists(string memory tokenURI) public view returns(bool){ return \_usedTokenURIs[tokenURI]==true; }  
  
WARN: THIS PARAGRAPH CONTAINS TAG: [CODE]   
  
then add a require statement in your mint function  
  
WARN: THIS PARAGRAPH CONTAINS TAG: [CODE]   
  
 require(!tokenURIExists(tokenURI),"Token URI already exists")  
  
WARN: THIS PARAGRAPH CONTAINS TAG: [CODE]   
  
 ● it is possible that people can use the same uri and make fake nft’s but remember people are gonna buy from reputable artists not from a random user that you dont know. You cannot prevent someone using same uri and creating a duplicate token. but this article talks about a company's system to prevent this:  
  
https://cointelegraph.com/news/there-is-a-way-to-protect-nfts-from-being-replicated-or-lost-this-company-does-just-that  
  
The Pastel Network has developed a unique solution to provide an extralayer of assurance to collectors that guarantees the NFT is not arip-off or a fake. Using the Pastel NFT fingerprint mechanism,creators can ensure that the authenticity of their original NFT ismaintained. While Pastel verifies the authenticity and provenanceusing the creator’s digital signatures (like all NFT systems in use),it goes much further and assesses how rare the underlying pixelpatterns of the NFTs’ data are.

**C1:**Thank you Yilmaz. But this would only check whether the URI exists on my smart contract right? What if someone else writes a similar contract and allows a user to claim ownership of the same URI there? How would anyone be able to tell who the legitimate owner is?

**C2:**@NiccolaTartaglia updated the answer

**C3:**Thank you Yilmaz for clarifying. But I am wondering from a technical perspective (ignoring reputation), what would prevent anyone from just creating a new smart contract that allows me to claim ownership to the same URI that was already claimed by someone else.

**C4:**@NiccolaTartaglia cointelegraph.com/news/…

**C5:**Got it, thank you so much for sharing this. Very interesting solution.