ERC721 TOKEN

ERC721 is a technical standard for the deployment of ‘Non-Fungible Tokens’, or, NFTs. A Non-Fungible token is a type of token that is unique. They are differentiated on the blockchain by different code and metadata for each NFT.

However, NFTs need not only be ERC721 type; they can be ERC1155 type also.

ALGORITHM FOR SMART CONTRACT:

Step 1: //SPDX-License-Identifier: MIT

Step 2: Compatible pragma version (currently 0.8.19+)

Step 3: IERC165, a meta-interface, is called

Step 4: IERC721 inherits IERC165.

Step 5: IERC721 declares set of prerequisite functions.

Step 6: Interface IERC721Receiver is called.

Step 7: contract is created, which implements IERC721.

Step 8: Externally emitting events; Transfer, Approval and ApprovalForAll utilised.

Step 9: Mappings to identify Owner, count number of NFTs, and record permissions are created.

Step 10: All declared functions are given definition and then will be called during program execution.