```
/**
* @title TokenMarket
* @dev A contract that allows the buying and selling of tokens.
*/

pragma solidity ^0.8.0;

import `@openzeppelin/contracts/token/ERC721/IERC721.sol`;
import `@openzeppelin/contracts/token/ERC20/IERC20.sol`;
import `@openzeppelin/contracts/utils/Context.sol`;

contract TokenMarket is Context {
// Token addresses
address public houseToken;
address public gardenToken;
address public mortgageToken;
address public loanToken;
address public greenAssetToken;
address public investmentToken;
address public insuranceToken;

// Mapping to keep track of token prices
mapping(address => uint256) public tokenPrices;

// Event for token purchase
event TokenPurchased(address buyer, address token, uint256 amount);

// Modifier to ensure only token owners can sell their tokens
modifier onlyTokenOwner(address token, uint256 tokenId) {
require(IERC721(token).ownerOf(tokenId) == _msgSender(), 'TokenMarket: Only token owner can
sell');
_;
}

/**
* @dev Constructor function
* @param _houseToken The address of the house token
* @param _gardenToken The address of the garden token
* @param _mortgageToken The address of the mortgage token
* @param _loanToken The address of the loan token
* @param _greenAssetToken The address of the green asset token
* @param _investmentToken The address of the investment token
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* @param _insuranceToken The address of the insurance token
*/
constructor(
address _houseToken,
address _gardenToken,
address _mortgageToken,
address _loanToken,
address _greenAssetToken,
address _investmentToken,
address _insuranceToken
) {
houseToken = _houseToken;
gardenToken = _gardenToken;
mortgageToken = _mortgageToken;
loanToken = _loanToken;
greenAssetToken = _greenAssetToken;
investmentToken = _investmentToken;
insuranceToken = _insuranceToken;
}

/**
* @dev Function to set the price for a token
* @param token The address of the token
* @param price The price of the token
*/
function setTokenPrice(address token, uint256 price) external {
require(price > 0, 'TokenMarket: Price must be greater than zero');
tokenPrices[token] = price;
}

/**
* @dev Function to buy a token
* @param token The address of the token being bought
* @param amount The amount of tokens being bought
*/
function buyToken(address token, uint256 amount) external payable {
uint256 totalCost = tokenPrices[token] * amount;
require(msg.value >= totalCost, 'TokenMarket: Insufficient payment for token');
require(IERC20(token).balanceOf(address(this)) >= amount, 'TokenMarket: Insufficient token
balance');
IERC20(token).transfer(_msgSender(), amount);
emit TokenPurchased(_msgSender(), token, amount);
```

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}

/**
* @dev Function to sell a token
* @param token The address of the token being sold
* @param amount The amount of tokens being sold
*/
function sellToken(address token, uint256 amount) external {
require(amount > 0, 'TokenMarket: Amount must be greater than zero');
require(IERC20(token).allowance(_msgSender(), address(this)) >= amount, 'TokenMarket: Token
allowance not set');
IERC20(token).transferFrom(_msgSender(), address(this), amount);
payable(_msgSender()).transfer(tokenPrices[token] * amount);
emit TokenPurchased(_msgSender(), token, amount);
}
}
```