

Marketplace

1. Objective

Build a marketplace application that allows users to sell their goods on the open. Sellers have a digital store that displays all items they are selling, and buyers can view, buy directly or make an offer on items in the store.

This is an excellent example of how blockchains can offer a secured ecosystem without relying on third parties.

2. Features

The following must be implemented in your system:

- Users can put items on the market. An item has a set amount of information, including name and description.
- At any point, I should be able to see all the items on the marketplace, and/or all the items sold by a specific user (like a specific store owned by an individual).
- Once I put an item to sale, if someone buys it, the transfer is immediate.
- A buyer can either buy the item directly or make an offer, which the owner can later accept.
- A seller in a hurry can set a moving price, that procedurally goes lower with time.

3. Hints

- You can either do everything on a single contract or split the workload between a smart contract and the blockchain itself.
- Think carefully about how you can implement time variance in your smart contract, for the seller in a hurry. Don't hesitate to modify the way smart contract are implemented on your blockchain.
- The more is handled procedurally on your contract, the better.
- How can you handle automated transfer of ownership once the sale has been made?
- Should you create a cryptocurrency for this marketplace?

