

Auction Description

A vehicle's owner deploys the contract to the blockchain and becomes the auction owner. The auction is opened immediately after the contract deployment, and once the bidding period is over, the highest bidder wins the auction, and the other participants withdraw their bids.

Problem Statement

- > Implement a smart contract for Auction.
- > The contract should have exactly one owner.
- > Clients can bid vehicle for time slots provided by owner
- > The owner have privilege for cancel Auction
- ➤ Once the bidding period is over, the highest bidder wins the auction, and the other participants withdraw their bids.

Prerequisites

- > Install ExpressJS
- > Install Truffle
- MetaMask with 3 or 4 Ropsten Accounts (2 ether Minimum)
- Create an account and project id in Infura





1) Creating and initializing project

```
$ mkdir <NameOfMyProject>
$ cd <NameOfMyProject>
$ truffle init
```

Truffle Output

```
Downloads...
Unpacking...
Setting up...
Unbox successful. Sweet!

Commands:
Compile:
Migrate:
Test contracts:
truffle compile
truffle migrate
truffle test
```

Truffle will create a set of folders: "contracts/," "migrations/," "test/," and a truffle configuration file, "truffle-config.js."

Your Truffle folder should looks like this:

```
-- contracts
| -- Migrations.sol
```



Now you can change this folder structure with your contract requirements

To create a new contract file under contracts folder, use following command

```
$truffle create contract <contract_name>
```

Example: truffle create contract Auction

To configure deployment of new contract, create a script file under migration folder for this use following command

```
$truffle create migration <migration_name>
```

Example: truffle create migration deploy_auction

Now your Truffle folder should look like this

```
-- contracts
-- Auction.sol
```



```
├─ Migrations.sol
├─ migrations
├─ 1_initial_migration.js
├─ 2_deploy_auction.js
├─ test
├─ truffle-config.js
```

