

DECENTRALIZED APARTMENT RENTING APP

- Page preview when there is no apartments created yet:

HouseShare


Contact UsDisconnect from Metamask

Click and Go!
Live decentralized
All around the globe!


Visit your favorite places and rent apartments with the best available prices by paying via your favorite cryptocurrency! Become a member now!


Disconnect from metamask


Connected with 0xf39fd6e51aad88f6f4ce6ab8827279cfffb92266



Book your apartment now with these THREE simple steps!

**Choose Location**
Select the location you want to go to!

**Choose the wanted Date**
Choose the date of arriving!

**Book your apartment**
Book an available apartment!


See balances

Buy tokens

Buy Tokens

We are AirBnb but better!

Rent an apartment now and pay with your favorite cryptocurrency! Use our brand new decentralized app and live anywhere you want all around the globe! You can find us on Facebook, Instagram, Twitter and you can subscribe to our newsletter.
From all of our team have a nice vacation.



Declare your apartment

Declare the price of your apartment in Tokens per night:

Price of Apartment

Upload image of your apartment!

Browse...No file selected.

Declare the address of your apartment!

zip code/City/Address

Declare the details of your apartment (WC, Kitchen, Living room, BedRooms)

Details of Apartment

No apartments created

Select the apartment you want to rent

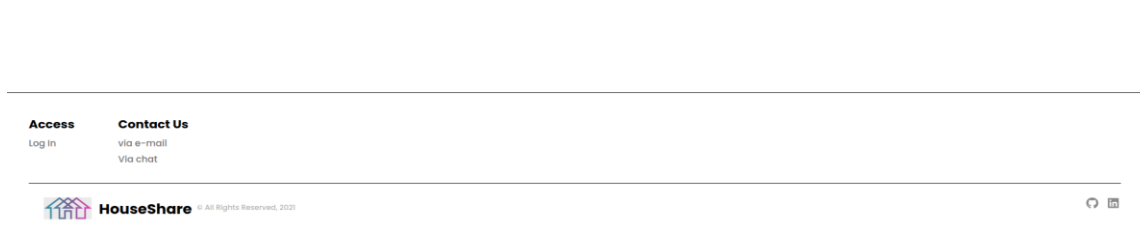
Declare the id, the date of your arrival and departure of the apartment you want to rent!

0mm/dd/yyyymm/dd/yyyy

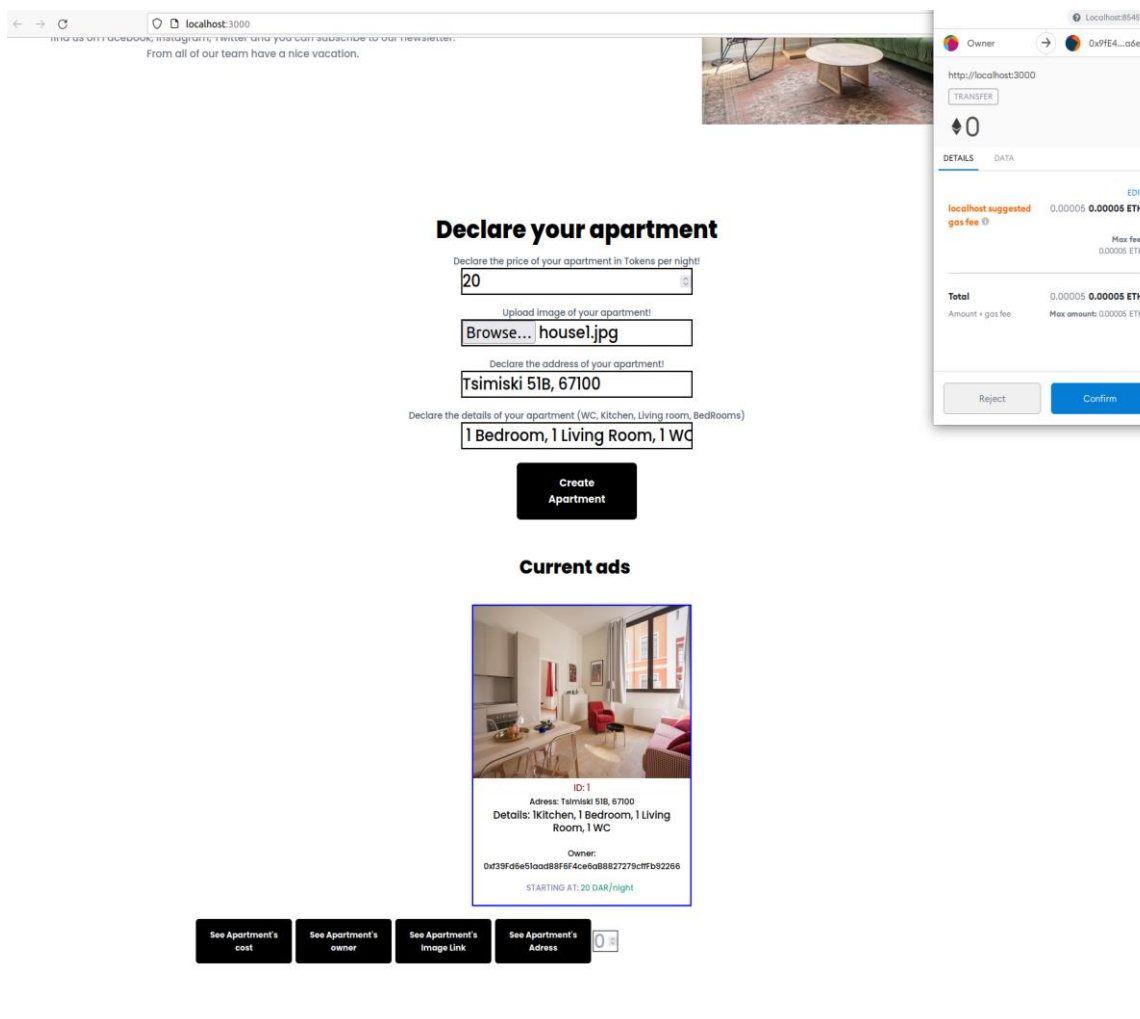
Select the id of the wanted apartment

Release the wanted apartment

See Apartment's renter

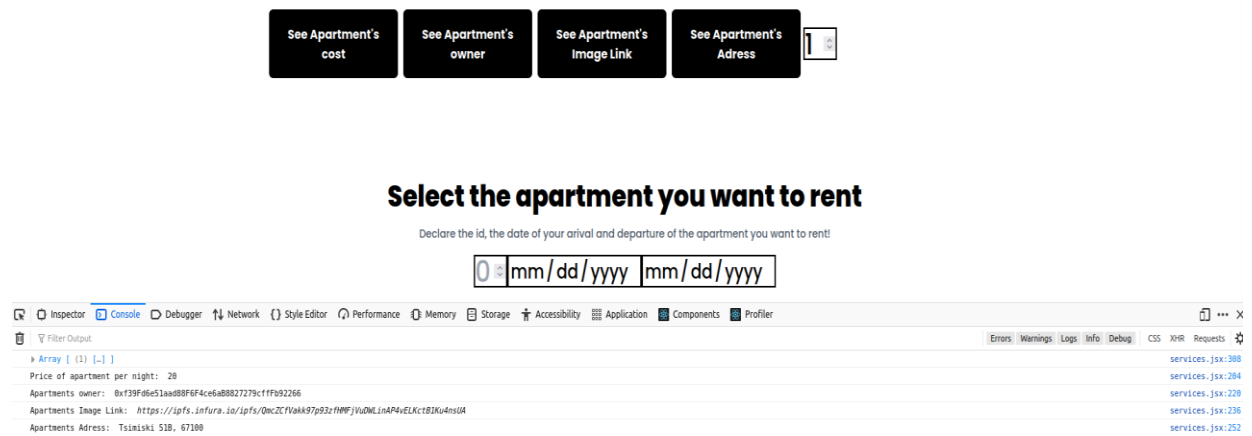


- Preview during and after the creation of an apartment:

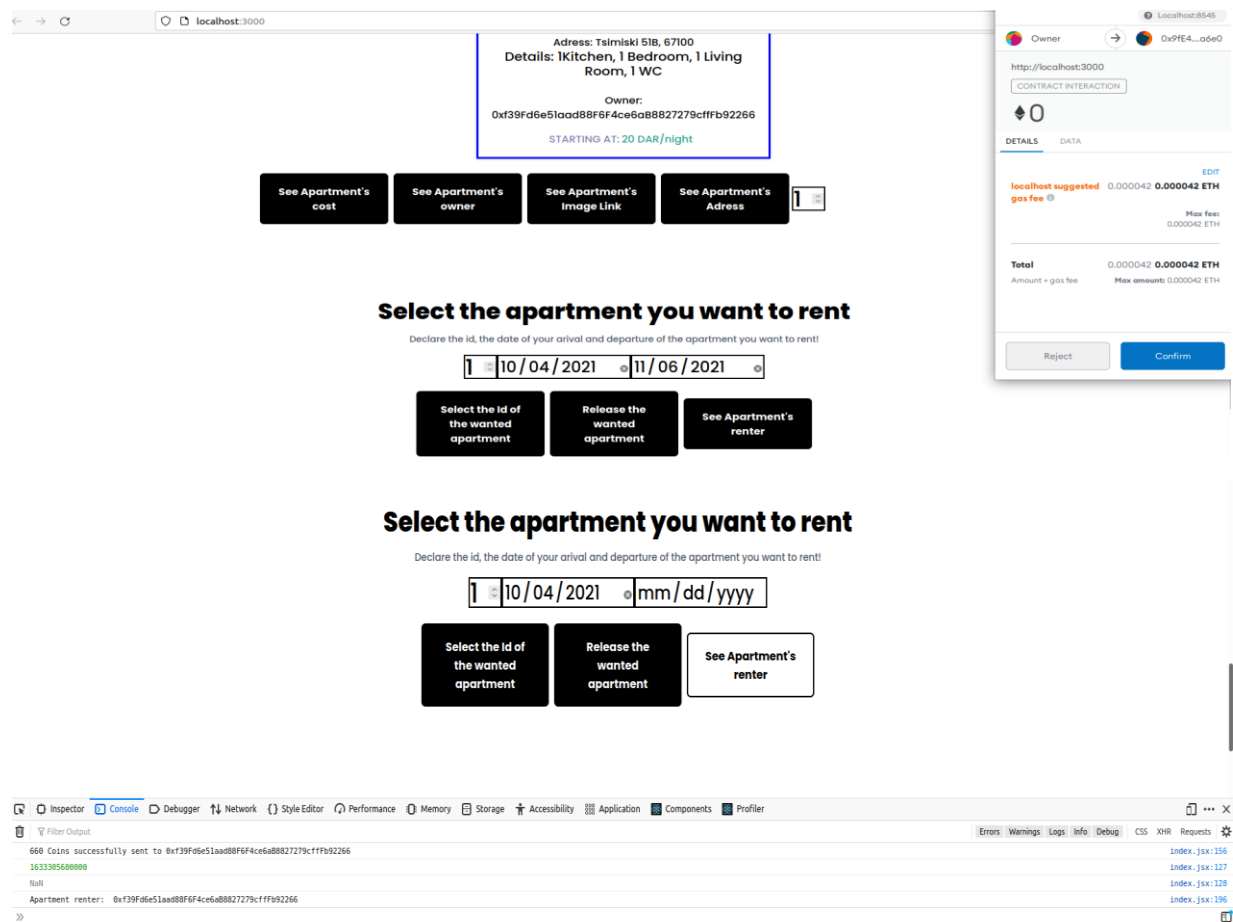


Apartments are created dynamically, the image is stored on the ipfs server and the app retrieves the hash so it can be displayed on the frontend. The price and the details of the apartment are all given by the user and are stored on the blockchain with the hash , the owner's address and the apartments Id.

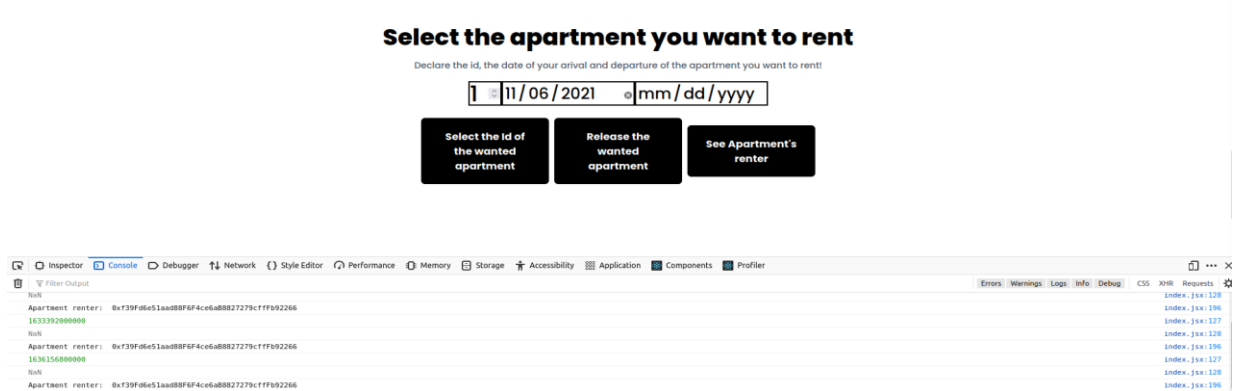
- Retriving data from the apartment struct and displaying them on the console:



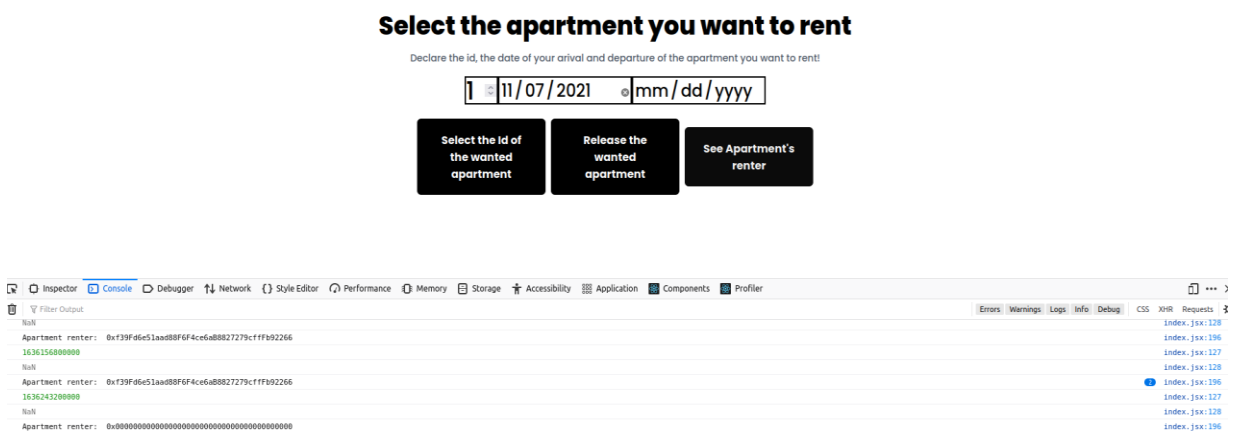
- Renting the apartment for a certain date (the apartment is available for all the other dates):



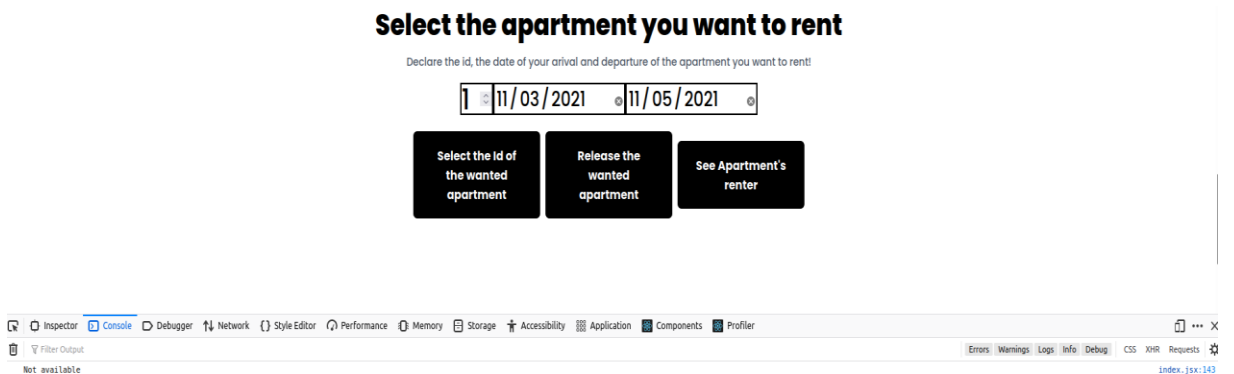
- Checking that the apartment is rented for all the given dates:



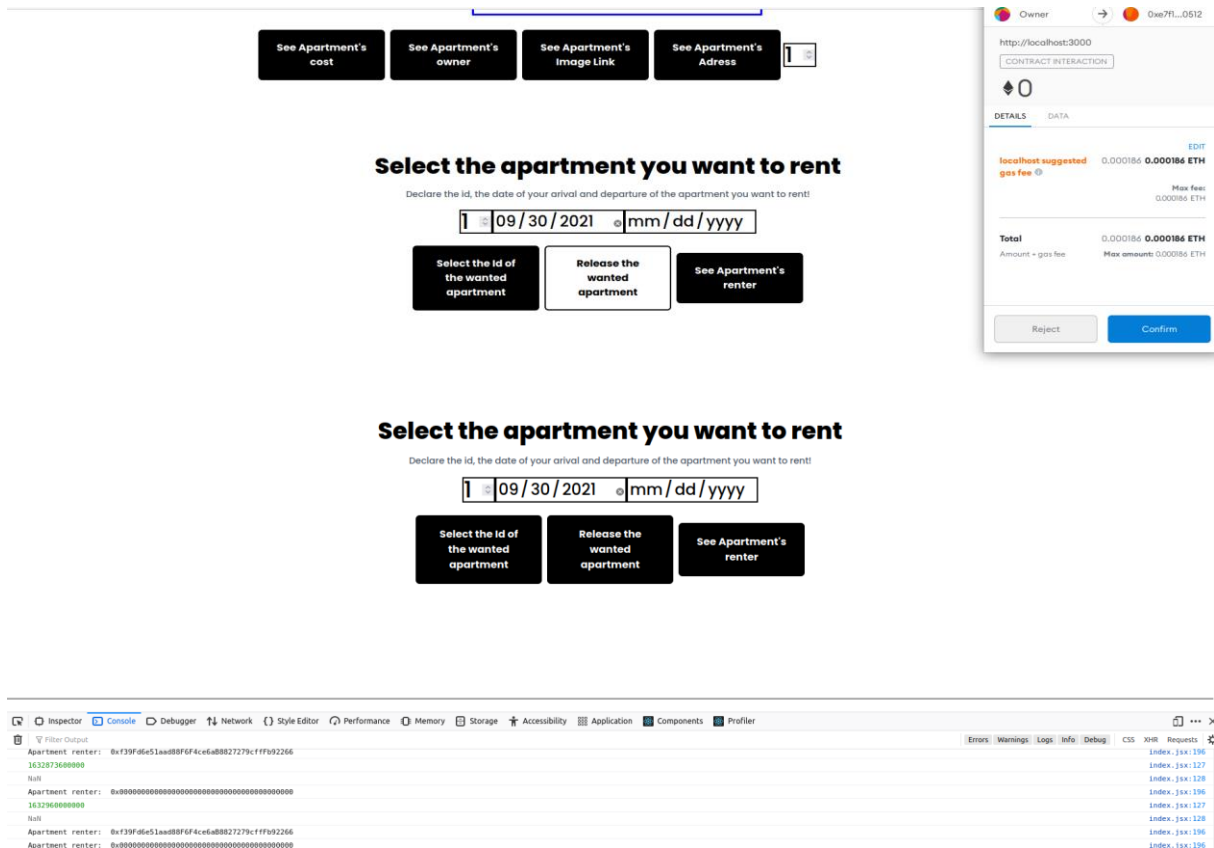
- Checking the apartment's renting status outside of the previous renting dates:



- Output when the user tries to rent an already rented apartment on a certain date:



- Canceling the reservation by the owner given a certain starting date, the rest of the days of the reservation will also get deleted (owner must provide the starting date of the reservation):



A solidity Red-Black Tree binary search library is used to store and access a sorted list of rival intervals (apartment's renting dates). Rival intervals can't overlap.

The Red-Black algorithm rebalances the binary search tree, resulting in $O(\log n)$ insert, remove and search time

For the currency i use an ERC20 token named DAR (Decentralized apartment renting) and it's purpose is just financially

TODO:

ERC721 token for ownership and renting validation