



## A DECENTRALIZED SOCIAL MEDIA USING BLOCKCHAIN AND IPFS

In the recent years, privacy has become a major concern. So far, social media platforms have been owned by their respective central organisations, meaning all the data as well as security are being handled by one single authority. Thus, concerns like privacy, and security have been raised in the past few years.

## POSSIBLE SOLUTION

A blockchain-based social media



### Decentralized

Blockchain runs on a peer-to-peer network



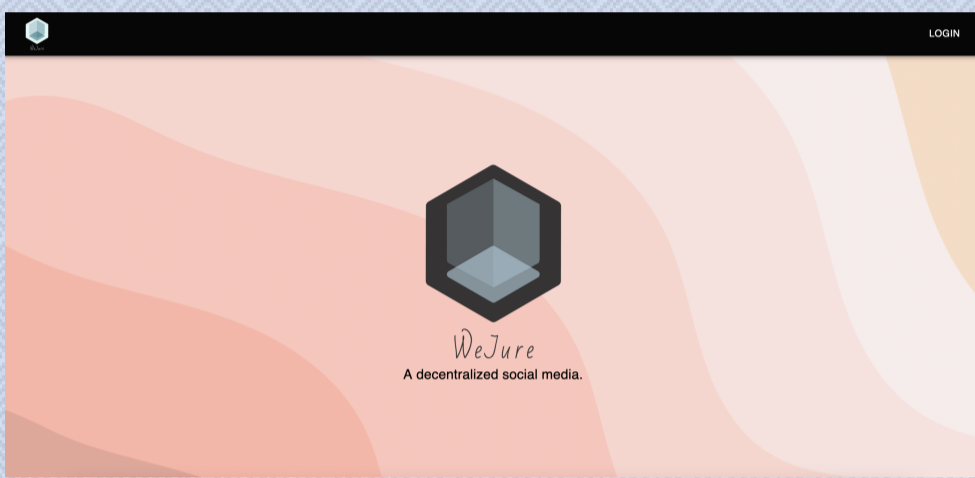
### Secure

Data are on the blockchain is immutable



### Transparent

The source code is accessible by all users. They can check how their data is being used.



1

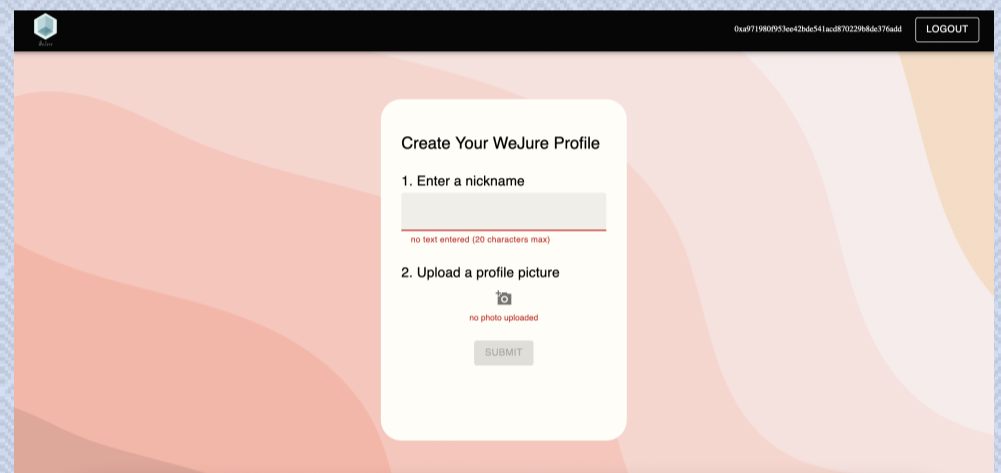
### Login Page

User logs in using their cryptocurrency wallet extension. If none is detected, the web app will ask the user to install MetaMask.

2

### Registration Page

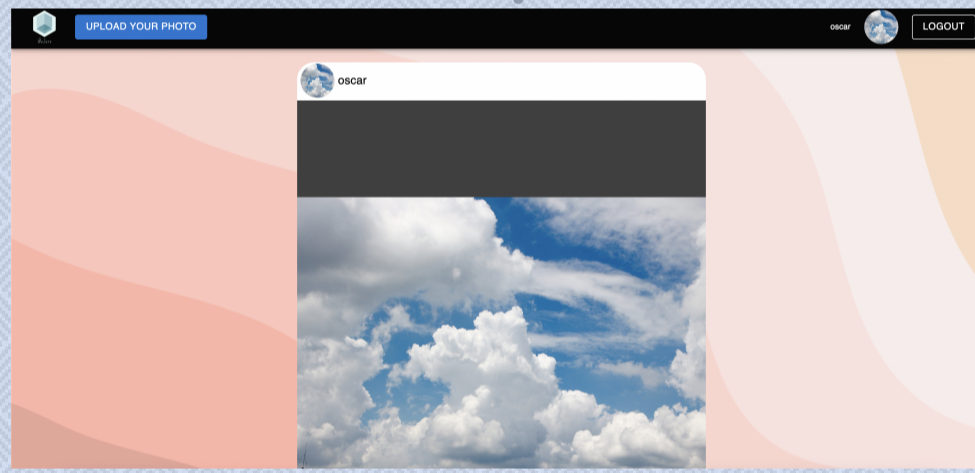
If the web app has no record of the account, it will direct the user to the registration page where the user will be asked to create his/her own profile.



3

### Main Page

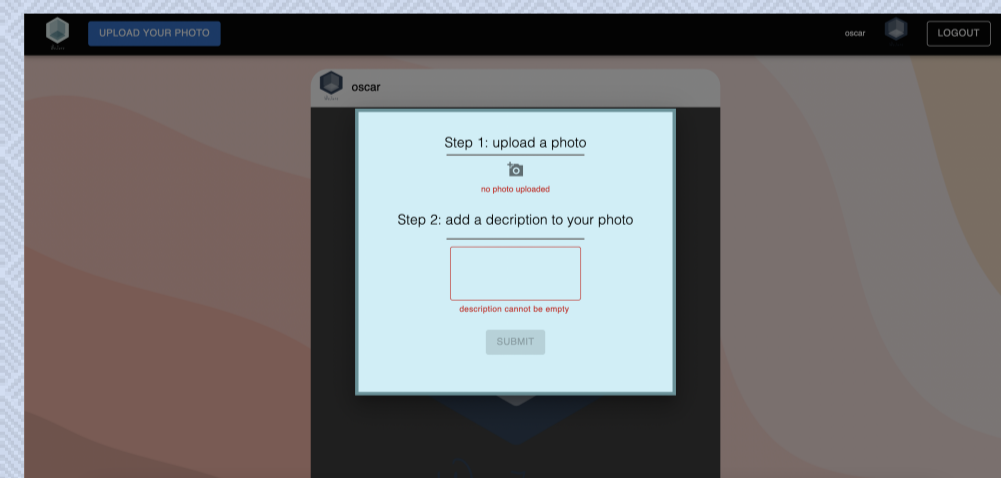
This is the page that displays all the posts, with the newest post on top.



4

### Photo Form

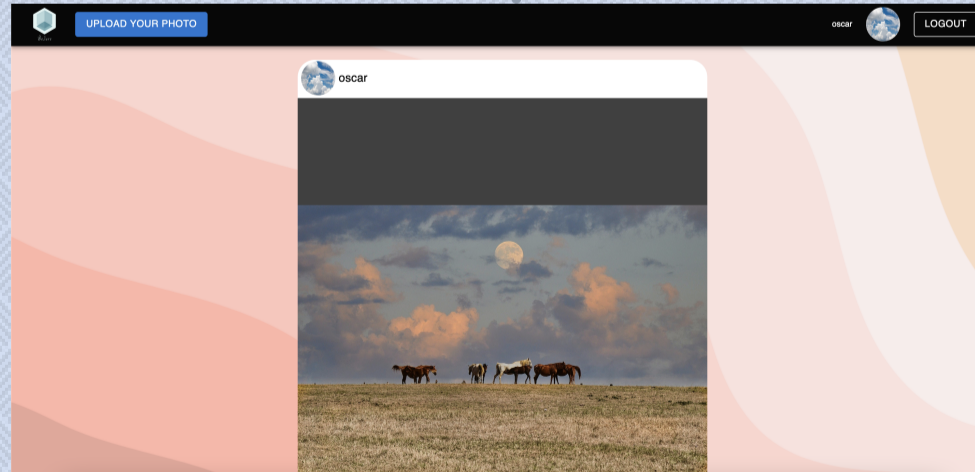
A modal pops up after the user clicks the "Upload Your Photo" button. It allows the user to choose a photo and a description for the post.



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### Updated Main Page

When the user refreshes the web app, the new post will be displayed in the main page.



## LIMITATIONS



### Costs

As every transaction made to the blockchain comes with a cost. Every time a user wants make a post, they would have to pay a fee.



### Immutability

As the blockchain is immutable, a new copy of the smart contract would have to be uploaded after every update.



### Transparency

As every transaction made to the blockchain is transparent. People can easily view the details of every action made on the platform.

IPFS also has the same issue, where as long as a person has the hash value, he/she can access the content of the uploaded file

A possible solution would be to encrypt the content.

