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PiratesCatcher

A Blockchain based platform to stop movie piracy.

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Abstract

Piracy is affecting the film industry globally and is spreading like wildfire.The estimated yearly revenue loss globally is to the tune of US$ 5-6 billion.The movie making process has various phases starting from ideation to post production and distribution.This requires a lot of effort and many people have worked very hard behind the scenes.

When some dishonest person or untrustworthy leaks the original copy to people, it's a great loss to filmmakers and a huge disrespect to the efforts of many people involved in the film.

PiratesCatcher is a blockchain based platform to stop movie piracy.It is a platform where filmmakers can keep a track of all the events starting from movie registration,shooting,editing final copy and then distribution of copies.

It also uses digital watermarking and encryption technologies to detect pirated copy and also the pirate.

Project Description

1. Create a blockchain based platform for filmmakers where they can keep a track of all the events starting from movie registration,shooting,editing final copy and then distribution of copies.

2. After the final copy is made,it's compulsory to upload to our platform i.e. decentralised storage.

3. So, every person's copy be it director,producer etc. will be unique and watermarked and signed with their address.

4. So, every director,producer,reviewer will have their unique wallet address which will be watermarked when they see movies.

5. Now, when the entities of filmmakers get their own copy, an event will be triggered to keep a track of what is happening and store it onto the blockchain network for future proof.

6. Now, copies can be distributed to all registered and authentic cinema halls owners with proper watermarking of their wallet addresses.

7. Now, whenever any cinema telecasts that show, an event is captured.

8. Any type of screen recording of that copy will contain the address on copy due to watermarking.

9. We can add a bounty system for reporting the pirated copy which will contain address to function the project effectively.

Tools/Technologies To Be Used(Tentative)

1. Ethereum Blockchain

2. Rinkeby Testnet

3. Sia File Storage/IPFS File Storage

4. Remix IDE

5. Ganache

6. Truffle

7. React.js

8. Metamask

9. Web3.js

10. Infura

11. VS Code IDE

Advantages

1. This platform will help us to accurately catch the pirate who has leaked the copy with the help of digital watermarking.

2. Each event in movie making process will be tracked.

3. We can easily find at which instance the movie was leaked by seeing the logs in blockchain ledger.

4. There will be bounties for the person who reports the leaked copy.

Features/Functionalities

1. Watermarking

   Behaviour:-This is a strong feature which will help us find the pirate as he cannot hide the address on film copy.

2. Movie Process Tracking

   Behaviour:- This feature helps us find at which point the movie was leaked.We can easily see track records of activities happened in movie production.

3. Bounties for Reporter

   Behaviour:- This feature will encourage the people to stop piracy.

   If they report the pirated copy. They will get bounty.

4. Decentralised Storages

   Behaviour:- Decentralised storages are hash based storages with the concept of indexing each and every file with hash.