Problem Statement

There is no sufficient trust system in place which users have access to which allows them to ensure the integrity of a file sent over the internet and thus keeping the source, receiver and transportation of said file, safe.

There is no sufficient trust system in place which ensures the integrity of files sent over the internet which protects the end user from alteration by the sender by ensuring that the file has not been altered in any manner.

Investigate, design and create a trusted distributed ledger which can determine whether a file from an online source is identical to a source or file already in the ledger.

It is possible for the source of a given file to alter the contents of

The source of a given file is an untrusted entity

All participants in a given network cannot assume that all other participants of the network are trustworthy.

Not all users of the internet have readily available access to a trustworthy Distributed Ledger to verify the integrity of a file in a Distributed Ledger.

I was thinking of something along the lines of user’s submitting specific files and the source of that file and storing that on a distributed ledger which other users can use to compare against. By only storing the hash of the file, the size associated with each file decreases significantly thus making it efficient to store. By using a Merkle Tree