

Avoid Duplicated Space For Same Files Specially On Social Media

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Abstract:

Now a days everyone smart phone holder using with whatsapp like social apps so plenty of images/videos/documents are stores every day in our mobile phones ultimately space gets reduce time to time and that is the biggest problem to manage these files. In this paper presents proposed solution to avoid this duplication of data for storing of memory space in mobile phones. Here presents a framework that will work on to avoid duplication of data.

Key Words: Social Apps, image/video processing, memory management, mobile computing.

Introduction:

Now we may say that the place of desktop computer is taken by mobiles, people are more familiar with smart phone than computer systems. And now there are various application i.e apps are also available for variety of functions and services on mobile phones. Some Social media site/apps(whatsapp) provide manual mechanism to select or download media file.

For avoiding duplicated files i.e images, videos, documents pdf etc. Basically there are two technologies comes:

i) Identification of duplicated files:

For identification of any files, different feature extraction and classification techniques as well as some meta-data used to identify identical files.

ii) Technique used to avoid duplication.

For reducing duplicated memory space, file compression techniques used.

Literature Review:

Nowadays WhatsApp became very popular for sending messages, chatting sharing picture of videos etc. News or any post that spread very quickly whether it is constructive or destructive.[1]

As per the survey, the maximum percentage of WhatsApp users are from age group from 26 to 35 and the minimum percentages are from senior citizen. WhatsApp provides a facility to send different types of messages like text, images, video, audio, and others. Author reported that text messages are used more as compared to other types of messages [2].

The very fast and rapid increasing use of mobile devices encourages the information system community to design efficient and easy communication solutions. Rather than just messaging applications IMAs, specially WhatsApp, provide users with new and simple communication experience. However, the limited space for storing of mobile devices might negatively impact the user experience of these services.[3]

Low storage space is the most important issue. In this paper author solved the issue of low space due to image duplication of file by the used hash function (MD5), Huffman code is use to generating unique code for each and every image and save this huffman code in image in the index file and use it to avoid of a duplicate from device's storage. [4]

the notion of authorized data de-duplication was proposed to protect the data security by including differential privileges of users in the duplicate check, presented several new de-duplication constructions supporting authorized duplicate check in hybrid cloud architecture, in which the duplicate-check tokens of files are generated by the private cloud server with private keys. Security analysis demonstrates that our schemes are secure in terms of insider and outsider attacks specified in the proposed security model.[5]

In this paper, Author presented a novel approach to realize cipher text policy attribute-based storage system support secure de-duplication. Storage system is built under a hybrid cloud architecture, where a private cloud manipulates the computation and a public cloud manages the storage. If the proof is valid, the private cloud runs a tag matching algorithm to see whether the same data underlying the cipher text has been stored. If

so, whenever it is necessary, it regenerates the cipher text into a cipher text of the same plaintext over an access policy which is the union set of both access policies[6]

Challenges:

As far as mobile computing concern memory plays important role for:
Storing various files on phone on limited space.
Vast data cannot be easily access on mobiles.
It also decreases the speed of cell phones.
Processor having less power than computers processor although mobiles trying to get place of computers.

Existing Techniques:

For Images:

When it comes to reducing the size of your images for the web there are different types of compression you can choose from. In today's post we will look at **lossy vs lossless compression**. [7]

Lossy Advantages and Disadvantages

Advantages: Very small file sizes and lots of tools, plugins, and software support it.

Disadvantages: Quality degrades with higher ratio of compression. Can't get original back after compressing.

Lossless Advantages and Disadvantages

Advantages: No loss of quality, slight decreases in image file sizes.

Disadvantages: Larger files than if you were to use lossy compression.

WebP Advantages and Disadvantages

Advantages: No loss of quality, large decreases in file size.

Disadvantages: Less browser support, slightly larger file sizes than lossy.

Proposed framework:

Here specifically taken picture files to reduce space in memory:

Media file stored in memory of mobile phone.

When later same file posted and storing at memory.

It compared to the previously stored files.

If new file is match to the previous file then there stores only its reference rather than actual file.

Here reference of actual file is so small in size than the actual that media file.

As compare to picture file: Its actual file size in few Kilo Bytes and its reference file size is few Bytes, so multiple size of memory is saved.

Drawbacks:

The first file should not be delete otherwise reference files will not displayed.

Reference keeping mechanism will be work there.

To identifying/ comparing new files to the previous files is much tedious task. There complete image/ video processing mechanism(i.e extracting features of existing file and compare to the new arrived every file is so complex task) will work that may decrease the speed of mobile/computer.

Further Scope:

Shifting the actual file to reference file should be provide.

To develop simple and less time consuming algorithm for feature extraction and identification of media files.

Conclusion:

For identifying files and reducing the memory space for duplicated files, there are n numbers of traditional techniques used. Here in this paper introduced referencing file technique to reduce the memory space

especially for social media application that generally used on mobiles, there are some pros and cons of this referencing file technique so there is scope for further research on memory management.

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