ABSTRACT

Rapid development of information technology has made the transmission of data over internet much easier than a decade ago. One form of those data being transferred is image file. Rule-of-thumb states that the bigger the size of the file the slower it will take to process. Hence, the pursuit of achieving faster transmission lies with the smaller file size. Size can be reduced by means of compression technique and can also be retrieved back with the help of decompression technique. This paper describes the development of an application that compresses and decompresses an image using Discrete Cosine Transform (DCT) technique and employing MATLAB software. It will be appeared in the form of MATLAB graphical user interface (GUI) in which a user can choose one out of six compression ratios available. The principle of this application, which is to first load an image file, compress and display it, save it, and finally decompress it back, will be described further in coming pages.