ABSTRACT

Bar code is a real object tagging symbol made of patterns of black and white bars and stripes in order to read easily by the computer. Generally barcode tagging technique cosist of two type, that is linear bar code and two dimensional bar code. 2D Barcode standard has much variation, although the only one better then the others is the standard that has been found in japan, it's called Quick Response Code (QR Code).

Untill now, in development, mobile equipment such as mobile phone has much additional fasility such as integrated digital camera, network connection using bluetooth and infra red, up to sepecial operating system. With the operating system in the mobile phone enable developers to produce great application.

Bases on QR Code's characteristic and technology that used by the mobile equipment, this paper will explain how to make an aplication that could read data from QR Code image which result by the integrated camera on mobile equipment bases on symbian operating system Nokia7650. The process of QR Code recognition start with the capture of QR Code image by the camera of Nokia7650, binerisation of the image then continue by the QR Code symbol reading process. On the process of binerisation Quick Adaptive Thresholding algorithm will be applied, this is because this algorithm can handle binerisation for the image that has uneven illumination.

From the result of testing and analysis from the QR Code recoginition process of version 1 – 5, the conclusion are the QR Code can be recognized by Nokia7650 mobile equipment specially version 1 – 3, for version 4 and 5 the precisement of recognition are very lack. The speed for recognition are fast and the speed of recognition in every version are relatively equal.

Keywords : binerisation, digital camera, QR Code, mobile equipment.