## <<interface>> BarcodeIO

- + scan(BarcodeImage bc): boolean
- + readText(String text): boolean
- + generateImageFromText(): boolean
- + translateImageToText(): boolean
- + displayTextToConsole(): void
- + displayImageToConsole(): void

## DataMatrix

- + BLACK CHAR: char
- + WHITE CHAR: char
- image: BarcodeImage
- text: String
- actualWidth: int
- actualHeight: int
- + DataMatrix()
- + DataMatrix(BarcodeImage image)
- + DataMatrix(String text)
- + readText(String text): boolean
- + scan(BarcodeImage image): boolean
- + generateImageFromText(): boolean
- + translateImageToText(): boolean
- + displayTextToConsole(): void
- + displayImageToConsole(): void
- + getActualWidth():int
- + getActualHeight(): int
- computeSignalWidth(): int
- computeSignalHeight(): int
- cleanImage(): void
- moveImageToLowerLeft(): void
- shiftImageDown(): void
- shiftImageLeft(): void
- + displayImageToConsole(): void
- readCharFromCol(int col): char
- writeCharToCol(int col, int code): boolean

## Optical Barcode Program

