BarcodeImage

* MAX\_HEIGHT: int
* MAX\_WIDTH: int

- imageData: boolean[][]

* BarcodeImage()
* BarcodeImage(String[] strData)
* BarcodeImage(BarcodeImage other)
* getPixel(int row, int col): boolean
* setPixel(int row, int col, boolean value): boolean
* checkSize(String[] data): boolean
* initImageData(): void
* displayToConsole(): void
* clone(): BarcodeImage

<<interface>>

Cloneable

* clone(): Object

DataMatrix

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

<<interface>>

BarcodeIO

* 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