

image_char_matching

SubImgCharMatcher

- charBrightness: HashMap<Character, Double>
- minBrightness: double
- maxBrightness: double

+ getCharByImageBrightness(brightness : double) : char
+ addChar(c : char) : void
+ removeChar(c : char) : void
+ getCharSet() : Set<Character>
- brightnessValue(c: char) :double
- normalizeBrightnessValues(): void

CharConverter

+ convertToBoolArray(c : char)
+ getBufferedImage(c : char, fontName : String, pixelsPerRow : int) : BufferedImage

ascii_art

Shell

- imageToProcess: ImageProcessing
- subImgCharMatcher: SubImgCharMatcher
- consoleAsciiOutput: ConsoleAsciiOutput
- htmlAsciiOutput: HtmlAsciiOutput
- outputDirectory: AsciiOutput
- currResolution: int

+ run() : void
- promptProcessing(inputPrompt : String, inputArg : String) : void
- addPrompt(arg : String) : void
- removePrompt(arg : String) : void
- changeResolutionPrompt(arg : String) : void
- imagePrompt(arg : String) : void
- outputPrompt(arg : String) : void
- asciiArtPrompt() : void
- commandError() : void
+ main(args: String[]) : void

KeyboardInput

+ getObject() : KeyboardInput
+ readLine() : String

AsciiArtAlgorithm

- image: ImageProcessing
- subImgCharMatcher: SubImgCharMatcher
- resolution: int

+ run() : char[][]

ex

IncorrectFormatException

- type: String

+ getType() : String

ExceedingBoundsException

- type: String

+ getType() : String

ExecuteException

- type: String

+ getType() : String

image

Image

- pixelArray: Color[][]
- width: int
- height: int

+ getWidth() : int
+ get Height() : int
+ getPixel(x : int, y : int) : Color
+ saveImage(fileName : String) : void

ImageProcessing

- image: Image
- subImagesBrightnessArray: double[]
- width: int
- height: int
- resolution: int
- minCharsInRow: int
- maxCharsInRow: int
- pixelArray: Color[][]

+ getSubImagesBrightnessArray(resolution : int) : double[]
+ getWidth() : int
+ get Height() : int
+ getMinCharsInRow() : int
+ getMaxCharsInRow() : int
- splitToSubImages(): void
- imagePadding(image : Image, prevHeight : int, prevWidth) : Image
- getGrayShade(pixel : Color) : double
- subImageBrightness(pixels : Color[][]) : double