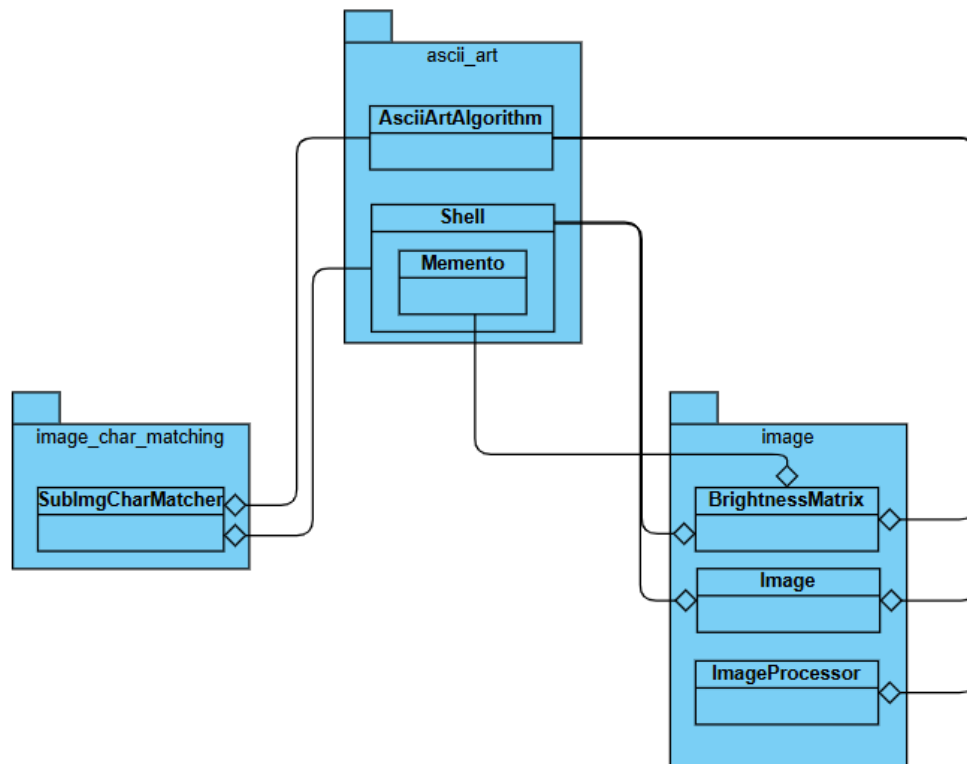
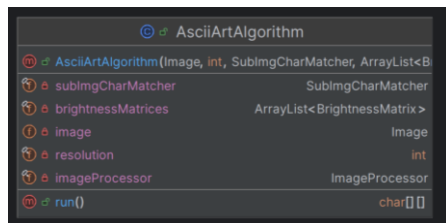


EX3 - UML



The methods and fields of every class are in the next pages (in order to keep the UML diagram clear and readable) :



Shell	
Shell()	
memento	Memento
sortedChars	SortedSet<Character>
resolution	int
image	Image
brightnessMatrices	ArrayList<BrightnessMatrix>
outputPath	String
subImgCharMatcher	SubImgCharMatcher
handleRound(String[])	void
sortedSetToArray(SortedSet<Character>)	char[]
handleAddOrRemove(String[], boolean)	void
handleCharsInput()	void
createCharArr(String)	char[]
run(String)	void
main(String[])	void
printAsciiArt(char[][])	void
initializeDefaultChars()	void
createAllCharsArray()	char[]
addToChars(char[])	void
createBrightnessMatrix()	BrightnessMatrix
handleAsciiArt()	void
handleRes(String[])	void
handleOutput(String[])	void
removeFromChars(char[])	void

BrightnessMatrix	
BrightnessMatrix (Image[])	
doubleImage	double[][]
getPixel(int, int)	double

Image	
Image(String)	
Image(Color[], int, int)	
width	int
pixelArray	Color[]
height	int
getPixel(int, int)	Color
saveImage(String)	void
getHeight()	int
getWidth()	int

ImageProcessor	
ImageProcessor()	
nextPowerOfTwo(int)	int
dividelImage(Image, int)	Image[]
extendImage(Image)	Image
calculateSidePixels(int, int)	int
extendDim(int)	int
imageBrightness (Image)	double

SubimgCharMatcher		
SubimgCharMatcher(char[])		
minValue		double
maxValue		double
charMap		Map<Character, Double>
roundMethod		String
brightnessCharMap		Map<Character, Double>
getCharBrightnessValue(char)		Double
updateMax(double)		void
setRoundMethod(String)		void
getCharByImageBrightness(double)		char
addChar(char)		void
updateMin(double)		void
findNewMinMax()		void
removeChar(char)		void
getNumTrueCells(boolean[])		int
calculateDistance(double, double)		double
createBrightnessCharMap()		void