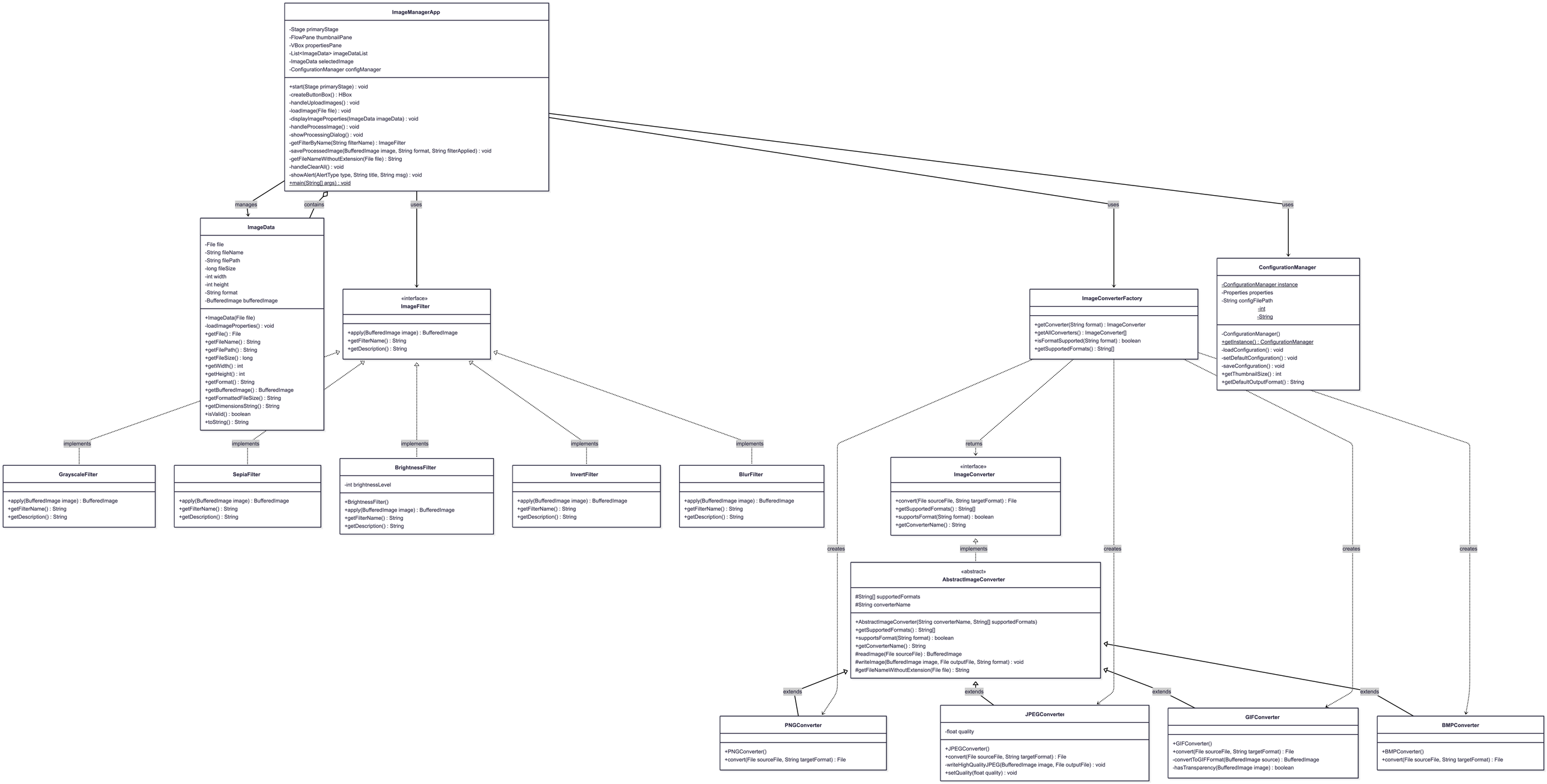
ImageManagerApp
-Stage primaryStage
-FlowPane thumbnailPane
-VBox propertiesPane
-List<ImageData> imageDataList
-ImageData selectedImage
-ConfigurationManager configManager
+start(Stage primaryStage) : void
-createButtonBox() : HBox
-handleUploadImages() : void
-loadImage(File file) : void
-displayImageProperties(ImageData imageData) : void
-handleProcessImage() : void
-showProcessingDialog() : void
-getFilterByName(String filterName) : ImageFilter
-saveProcessedImage(BufferedImage image, String format, String filterApplied) : void
-getFileNameWithoutExtension(File file) : String
-handleClearAll() : void
-showAlert(AlertType type, String title, String msg) : void
+main(String[] args) : void
manages
contains
uses
uses
uses
ImageData
-File file
-String fileName
-String filePath
-long fileSize
-int width
-int height
-String format
-BufferedImage bufferedImage
+ImageData(File file)
-loadImageProperties() : void
+getFile() : File
+getFileName() : String
+getFilePath() : String
+getFileSize() : long
+getWidth() : int
+getHeight() : int
+getFormat() : String
+getBufferedImage() : BufferedImage
+getFormattedFileSize() : String
+getDimensionsString() : String
+isValid() : boolean
+toString() : String
«interface»
ImageFilter
+apply(BufferedImage image) : BufferedImage
+getFilterName() : String
+getDescription() : String
ImageConverterFactory
+getConverter(String format) : ImageConverter
+getAllConverters() : ImageConverter[]
+isFormatSupported(String format) : boolean
+getSupportedFormats() : String[]
ConfigurationManager
-ConfigurationManager instance
-Properties properties
-String configFilePath
-int
-String
-ConfigurationManager()
+getInstance() : ConfigurationManager
-loadConfiguration() : void
-setDefaultConfiguration() : void
-saveConfiguration() : void
+getThumbnailSize() : int
+getDefaultOutputFormat() : String
implements
implements
implements
implements
implements
GrayscaleFilter
+apply(BufferedImage image) : BufferedImage
+getFilterName() : String
+getDescription() : String
SepiaFilter
+apply(BufferedImage image) : BufferedImage
+getFilterName() : String
+getDescription() : String
BrightnessFilter
-int brightnessLevel
+BrightnessFilter()
+apply(BufferedImage image) : BufferedImage
+getFilterName() : String
+getDescription() : String
InvertFilter
+apply(BufferedImage image) : BufferedImage
+getFilterName() : String
+getDescription() : String
BlurFilter
+apply(BufferedImage image) : BufferedImage
+getFilterName() : String
+getDescription() : String
returns
«interface»
ImageConverter
+convert(File sourceFile, String targetFormat) : File
+getSupportedFormats() : String[]
+supportsFormat(String format) : boolean
+getConverterName() : String
creates
implements
creates
creates
creates
«abstract»
AbstractImageConverter
#String[] supportedFormats
#String converterName
+AbstractImageConverter(String converterName, String[] supportedFormats)
+getSupportedFormats() : String[]
+supportsFormat(String format) : boolean
+getConverterName() : String
#readImage(File sourceFile) : BufferedImage
#writeImage(BufferedImage image, File outputFile, String format) : void
#getFileNameWithoutExtension(File file) : String
extends
extends
extends
extends
PNGConverter
+PNGConverter()
+convert(File sourceFile, String targetFormat) : File
JPEGConverter
-float quality
+JPEGConverter()
+convert(File sourceFile, String targetFormat) : File
-writeHighQualityJPEG(BufferedImage image, File outputFile) : void
+setQuality(float quality) : void
GIFConverter
+GIFConverter()
+convert(File sourceFile, String targetFormat) : File
-convertToGIFFormat(BufferedImage source) : BufferedImage
-hasTransparency(BufferedImage image) : boolean
BMPConverter
+BMPConverter()
+convert(File sourceFile, String targetFormat) : File