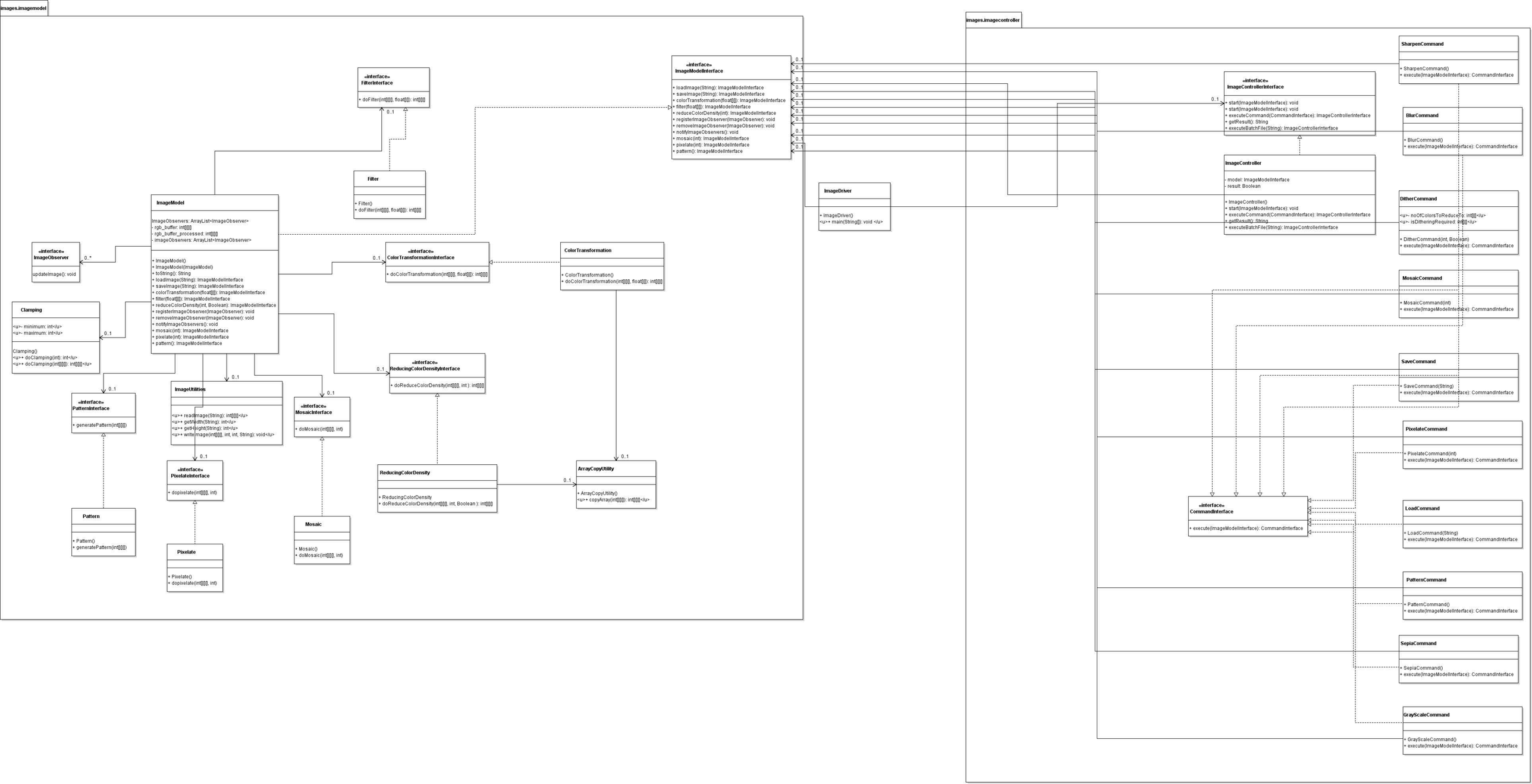
images.imagemodel
«interface»
FilterInterface
+ doFilter(int[][][], float[][]): int[][][]
0..1
Filter
+ Filter()
+ doFilter(int[][][], float[][]): int[][][]
«interface»
ImageModelInterface
+ loadImage(String): ImageModelInterface
+ saveImage(String): ImageModelInterface
+ colorTransformation(float[][]): ImageModelInterface
+ filter(float[][]): ImageModelInterface
+ reduceColorDensity(int): ImageModelInterface
+ registerImageObserver(ImageObserver): void
+ removeImageObserver(ImageObserver): void
+ notifyImageObservers(): void
+ mosaic(int): ImageModelInterface
+ pixelate(int): ImageModelInterface
+ pattern(): ImageModelInterface
ImageModel
ImageObservers: ArrayList<ImageObserver>
- rgb_buffer: int[][][]
- rgb_buffer_processed: int[][][]
- imageObservers: ArrayList<ImageObserver>
+ ImageModel()
+ ImageModel(ImageModel)
+ toString(): String
+ loadImage(String): ImageModelInterface
+ saveImage(String): ImageModelInterface
+ colorTransformation(float[][]): ImageModelInterface
+ filter(float[][]): ImageModelInterface
+ reduceColorDensity(int, Boolean): ImageModelInterface
+ registerImageObserver(ImageObserver): void
+ removeImageObserver(ImageObserver): void
+ notifyImageObservers(): void
+ mosaic(int): ImageModelInterface
+ pixelate(int): ImageModelInterface
+ pattern(): ImageModelInterface
«interface»
ImageObserver
updateImage(): void
0..*
«interface»
ColorTransformationInterface
+ doColorTransformation(int[][][], float[][]): int[][][]
ColorTransformation
+ ColorTransformation()
+ doColorTransformation(int[][][], float[][]): int[][][]
Clamping
<u>- minimum: int</u>
<u>- maximum: int</u>
Clamping()
<u>+ doClamping(int): int</u>
<u>+ doClamping(int[][][]): int[][][]</u>
«interface»
ReducingColorDensityInterface
+ doReduceColorDensity(int[][][], int): int[][][]
«interface»
PatternInterface
+ generatePattern(int[][][])
ImageUtilities
<u>+ readImage(String): int[][][]</u>
<u>+ getWidth(String): int</u>
<u>+ getHeight(String): int</u>
<u>+ writeImage(int[][][], int, int, String): void</u>
«interface»
MosaicInterface
+ doMosaic(int[][][], int)
«interface»
PixelateInterface
+ dopixelate(int[][][], int)
ReducingColorDensity
+ ReducingColorDensity
+ doReduceColorDensity(int[][][], int, Boolean): int[][][]
ArrayCopyUtility
+ ArrayCopyUtility()
<u>+ copyArray(int[][][]): int[][][]</u>
Pattern
+ Pattern()
+ generatePattern(int[][][])
Pixelate
+ Pixelate()
+ dopixelate(int[][][], int)
Mosaic
+ Mosaic()
+ doMosaic(int[][][], int)
ImageDriver
+ ImageDriver()
<u>+ main(String[]): void </u>
images.imagecontroller
«interface»
ImageControllerInterface
+ start(ImageModelInterface): void
+ start(ImageModelInterface): void
+ executeCommand(CommandInterface): ImageControllerInterface
+ getResult(): String
+ executeBatchFile(String): ImageControllerInterface
ImageController
- model: ImageModelInterface
- result: Boolean
+ ImageController()
+ start(ImageModelInterface): void
+ executeCommand(CommandInterface): ImageControllerInterface
+ getResult(): String
+ executeBatchFile(String): ImageControllerInterface
«interface»
CommandInterface
+ execute(ImageModelInterface): CommandInterface
SharpenCommand
+ SharpenCommand()
+ execute(ImageModelInterface): CommandInterface
BlurCommand
+ BlurCommand()
+ execute(ImageModelInterface): CommandInterface
DitherCommand
<u>- noOfColorsToReduceTo: int[][]</u>
<u>- isDitheringRequired: int[][]</u>
+ DitherCommand(int, Boolean)
+ execute(ImageModelInterface): CommandInterface
MosaicCommand
+ MosaicCommand(int)
+ execute(ImageModelInterface): CommandInterface
SaveCommand
+ SaveCommand(String)
+ execute(ImageModelInterface): CommandInterface
PixelateCommand
+ PixelateCommand(int)
+ execute(ImageModelInterface): CommandInterface
LoadCommand
+ LoadCommand(String)
+ execute(ImageModelInterface): CommandInterface
PatternCommand
+ PatternCommand()
+ execute(ImageModelInterface): CommandInterface
SepiaCommand
+ SepiaCommand()
+ execute(ImageModelInterface): CommandInterface
GrayScaleCommand
+ GrayScaleCommand()
+ execute(ImageModelInterface): CommandInterface

Cross Stich Controller Testing Plan

S.No	Description	Result	Expected
1	Load the file by giving valid filepath and verify result by calling getResult()		Success
2	Load the file by giving invalid filepath and verify result by calling getResult()		Failure
3	Save the file by giving valid filepath and verify result by calling getResult()		Success
4	Save the file by giving invalid filepath and verify result by calling getResult()		Failure
5	Call executeCommand by giving blur command and verify result by calling getResult()		Success
6	Call executeCommand by giving sharpen command and verify result by calling getResult()		Success
7	Call executeCommand by giving grayscale command and verify result by calling getResult()		Success
8	Call executeCommand by giving sepia command and verify result by calling getResult()		Success
9	Call executeCommand by giving dither command by giving number of color reduce to value as 8 and dithering required value as true and verify result by calling getResult()		Success
10	Call executeCommand by giving dither command by giving number of color reduce to value as 8 and dithering required value as false and verify result by calling getResult()		Success
11	Call executeCommand by giving pixelate command by giving number of squares as 30 and dithering required value as true and verify result by calling getResult()		Success
12	Call executeCommand by giving mosaic command by giving number of seeds as 1000 and dithering required value as true and verify result by calling getResult()		Success
13	Call executeCommand by giving pattern command and verify result by calling getResult() and visually checking the generated txt file		Success and file saved at /res/pattern.txt
14	Call executeBatchFile by giving filepath and verify result by calling getResult()		Success