

How was the Project done?

To start off with, I Googled about how an ImageViewer can be created using Java, specially to be sure of what classes and libraries to use in my project. The following link helped me lot to start off well:

<http://forum.codecall.net/classes-code-snippets/24086-java-imageviewer-simple.html>

It did not have previews or any routines that scaled the image so as to fit it to a particular size in the viewer. All that happened was when you selected an image-file from the open dialog box, it displayed the image. If the image was big enough or of HD quality, it simply cropped the image in an irregular manner and it was not good at all to look at.

However, I studied the program carefully and planned how my image viewer is going to be. The libraries I used in my project are:

- ✓ Javax.swing (for basic GUI widgets like Frame, Label etc)
- ✓ Java.awt.event (for Listening to various action events like mouse click and selection)
- ✓ Java.awt (To access a class called Image that holds the images to be displayed)
- ✓ Java.awt.image (To access some scaling methods)
- ✓ Java.io (For file input outputs)
- ✓ Java.imageio (To read images from files)

(In all the above cases I have made use of Wild-card import.)

I first added preview functionality for only 4 images (a.jpg b.jpg c.jpg and d.jpg) and then made another stride forward by giving previews for 4 most recently viewed images as well, using radio buttons.

Once the project was almost done, I tested it for various types of images of numerous shapes and sizes, and the viewer is found to be working just fine.

How the Project can be compiled?

As I have used Netbeans to develop the project, simplest way is to import the project into Netbeans and compile it to run directly. There are 4 java files in the project source folder: Main.java, Viewer.java, Help.java, and About.java. To compile the project from the command line, the following code can be used (Unix):

```
$ ls ImageViewer/src
Main.java  Viewer.java  Help.java  About.java
$ javac ImageViewer/src/*.java
```

```
$ ls ImageViewer/src
Main.class  Viewer.class      Help.class
About.class
                Main.java  Viewer.java      Help.java
About.java
```

To run, type:

```
$java Main
```

How the executable can be used?

Here the executable is the executable jar file that is by default created in the dist directory of the project folder when you build the project. To run it, you can either double click it if you have the Java Platform SE binary working. Otherwise, you can use the command line to run it as follows if the Environmental variables are set for JDK:

```
$ java -jar ImageView.jar
```

You can also generate the native executable (like .exe) if you have jSmooth or launch4j installed, wherein you can directly run.

Assumptions made for the safe execution of the application

- The application does not make use of multithreading and uses only two threads (main and event-dispatching). So there is a limit to the interval of listening to actions. That is, you cannot click very fast on the previews in some extreme cases the previews may not be rendered properly. (Select default again and select back recent in that case.)
- File chosen has to be a valid image file (like JPEG). Otherwise the application would generate exceptions.

Declaration

I hereby declare that the submitted project is my genuine work, and I have not sought or provided assistance to anyone else on this project.

Place: Bangalore

Date: 28th April 2011

M. CHINMAY

Statement

Dear Sir,

I hereby make it sure and clear that I would be available for the Summer Internship starting from **June 20th to August 20th for two months**, as I would be on my semester end holidays for the college.

I would consider working for you beyond the summer if it would not collide with my regular college activities, as I would be in the final year of my Engineering education. But invariably, I am looking forward for an exciting learning process this summer as an intern.

Thanking you,

Yours Faithfully,

M. Chinmay