

# **DESKTOP- APPLICATION FRAMEWORK**

## **USER MANUAL**

### **Prerequisite:**

1. Python 3.8 or more
2. GUI: PyQt5 v.5.15.4
3. Docker
4. Graphviz

### **Initial Setup:**

1. Unzip the file “Desktop-Application-Framework.zip”
2. Go to DesktopFramework\Frontend
3. Open config.json with textedit/notepad
4. If the user uses Windows OS, then under the "PATHS": change "VOLUME\_PATH\_WINDOWS" to > “Your own directory of app-data” .  
As example:

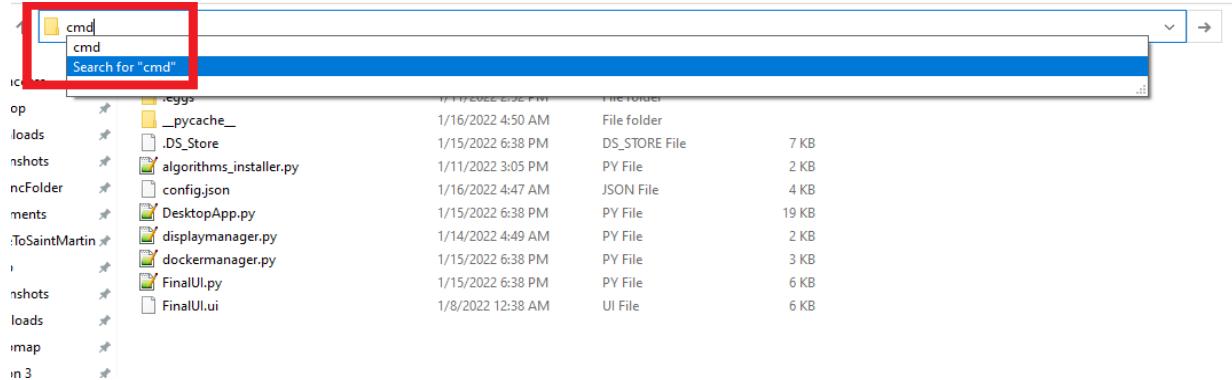
```
{
  "PATHS": {
    "VOLUME_PATH_WINDOWS": "D:\\Desktop_Framework\\Desktop-Application-Framework\\app-data\\",
    "VOLUME_PATH_MAC": "/Users/kumarmukand/Pictures/Desktop-Application-Framework/app-data/",
    "IMAGE_BUILD_PATH_WINDOWS": "D:\\Desktop_Framework\\Desktop-Application-Framework\\Backend\\",
    "IMAGE_BUILD_PATH_MAC": "/Users/kumarmukand/Pictures/Desktop-Application-Framework/Backend/"
  },
}
```

5. Under the “PATHS:” change "IMAGE\_BUILD\_PATH\_WINDOWS" to > “your own directory of Backend”

As an example:

```
"PATHS": {
  "VOLUME_PATH_WINDOWS": "D:\\Desktop_Framework\\Desktop-Application-Framework\\app-data\\",
  "VOLUME_PATH_MAC": "/Users/kumarmukand/Pictures/Desktop-Application-Framework/app-data/",
  "IMAGE_BUILD_PATH_WINDOWS": "D:\\Desktop_Framework\\Desktop-Application-Framework\\Backend\\",
  "IMAGE_BUILD_PATH_MAC": "/Users/kumarmukand/Pictures/Desktop-Application-Framework/Backend/"
},
```

6. If the user uses Mac OS, then repeat step 4 and 5 and update "VOLUME\_PATH\_MAC" and "IMAGE\_BUILD\_PATH\_MAC" instead with corresponding directory locations of app-data and Backend.
7. Save config.json
8. Go to DesktopFramework\Frontend. And type “cmd” in the explorer search area and hit enter.



For windows OS

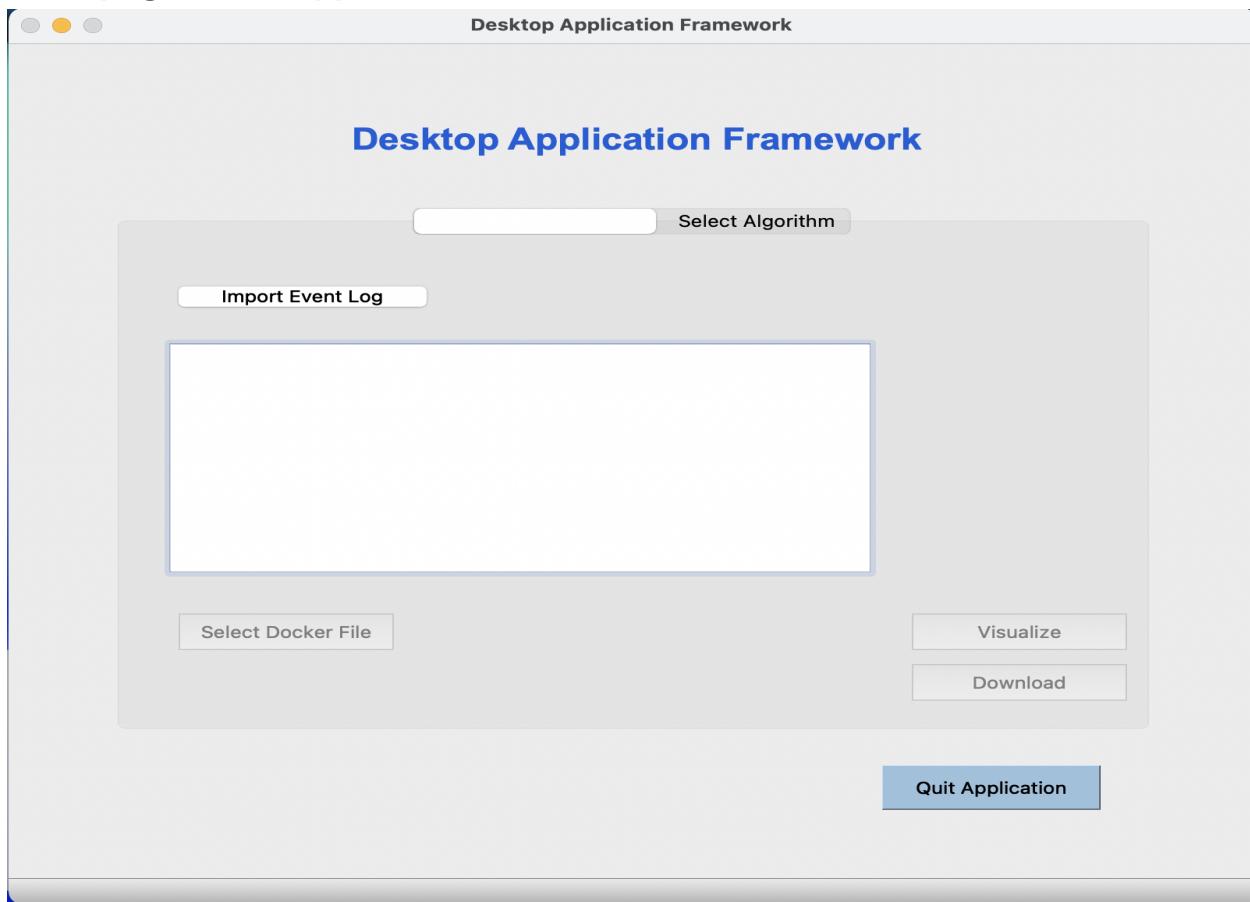
```
Last login: Tue Jan 18 19:07:23 on ttys001

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
(base) jahnnavis-MacBook-Pro:Frontend jahnnavijaiswal$
```

For Mac OS

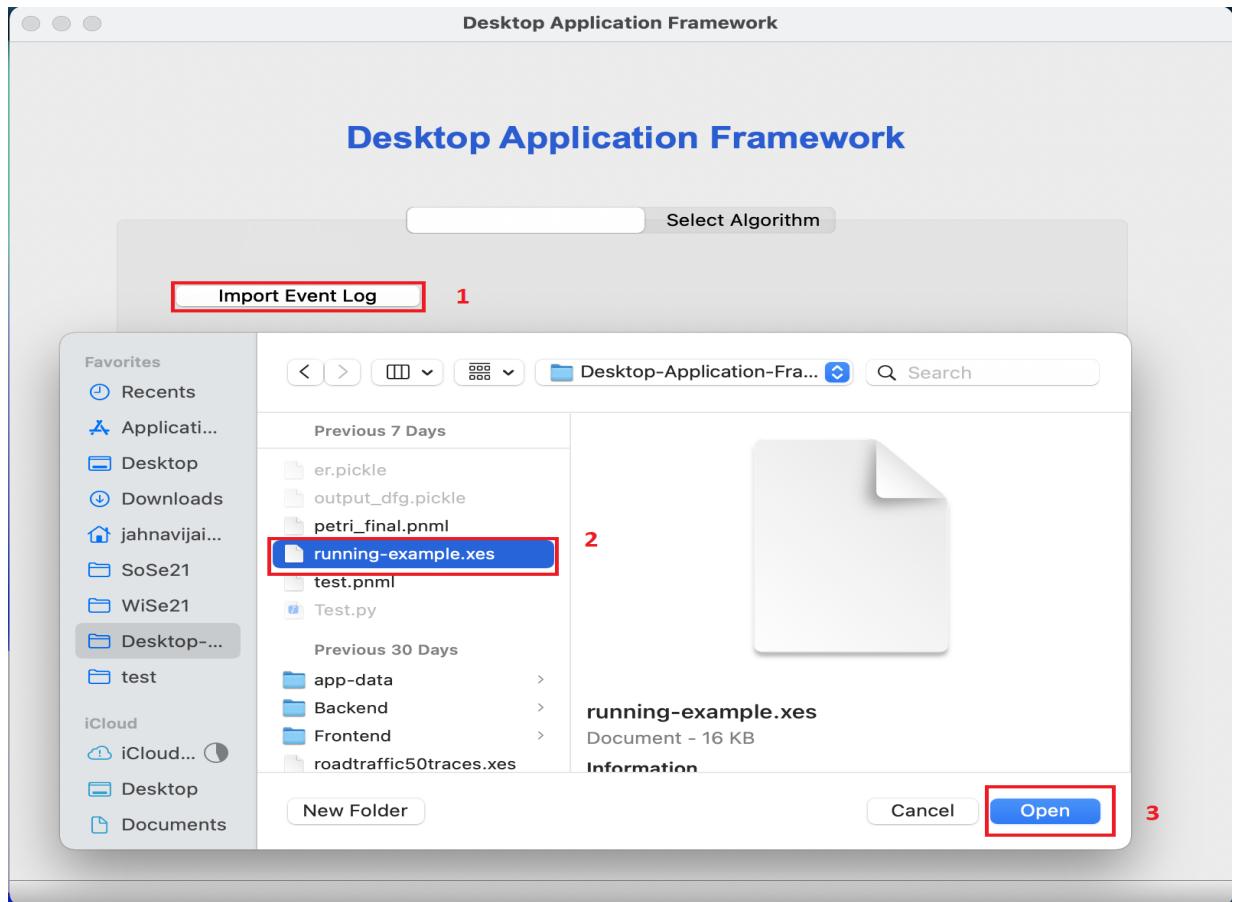
9. In the cmd/terminal type “python algorithms\_installer.py” and press enter. It will take some time.
10. After that, in the same cmd/terminal type “python DesktopApp.py”and press enter. Now the application will be opened.
11. Step 1-10 is only for the first time use. For later uses only follow step 10.

## Homepage of the application:



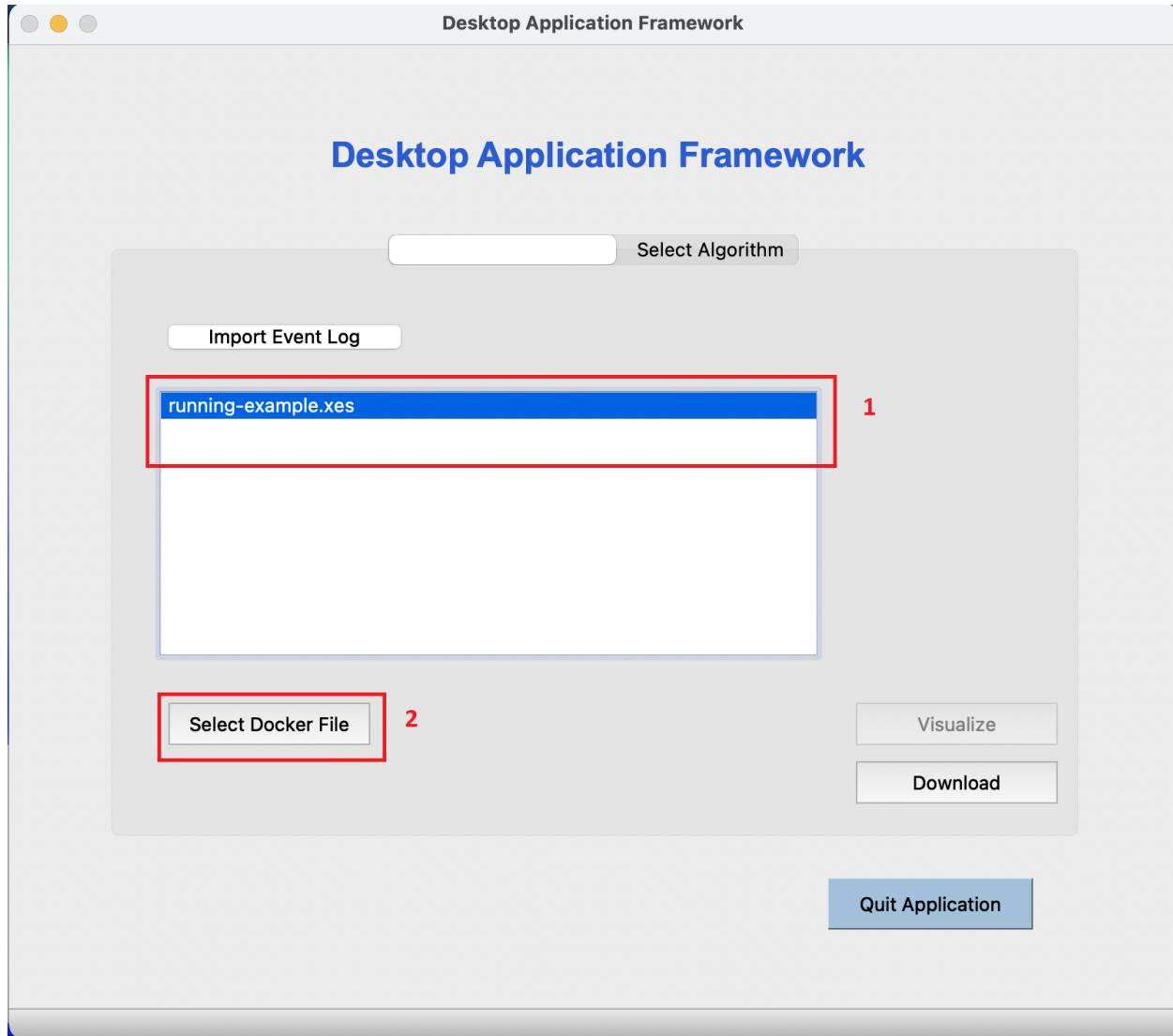
## Upload Event Data:

- 1.To upload an event log, Click the “Import Event Log button” [Red Mark1].
- 2.Select an .XES file [Red Mark 2]
- 3.Click open[Red Mark 3]



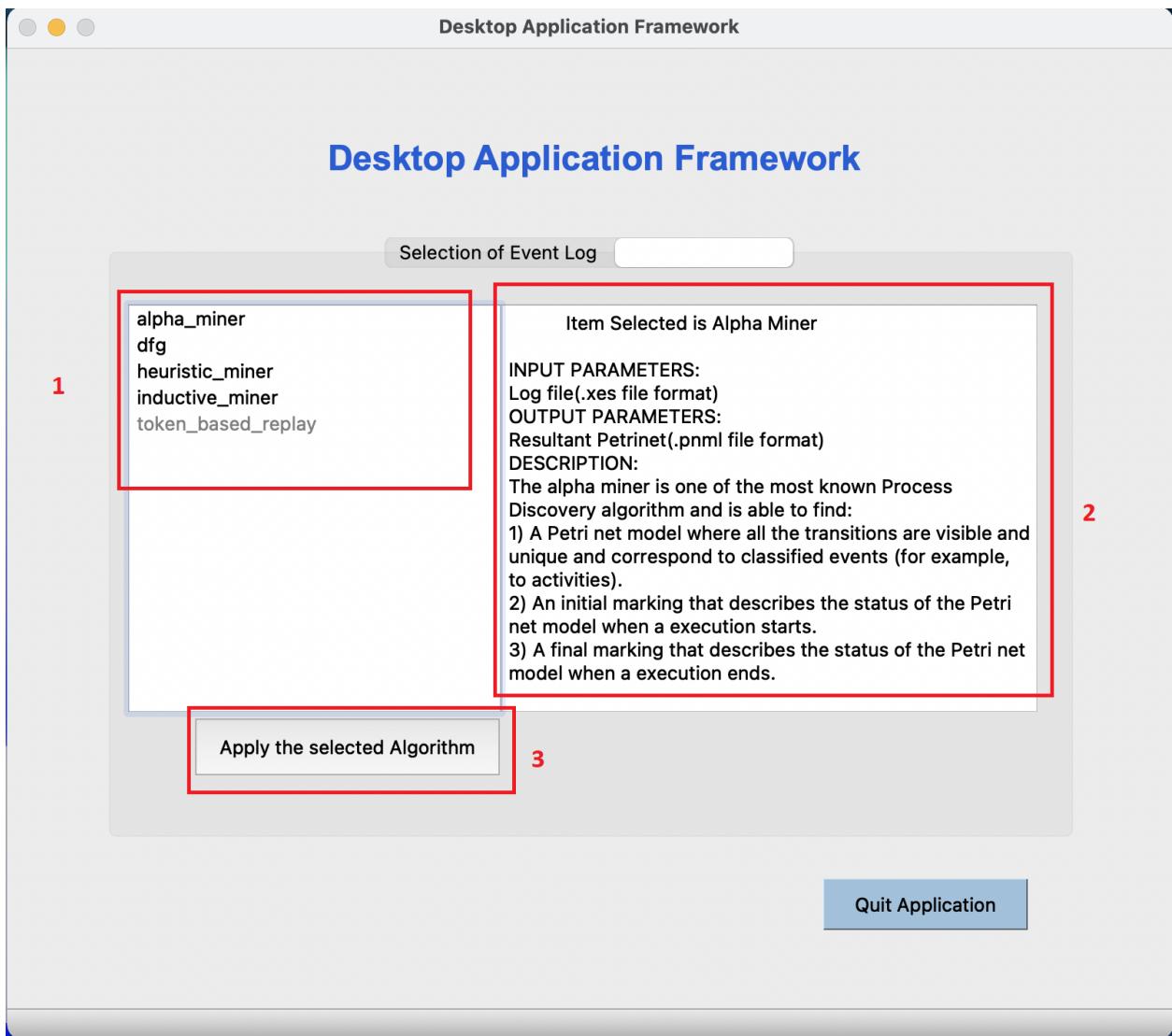
**Select file for applying Algorithm:**

1. Select the imported file[Red mark 1]
2. Click the button “Select Docker File”[Red mark 2]



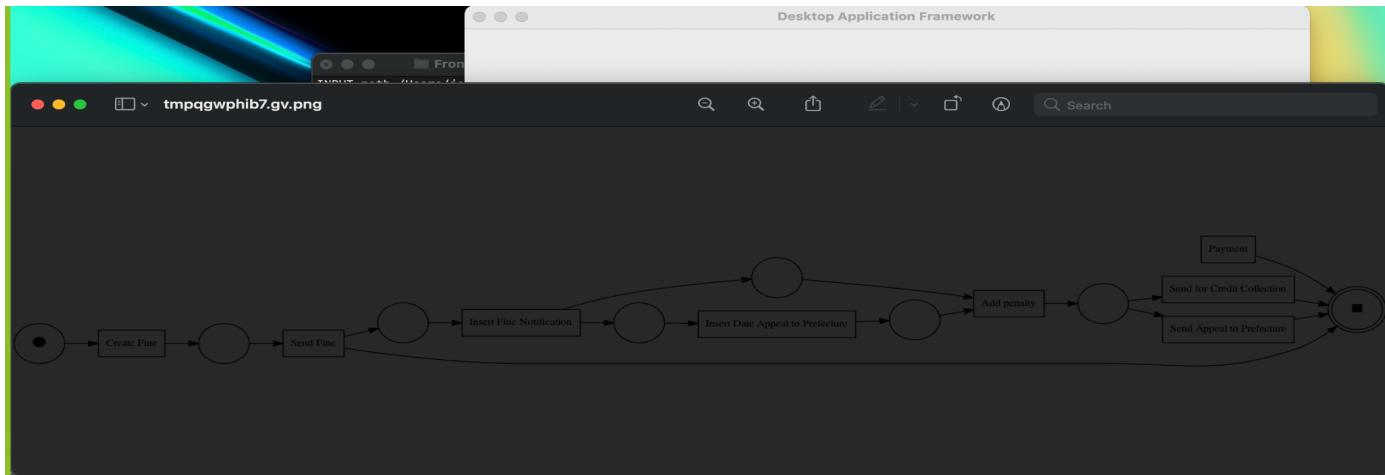
### Select algorithm from List:

1. After clicking “Select Docker File” the window moves to second tab.
2. Here User can see the list of algorithms [RedMark1] and those algorithm’s respective short description [Red Mark 2]
3. User can select any enabled algorithm from the list.
4. Click “Apply the selected algorithm button ” to apply the algorithm[Red mark 3]



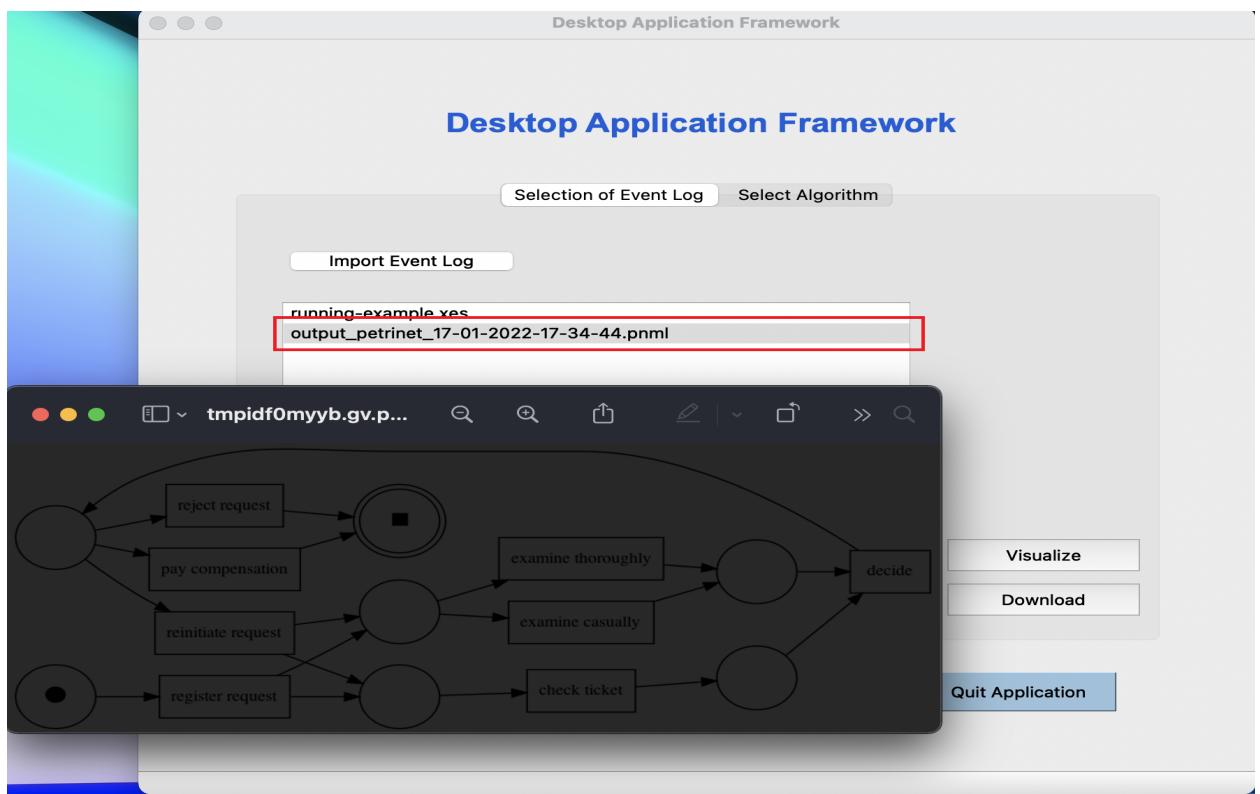
## Result:

After clicking the “Apply the selected Algorithm” button,a pop-up of a petri net/dfg/pdf file is generated and can be visualized.



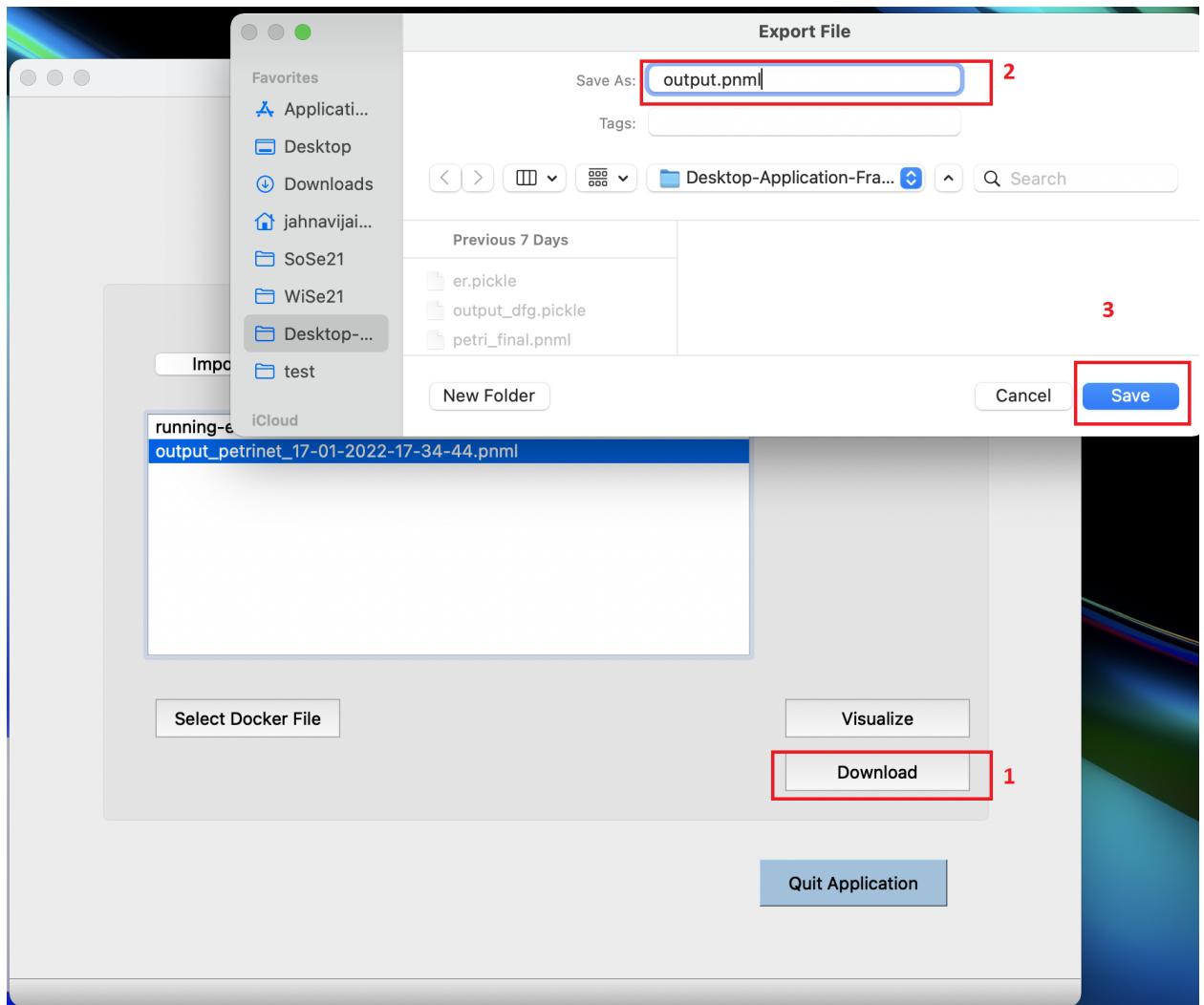
## Output File in Input Section:

Users now can see the Output files in the first tab. Users can use this for future purposes.



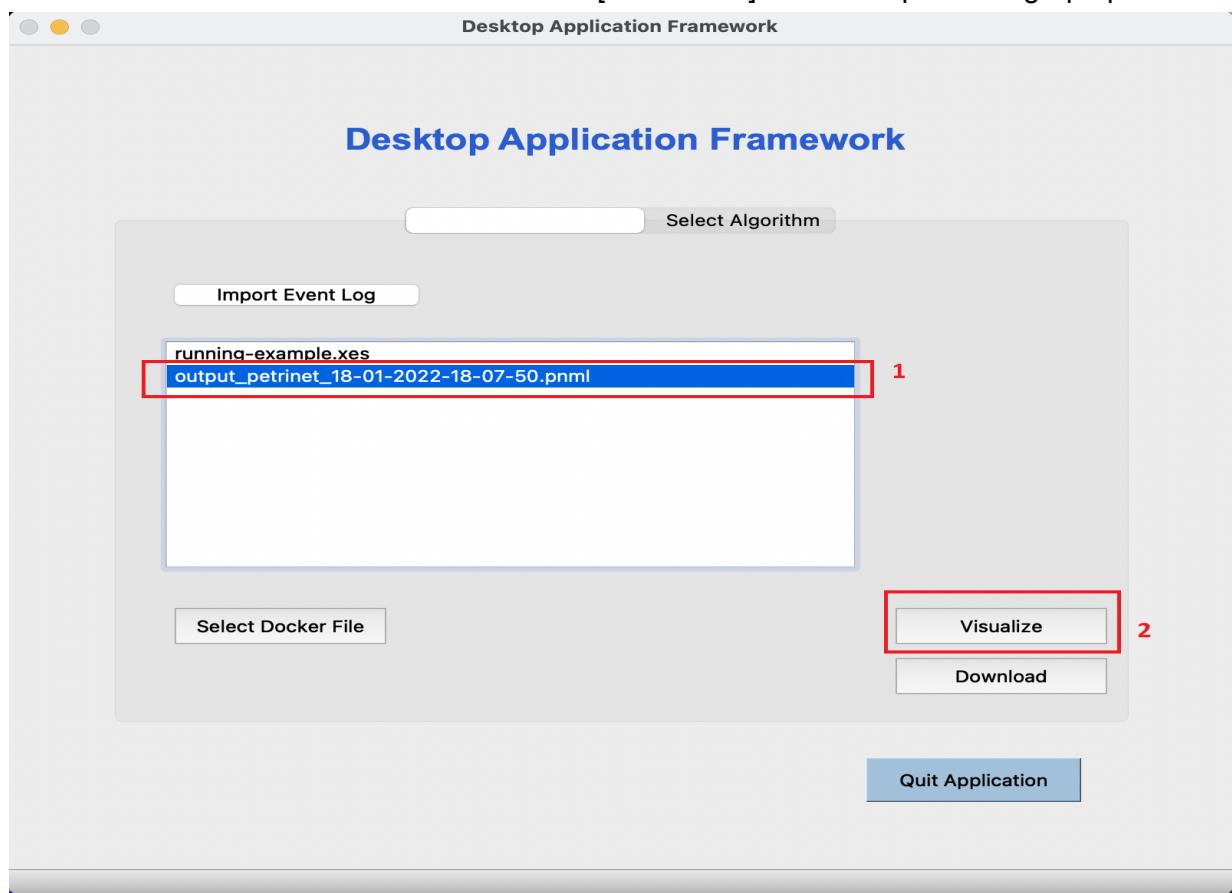
**Download File:**

1. Select any file from the list and click “Download” button to export the file. [RedMark1]
2. Name the file [RedMark2]
3. Click “save” [RedMark 3]

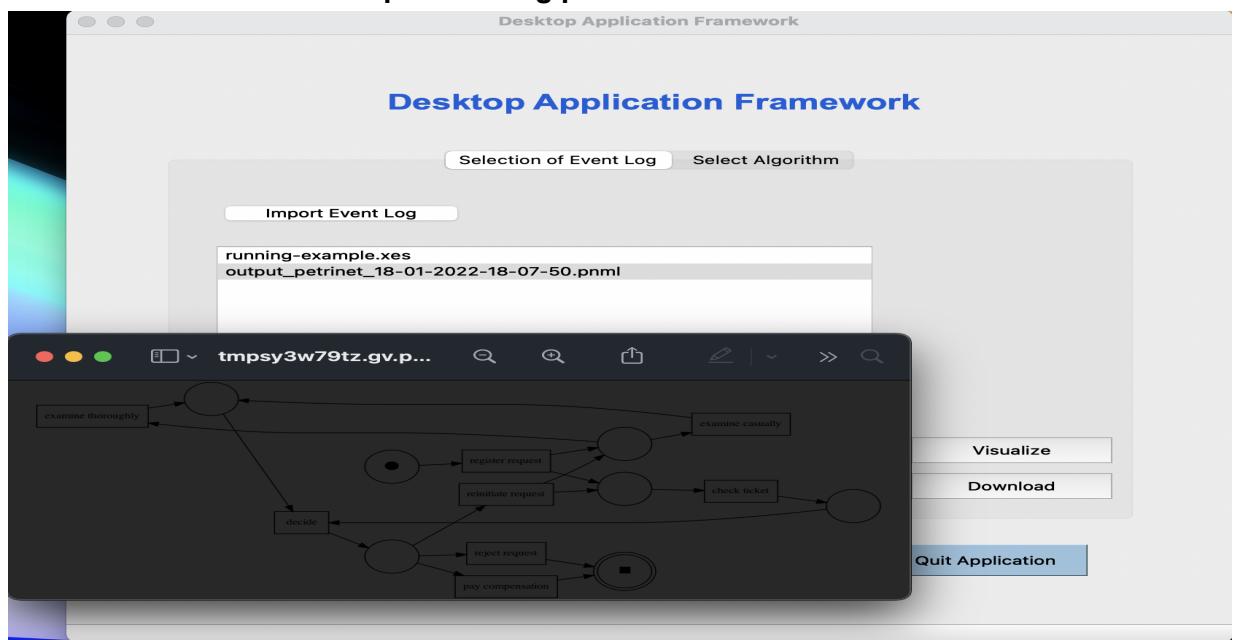


**Visualize:**

1. Users can select the output file which is now input [RedMark 1].
2. Then user can click the button “Visualize” [RedMark 2] to see the petri net/ graph/pdf

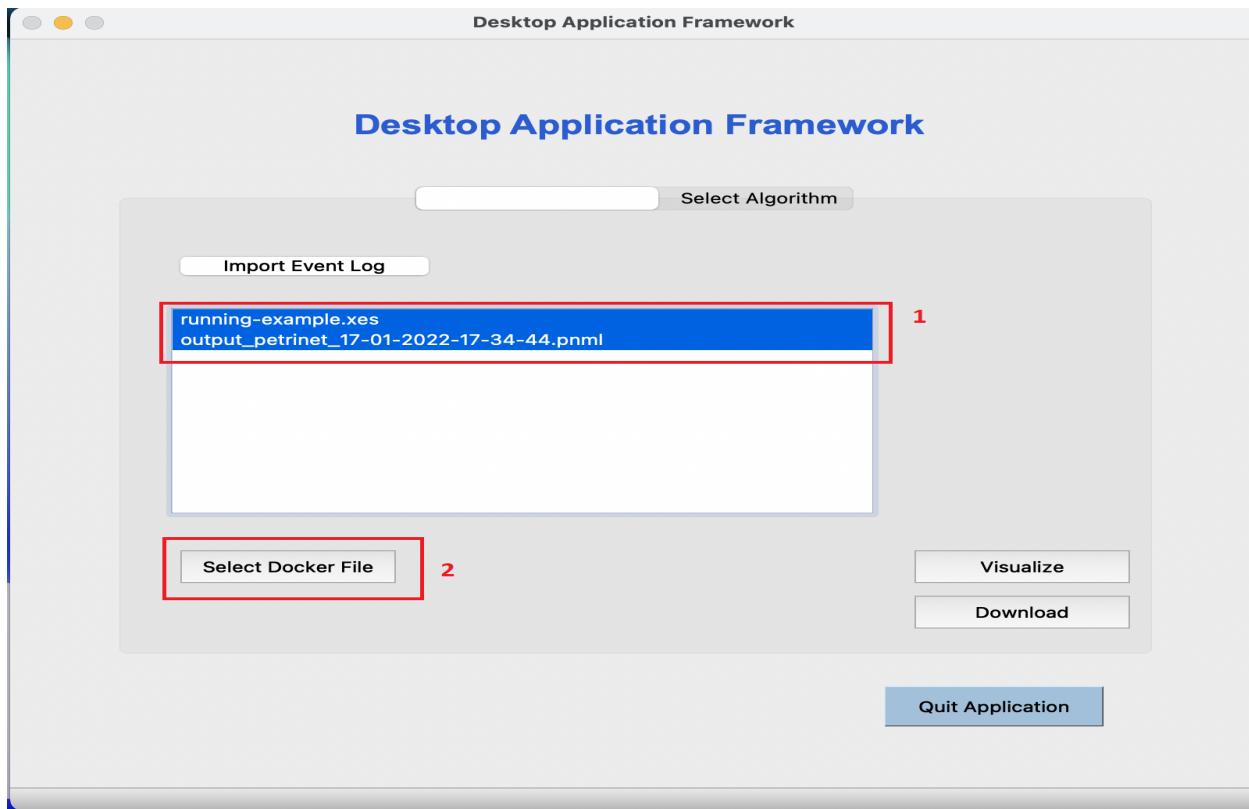


3. After that User can see the petri net/dfg/pdf :



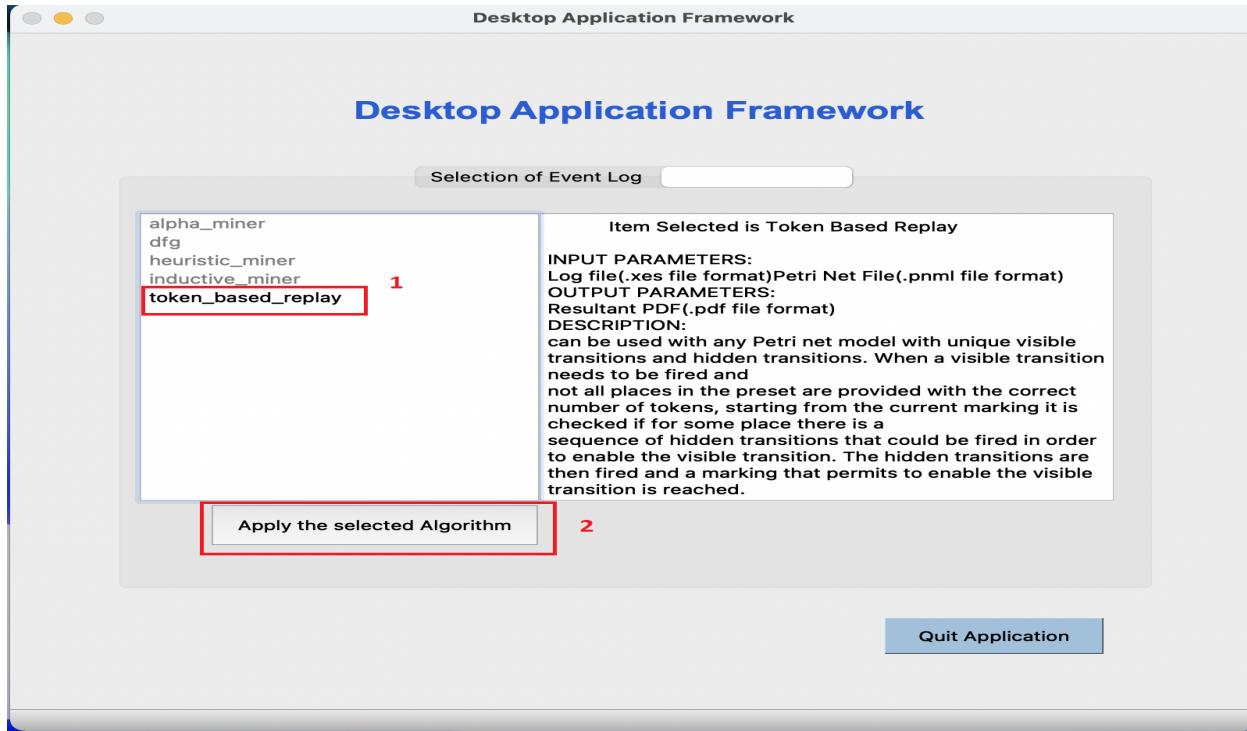
Select 2 file as Input:

1. Select one file.
2. Press and hold “ctrl” and select another file [Red mark 1]
3. Click “Select Docker File” button.

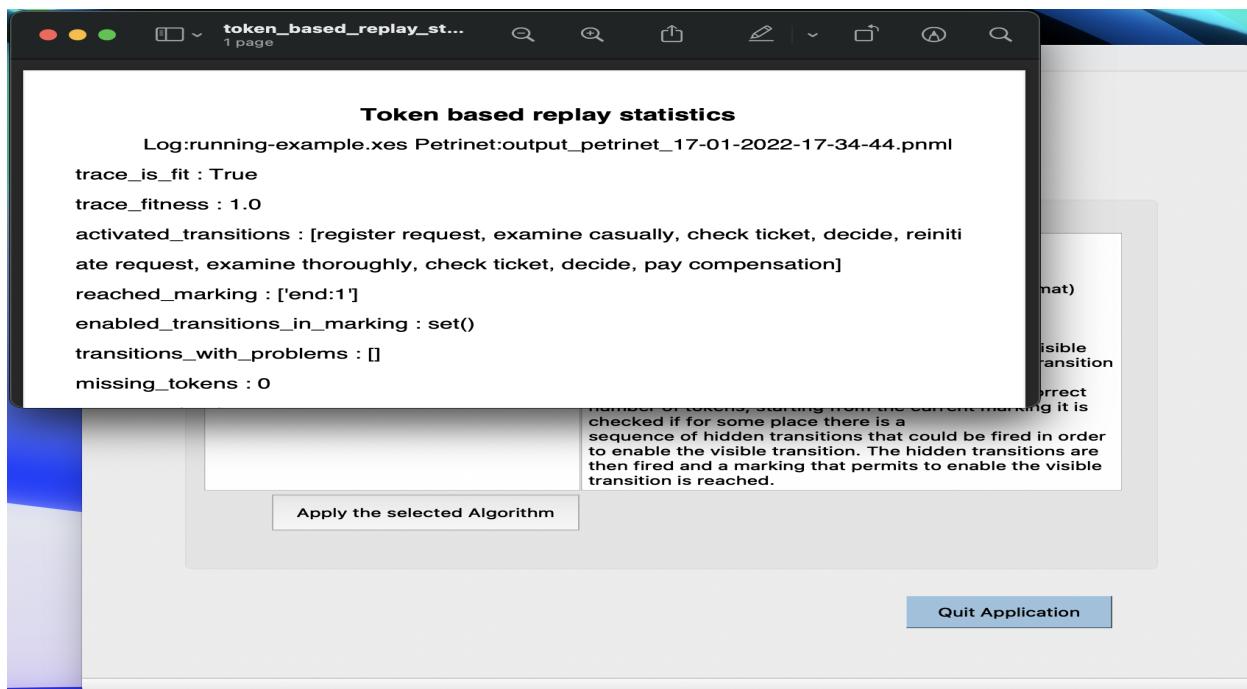


### Algorithm list for 2 input:

1. Now it will show modified algorithm list which only allows 2 file as input. [Red mark1]
2. Click the button “Apply the selected Algorithm” to apply algorithm.[Red mark 2]

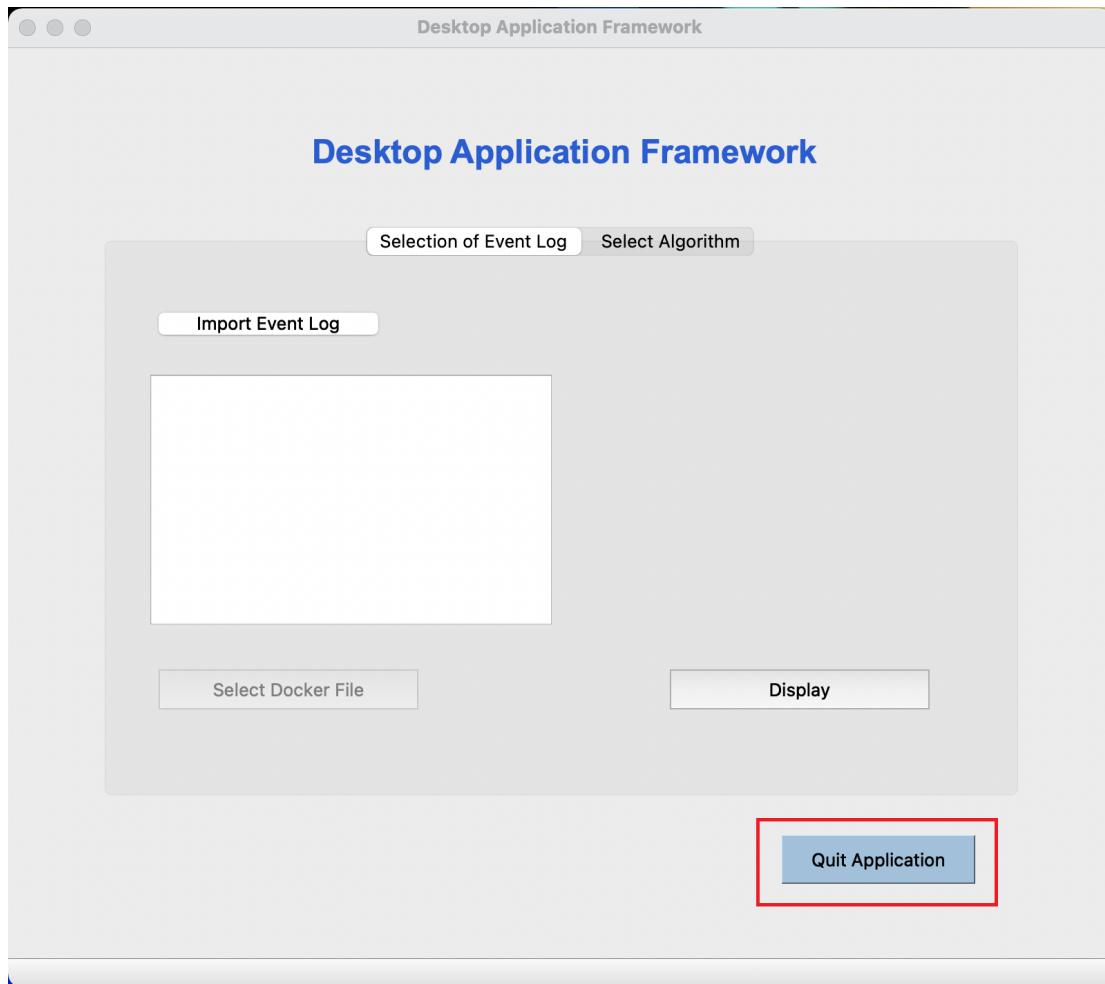


### Result for 2 input algorithm:



**Quit Application:**

Click on the “Quit Application” button to exit from the application any time.



For creation of new algorithms please refer to Manual for Algorithm file located in Docs Folder.