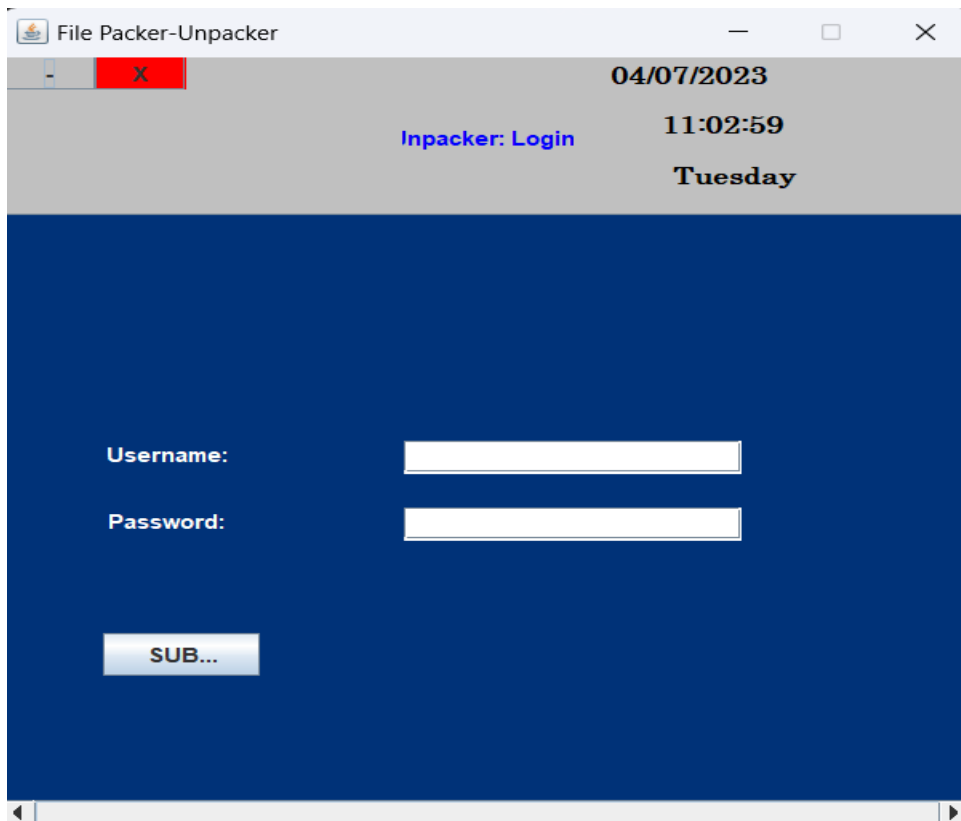# File Packer Unpacker

- This project is used to perform packing and unpacking activity for multiple types of files.

- In case of Packing activity me maintain one file which contains metadata and data of multiple files from specified directory.

- In case of Unpacking activity we extract all data from packed files and according to its metadata we create all files.

- In this project we have to use Java as Front end as well as Backend for platform independency.

Steps to develop above project

- Design one window which accept username and password from user for authentication purpose.

- When user submit the username and password we have to check whether username is "**MarvellousAdmin"** and password is "**MarvellousAdmin**".

- If password or username is incorrect then we have to provide 3 attempts to user. If user is unable to provide correct username and password in 3 attempts we have to close the project.

- For checking whether username and password contains minimum contains 8 letters or not we have to create one thread. That thread also check whether caps lock key is on or not.

- After successful authentication we have to open new window which displays two options as Pack and Unpack.
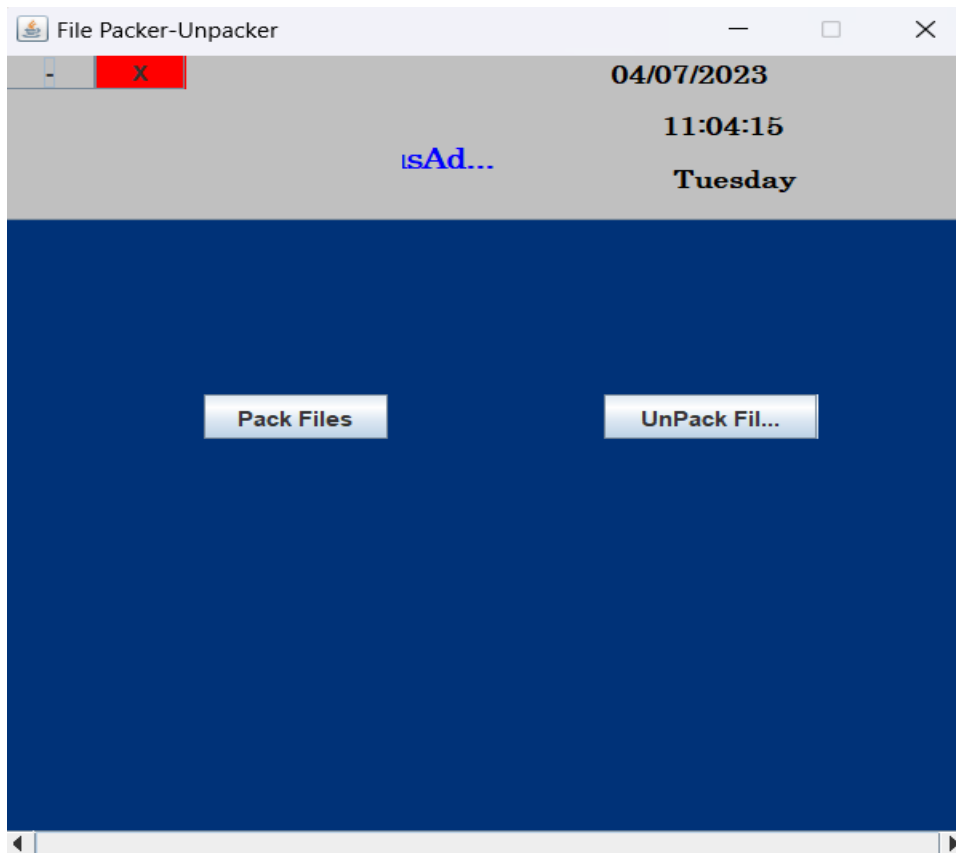
- When user press Pack button we have to open new window which looks like !
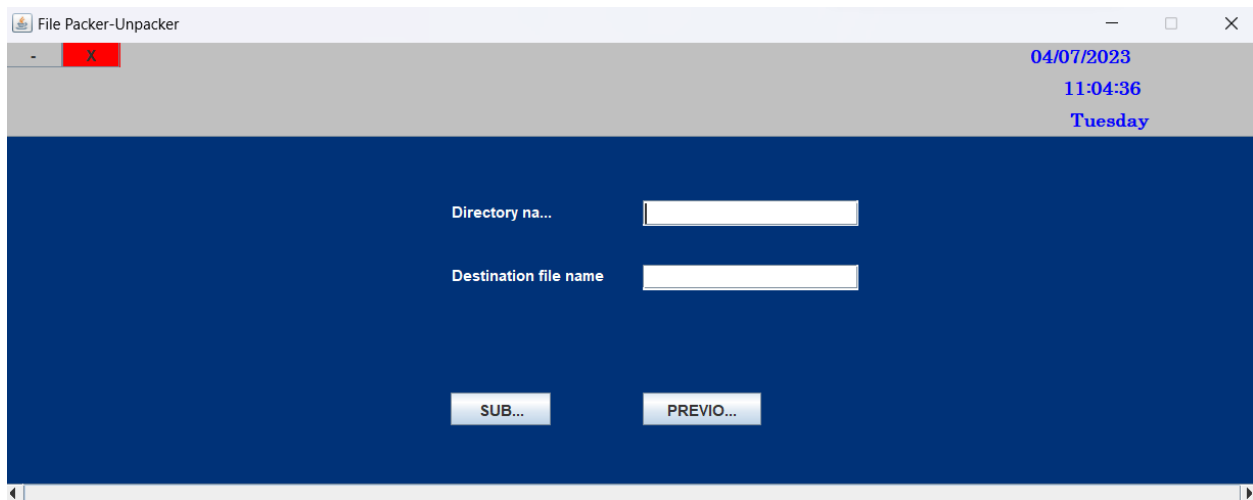
- From the above window we have to accept name of directory that we want to pack and name of the packed file from user.

- Name of the packed file gets newly created which contains data and metadata of all files from that directory.

- When user click submit button we have to perform "Packing Activity". After that previous window should be displayed as
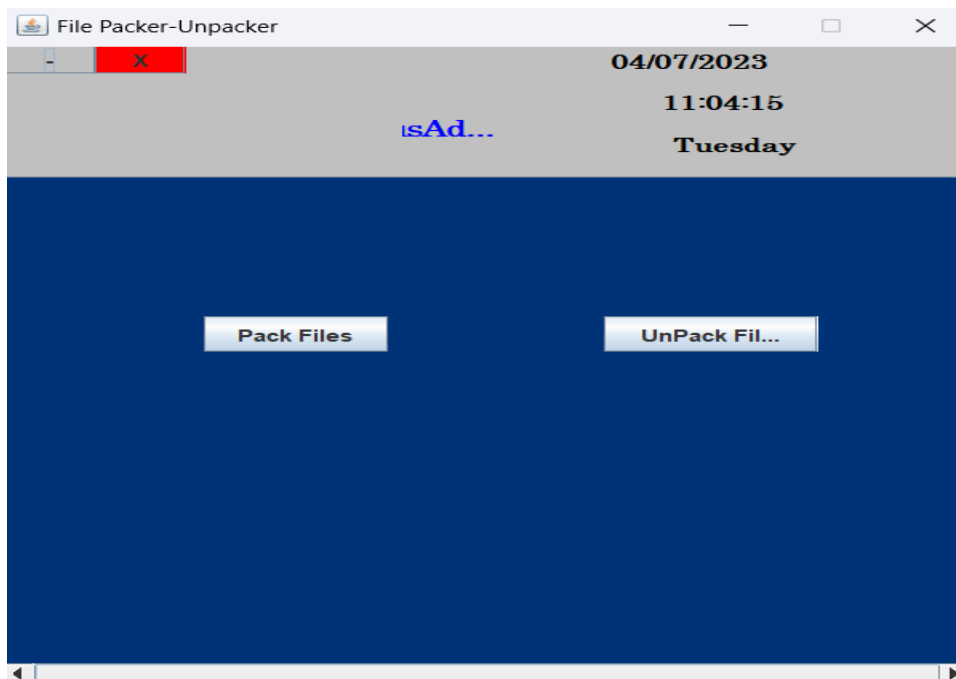
- When user click Unpack button below window should be displayed as
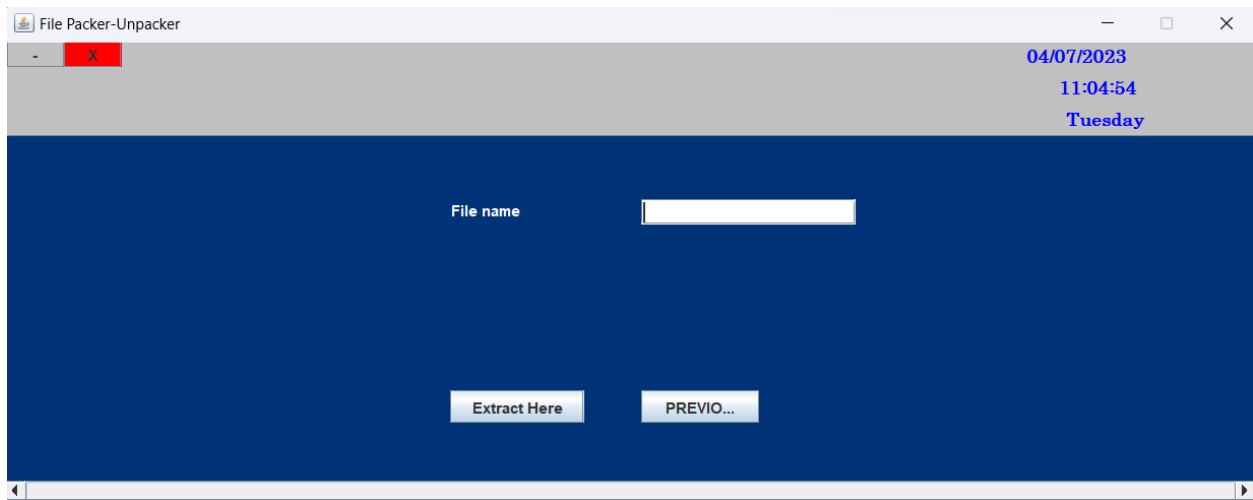
- From this window accept name of packed file.

- When user click Extract Here button we have to perform "Unpacking Activity".

Backend Logic

Packing Activity :

•In case of Packing activity we accept directory name and file name from user.

•We have to create new regular file as the name specified by the user.

•Now open the directory and traverse each file from that directory. In newly created file write Metadata as header and actual file data in sequence.

•While writing data perform encryption.

•Each name of file ,its size and checksum should be written in log file which gets created in system directory.

•After packing display packing report.

UnPacking Activity :

•In case of UnPacking activity we accept packed file name from user.

•for authentication of packed file use any logic like Magic Number.

- Open the packed file in read mode and perform below activity as

- Read header

- From the name specified in header create new file.

- Write data into newly created file from packed file.

- Repeat all above steps till we reached at end of the file unpacked file.

- After unpacking display unpacking report.