File Packer Unpacker Utility

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

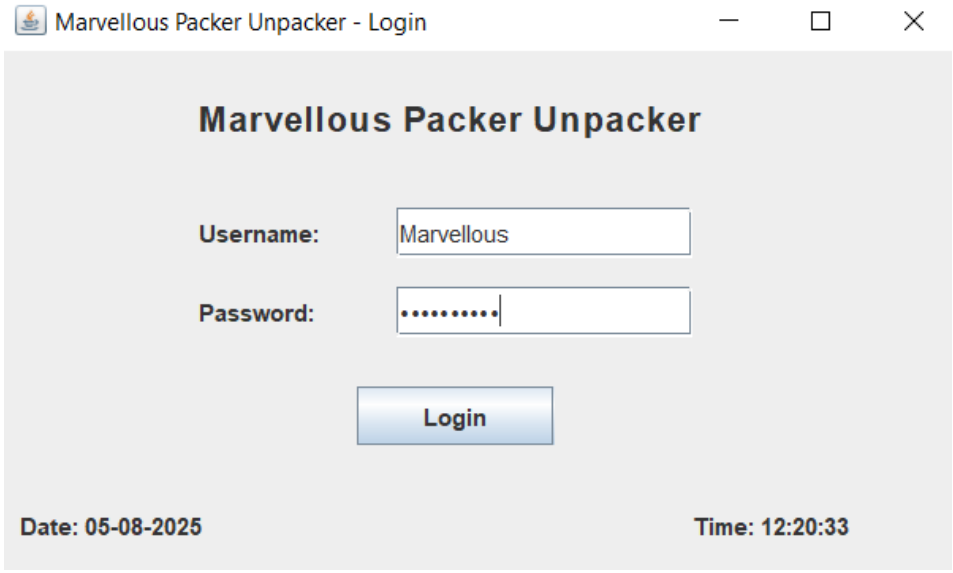
- In case of Packing activity me maintain one file which contains metadata and data of multiple files from specified directory.

- 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.

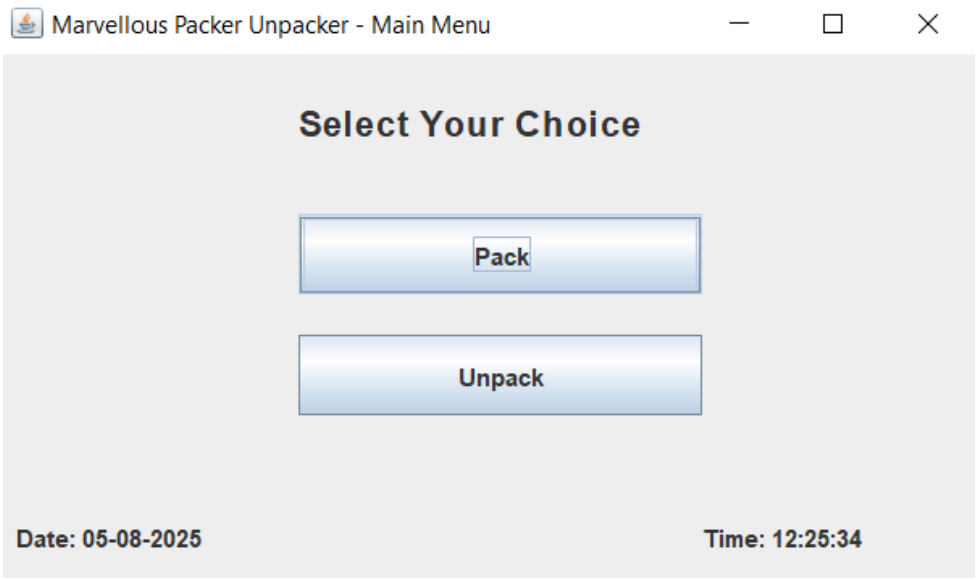


- When user submit the username and password we have to check whether is
- Username: Marvellous
- Password: Marvellous.

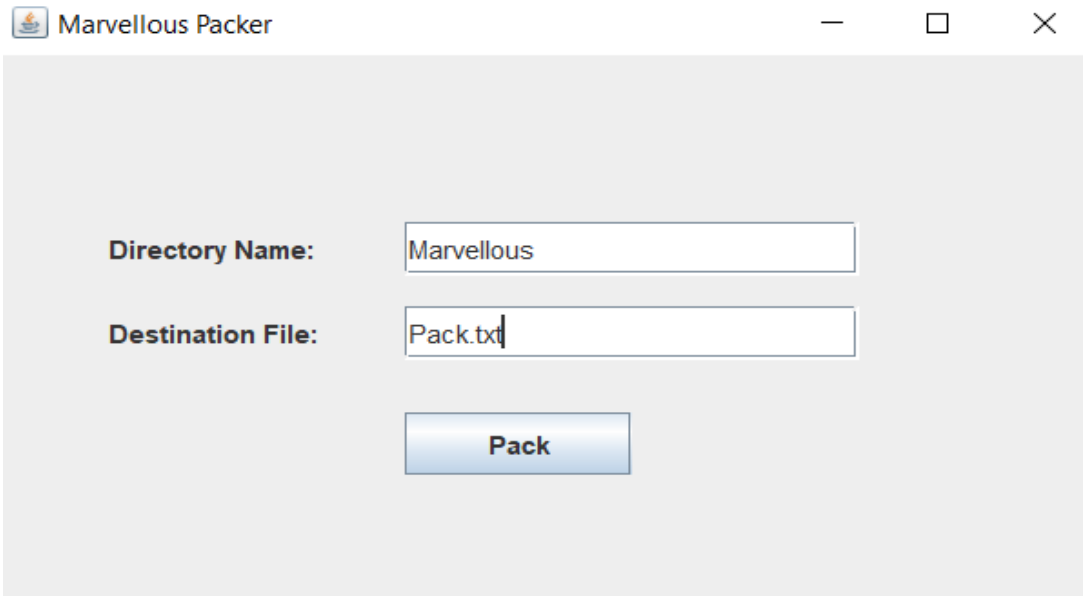
- If password or username is incorrect then we have to provide 3 attempts to user. I user is unable to provide correct username and password in 3 attempts we have to close the project.

- 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

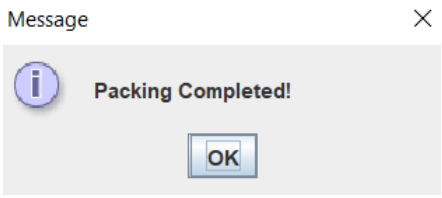


- From the above window we have to accept name of directory that we want to pack and name of the packed file from user.

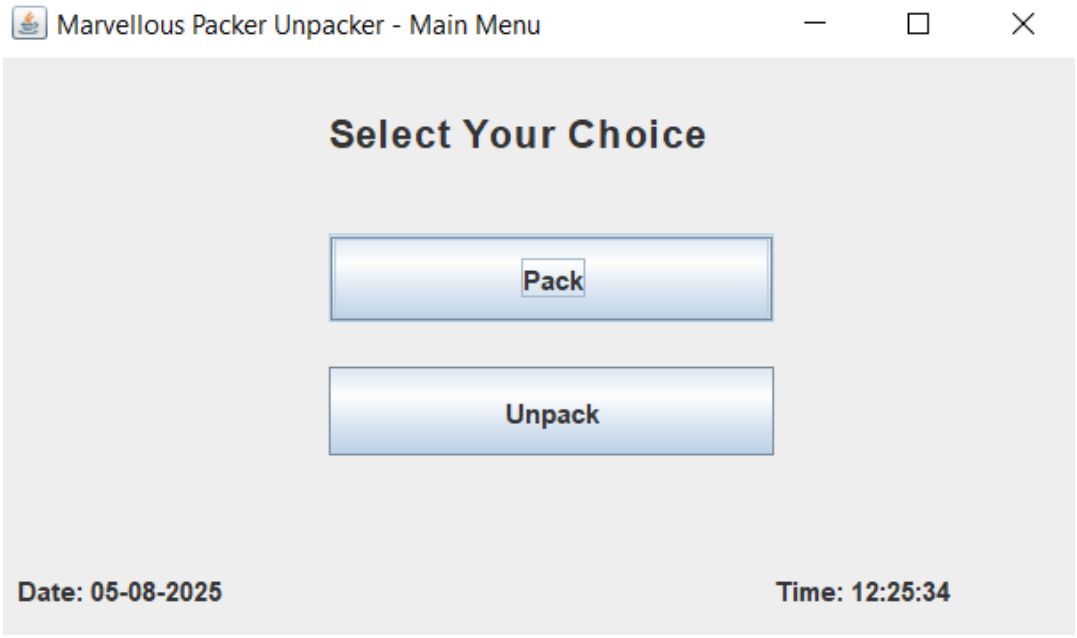
- Name of the packed file gets newly created which contains data and metadata of all files from that directory.

- When user click submit button we have to perform “Packing Activity”.

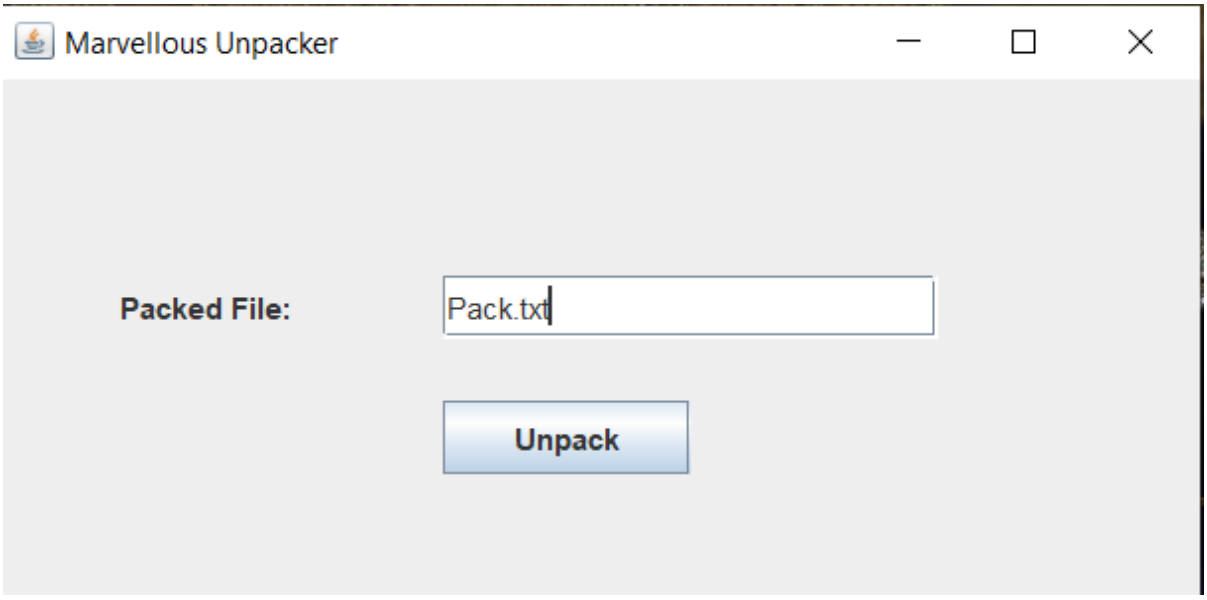
- When user click submit button Message Box Appears As Packing Completed.



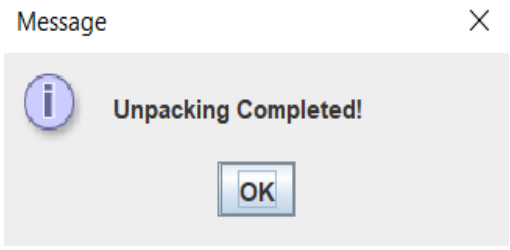
- After that previous window should be displayed as



- When user click Unpack button below window should be displayed as



- From this window accept name of packed file.
- When user click Unpack button we have to perform “Unpacking Activity”.
- When user click Unpack button then Message Box Will Appear As



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.