A
PROJECT REPORT
ON

"File Packer-Unpacker"

Submitted In the Partial Fulfillment of the Requirement of the Post Graduation Course Of

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File Packer-Unpacker

Overview:-

- This project is used to perform process monitoring activity.
- By using this project, we can fetch data from all files and merge it into one file. As well as we can also extract all packed file whenever required.
- 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.

Hardware-Requirments:-

- Modern Operating System:
  i. Windows 7 or 10
  ii. Mac OS X 10.11 or higher, 64-bit
  iii. Linux: RHEL 6/7, 64-bit (almost all libraries also work in ubutu

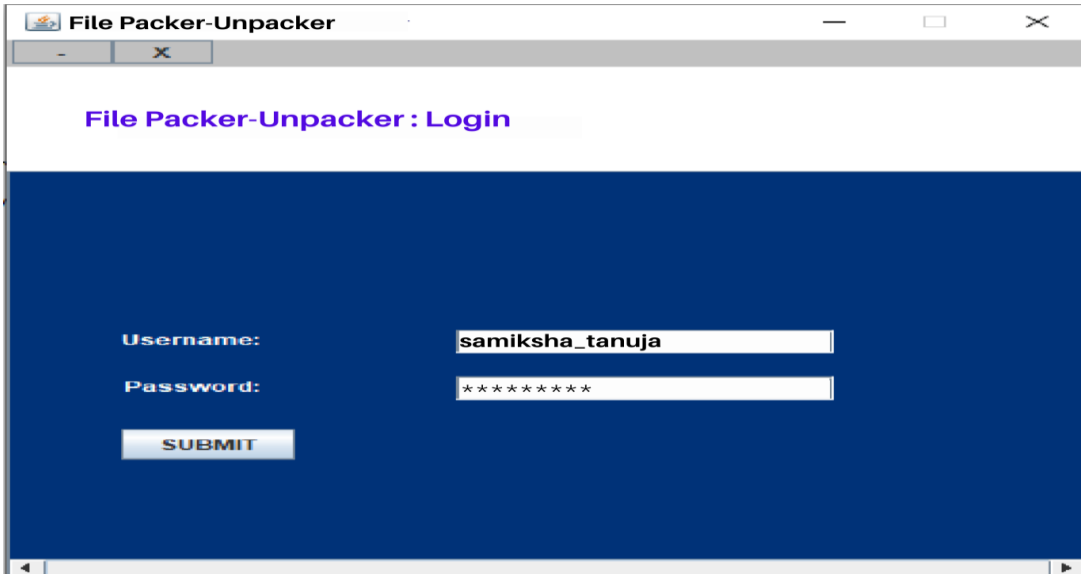
Software-Requirments:-

- Java Servlet container
- Java JRE 1.6 or Higher

Implementation:-

Steps to develop above project

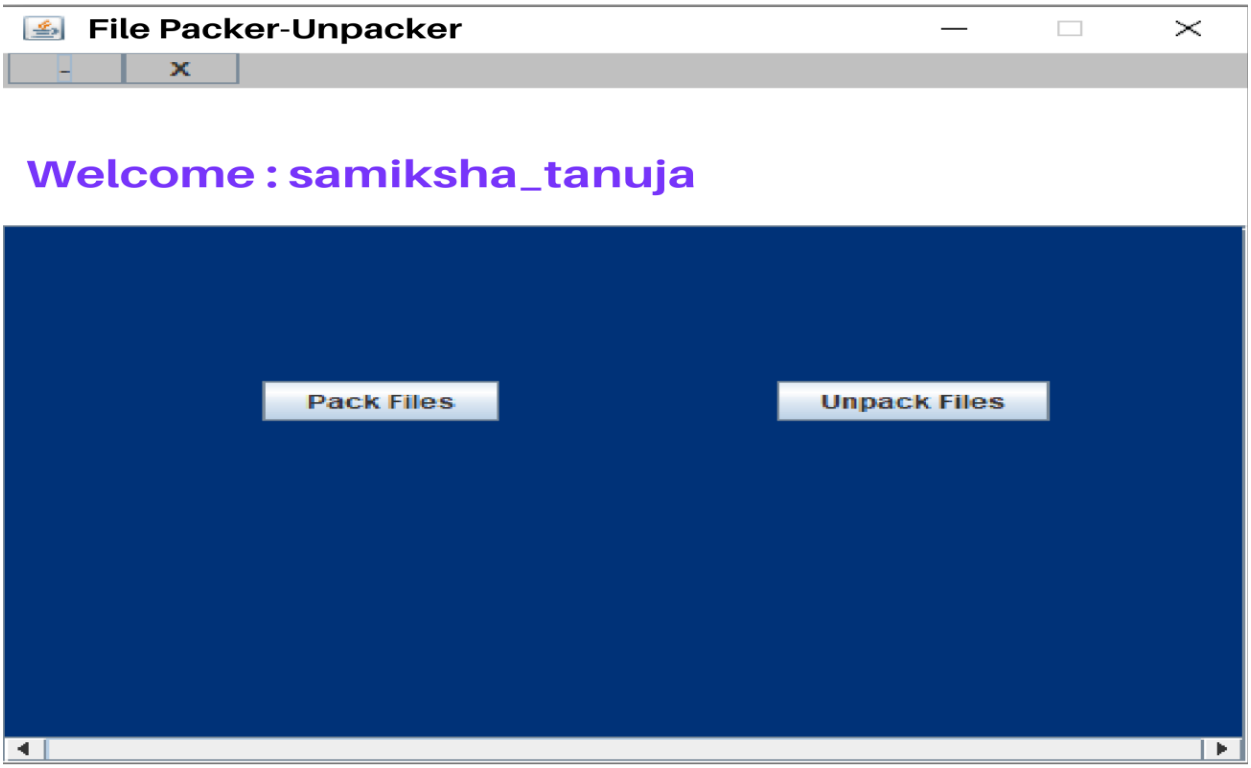
- Design one window which accept username and password from user for authentication purpose.



- When user submit the username and password, we

have to check whether username is "samiksha_tanuja" and password is "Admin@99".

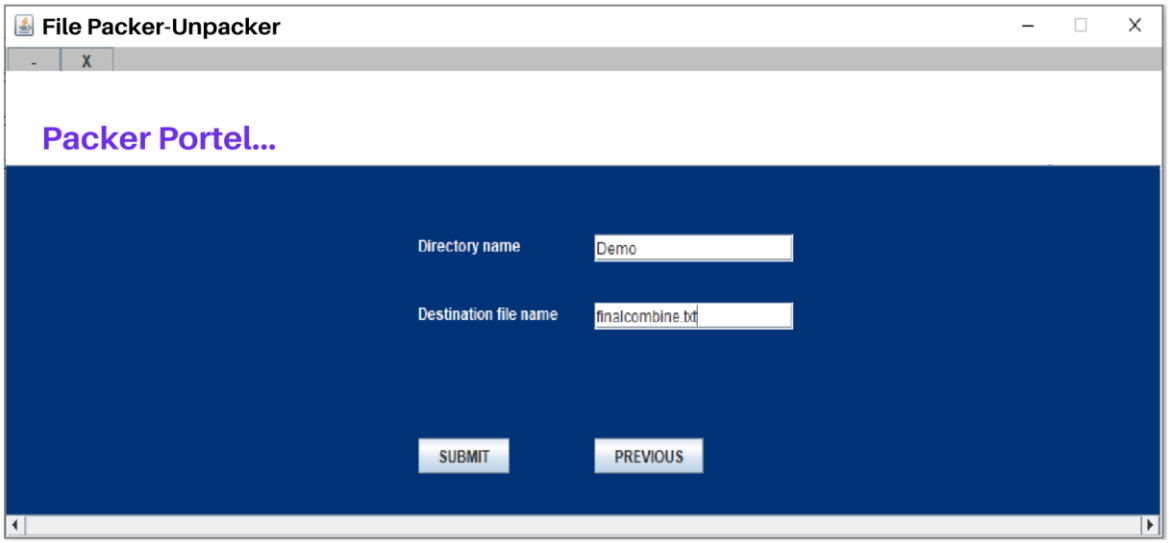
- If password or username is incorrect then we have to provide 3 attempts to user. I user is unable to provide correct username and password in 3 attempts we have to close the project.
- For checking whether username and password contains minimum contains 8 letters or not we have to create one thread. That thread also checks whether caps lock key is on or not.
- After successful authentication we have to open new window



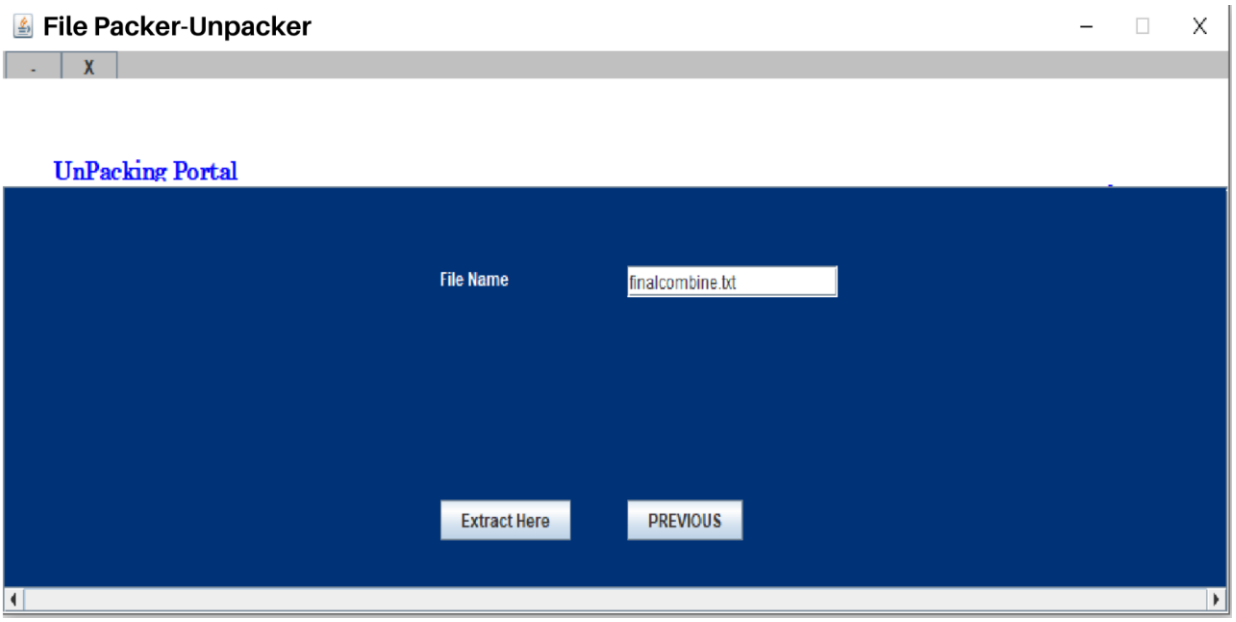
which displays two options as Pack and Unpack.

- When user press Pack button we have to open new window wh ich 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

Platform required

Windows NT platform OR Linux

Architectural requirement

Intel 32-bit processor

User Interface

Graphical User Interface

Technology used

Java Programming

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.