Software Engineering and Information System Design Sessional
CSE308
File Explorer

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In this document the method of the corresponding classes and different types design pattern used in file explorer is described.

1 Description Of The Method of Corresponding Classes

Class Name : Fileexplorer

This is the main class of this project.The method of this class are listed below.

- **getmenu():** This method generate and trigger the menubar option.
- **main():**This is the main method where the object of this class is created.

Class Name : Tablebuilder

This is the class where defaulttable and updated table is created.The method of this class is listed below.

- **gettable():**This method initialize the jtable.
- **getdefaulttable():** This method creates table with those folder where the jar file is located.
- **folderopener():** This method open folder in which folder is clicked in jtable.
- **getupdatetable():**This method update the table when a tree node is clicked.

Class Name : Mytree

This class initialize and update my jtree.

- **gettree():** This method initialize the jtree and make the jtree rooted at Mycomputer.
- **makeleaf():** This method generates the leaf of the current node of jtree.

Class Name : Mylistview

This class initialize my jlist .

- **addjlist():**This method initialize the jlist.

Class Name : MyCellRenderer

This class helps to show icon and folder name in jlist.

- **getListCellRendererComponent():**This method set the icon and name of componet in jlist.

Class Name : Mytable

This class helps to show populated data in jtable.

- **getValueAt():**This method show appropriate data in appropriate column.
- **openfolder():**This method open the folder of table.
- **getColumnClass():**This method return the image icon of file.
- **getColumnName():**This method set the column names of jtable.
- **getRowCount():**This method return the number of rows in jtable.
- **setFiles():**This method set the member variable of this class.

2 Description Of The Method of Corresponding Classes

In this project various types of design pattern were used.

Singleton pattern

In my project I have used singleton pattern for the following class's object declaration .

- Tablebuilder
- Mytree
- Mylistview

Composite Pattern

In my project composite pattern is used in **Mytree** class.The jtree use the composite pattern to show all the file and folder.

Adapter pattern

In my project adapter pattern is used in **Mytree** class,**Tablebuilder** class, **Mylistview** class and **Fileexplorer**
For Mytree class the adapter components are

- **Adapter :** JTree
- **Adaptee :** DefaultMutableTreeNode
- **Target:** Mytree
- **Client :** Fileexplorer

For Tablebuilder class the adapter components are

- **Adapter :** JTable
- **Adaptee :** AbstractTableModel
- **Target:** Tablebuilder
- **Client :** Fileexplorer

For Mylistview class the adapter components are

- **Adapter :** JList
- **Adaptee :** MyCellRenderer
- **Target:** Mylistview
- **Client :** Fileexplorer

Factory pattern

In my project factory pattern is used in **getmenu** method of **Fileexplorer** class for altering the two types of view which are **listview** and **tableview**.