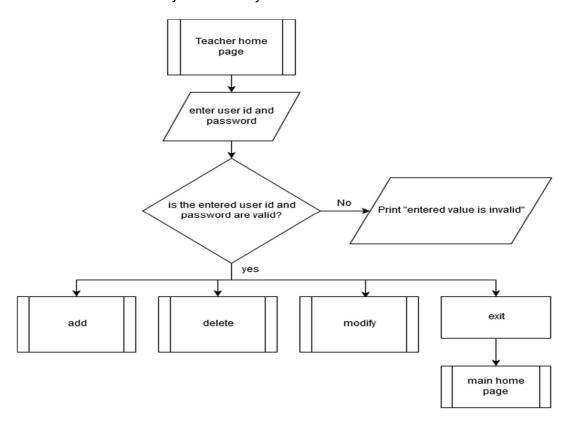
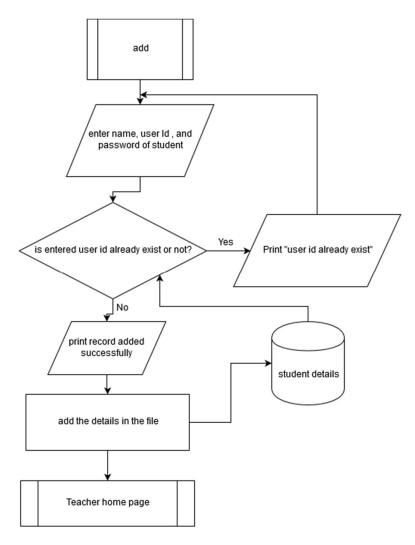


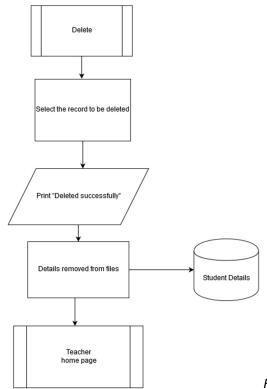
Flow chart 1: the outline of the whole soft ware.



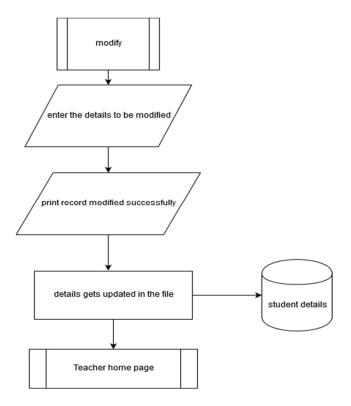
Flow chart 2: the outline of the whole teacher page.



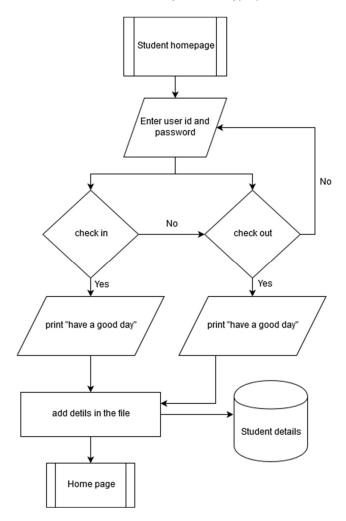
Flow chart 3: the outline of the add option.



Flow chart 3: the outline of the delete option.

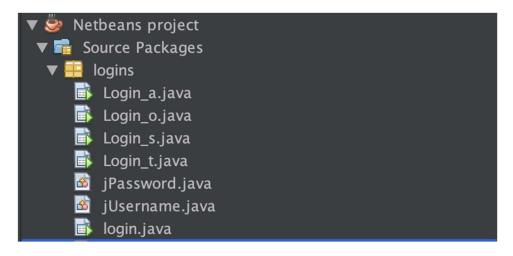


Flow chart 3: the outline of the modify option.



Flow chart 3: represents the working outline of the student page.

UML Diagrams:

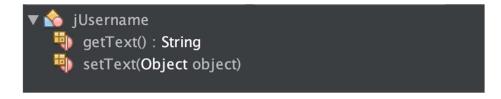


UML diagram 1: Class Diagram

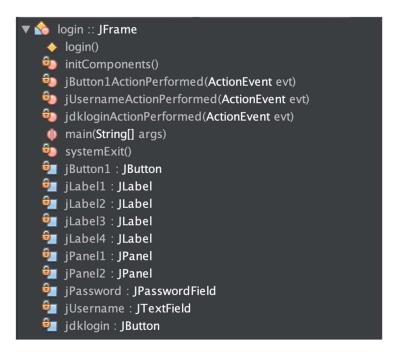
```
▼ 🏠 jPassword

□ getText(): String
□ setText(Object object)
```

UML diagram 2: jPassword



UML diagram: jUsername



UML diagram 4: Login

```
▼ 🏡 Login_a :: JFrame
    Login_a()
   addlisting()
   checkalreadyexist() : boolean
    oreateRowFilter(JTable table) : JTextField
   initComponents()
   jAddActionPerformed(ActionEvent evt)
   jButton1ActionPerformed(ActionEvent evt)
   jButton2ActionPerformed(ActionEvent evt)
   jButton3ActionPerformed(ActionEvent evt)
jButton4ActionPerformed(ActionEvent evt)
   jButton5ActionPerformed(ActionEvent evt)
   jGradeActionPerformed(ActionEvent evt)
   jNameActionPerformed(ActionEvent evt)
   jTable3MouseClicked(MouseEvent evt)
   jTable3MousePressed(MouseEvent evt)
   jUseridActionPerformed(ActionEvent evt)
    main(String[] args)
   🗓 renderdata()
  Searchtext : JTextField
   ■ fmodel : DefaultTableModel
   算 jAdd : JButton
   算 jButton1 : JButton
   jButton2 : JButton
   🗓 jButton3 : JButton
   jButton4 : JButton
   jButton5 : JButton
   🛂 jGrade : JTextField
   算 jLabel1 : JLabel
   🛂 jLabel2 : JLabel
   算 jLabel3 : JLabel
```

UML diagram 5 : Login_a 1

```
🛂 jLabel4 : JLabel
算 jLabel5 : JLabel
算 jLabel6 : JLabel
算 jName : JTextField
jPanel1 : JPanel
jPassword : JTextField
jPasswords : JPasswordField
jScrollPane1 : JScrollPane
jScrollPane2 : JScrollPane
9 jScrollPane3 : JScrollPane
🗓 jScrollPane4 : JScrollPane
🗓 jScrollPane6 : JScrollPane
jSeparator1 : JSeparator
竰 jSplitPane1 : JSplitPane
算 jTable1 : JTable
🦆 jTable2 : JTable
算 jTable3 : JTable
算 jText : JTextArea
算 jTextArea1 : JTextArea
🖣 jUserid : JTextField
👊 username : String
```

UML diagram 6 : Login_a 2

```
    Login_o()
    initComponents()
    jButton1ActionPerformed(ActionEvent evt)
    jButton2ActionPerformed(ActionEvent evt)
    main(String[] args)
    jButton1: JButton
    jButton2: JButton
    jLabel1: JLabel
    jLabel2: JLabel
    jLabel3: JLabel
    ill loginnew: Login_o
```

UML diagram 7 : Login_o

```
▼ shops a strain with the shops are shown in the shown in the shown in the shops are shown in the shown i
               Login_s()
             disablebutton()
           initComponents()
            jButton1ActionPerformed(ActionEvent evt)
            jButton2ActionPerformed(ActionEvent evt)
           jButton3ActionPerformed(ActionEvent evt)
            jTextField4ActionPerformed(ActionEvent evt)
            jTextField5ActionPerformed(ActionEvent evt)
             main(String[] args)
              setusername(String username)
             flag: boolean
           jButton1 : JButton
           算 jButton2 : JButton
            算 jButton3 : JButton
           竰 jLabel1 : JLabel
           দ jLabel2 : JLabel
           竰 jLabel3 : JLabel
           算 jLabel4 : JLabel
           算 jLabel5 : JLabel
           竰 jLabel6 : JLabel
           竰 jLabel7 : JLabel
           jScrollPane1 : JScrollPane
           🗓 jScrollPane2 : JScrollPane
           🖣 jScrollPane3 : JScrollPane
           jScrollPane4 : JScrollPane
           🖣 jScrollPane5 : JScrollPane
           算 jScrollPane6 : JScrollPane
           jScrollPane7 : JScrollPane
           🛂 jScrollPane8 : JScrollPane
            🛂 jScrollPane9 : JScrollPane
```

UML diagram 7 : Login_s 1

```
jTextArea1: JTextArea
jTextArea2: JTextArea
jTextArea3: JTextArea
jTextArea4: JTextArea
jTextArea5: JTextArea
jTextField1: JTextField
jTextField2: JTextField
jTextField3: JTextField
jTextField4: JTextField
jTextField5: JTextField
jTextField5: JTextField
jTextField5: JTextField
jTextPane1: JTextPane
jTextPane2: JTextPane
jTextPane3: JTextPane
jTextPane4: JTextPane
jTextPane4: JTextPane
```

UML diagram 8: Login s 2

```
▼ 🏫 Login_t :: JFrame
   Login_t()
   initComponents()
   jButton1ActionPerformed(ActionEvent evt)
   jButton2ActionPerformed(ActionEvent evt)
   Button3ActionPerformed(ActionEvent evt)
   jUsernameActionPerformed(ActionEvent evt)
   main(String[] args)
   🧓 systemExit()
   🖣 jButton1 : JButton
   🖣 jButton2 : JButton
   🛂 jButton3 : JButton
   算 jLabel1 : JLabel
   算 jLabel2 : JLabel
   ঘ jLabel3 : JLabel
   算 jLabel4 : JLabel
   🛂 jLabel5 : JLabel
   🖣 jPassword : JPasswordField
   🛂 jUsername : JTextField
   logint : Login_t
```

UML diagram 9 : Login t

Test plan

Success criteria	Test plan
Error message when empty cells are entered Error message when wrong pass or	Enter empty cells and check if error statement pops up. Enter wrong password or user id
user id is entered	and check.
Creation of multiple student accounts with the same user id	Create many accounts with same user id and see if error statement is displayed or not
Delete and see if only the selected student account is deleted or all are deleted.	Select the cell and delete and see.
See if the modifications are successfully modified	Use a pop up which displays 'successfully modified' if the entered is successfully updated.
See if check in is successfully registered when you click check in once.	Use a pop up that pops up once the student selects check in once. It must display user friendly message like "have a nice day" with ok button which will redirect student back to student page.
See if check in is successfully registered when you click check out once.	Use a pop up that pops up once the student selects check in once. It must display user friendly message like "good bye" with ok button which will redirect student back to student page.
going back to home page directly instead of closing and opening the program each time.	Add exit button to every page which will redirect the user to main login page.
Check if the program works with every operating system.	The program was shared with my friends to see if successfully runs on their laptop.
Check if there is data loss when information is shared and check if the entered data succefully gets stored.	The program was shared with my friends as a zip file and was run on their laptop and it was made sure no data loss takes place.