

LAPORAN TUGAS MATA KULIAH
PEMROGRAMAN BERORIENTASI OBYEK

Pertemuan Keempat Belas: Penerapan Download Data File Csv

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SURABAYA
TAHUN 2025

A. PRAKTIKUM

1) Login

a. membuat JFrame Login

LOGIN

Username

Passwora

☐ Tampilkan Password lupa password?

Masuk

belum punya akun? buat akun

b. code tombol masuk

```
] private void btnMasukActionPerformed(java.awt.event.ActionEvent evt) {  
]     if (txtUsername.getText().equals("")) {  
]         JOptionPane.showMessageDialog(this, "Isi Semua Data!",  
]             "Peringatan", JOptionPane.WARNING_MESSAGE);  
]     } else if (new String(txtPW.getPassword()).equals("")) {  
]         JOptionPane.showMessageDialog(this, "Isi Semua Data!",  
]             "Peringatan", JOptionPane.WARNING_MESSAGE);  
]     } else {  
]         try {  
]             EntityManager em = emf.createEntityManager();  
]             em.getTransaction().begin();  
]             TypedQuery<Pw> query = em.createQuery(  
]                 "SELECT a FROM Pw a WHERE a.username = :u AND a.password = :p", Pw.class);  
]             query.setParameter("u", txtUsername.getText());  
]             query.setParameter("p", new String(txtPW.getPassword()));  
]             List<Pw> hasil = query.getResultList();  
]             if (!hasil.isEmpty()) {  
]                 JOptionPane.showMessageDialog(this,  
]                     "Login berhasil! Selamat datang, " + txtUsername.getText() + ".",  
]                     "Sukses", JOptionPane.INFORMATION_MESSAGE);  
]                 tugaspl44.DataPenduduk().setVisible(true);  
]                 dispose();  
]             } else {  
]                 JOptionPane.showMessageDialog(this,  
]                     "Username atau Password salah!",  
]                     "Gagal Login", JOptionPane.ERROR_MESSAGE);  
]             }  
]             em.getTransaction().commit();  
]         } catch (Exception e) {  
]             JOptionPane.showMessageDialog(this,  
]                 "Terjadi kesalahan koneksi ke database: " + e.getMessage(),  
]                 "Error", JOptionPane.ERROR_MESSAGE);  
]         }  
]     }  
]
```

2) Daftar Akun

a. Membuuh Jdialog Daftar

DAFTAR

Username

Nama Ibu

Password

☐ Tampilkan Password

Konfirmasi password

Buat Akun

b. Kode pada tombol buat dengan tambahan nama ibu dan konfirmasi password

```
private void btnMasukActionPerformed(java.awt.event.ActionEvent evt) {
    String pw1 = new String(txtPW1.getPassword()).trim();
    String pw2 = new String(txtPW2.getPassword()).trim();
    char[] p1 = txtPW1.getPassword();
    char[] p2 = txtPW2.getPassword();

    if (txtUsername.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Isi Semua Data!",
            "Peringatan", JOptionPane.WARNING_MESSAGE);
    } else if (pw1.equals("")) {
        JOptionPane.showMessageDialog(this, "Isi Semua Data!",
            "Peringatan", JOptionPane.WARNING_MESSAGE);
    } else if (pw2.equals("")) {
        JOptionPane.showMessageDialog(this, "Isi Semua Data!",
            "Peringatan", JOptionPane.WARNING_MESSAGE);
    } else if (txtIbu.getText().equals("")) {
        JOptionPane.showMessageDialog(this, "Isi Semua Data!",
            "Peringatan", JOptionPane.WARNING_MESSAGE);
    } else if (!Arrays.equals(p1, p2)) {
        JOptionPane.showMessageDialog(this,
            "Password dan Konfirmasi Password tidak sama!",
            "Peringatan", JOptionPane.WARNING_MESSAGE);
    } else {
        try {
            EntityManager em = emf.createEntityManager();
            em.getTransaction().begin();

            Pw a = new Pw();
            a.setUsername(txtUsername.getText());
            a.setPassword(new String(txtPW1.getPassword()));
            a.setIbu(txtIbu.getText());

            em.persist(a);
            em.getTransaction().commit();

            JOptionPane.showMessageDialog(this, "Akun " + txtUsername.getText() + " berhasil dibuat!");
            bersih();
            dispose();
        } catch (Exception e) {
            JOptionPane.showMessageDialog(this, "Error: " + e.getMessage());
        }
    }
}
```

3) JDialog Ubah Password

a. Kode pada tombol ubah

```

221 private void btnUbahActionPerformed(java.awt.event.ActionEvent evt) {
222
223     String pw1 = new String(txtPW1.getPassword()).trim();
224     String pw2 = new String(txtPW2.getPassword()).trim();
225     char[] p1 = txtPW1.getPassword();
226     char[] p2 = txtPW2.getPassword();
227
228     if (pw1.equals("")) {
229         JOptionPane.showMessageDialog(this, "Isi Semua Data!",
230             "Peringatan", JOptionPane.WARNING_MESSAGE);
231     } else if (pw2.equals("")) {
232         JOptionPane.showMessageDialog(this, "Isi Semua Data!",
233             "Peringatan", JOptionPane.WARNING_MESSAGE);
234     } else if (!Arrays.equals(p1, p2)) {
235         JOptionPane.showMessageDialog(this,
236             "Password dan Konfirmasi Password tidak sama!",
237             "Peringatan", JOptionPane.WARNING_MESSAGE);
238     } else {
239         try {
240             EntityManager em = emf.createEntityManager();
241             em.getTransaction().begin();
242
243             Pw a = em.find(Pw.class, txtUsername.getText());
244             a.setPassword(new String(txtPW1.getPassword()));
245
246             em.merge(a);
247             em.getTransaction().commit();
248
249             JOptionPane.showMessageDialog(this, "Password berhasil diubah!");
250             dispose();
251         } catch (Exception e) {
252             JOptionPane.showMessageDialog(this,
253                 "Terjadi kesalahan koneksi: " + e.getMessage(),
254                 "Error", JOptionPane.ERROR_MESSAGE);
255         }
256     }
257 }
258

```

b. Kode pada tombol cari dan tambahan JOptionPane konfirmasi nama ibu saat ingin merubah password

```

if (txtUsername.getText().equals("")) {
    JOptionPane.showMessageDialog(this, "Isi Username!",
        "Peringatan", JOptionPane.WARNING_MESSAGE);
} else {
    try {
        EntityManager em = emf.createEntityManager();
        em.getTransaction().begin();

        Pw a = em.find(Pw.class, txtUsername.getText());

        if (a != null) {
            String Ibu = JOptionPane.showInputDialog(
                this,
                "Username ditemukan!"
                + "Masukkan Nama Ibu.",
                "konfirmasi", JOptionPane.INFORMATION_MESSAGE);

            if (Ibu == null) {
                return;
            }

            if (!Ibu.equalsIgnoreCase(a.getIbu())) {
                JOptionPane.showMessageDialog(this,
                    "Nama Ibu tidak sesuai!",
                    "Peringatan", JOptionPane.WARNING_MESSAGE);
                return;
            }

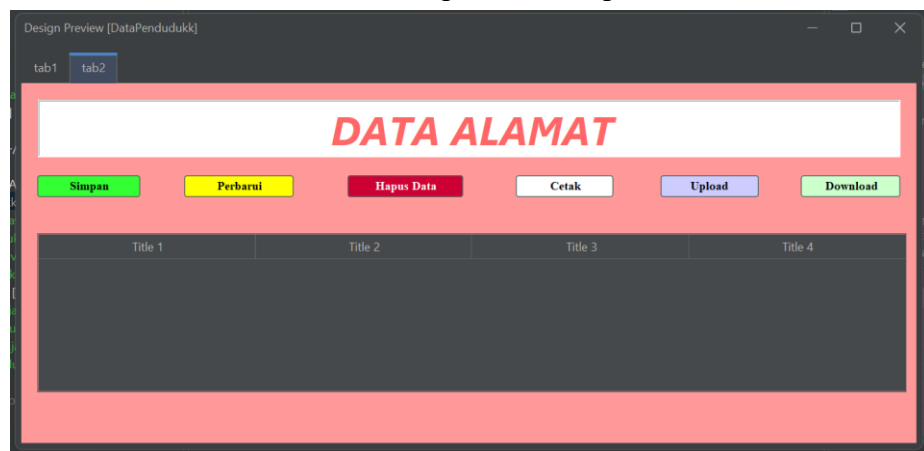
            JOptionPane.showMessageDialog(this,
                "Verifikasi berhasil! Silahkan ubah password.",
                "Informasi", JOptionPane.INFORMATION_MESSAGE);
            jPanel2.setVisible(true);
            txtPw1.requestFocus();
        } else {
            JOptionPane.showMessageDialog(this,
                "Username tidak ditemukan!",
                "Error", JOptionPane.ERROR_MESSAGE);
        }

        em.getTransaction().commit();
    } catch (Exception e) {
        JOptionPane.showMessageDialog(this,
            "Terjadi kesalahan koneksi: " + e.getMessage(),
            "Error", JOptionPane.ERROR_MESSAGE);
    }
}

```

4) Menambahkan fitur Download Data

a. Menambahkan tombol download pada tabbed pane tabel



b. Kode pada tombol download

```

private void jButton1ActionPerformed(java.awt.event.ActionEvent evt) {
    try {
        if (jTable2.getRowCount() == 0) {
            JOptionPane.showMessageDialog(this, "Tidak ada data untuk diekspor!");
            return;
        }

        JFileChooser chooser = new JFileChooser();
        chooser.setDialogTitle("Simpan Data Mengajar");

        int result = chooser.showSaveDialog(this);

        if (result == JFileChooser.APPROVE_OPTION) {
            String path = chooser.getSelectedFile().getAbsolutePath();

            if (!path.toLowerCase().endsWith(".csv")) {
                path += ".csv";
            }

            exportToCSV(jTable2, path);

            JOptionPane.showMessageDialog(this, "Data berhasil diekspor ke:\n" + path);
        }
    } catch (Exception e) {
        JOptionPane.showMessageDialog(this, "Gagal ekspor: " + e.getMessage());
    }
}

```

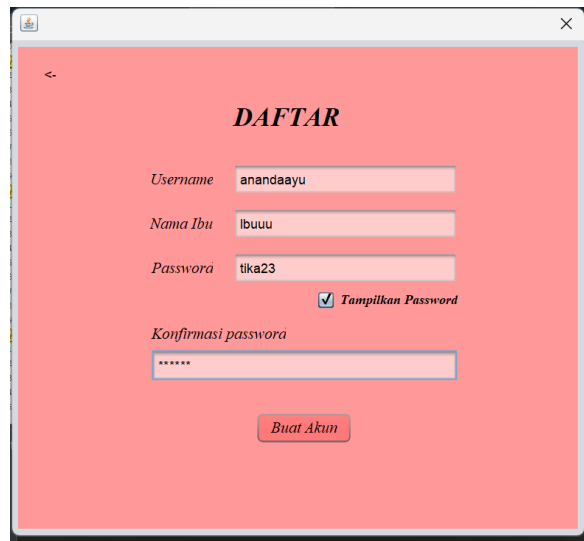
5) Tambahkan method untuk menyimpan dalam bentuk .csv

```
public void exportToCSV(JTable table, String filePath) {
    try (FileWriter writer = new FileWriter(filePath)) {
        TableModel model = table.getModel();

        for (int i = 0; i < model.getColumnCount(); i++) {
            writer.append(model.getColumnName(i));
            if (i < model.getColumnCount() - 1) {
                writer.append(",");
            }
        }
        writer.append("\n");
        for (int row = 0; row < model.getRowCount(); row++) {
            for (int col = 0; col < model.getColumnCount(); col++) {
                Object value = model.getValueAt(row, col);
                writer.append(value == null ? "" : value.toString());
                if (col < model.getColumnCount() - 1) {
                    writer.append(",");
                }
            }
            writer.append("\n");
        }
        writer.flush();
        JOptionPane.showMessageDialog(this, "Data berhasil diekspor ke CSV!");
    } catch (Exception e) {
        JOptionPane.showMessageDialog(this, "Gagal ekspor CSV: " + e.getMessage());
    }
}
```

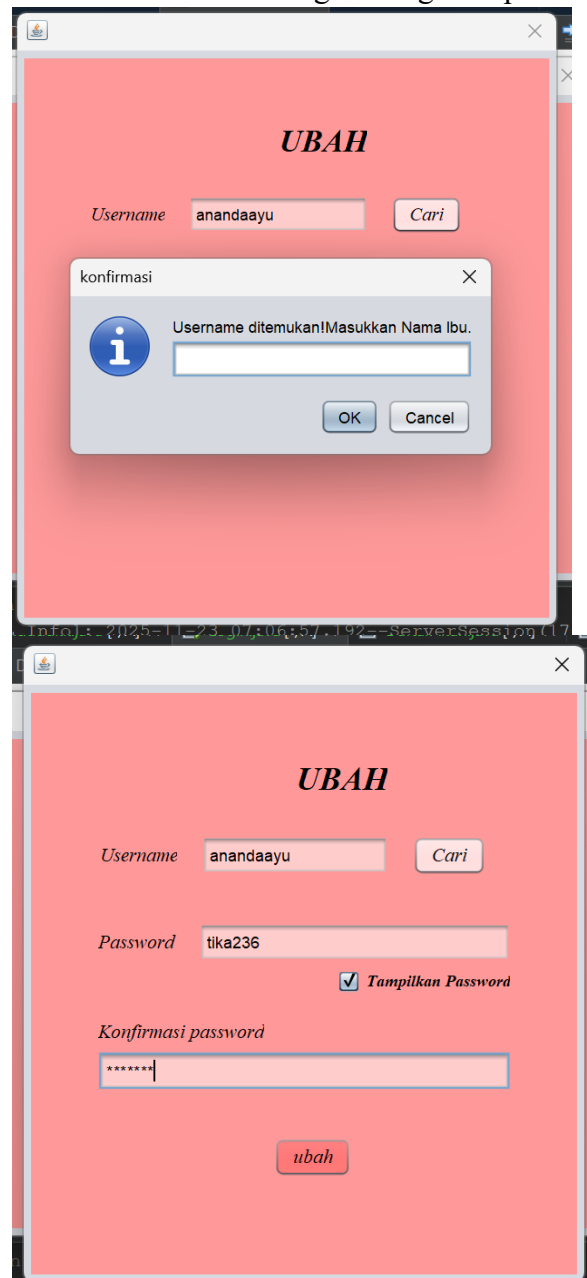
6) Output

a. Tampilan daftar akun



The screenshot shows a web browser window with a pink background. The title is **DAFTAR**. There are four input fields: **Username** (containing 'anandaayu'), **Nama Ibu** (containing 'Ibuuu'), **Passwora** (containing 'tika23'), and **Konfirmasi passwora** (containing '*****'). A checkbox labeled **Tampilkan Password** is checked. At the bottom is a red button labeled **Buat Akun**.

b. Konfirmasi nama ibu saat ingin mengubah password



The top screenshot shows the **UBAH** form with the **Username** field containing 'anandaayu' and a **Cari** button. A modal dialog box titled 'konfirmasi' is open, displaying an information icon and the message 'Username ditemukan!Masukkan Nama Ibu.' with an input field for the mother's name. The dialog has **OK** and **Cancel** buttons.

The bottom screenshot shows the **UBAH** form again, but now with the **Password** field containing 'tika236' and the **Konfirmasi password** field containing '*****'. The **Tampilkan Password** checkbox is checked. A red button labeled **ubah** is at the bottom.

c. Saat ingin download data tabel

