BAB IV

IMPLEMENTASI

Pada bab yang keempat ini akan membahas mengenai implementasi desain dari software Alternatech. Implementasi / code dibuat melalui software Microsoft Visual Studio. Software ini menggunakan .NET Framework 4.6.1 serta menggunakan WPF Web Application. Software Alternatech saat ini memiliki 7 form atau window, dan setiap role akan memiliki akses pada window-window yang berbeda. Aplikasi ini sendiri terbagi menjadi 1 halaman admin, 4 window customer, dan juga 1 window login. Software juga membutuhkan koneki dengan server MySql.

4.1 **Koneksi Server**

Segmen Program 4.1 berfungsi untuk membuka koneksi pada server Mysql. Koneksi ini membutuhkan data source, user ID dan juga password untuk dapat terhubung pada server. Selain itu, terdapat juga prosedur *Connect* yang berfungsi untuk membuka koneksi.

**Segment program 4.1 Connection**

1. class Connection
2. {
3. public MySqlConnection conn;
4. public void Connect()
5. {
6. conn= new MySqlConnection("server=localhost;user=root; database=sdp\_db;port=3306;password=");
7. conn.Open();
8. conn.Close();
9. }
10. }

4.2 **App Page**

App page ini berfungsi untuk login (berdasarkan role). Dari window App, user dapat beralih ke window admin, window homepage(user).Window ini memiliki 1 button serta 1 link yang digunakan untuk register , gambar dibawah ini digunakan Ketika user role login sebagai admin atau sebagain user dan link route untuk menuju register

**Segment program 4.2 Login di App Page**

1. if (email.Length > 0 && password.Length > 0)
2. {
3. if (email.ToLower() == "admin" && password.ToLower() == "admin")

**Lanjutan Segment program** **4.2 Login di App Page**

1. {
2. var admin = new Admin();
3. this.NavigationService.Navigate(admin);
4. }
5. else
6. {
7. conn.conn.Open();
8. cmd = new MySqlCommand();
9. cmd = new MySqlCommand($"SELECT \* FROM CUSTOMER WHERE EMAIL = '{email}'", conn.conn);
10. MySqlDataReader reader = cmd.ExecuteReader();
11. bool isFound = false;
12. while (reader.Read())
13. {
14. if (reader[3].ToString() == email)
15. {
16. isFound = true;
17. if (reader[5].ToString() == password)
18. {
19. Int id= Convert.ToInt32 (reader[0].ToString());
20. var menu = new MainMenu(id);
21. this.NavigationService.Navigate(menu);
22. break;
23. }
24. else
25. {
26. MessageBox.Show("password salah");
27. }
28. }
29. }
30. conn.conn.Close();
31. if (!isFound)
32. {
33. MessageBox.Show("User tidak ditemukan");
34. }
35. }
36. }
37. else
38. {
39. MessageBox.Show("data tidak boleh kosong");
40. }

**Segment program 4.2 Route Register di App Page**

1. private void lbregister\_PreviewMouseDown(object sender, MouseButtonEventArgs e)
2. {
3. var reg = new register();
4. this.NavigationService.Navigate(reg);
5. }

4.3 **Register Page**

Register page ini berfungsi untuk mendaftarkan akun user.page ini memiliki 1 button untuk register dan 1 page link untuk menuju login.

**Segment program 4.3 Register**

1. if (email.Length > 0 && username.Length > 0 && pass.Length > 0 && passconf.Length > 0 && nomor.Length > 0)
2. {
3. if(pass == passconf)
4. {
5. try
6. {
7. conn.conn.Open();
8. MySqlCommand cmd = new MySqlCommand($"INSERT INTO CUSTOMER(USERNAME, NAMA\_CUST, EMAIL,NO\_TELP,PASSWORD, SALDO) VALUES('{username}', '{name}', '{email}', '{nomor}', '{pass}', 0)", conn.conn);
10. cmd.ExecuteNonQuery();
11. conn.conn.Close();
12. }
13. catch(Exception ex)
14. {
15. MessageBox.Show(ex.Message);
16. conn.conn.Close();
17. }
18. }
19. else
20. {
21. MessageBox.Show("Konfirmasi password tidak sesuai");
22. }
23. }
24. else
25. {
26. MessageBox.Show("Data tidak boleh kosong");
27. }

**Segment program 4.3 Route Login**

1. Private void lblogin\_PreviewMouseDown(objectsender, MouseButtonEventArgs e)
2. {
3. var page1 = new Page1();
4. this.NavigationService.Navigate(page1);
5. }

4.4 **Admin Page**

Admin page ini berfungsi untuk CRUD barang , update request saldo user serta dapat meliah report user dan report transaksi. Admin page ini memiliki 5 button dan 1 button untuk logout, button barang digunakan untuk memunculkan data list barang, lalu button user digunakan untuk memunculkan data list user , lalu button laporan transaksi digunakan untuk memunculkan report laporan transaksi, lalu button konfirmasi top up untuk memunculkan list top up yang masih pending ,lalu button load digunakan untuk memunculkan user yang dimana terdapat combo box yang digunakan untuk memunculkan sesuai user yang dipilih Combo Box serta bisa di filter sesuai kegunaannya dengan memilih 4 button yaitu Barang, User, Laporan Transaksi, Konfirmasi Top up.

**Segment program 4.4 Button Load Barang**

1. conn.conn.Open();
2. cmd = new MySqlCommand();
3. cmd = new MySqlCommand($"SELECT BARANG.ID ,BARANG.NAMA\_BARANG AS \"NAMA BARANG\",MERK.NAMA\_MERK ,KATEGORI.NAMA\_KAT,STOK,HARGA FROM BARANG,MERK,KATEGORI WHERE BARANG.MERK = MERK.KODE\_MERK AND BARANG.KATEGORI = KATEGORI.KODE\_KAT ORDER BY id ASC", conn.conn);
4. MySqlDataAdapter sda = new MySqlDataAdapter(cmd);
5. dt = new DataTable();
6. sda.Fill(dt);
7. dgvUser.ItemsSource = dt.DefaultView;
8. conn.conn.Close();

**Segment program 4.4 Button Load User**

1. conn.conn.Open();
2. cmd = new MySqlCommand();
3. cmd = new MySqlCommand($"SELECT CUSTOMER.ID ,CUSTOMER.NAMA\_CUST AS \"NAMA CUSTOMER\",CUSTOMER.SALDO AS \"SALDO\" FROM CUSTOMER ORDER BY id ASC", conn.conn);
4. MySqlDataAdapter sda = new MySqlDataAdapter(cmd);
5. dt = new DataTable();
6. sda.Fill(dt);
7. dgvcustomer.ItemsSource = dt.DefaultView;
8. conn.conn.Close();

**Segment program 4.4 Button Load Laporan Transaksi**

1. int sub = 0;
2. conn.conn.Open();
3. cmd = new MySqlCommand();
4. cmd = new MySqlCommand($"SELECT BARANG.NAMA\_BARANG AS \"NAMA BARANG\",H\_BELI.NOMOR\_NOTA AS \"NOMOR NOTA\",D\_BELI.jumlah,D\_BELI.SUBTOTAL as \"Subtotal\" from Barang,H\_BELI,D\_BELI,Customer where Customer.id={getiduser} and H\_BELI.ID\_CUSTOMER=CUSTOMER.ID and D\_BELI.NOMOR\_NOTA=H\_BELI.NOMOR\_NOTA and BARANG.ID=D\_BELI.ID\_BARANG ORDER BY BARANG.NAMA\_BARANG", conn.conn);
5. MySqlDataAdapter sda = new MySqlDataAdapter(cmd);
6. dt = new DataTable();
7. sda.Fill(dt);
8. dgvLaporan.ItemsSource = dt.DefaultView;
9. conn.conn.Close();
10. conn.conn.Open();

**Lanjutan Segment program 4.4 Button Load Laporan Transaksi**

1. cmd = new MySqlCommand($"SELECT D\_BELI.SUBTOTAL from Barang,H\_BELI,D\_BELI,Customer where Customer.id= {getiduser} and H\_BELI.ID\_CUSTOMER=CUSTOMER.ID and D\_BELI.NOMOR\_NOTA=H\_BELI.NOMOR\_NOTA and BARANG.ID=D\_BELI.ID\_BARANG ORDER BY BARANG.NAMA\_BARANG", conn.conn);
2. MySqlDataReader reader = cmd.ExecuteReader();
3. while(reader.Read())
4. {
5. sub += Convert.ToInt32(reader[0].ToString());
6. }
7. customerLb.Content = "Name: " + (cblistcustomer.SelectedItem.ToString().Split('-'))[1];
8. totalLb.Content = "Total: " + sub.ToString();
9. conn.conn.Close();

**Segment program 4.4 Button Load Konfirmasi Top Up**

1. conn.conn.Open();
2. cmd = new MySqlCommand();
3. cmd = new MySqlCommand($"SELECT REQ\_SALDO.ID AS \"ID\",CUSTOMER.NAMA\_CUST AS \"NAMA CUSTOMER\",REQ\_SALDO.saldoreq AS \"SALDO\" FROM REQ\_SALDO,CUSTOMER WHERE CUSTOMER.ID = REQ\_SALDO.ID\_CUST AND REQ\_SALDO.KONFIRMASI = 'pending' ORDER BY REQ\_SALDO.id ASC", conn.conn);
4. MySqlDataAdapter sda = new MySqlDataAdapter(cmd);
5. dt = new DataTable();
6. sda.Fill(dt);
7. dgvkonfirsaldo.ItemsSource = dt.DefaultView;
8. conn.conn.Close();

Lalu ketika admin ingin melakukan penambahan data, admin harus memasukkan nama barang, kategori, merek, harga barang dan stock barang dan untuk mengafifkan mode ini user harus menekan tombol load barang terlebih dahulu . Ketika penambahan berhasil dimasukkan, akan muncul notifikasi berhasil. Ketika penambahan gagal, akan terdapat notifikasi juga yang muncul memberitahukan bahwa proses penambahan barang tersebut gagal.

**Segment program 4.4 Insert Barang**

1. if (text\_nmbarang.Text.Length != 0 || text\_harga.Text.Length != 0 || text\_stok.Text.Length != 0)
2. {
3. if (combo\_kategori.SelectedIndex != -1 || combo\_merk.SelectedIndex != -1)
4. {
5. getkodekat();
6. getkodemerk();
7. conn.conn.Open();

**Lanjutan Segment program 4.4 Insert Barang**

1. using(MySqlTransaction trans = conn.conn.BeginTransaction())
2. {
3. try
4. {
5. MySqlCommand cmd = new MySqlCommand($"insert into BARANG(NAMA\_BARANG, MERK, KATEGORI,STOK,HARGA) values('{text\_nmbarang.Text}','{kodemerk}','{kodekat}',{Convert.ToInt32(text\_stok.Text)},{Convert.ToInt32(text\_harga.Text)})", conn.conn);
6. cmd.ExecuteNonQuery();
7. trans.Commit();
8. conn.conn.Close();
9. MessageBox.Show("Insert berhasil");
10. }
11. catch (Exception ex)
12. {
13. trans.Rollback();
14. conn.conn.Close();
15. MessageBox.Show(ex.Message);
16. }
17. }
18. conn.conn.Close();
19. loadBarang();
20. normalmode();
21. }
22. else
23. {
24. MessageBox.Show("Pilih combobox terlebih dahulu");
25. }
26. }
27. else
28. {
29. MessageBox.Show("isi textbox terlebih dahulu");
30. }

Lalu Ketika admin ini menghapus salah satu barang harus menekan salah satu dari datagrid terlebih dahulu lalu data tersebut akan tertampil di textbox lalu admin bisa menghapus barang tersebut.

**Segment program 4.4 Delete Barang**

1. conn.conn.Open();
2. using(MySqlTransaction trans = conn.conn.BeginTransaction())
3. {
4. try
5. {
6. MySqlCommand cmd = new MySqlCommand($"delete from barang where ID = {index+1}", conn.conn);
7. cmd.ExecuteNonQuery();
8. trans.Commit();
9. conn.conn.Close();

**Lanjutan Segment program 4.4 Delete Barang**

1. MessageBox.Show("delete berhasil");
2. }
3. catch (Exception ex)
4. {
5. trans.Rollback();
6. conn.conn.Close();
7. MessageBox.Show(ex.Message);
8. }
9. }
10. conn.conn.Close();
11. loadBarang();
12. normalmode();

lalu ketika admin ingin memperbarui isi data barang sama dengan cara untuk menghapus barang yang terdapat pada list , hanya menekan barang yang dipilih serta lalu isi 5 combo box yang mau diubah yang terdiri dari nama barang, stock, harga , kategori, merek.

**Segment program 4.4 Update Barang**

1. if (text\_nmbarang.Text.Length != 0 || text\_harga.Text.Length != 0 || text\_stok.Text.Length != 0)
2. {
3. if (combo\_kategori.SelectedIndex != -1 || combo\_merk.SelectedIndex != -1)
4. {
5. getkodekat();
6. getkodemerk();
7. conn.conn.Open();
8. using (MySqlTransaction trans = conn.conn.BeginTransaction())
9. {
10. try
11. {
12. MySqlCommand cmd =new MySqlCommand($"Update BARANG SET NAMA\_BARANG = '{ text\_nmbarang.Text }',MERK = '{ kodemerk }',kategori='{kodekat}',STOK={Convert.ToInt32 (text\_stok.Text)},HARGA = {Convert.ToInt32(text\_harga.Text)} Where id = " + (index+1) ,conn.conn);
13. cmd.ExecuteNonQuery();
14. trans.Commit();
15. conn.conn.Close();
16. MessageBox.Show("Update berhasil");
17. }
18. catch (Exception ex)
19. {
20. trans.Rollback();
21. conn.conn.Close();
22. MessageBox.Show(ex.Message);
23. }
24. }
25. conn.conn.Close();
26. loadBarang();
27. normalmode();
28. }
29. else
30. {

**Lanjutan Segment program 4.4 Delete Barang**

1. MessageBox.Show("Pilih combobox terlebih dahulu");
2. }
3. }
4. else
5. {
6. MessageBox.Show("isi textbox terlebih dahulu");
7. }

Lalu pada fitur konfirmasi saldo, admin dapat menyetujui request saldo atau menolak request saldo user, terlebidahulu admin harus menekan salah satu user yang terdapat pada datagridview, lalu terdapat 2 tombol terima dan tolak.saat admin menekan tombol terima maka saldo akan langsung masuk ke saldo user yang sudah di konfirmasi dan saat admin menekan tombol tolak makan request tersebut dibatalkan.

**Segment program 4.4 menyetejui request saldo**

1. if (tbnamacust.Text.Length != 0 || tbsaldo.Text.Length != 0)
2. {
3. conn.conn.Open();
4. using (MySqlTransaction trans = conn.conn.BeginTransaction())
5. {
6. try
7. {
8. MySqlCommand cmd = new MySqlCommand($"Update CUSTOMER SET SALDO = {Convert.ToInt32(tbsaldo.Text)} WHERE NAMA\_CUST = '{tbnamacust.Text}'" , conn.conn);
9. MySqlCommand cmd2 = new MySqlCommand($"Update REQ\_SALDO SET KONFIRMASI = 'accepted' WHERE ID = {dt.Rows[dgvkonfirsaldo.SelectedIndex][0]}", conn.conn);
10. cmd.ExecuteNonQuery();
11. cmd2.ExecuteNonQuery();
12. trans.Commit();
13. conn.conn.Close();
14. MessageBox.Show("Top Up Berhasil Diterima");
15. LoadSaldo();
16. }
17. catch (Exception ex)
18. {
19. trans.Rollback();
20. conn.conn.Close();
21. MessageBox.Show(ex.Message);
22. }
23. }
24. }
25. else
26. {
27. MessageBox.Show("pilihan tidak boleh kosong");
28. }

**Segment program 4.4 menolak request saldo**

1. if (tbnamacust.Text.Length != 0 || tbsaldo.Text.Length != 0
2. {
3. conn.conn.Open();
4. using (MySqlTransaction trans = conn.conn.BeginTransaction())
5. {
6. try
7. {
8. MySqlCommand cmd = new MySqlCommand($"Update REQ\_SALDO SET KONFIRMASI = 'rejected' WHERE ID = {dt.Rows[dgvkonfirsaldo.SelectedIndex][0]}", conn.conn);
9. cmd.ExecuteNonQuery();
10. trans.Commit();
11. conn.conn.Close();
12. MessageBox.Show("Top Up Berhasil Ditolak");
13. LoadSaldo();
14. }
15. catch (Exception ex)
16. {
17. trans.Rollback();
18. conn.conn.Close();
19. MessageBox.Show(ex.Message);
20. }
21. tbnamacust.Clear();
22. tbsaldo.Clear();
23. }
24. }
25. else
26. {
27. MessageBox.Show("pilihan tidak boleh kosong");
28. }

4.5 **User Page**

**Segment program 4.5 update profil pada user**

1. conn.conn.Open();
2. MySqlCommand cmd = new MySqlCommand($"UPDATE customer SET NAMA\_CUST=@name,EMAIL=@email, NO\_TELP=@notelp WHERE ID={iduser}", conn.conn);
3. cmd.Parameters.AddWithValue("@name", name);
4. cmd.Parameters.AddWithValue("@email", email);
5. cmd.Parameters.AddWithValue("@notelp", notelp);
6. cmd.ExecuteNonQuery();
7. conn.conn.Close();
8. loaduser(user.id);
9. MessageBox.Show("Update berhasil");

**Segment program 4.5 ganti password pada user**

1. if(tbupdate\_oldpass.Password == user.password)
2. {
3. if(tbupdate\_newpass.Password == tbupdate\_confirm.Password)
4. {
5. conn.conn.Open();
6. MySqlCommand cmd = new MySqlCommand($"UPDATE customer SET Password=@password WHERE ID={iduser}", conn.conn);
7. cmd.Parameters.AddWithValue("@password", password);
8. cmd.ExecuteNonQuery();
9. conn.conn.Close();
10. loaduser(user.id);
11. MessageBox.Show("Change Password Success");
12. }
13. else
14. {
15. MessageBox.Show("Password baru dan password confirmation tidak sama");
16. }
17. }
18. else
19. {
20. MessageBox.Show("Password salah");
21. }

**Segment program 4.5 load barang pada user**

1. barangList.Clear();
2. indexingItem = 0;
3. if (kategori[kat] == "All")
4. {
5. conn.conn.Open();
6. if(filtercb.SelectedIndex == 0)
7. {
8. if (tbsearch.Text.Length > 0)
9. {
10. MySqlCommand cmd = new MySqlCommand($"SELECT \* FROM BARANG WHERE UPPER(NAMA\_BARANG) like '%{tbsearch.Text.ToUpper()}%' ORDER BY ID DESC", conn.conn);
11. MySqlDataReader reader = cmd.ExecuteReader();
12. while (reader.Read())
13. {
14. byte[] binaryData = Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(reader[6])));
15. barangList.Add(new Barang(Convert.ToInt32(reader[0].ToString()), reader[1].ToString(), reader[2].ToString(), reader[3].ToString(), Convert.ToInt32(reader[4].ToString()), Convert.ToInt32(reader[5].ToString()), binaryData));
16. }
17. }

**Lanjutan Segment program 4.5 load barang pada user**

1. else
2. {
3. MySqlCommand cmd = new MySqlCommand("SELECT \* FROM BARANG ORDER BY ID DESC", conn.conn);
4. MySqlDataReader reader = cmd.ExecuteReader();
5. int ctr = 1;
6. while (reader.Read())
7. {
8. ctr++;
9. byte[] binaryData = Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(reader[6])));
10. barangList.Add(new Barang(Convert.ToInt32(reader[0].ToString()), reader[1].ToString(), reader[2].ToString(), reader[3].ToString(), Convert.ToInt32(reader[4].ToString()), Convert.ToInt32(reader[5].ToString()), binaryData));
11. }
12. }
13. conn.conn.Close();
15. }else if (filtercb.SelectedIndex == 1)
16. {
17. if (tbsearch.Text.Length > 0)
18. {
19. MySqlCommand cmd = new MySqlCommand($"SELECT \* FROM BARANG WHERE UPPER(NAMA\_BARANG)
20. like '%{tbsearch.Text.ToUpper()}%' ORDER BY harga DESC", conn.conn);
21. MySqlDataReader reader = cmd.ExecuteReader();
22. while (reader.Read())
23. {
24. byte[] binaryData = Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(reader[6])));
25. barangList.Add(new Barang(Convert.ToInt32(reader[0].ToString()), reader[1].ToString(), reader[2].ToString(), reader[3].ToString(), Convert.ToInt32(reader[4].ToString()), Convert.ToInt32(reader[5].ToString()), binaryData));
26. }
27. }
28. else
29. {
30. MySqlCommand cmd = new MySqlCommand("SELECT \* FROM BARANG ORDER BY harga DESC", conn.conn);
31. MySqlDataReader reader = cmd.ExecuteReader();
32. while (reader.Read())
33. {

**Lanjutan Segment program 4.5 load barang pada user**

1. byte[] binaryData = Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(reader[6])));
2. barangList.Add(new Barang(Convert.ToInt32(reader[0].ToString()), reader[1].ToString(), reader[2].ToString(), reader[3].ToString(), Convert.ToInt32(reader[4].ToString()), Convert.ToInt32(reader[5].ToString()), binaryData));
3. }
4. }
5. conn.conn.Close();
6. }else if (filtercb.SelectedIndex == 2)
7. {
8. if (tbsearch.Text.Length > 0)
9. {
10. MySqlCommand cmd = new MySqlCommand($"SELECT \* FROM BARANG WHERE UPPER(NAMA\_BARANG) like '%{tbsearch.Text.ToUpper()}%' ORDER BY harga ASC", conn.conn);
11. MySqlDataReader reader = cmd.ExecuteReader();
12. while (reader.Read())
13. {
14. byte[] binaryData = Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(reader[6])));
15. barangList.Add(new Barang(Convert.ToInt32(reader[0].ToString()), reader[1].ToString(), reader[2].ToString(), reader[3].ToString(), Convert.ToInt32(reader[4].ToString()), Convert.ToInt32(reader[5].ToString()), binaryData));
16. }
17. }
18. Else
19. {
20. MySqlCommand cmd = new MySqlCommand("SELECT \* FROM BARANG ORDER BY harga ASC", conn.conn);
21. MySqlDataReader reader = cmd.ExecuteReader();
22. while (reader.Read())
23. {
24. byte[] binaryData = Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(reader[6])));
25. barangList.Add(new Barang(Convert.ToInt32(reader[0].ToString()), reader[1].ToString(), reader[2].ToString(), reader[3].ToString(), Convert.ToInt32(reader[4].ToString()), Convert.ToInt32(reader[5].ToString()), binaryData));
26. }
27. }
28. conn.conn.Close();
29. }
30. }
31. else
32. {

**Lanjutan Segment program 4.5 load barang pada user**

1. if(filtercb.SelectedIndex == 0)
2. {
3. if (tbsearch.Text.Length > 0)
4. {
5. conn.conn.Open();
6. MySqlCommand cmd = new MySqlCommand($"SELECT \* FROM BARANG WHERE KATEGORI='{kategori[kat]}' AND UPPER(NAMA\_BARANG) like '%{tbsearch.Text.ToUpper()}%' ORDER BY ID DESC", conn.conn);
7. MySqlDataReader reader = cmd.ExecuteReader();
8. while (reader.Read())
9. {
10. byte[] binaryData = Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(reader[6])));
11. barangList.Add(new Barang(Convert.ToInt32(reader[0].ToString()), reader[1].ToString(), reader[2].ToString(), reader[3].ToString(), Convert.ToInt32(reader[4].ToString()), Convert.ToInt32(reader[5].ToString()), binaryData));
12. }
13. }
14. else
15. {
16. conn.conn.Open();
17. MySqlCommand cmd = new MySqlCommand($"SELECT \* FROM BARANG WHERE KATEGORI='{kategori[kat]}' ORDER BY ID DESC", conn.conn);
18. MySqlDataReader reader = cmd.ExecuteReader();
19. while (reader.Read())
20. {
21. byte[] binaryData =
22. Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(re
23. ader[6])));
24. barangList.Add(new
25. Barang(Convert.ToInt32(reader[0].ToString()),
26. reader[1].ToString(), reader[2].ToString(),
27. reader[3].ToString(), Convert.ToInt32(reader[4].ToString()),
28. Convert.ToInt32(reader[5].ToString()), binaryData));
29. }
30. }
32. conn.conn.Close();
34. }else if (filtercb.SelectedIndex == 1)
35. {
36. if (tbsearch.Text.Length > 0)
37. {
38. conn.conn.Open();
39. MySqlCommand cmd = new
40. MySqlCommand($"SELECT \* FROM BARANG WHERE
41. KATEGORI='{kategori[kat]}' AND UPPER(NAMA\_BARANG) like
42. '%{tbsearch.Text.ToUpper()}%' ORDER BY harga DESC",
43. conn.conn);
44. MySqlDataReader reader =
45. cmd.ExecuteReader();
46. while (reader.Read())

**Lanjutan Segment program 4.5 load barang pada user**

1. {
2. byte[] binaryData =
3. Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(re
4. ader[6])));
5. barangList.Add(new
6. Barang(Convert.ToInt32(reader[0].ToString()),
7. reader[1].ToString(), reader[2].ToString(),
8. reader[3].ToString(), Convert.ToInt32(reader[4].ToString()),
9. Convert.ToInt32(reader[5].ToString()), binaryData));
10. }
11. }
12. else
13. {
14. conn.conn.Open();
15. MySqlCommand cmd = new
16. MySqlCommand($"SELECT \* FROM BARANG WHERE
17. KATEGORI='{kategori[kat]}' ORDER BY harga DESC", conn.conn);
18. MySqlDataReader reader =
19. cmd.ExecuteReader();
20. while (reader.Read())
21. {
22. byte[] binaryData =
23. Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(re
24. ader[6])));
25. barangList.Add(new
26. Barang(Convert.ToInt32(reader[0].ToString()),
27. reader[1].ToString(), reader[2].ToString(),
28. reader[3].ToString(), Convert.ToInt32(reader[4].ToString()),
29. Convert.ToInt32(reader[5].ToString()), binaryData));
30. }
31. }
32. conn.conn.Close();
34. }else if (filtercb.SelectedIndex == 2)
35. {
36. if (tbsearch.Text.Length > 0)
37. {
38. conn.conn.Open();
39. MySqlCommand cmd = new MySqlCommand($"SELECT \* FROM BARANG WHERE KATEGORI='{kategori[kat]}' AND UPPER(NAMA\_BARANG) like '%{tbsearch.Text.ToUpper()}%' ORDER BY harga ASC", conn.conn);
40. MySqlDataReader reader = cmd.ExecuteReader();
41. while (reader.Read())
42. {
43. byte[] binaryData =
44. Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(re
45. ader[6])));
46. barangList.Add(new
47. Barang(Convert.ToInt32(reader[0].ToString()),
48. reader[1].ToString(), reader[2].ToString(),
49. reader[3].ToString(), Convert.ToInt32(reader[4].ToString()),
50. Convert.ToInt32(reader[5].ToString()), binaryData));
51. }
52. }
53. else
54. {

**Lanjutan Segment program 4.5 load barang pada user**

1. conn.conn.Open();
2. MySqlCommand cmd = new MySqlCommand($"SELECT \* FROM BARANG WHERE KATEGORI='{kategori[kat]}' ORDER BY harga ASC", conn.conn);
3. MySqlDataReader reader = cmd.ExecuteReader();
4. while (reader.Read())
5. {
6. byte[]binaryData = Convert.FromBase64String(Encoding.UTF8.GetString((byte[])(reader[6])));
7. barangList.Add(new Barang(Convert.ToInt32(reader[0].ToString()), reader[1].ToString(), reader[2].ToString(), reader[3].ToString(), Convert.ToInt32(reader[4].ToString()), Convert.ToInt32(reader[5].ToString()), binaryData));
8. }
9. }
10. conn.conn.Close();
11. }
12. }
13. loadBarangScreen();
14. nextbtn.IsEnabled = true;
15. if(indexingItem == Math.Ceiling(Convert.ToDouble(barangList.Count() / 8)))
16. {
17. nextbtn.IsEnabled = false;
18. }
20. if (indexingItem == 0)
21. {
22. prevButton.IsEnabled = false;
23. }

**Segment program 4.5 menambahkan barang ke cart**

1. string temp = lbldetail.Content.ToString();
2. conn.conn.Open();
3. int idbrg = -1;
4. MySqlCommand cmd = new MySqlCommand($"SELECT ID FROM BARANG WHERE NAMA\_BARANG = '{temp}'", conn.conn);
5. MySqlDataReader reader = cmd.ExecuteReader();
6. while(reader.Read())
7. {
8. idbrg = Convert.ToInt32(reader[0].ToString());
9. }
10. conn.conn.Close();
11. conn.conn.Open();
12. cmd = new MySqlCommand($"SELECT ID\_BARANG FROM CART WHERE USERNAME='{user.username}'", conn.conn);
13. reader = cmd.ExecuteReader();

**Lanjutan Segment program 4.5 menambahkan barang ke cart**

1. bool isFound = false;
2. while(reader.Read())
3. {
4. if(idbrg == Convert.ToInt32(reader[0].ToString()))
5. {
6. isFound = true;
7. }
8. }
9. conn.conn.Close();
10. if(!isFound)
11. {
12. conn.conn.Open();
13. cmd = new MySqlCommand($"INSERT INTO CART VALUES('{user.username}', {idbrg})", conn.conn);
14. cmd.ExecuteNonQuery();
15. conn.conn.Close();
16. idbrg = -1;
18. }
19. else
20. {
21. MessageBox.Show("Barang sudah ada di dalam cart");
22. idbrg = -1;
23. isFound = false;
24. }

**Segment program 4.5 checkout barang**

1. conn.conn.Open();
2. MySqlCommand cmd = new MySqlCommand($"SELECT BARANG.ID, BARANG.NAMA\_BARANG, BARANG.HARGA FROM BARANG, CART WHERE CART.ID\_BARANG = BARANG.ID AND CART.USERNAME = '{user.username}'", conn.conn);
3. int total = 0;
4. MySqlDataReader reader = cmd.ExecuteReader();
5. while (reader.Read())
6. {
7. total += Convert.ToInt32(reader[2].ToString());
8. }
9. conn.conn.Close();
10. if (total <= user.saldo)
11. {
12. List<dBeli> dbeli = new List<dBeli>();
13. string nota = generateNota();
14. conn.conn.Open();
15. cmd = new MySqlCommand($"INSERT INTO H\_BELI VALUES(\"{nota}\", {user.id}, {total}, \"{DateTime.Now.ToString("yyyy-MM-dd")}\")",conn.conn);

**Lanjutan segment program 4.5 checkout barang**

1. cmd.ExecuteNonQuery();
2. cmd = new MySqlCommand($"UPDATE CUSTOMER SET SALDO = {user.saldo - total} WHERE ID = {user.id}", conn.conn);
3. cmd.ExecuteNonQuery();
4. conn.conn.Close();
5. List<int> listidbarang = new List<int>();
6. conn.conn.Open();
7. cmd = new MySqlCommand($"SELECT BARANG.ID, BARANG.NAMA\_BARANG, BARANG.HARGA FROM BARANG, CART WHERE CART.ID\_BARANG = BARANG.ID AND CART.USERNAME = '{user.username}'", conn.conn);
8. reader = cmd.ExecuteReader();
9. while(reader.Read())
10. {
11. dbeli.Add(new dBeli(Convert.ToInt32(reader[0].ToString()),reader[1].ToString(), Convert.ToInt32(reader[2].ToString())));
12. listidbarang.Add(Convert.ToInt32(reader[0].ToString()));
13. }
14. conn.conn.Close();
15. conn.conn.Open();
16. for (int i = 0; i < dbeli.Count; i++)
17. {
18. cmd = new MySqlCommand($"UPDATE BARANG SET STOK = STOK-1 WHERE BARANG.ID = {listidbarang[i]}", conn.conn);
19. cmd.ExecuteNonQuery();
20. }
21. conn.conn.Close();
22. listidbarang.Clear();
23. conn.conn.Open();
24. foreach(dBeli data in dbeli)
25. {
26. cmd = new MySqlCommand($"INSERT INTO D\_BELI VALUES(\"{nota}\", {Convert.ToInt32(data.idBarang)}, 1, {Convert.ToInt32(data.hargaBarang)})", conn.conn);
27. cmd.ExecuteNonQuery();
28. }
29. conn.conn.Close();
30. conn.conn.Open();
31. cmd = new MySqlCommand($"DELETE FROM CART WHERE USERNAME = \"{user.username}\"", conn.conn);
32. cmd.ExecuteNonQuery();
33. conn.conn.Close();
34. conn.conn.Open();
35. cmd = new MySqlCommand($"DELETE FROM BARANG WHERE STOK = 0", conn.conn);
36. cmd.ExecuteNonQuery();
37. conn.conn.Close();
38. MessageBox.Show("Terima kasih sudah berbelanja");
39. loadData();
40. loadCart();

**Lanjutan segment program 4.5 checkout barang**

1. var report = new ReportPembelian(user.id, dbeli);
2. this.NavigationService.Navigate(report);
3. }
4. else
5. {
6. MessageBox.Show("Uang tidak cukup");
7. }

**Segment program 4.5 pembuatan nota barang**

1. conn.conn.Open();
2. string temp = $"SELECT CONCAT(\"{
3. DateTime.Now.ToString("yyyyMMdd")}\" ,
4. LPAD((COUNT(NOMOR\_NOTA) + 1), 3, '0')) FROM H\_BELI WHERE
5. NOMOR\_NOTA LIKE '%{DateTime.Now.ToString("yyyyMMdd")}%'";
6. MySqlCommand cmd = new MySqlCommand(temp,
7. conn.conn);
8. MySqlDataReader reader = cmd.ExecuteReader();
9. string nota = "";
10. while(reader.Read())
11. {
12. nota = reader[0].ToString();
13. }
14. conn.conn.Close();
15. return nota;

**Segment program 4.5 tambah barang di user seller**

1. string namabarang = tb\_seller\_nama.Text.ToString();
2. int stok = int.Parse(tb\_seller\_stok.Text.ToString());
3. int harga =
4. int.Parse(tb\_seller\_harga.Text.ToString());
5. getid();
7. try
8. {
9. conn.conn.Open();
10. MySqlCommand cmd = new MySqlCommand($"INSERT
11. INTO BARANG(NAMA\_BARANG,MERK,KATEGORI,STOK,HARGA,IMG)
12. VALUES('{namabarang}','{kodemerk}','{kodekat}','{stok}','{ha
13. rga}','iVBORw0KGgoAAAANSUhEUgAAAPoAAAD6BAMAAAB6wkcOAAAAG1BMV
14. EXMzMwAAAB/f39MTEwZGRmysrKZmZlmZmYzMzNjTEbvAAAACXBIWXMAAA7EA
15. AAOxAGVKw4bAAACeklEQVR4nO3WMU/bQBTA8cPh7IwYHKdjIoGUkaq0YmxIp
16. WR0WkpXpxJRR6gQzUigLXzsvnc+F0ckqK09dPj/pDiPy9M9v8udgzEAAAAAA
17. AAAAAAAAAAAAAAAAAAAAADNCI7iUSbvgwfRkyD6nrx5Ji/QvFsdWQxHec3iY
18. fJ1PtiV4PibkNnsu+vPy4vNea17ybuW4HQ8H3TrVu/J5VKq3vmB7R/S3+7mv
19. PahH5nISvR7Ncu7ijLjvY8vdXmPNue1/bpEHbm03jZQPZJJxj5279PexrxtX
20. 92926eL9G/VT4owTPVaLK/N3Ui2Wt3f2Mx9eGfq01l9F8FOOSCxu5PZxUrel
21. q/ed9erBqprq6mda5PRzeM9uF0WdlfztvKzc40XlXuoR1bRdpdxIl22XPWw4
22. 8ajdKV1t9rTRRzr3jguRjJT24N8x8mBeT+R6oeV6tJ8tXXNM9OTzO7LLb5qq
23. nqgtXJ5nV74/VZWj9Jq6y4vlJcdl/utgeqzng9kV62svDTfXZenm62plbejM
24. pKivvpOWTBdl6dFffW6xc1p+ew0NvVnrbjqhtdt/yTPTHN/1mqfODt5DDt+z
25. YsV0A0fpWvyzDTza35ct3qlJT3m7qnjH6e64X83X8nTY77V02Bs6gkfv03Xs
26. vuB6RebSTd82Xw1T1t2PzBBx9RTPVL9XBZV/rbFTi/Oum9+5eilPmf69B+Bv
27. xLsfRSZCW4z80EnDPcys39TVHdzR3k1zwwOjH2pH8xem2CyftI/1o5Vx9ire
28. PjC1fkSD9d8m2We+TRM4p/u3pZJUrP1irN5GZw/m2fneRk08JAHAAAAAAAAA
29. AAAAAAAAAAAAAAAAAD/mV+CPmI6PVs6jQAAAABJRU5ErkJggg==')",
30. conn.conn);
31. cmd.ExecuteNonQuery();

**Lanjutan Segment program 4.5 tambah barang di user seller**

1. conn.conn.Close();
2. }
3. catch (Exception ex)
4. {
5. MessageBox.Show(ex.Message);
6. conn.conn.Close();
7. }
8. conn.conn.Open();
9. cmd = new MySqlCommand("SELECT MAX(ID) FROM
10. BARANG", conn.conn);
11. reader = cmd.ExecuteReader();
12. while (reader.Read())
13. {
14. barangID = int.Parse(reader[0].ToString());
15. }
16. conn.conn.Close();
17. try
18. {
19. conn.conn.Open();
20. MySqlCommand cmd = new MySqlCommand($"INSERT
21. INTO DIGITAL\_SELLER(ID\_USER, ID\_BARANG)
22. VALUES('{userID}','{barangID}')", conn.conn);
23. cmd.ExecuteNonQuery();
24. conn.conn.Close();
25. }
26. catch (Exception ex)
27. {
28. MessageBox.Show(ex.Message);
29. conn.conn.Close();
30. }
31. MessageBox.Show("Berhasil insert");

**Segment program 4.5 delete barang di user seller**

1. Try
2. {
3. conn.conn.Open();
4. MySqlCommand cmd = new MySqlCommand($"DELETE
5. FROM BARANG WHERE id = {barangID}", conn.conn);
6. cmd.ExecuteNonQuery();
7. conn.conn.Close();
8. }
9. catch (Exception ex)
10. {
11. MessageBox.Show(ex.Message);
12. conn.conn.Close();
13. }
14. try
15. {
16. conn.conn.Open();
17. MySqlCommand cmd = new MySqlCommand($"DELETE FROM DIGITAL\_SELLER WHERE id\_user = {userID} and id\_barang = {barangID}", conn.conn);
18. cmd.ExecuteNonQuery();
19. conn.conn.Close();
20. }

**Lanjutan Segment program 4.5 delete barang di user seller**

1. catch(Exception ex)
2. {
3. MessageBox.Show(ex.Message);
4. conn.conn.Close();
5. }
6. loaddatagrid();