**Class diagram:**

Nama class: makan

+ hargaNasi = 10000 double

+ hargaAyam = 20000 double

+ hargaSayur = 30000 double

+ jumlahNasi = 0 double

+ jumlahAyam = 0 double

+ jumlahSayur = 0 double

+ setMenu(string nasi = "", string ayam = "", string sayur = "") : void

+ setTambahMenu(string menu, int jumlah): void

+ bayar() : double

**Form1.cs (all event)**

using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace tugasLiburan

{

public partial class formMakan : Form

{

public formMakan()

{

InitializeComponent();

}

private void Form1\_Load(object sender, EventArgs e)

{

txtJumlahTambahMenu.Text = "0";

makan ramdan = new makan();

lblHargaNasi.Text = ramdan.hargaNasi.ToString();

lblHargaAyam.Text = ramdan.hargaAyam.ToString();

lblHargaSayur.Text = ramdan.hargaSayur.ToString();

lblJumlahNasi.Text = "1";

lblJumlahAyam.Text = "1";

lblJumlahSayur.Text = "1";

lblTotalHargaNasi.Text = ramdan.hargaNasi.ToString();

lblTotalHargaAyam.Text = ramdan.hargaAyam.ToString();

lblTotalHargaSayur.Text = ramdan.hargaSayur.ToString();

txtJumlahTambahMenu.Text = "1";

cmbTambahMenu.SelectedIndex = 0;

lblTotalBayar.Text = (Convert.ToDouble(lblTotalHargaNasi.Text) + Convert.ToDouble(lblTotalHargaAyam.Text) + Convert.ToDouble(lblTotalHargaSayur.Text)).ToString();

}

private void chkNasi\_CheckedChanged(object sender, EventArgs e)

{

makan ramdan = new makan();

if(chkNasi.Checked)

{

cmbTambahMenu.Items.Insert(0, "Nasi");

cmbTambahMenu.SelectedIndex = 0;

lblHargaNasi.Text = ramdan.hargaNasi.ToString();

lblJumlahNasi.Text = "1";

lblTotalHargaNasi.Text = ramdan.hargaNasi.ToString();

//tambahin harga total bayar

int totalBayar = Convert.ToInt32(lblTotalBayar.Text);

int totalHargaNasi = Convert.ToInt32(lblTotalHargaNasi.Text);

totalBayar = totalBayar + totalHargaNasi;

lblTotalBayar.Text = totalBayar.ToString();

}

else if(!chkNasi.Checked)

{

cmbTambahMenu.Items.Remove("Nasi");

//kurangin harga total bayar

int totalBayar = Convert.ToInt32(lblTotalBayar.Text);

int totalHargaNasi = Convert.ToInt32(lblTotalHargaNasi.Text);

totalBayar = totalBayar - totalHargaNasi;

//set ke 0

lblHargaNasi.Text = "0";

lblJumlahNasi.Text = "0";

lblTotalHargaNasi.Text = "0";

lblTotalBayar.Text = totalBayar.ToString();

if((!chkAyam.Checked && chkSayur.Checked) || (chkAyam.Checked && !chkSayur.Checked) || (chkAyam.Checked && chkSayur.Checked))

{

cmbTambahMenu.SelectedIndex = 0;

}

else if (!chkNasi.Checked && !chkAyam.Checked && !chkSayur.Checked)

{

MessageBox.Show("Tidak ada menu yang dipilih");

}

}

}

private void chkAyam\_CheckedChanged(object sender, EventArgs e)

{

makan ramdan = new makan();

if(chkAyam.Checked)

{

lblHargaAyam.Text = ramdan.hargaAyam.ToString();

lblJumlahAyam.Text = "1";

lblTotalHargaAyam.Text = ramdan.hargaAyam.ToString();

//tambahin harga total bayar

int totalBayar = Convert.ToInt32(lblTotalBayar.Text);

int totalHargaAyam = Convert.ToInt32(lblTotalHargaAyam.Text);

totalBayar = totalBayar + totalHargaAyam;

lblTotalBayar.Text = totalBayar.ToString();

if (chkNasi.Checked)

{

cmbTambahMenu.Items.Insert(1, "Ayam");

}else if(!chkNasi.Checked)

{

cmbTambahMenu.Items.Insert(0, "Ayam");

}

cmbTambahMenu.SelectedIndex = 0;

}

else if(!chkAyam.Checked)

{

//kurangin harga total bayar

int totalBayar = Convert.ToInt32(lblTotalBayar.Text);

int totalHargaAyam = Convert.ToInt32(lblTotalHargaAyam.Text);

totalBayar = totalBayar - totalHargaAyam;

lblTotalBayar.Text = totalBayar.ToString();

lblHargaAyam.Text = "0";

lblJumlahAyam.Text = "0";

lblTotalHargaAyam.Text = "0";

cmbTambahMenu.Items.Remove("Ayam");

if((!chkNasi.Checked && chkSayur.Checked) || (chkNasi.Checked && !chkSayur.Checked))

{

cmbTambahMenu.SelectedIndex = 0;

}

else if (!chkNasi.Checked && !chkAyam.Checked && !chkSayur.Checked)

{

MessageBox.Show("Tidak ada menu yang dipilih");

}

}

}

private void chkSayur\_CheckedChanged(object sender, EventArgs e)

{

makan ramdan = new makan();

if(chkSayur.Checked)

{

lblHargaSayur.Text = ramdan.hargaSayur.ToString();

lblJumlahSayur.Text = "1";

lblTotalHargaSayur.Text = ramdan.hargaSayur.ToString();

//tambahin harga total bayar

int totalBayar = Convert.ToInt32(lblTotalBayar.Text);

int totalHargaSayur = Convert.ToInt32(lblTotalHargaSayur.Text);

totalBayar = totalBayar + totalHargaSayur;

lblTotalBayar.Text = totalBayar.ToString();

if ((chkNasi.Checked && !chkAyam.Checked) || (!chkNasi.Checked && chkAyam.Checked))

{

cmbTambahMenu.Items.Insert(1, "Sayur");

}else if(chkNasi.Checked && chkAyam.Checked)

{

cmbTambahMenu.Items.Insert(2, "Sayur");

}else if(!chkNasi.Checked && !chkAyam.Checked)

{

cmbTambahMenu.Items.Insert(0, "Sayur");

}

cmbTambahMenu.SelectedIndex = 0;

}else if(!chkSayur.Checked)

{

//kurangin harga total bayar

int totalBayar = Convert.ToInt32(lblTotalBayar.Text);

int totalHargaSayur = Convert.ToInt32(lblTotalHargaSayur.Text);

totalBayar = totalBayar - totalHargaSayur;

lblTotalBayar.Text = totalBayar.ToString();

lblHargaSayur.Text ="0";

lblJumlahSayur.Text = "0";

lblTotalHargaSayur.Text = "0";

cmbTambahMenu.Items.Remove("Sayur");

if((chkNasi.Checked && !chkAyam.Checked) || (!chkNasi.Checked && chkAyam.Checked))

{

cmbTambahMenu.SelectedIndex = 0;

}else if(!chkNasi.Checked && !chkAyam.Checked && !chkSayur.Checked)

{

MessageBox.Show("Tidak ada menu yang dipilih");

}

}

}

private void cmbTambahMenu\_SelectedIndexChanged(object sender, EventArgs e)

{

}

private void btnTambahMenu\_Click(object sender, EventArgs e)

{

if(cmbTambahMenu.Text == "Nasi")

{

int jumlahNasi = Convert.ToInt16(lblJumlahNasi.Text);

jumlahNasi += Convert.ToInt16(txtJumlahTambahMenu.Text);

lblJumlahNasi.Text = jumlahNasi.ToString();

double totalHargaNasi = Convert.ToDouble(lblHargaNasi.Text) \* jumlahNasi;

lblTotalHargaNasi.Text = totalHargaNasi.ToString();

}else if(cmbTambahMenu.Text == "Ayam")

{

int jumlahAyam = Convert.ToInt16(lblJumlahAyam.Text);

jumlahAyam += Convert.ToInt16(txtJumlahTambahMenu.Text);

lblJumlahAyam.Text = jumlahAyam.ToString();

double totalHargaAyam = Convert.ToDouble(lblHargaAyam.Text) \* jumlahAyam;

lblTotalHargaAyam.Text = totalHargaAyam.ToString();

}

else if (cmbTambahMenu.Text == "Sayur")

{

int jumlahSayur = Convert.ToInt16(lblJumlahSayur.Text);

jumlahSayur += Convert.ToInt16(txtJumlahTambahMenu.Text);

lblJumlahSayur.Text = jumlahSayur.ToString();

double totalHargaSayur = Convert.ToDouble(lblHargaSayur.Text) \* jumlahSayur;

lblTotalHargaSayur.Text = totalHargaSayur.ToString();

}

lblTotalBayar.Text = (Convert.ToDouble(lblTotalHargaNasi.Text) + Convert.ToDouble(lblTotalHargaAyam.Text) + Convert.ToDouble(lblTotalHargaSayur.Text)).ToString();

//exception untuk enable tombol button bayar

bool nilai = Convert.ToInt16(lblJumlahNasi.Text) >= 0 && Convert.ToInt16(lblJumlahAyam.Text) >= 0 && Convert.ToInt16(lblJumlahSayur.Text) >= 0;

if (nilai)

{

btnBayar.Enabled = true;

}

}

private void btnKurangMenu\_Click(object sender, EventArgs e)

{

if (txtJumlahTambahMenu.Text == "")

{

MessageBox.Show("Harap input jumlah tambah menu!");

txtJumlahTambahMenu.Text = "0";

}

if (cmbTambahMenu.Text == "Nasi")

{

int jumlahNasi = Convert.ToInt16(lblJumlahNasi.Text);

jumlahNasi -= Convert.ToInt16(txtJumlahTambahMenu.Text);

lblJumlahNasi.Text = jumlahNasi.ToString();

double totalHargaNasi = Convert.ToDouble(lblHargaNasi.Text) \* jumlahNasi;

lblTotalHargaNasi.Text = totalHargaNasi.ToString();

}

else if (cmbTambahMenu.Text == "Ayam")

{

int jumlahAyam = Convert.ToInt16(lblJumlahAyam.Text);

jumlahAyam -= Convert.ToInt16(txtJumlahTambahMenu.Text);

lblJumlahAyam.Text = jumlahAyam.ToString();

double totalHargaAyam = Convert.ToDouble(lblHargaAyam.Text) \* jumlahAyam;

lblTotalHargaAyam.Text = totalHargaAyam.ToString();

}

else if (cmbTambahMenu.Text == "Sayur")

{

int jumlahSayur = Convert.ToInt16(lblJumlahSayur.Text);

jumlahSayur -= Convert.ToInt16(txtJumlahTambahMenu.Text);

lblJumlahSayur.Text = jumlahSayur.ToString();

double totalHargaSayur = Convert.ToDouble(lblHargaSayur.Text) \* jumlahSayur;

lblTotalHargaSayur.Text = totalHargaSayur.ToString();

}

lblTotalBayar.Text = (Convert.ToDouble(lblTotalHargaNasi.Text) + Convert.ToDouble(lblTotalHargaAyam.Text) + Convert.ToDouble(lblTotalHargaSayur.Text)).ToString();

//exception jika ada harga yang mines yang mines

bool nilai = Convert.ToInt16(lblJumlahNasi.Text) < 0 || Convert.ToInt16(lblJumlahAyam.Text) < 0 || Convert.ToInt16(lblJumlahSayur.Text) < 0;

if(nilai)

{

MessageBox.Show("Tidak boleh ada data mines!");

btnBayar.Enabled = false;

}

}

private void textBox1\_TextChanged(object sender, EventArgs e)

{

if (txtUangBayar.Text != "")

{

if (!Int32.TryParse(txtUangBayar.Text, out Int32 data))

{

MessageBox.Show("Harap input hanya angka saja!");

btnBayar.Enabled = false;

}else

{

btnBayar.Enabled = true;

}

}

}

private void btnBayar\_Click(object sender, EventArgs e)

{

if(txtUangBayar.Text == "")

{

MessageBox.Show("Harap Masukkan Uang Bayar!");

}else

{

double totalBayar = Convert.ToDouble(lblTotalBayar.Text);

double uangBayar = Convert.ToDouble(txtUangBayar.Text);

lblTotalKembalian.Text = (uangBayar - totalBayar).ToString("N3");

}

}

private void txtJumlahTambahMenu\_TextChanged(object sender, EventArgs e)

{

if (txtJumlahTambahMenu.Text != "" )

{

if (!Int32.TryParse(txtJumlahTambahMenu.Text, out Int32 data))

{

MessageBox.Show("Harap input hanya angka saja!");

btnTambahMenu.Enabled = false;

btnKurangMenu.Enabled = false;

}

else

{

btnTambahMenu.Enabled = true;

btnKurangMenu.Enabled = true;

}

}

else if(txtJumlahTambahMenu.Text == "")

{

btnTambahMenu.Enabled = false;

btnKurangMenu.Enabled = false;

}

else if (Convert.ToDouble(txtJumlahTambahMenu.Text) < 0)

{

MessageBox.Show("Input tidak boleh lebih kecil dari 0!");

btnTambahMenu.Enabled = false;

btnKurangMenu.Enabled = false;

}

else

{

btnTambahMenu.Enabled = true;

btnKurangMenu.Enabled = true;

}

}

private void button1\_Click(object sender, EventArgs e)

{

makan ramdan = new makan();

//reset textbox jumlah item tambah

txtJumlahTambahMenu.Text = "1";

//reset jumlah item, harga item, dan total harga item

lblHargaNasi.Text = ramdan.hargaNasi.ToString();

lblHargaAyam.Text = ramdan.hargaAyam.ToString();

lblHargaSayur.Text = ramdan.hargaSayur.ToString();

lblJumlahNasi.Text = "1";

lblJumlahAyam.Text = "1";

lblJumlahSayur.Text = "1";

lblTotalHargaNasi.Text = ramdan.hargaNasi.ToString();

lblTotalHargaAyam.Text = ramdan.hargaAyam.ToString();

lblTotalHargaSayur.Text = ramdan.hargaSayur.ToString();

//reset total bayar

lblTotalBayar.Text = (Convert.ToDouble(lblHargaNasi.Text) + Convert.ToDouble(lblHargaAyam.Text) + Convert.ToDouble(lblHargaSayur.Text)).ToString();

//reset uang bayar

txtUangBayar.Text = "";

//reset uang kembalian

lblTotalKembalian.Text = "-";

}

}

}

**Class makan.cs**

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

namespace tugasLiburan

{

class makan

{

public double hargaNasi = 10000, hargaAyam = 20000, hargaSayur = 30000;

public int jumlahNasi = 0, jumlahAyam = 0, jumlahSayur = 0;

public void setMenu(string nasi = "", string ayam = "", string sayur = "")

{

if(nasi == "nasi")

{

this.jumlahNasi++;

}else if(ayam == "ayam")

{

this.jumlahAyam++;

}

else if (sayur == "sayur")

{

this.jumlahSayur++;

}

}

public void setTambahMenu(string menu, int jumlah)

{

if (menu == "nasi")

{

this.jumlahNasi+= jumlah;

}

else if (menu == "ayam")

{

this.jumlahAyam += jumlah;

}

else if (menu == "sayur")

{

this.jumlahSayur += jumlah;

}else

{

MessageBox.Show("Menu yang akan ditambah tidak ada! Silakan cek lagi");

}

}

public double bayar()

{

double bayar = (this.jumlahNasi \* this.hargaNasi) + (this.jumlahAyam \* this.hargaAyam) + (this.jumlahSayur \* this.hargaSayur);

return bayar;

}

}

}