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SE07-02
1. Program.cs

File ini berisi program utama aplikasi transfer bank.

Fungsinya yaitu :

1. Membaca konfigurasi dari file JSON menggunakan class `BankTransferConfig`.
2. Meminta input jumlah uang, lalu menghitung biaya transfer berdasarkan aturan threshold.
3. Menampilkan daftar metode transfer dan meminta konfirmasi dari user.
4. Memberikan hasil akhir apakah transfer berhasil atau dibatalkan, tergantung input user.

ScreenShoot codingan :

```csharp
using System;
using JM8;

class Program
{
    static void Main()
    {
        BankTransferConfig config = BankTransferConfig.LoadConfig();

        Console.WriteLine("==== Bank Transfer Application ====");
        Console.Write(config.lang == "en" ? "Please insert the amount of money to transfer:\n>> " :
            "Masukkan jumlah uang yang akan di-transfer:\n>> ");
        int amount = Convert.ToInt32(Console.ReadLine());

        int fee = (amount <= config.transfer.threshold) ? config.transfer.low_fee : config.transfer.high_fee;
        int total = amount + fee;

        Console.WriteLine(config.lang == "en"
            ? $"Transfer fee = {fee}\nTotal amount = {total}"
            : $"Biaya transfer = {fee}\nTotal biaya = {total}");

        Console.WriteLine();
        Console.WriteLine(config.lang == "en" ? "Select transfer method:" : "Pilih metode transfer:");
        for (int i = 0; i < config.methods.Count; i++)
        {
            Console.WriteLine($"{i + 1}. {config.methods[i]}");
        }

        Console.Write(config.lang == "en"
            ? $"\nPlease type \"{config.confirmation.en}\" to confirm the transaction:\n>> "
            : $"\nKetik \"{config.confirmation.id}\" untuk mengkonfirmasi transaksi:\n>> ");
        string confirm = Console.ReadLine();

        if ((config.lang == "en" && confirm == config.confirmation.en) ||
            (config.lang == "id" && confirm == config.confirmation.id))
        {
            Console.WriteLine(config.lang == "en" ? "The transfer is completed" : "Proses transfer berhasil");
        }
        else
        {
            Console.WriteLine(config.lang == "en" ? "Transfer is cancelled" : "Transfer dibatalkan");
        }
    }
}
```

2. BankTransferConfig.cs

File ini berisi **class konfigurasi runtime**.
 Fungsinya:

1. Membaca dan menyimpan pengaturan dari file
   `bank_transfer_config.json`.
2. Menyediakan nilai default jika file JSON belum ada.

3. Menyimpan data seperti: bahasa (`lang`), ambang batas (`threshold`), biaya transfer (`low_fee`, `high_fee`), metode transfer, dan teks konfirmasi.

Screenshoot codingan :

```csharp
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Text.Json;
using System.Threading.Tasks;

namespace JM8
{
    5 references
    class BankTransferConfig
    {

        9 references
        public string lang { get; set; }
        4 references
        public Transfer transfer { get; set; }
        3 references
        public List<string> methods { get; set; }
        5 references
        public Confirmation confirmation { get; set; }

        private const string filePath = "bank_transfer_config.json";

        1 reference
        public static BankTransferConfig LoadConfig()
        {
            if (File.Exists(filePath))
            {
                string json = File.ReadAllText(filePath);
                return JsonSerializer.Deserialize<BankTransferConfig>(json);
            }
            else
            {
                var defaultConfig = new BankTransferConfig
                {
                    lang = "en",
                    transfer = new Transfer { threshold = 25000000, low_fee = 6500, high_fee = 15000 },
                    methods = new List<string> { "RTO (real-time)", "SKN", "RTGS", "BI FAST" },
                    confirmation = new Confirmation { en = "yes", id = "ya" }
                };
                defaultConfig.SaveConfig();
                return defaultConfig;
            }
        }

        1 reference
        public void SaveConfig()
        {
            var json = JsonSerializer.Serialize(this, new JsonSerializerOptions { WriteIndented = true });
            File.WriteAllText(filePath, json);
        }
    }

    2 references
    public class Transfer
    {
        2 references
        public int threshold { get; set; }
        2 references
        public int low_fee { get; set; }
        2 references
        public int high_fee { get; set; }
    }

    2 references
    public class Confirmation
    {
        3 references
        public string en { get; set; }
        3 references
        public string id { get; set; }
    }
}
```

Outputnya:

```
==== Bank Transfer Application ====
Please insert the amount of money to transfer:
>> 30000000
Transfer fee = 15000
Total amount = 30015000

Select transfer method:
1. RTO (real-time)
2. SKN
3. RTGS
4. BI FAST

Please type "yes" to confirm the transaction:
>> yes
The transfer is completed
```