

**TUGAS JURNAL
KONSTRUKSI PERANGKAT LUNAK**

MODUL VIII

Bank Transfer



Disusun Oleh :

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SE06-3

**PROGRAM STUDI S1 SOFTWARE ENGINEERING
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TUGAS JURNAL

A. Program.cs

```
using System;

class Program
{
    static void Main()
    {
        var config = BankTransferConfig.
LoadConfig("bank_transfer_config.json");

        string lang = config.lang;
        Console.WriteLine(lang == "id" ?
"Masukkan jumlah uang yang akan di-transfer:"
:
"Please insert the amount of money to transfer:");
        string? inputAmount = Console.
ReadLine();
        if (!int.TryParse(inputAmount, out
int amount))
        {
            Console.WriteLine(
"Invalid input.");
            return;
        }

        if (amount < 0)
        {
            Console.WriteLine(
"Invalid input.");
            return;
        }
        if (amount == 0)
        {
            Console.WriteLine(
"Invalid input.");
            return;
        }
        int fee = amount <= config.transfer.
threshold ? config.transfer.low_fee : config.
transfer.high_fee;
        int total = amount + fee;

        if (lang == "id")
        {
            Console.WriteLine($"
Biaya transfer = {fee}");
            Console.WriteLine($"
Total biaya = {total}");
        }
        else
        {
            Console.WriteLine($"
Transfer fee = {fee}");
            Console.WriteLine($"
Total amount = {total}");
        }
    }
}
```

```
Console.WriteLine(lang == "id" ?
"Pilih metode transfer:" :
"Select transfer method:");
        for (int i = 0; i < config.methods.
Count; i++)
        {
            Console.WriteLine($"{i + 1}. {
config.methods[i]}");
        }
        Console.ReadLine();
        // Pilihan user tidak digunakan dalam logika

        string confirmText = lang == "id" ?
config.confirmation.id : config.confirmation.
en;
        Console.WriteLine(lang == "id" ? $"
Ketik \"{confirmText}\"
untuk mengkonfirmasi transaksi:" : $"
Please type \"{confirmText}\"
to confirm the transaction:");
        string? input = Console.ReadLine();
        if (input == null)
        {
            Console.WriteLine(lang == "id" ?
"Input tidak valid." : "Invalid input.");
            return;
        }

        if (input.ToLower() == confirmText.
ToLower())
        {
            Console.WriteLine(lang == "id" ?
"Proses transfer berhasil" :
"The transfer is completed");
        }
        else
        {
            Console.WriteLine(lang == "id" ?
"Transfer dibatalkan" :
"Transfer is cancelled");
        }
    }
}
```

B. BankTransferConfig

```
using System;
using System.IO;
using System.Text.Json;
using System.Collections.Generic;

public class BankTransferConfig
{
    public string lang { get; set; } = "en";
    public Transfer transfer { get; set; } =
new Transfer();
    public List<string> methods { get; set
; } = new List<string>();
    public Confirmation confirmation { get;
set; } = new Confirmation();

    public static BankTransferConfig
LoadConfig(string path)
    {
        if (File.Exists(path))
        {
            string json = File.ReadAllText(
path);
            BankTransferConfig? config =
JsonSerializer.Deserialize<BankTransferConfig>(json);
            if (config != null) return config
;
        }

        // Nilai default jika file tidak ada atau gag
al deserialize
        return 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"
    }
};
}

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

public class Confirmation
{
    public string en { get; set; } = "yes";
    public string id { get; set; } = "ya";
}
```

C. bank_transfer_config

```
{
  "lang": "en",
  "transfer": {
    "threshold": 25000000,
    "low_fee": 6500,
    "high_fee": 15000
  },
  "methods": [
    "RTO (real-time)",
    "SKN",
    "RTGS",
    "BI FAST"
  ],
  "confirmation": {
    "en": "yes",
    "id": "ya"
  }
}
```

D. Output

```
PS D:\KULIAH\SEM6\KPL\TugasPraktikum\Pertemuan8\Jurnal\Jurnal> dotnet run
Using launch settings from D:\KULIAH\SEM6\KPL\TugasPraktikum\Pertemuan8\Jurnal\Jurnal\Properties\launchSettings.json...
Building...
Please insert the amount of money to transfer:
-1000
Invalid input.
PS D:\KULIAH\SEM6\KPL\TugasPraktikum\Pertemuan8\Jurnal\Jurnal> dotnet run
Using launch settings from D:\KULIAH\SEM6\KPL\TugasPraktikum\Pertemuan8\Jurnal\Jurnal\Properties\launchSettings.json...
Building...
Please insert the amount of money to transfer:
1000000
Transfer fee = 6500
Total amount = 1006500
Select transfer method:
1. RTO (real-time)
2. SKN
3. RTGS
4. BI FAST
4
Please type "yes" to confirm the transaction:
yes
The transfer is completed
PS D:\KULIAH\SEM6\KPL\TugasPraktikum\Pertemuan8\Jurnal\Jurnal>
```