

2311104027

Haikal Fadhilah Mufid

S1SE-07-01

```
const fs = require("fs");

class BankTransferConfig {
  constructor() {
    this.configFile = "bank_transfer_config.json";
    this.defaultConfig = this.createDefaultConfig();
    this.config = this.initializeConfig();
  }

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

  initializeConfig() {
    if (this.isConfigFileExists()) {
      const configData = this.readConfigFile();
      return JSON.parse(configData);
    } else {
      this.saveConfigFile(this.defaultConfig);
      return this.defaultConfig;
    }
  }

  isConfigFileExists() {
    return fs.existsSync(this.configFile);
  }
}
```

```

readConfigFile() {
  return fs.readFileSync(this.configFile);
}

saveConfigFile(config) {
  fs.writeFileSync(this.configFile, JSON.stringify(config, null, 2));
}

getConfig() {
  return this.config;
}
}

module.exports = BankTransferConfig;

```

mengelola file konfigurasi, memeriksa apakah file konfigurasi ada, dan membaca atau menyimpan data JSON ke dalam file. Jika file tidak ada, ia akan menyimpan konfigurasi default.

```

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

```

konfigurasi untuk aplikasi, seperti pengaturan bahasa, ambang batas transfer, biaya transfer, metode transfer yang tersedia, dan konfirmasi transaksi dalam dua bahasa Indonesia dan Inggris.

```

const readline = require("readline");
const BankTransferConfig = require("./BankTransferConfig");

```

```
const rl = readline.createInterface({
  input: process.stdin,
  output: process.stdout
});

class BankTransferApp {
  constructor() {
    this.configObj = new BankTransferConfig();
    this.config = this.configObj.getConfig();
    this.lang = this.config.lang;
  }

  start() {
    this.askAmount();
  }

  askAmount() {
    const promptText = this.lang === "id"
      ? "Masukkan jumlah uang yang akan di-transfer: "
      : "Please insert the amount of money to transfer: ";

    rl.question(promptText, (amountInput) => this.processAmount(amountInput));
  }

  processAmount(amountInput) {
    const amount = parseInt(amountInput);
    const fee = this.calculateFee(amount);
    const total = amount + fee;

    this.showTransferDetails(fee, total);
    this.askMethodChoice();
  }

  calculateFee(amount) {
    const threshold = this.config.transfer.threshold;
    const lowFee = this.config.transfer.low_fee;
    const highFee = this.config.transfer.high_fee;
    return amount <= threshold ? lowFee : highFee;
  }

  showTransferDetails(fee, total) {
    if (this.lang === "id") {
      console.log(`Biaya transfer = ${fee}`);
    }
  }
}
```

```

        console.log(`Total biaya = ${total}`);
    } else {
        console.log(`Transfer fee = ${fee}`);
        console.log(`Total amount = ${total}`);
    }
}

askMethodChoice() {
    const methodPrompt = this.lang === "id" ? "Pilih metode transfer:" : "Select transfer method:";
    console.log(methodPrompt);
    this.config.methods.forEach((method, index) => {
        console.log(`${index + 1}. ${method}`);
    });

    rl.question("> ", (methodChoice) => this.askConfirmation(methodChoice));
}

askConfirmation(methodChoice) {
    const confirmationKey = this.lang === "id"
        ? this.config.confirmation.id
        : this.config.confirmation.en;

    const confirmPrompt = this.lang === "id"
        ? `Ketik "${confirmationKey}" untuk mengkonfirmasi transaksi: `
        : `Please type "${confirmationKey}" to confirm the transaction: `;

    rl.question(confirmPrompt, (confirmInput) => {
        this.confirmTransaction(confirmInput, confirmationKey);
    });
}

confirmTransaction(confirmInput, confirmationKey) {
    if (confirmInput.toLowerCase() === confirmationKey.toLowerCase()) {
        console.log(this.lang === "id" ? "Proses transfer berhasil" : "The transfer is completed");
    } else {
        console.log(this.lang === "id" ? "Transfer dibatalkan" : "Transfer is cancelled");
    }
    rl.close();
}

const app = new BankTransferApp();
app.start();

```

menggunakan class BankTransferConfig untuk memulai aplikasi transfer uang, meminta input jumlah uang yang akan ditransfer, menghitung biaya transfer, menampilkan rincian, serta meminta konfirmasi dari pengguna untuk menyelesaikan transaksi.

Dengan Output sebagai berikut :

```
Masukkan jumlah uang yang akan di-transfer: 2500000
Biaya transfer = 6500
Total biaya = 2506500
Pilih metode transfer:
1. RTO (real-time)
2. SKN
3. RTGS
4. BI FAST
> 2
Ketik "Konfirmasi" untuk mengkonfirmasi transaksi: Konfirmasi
Proses transfer berhasil
○ PS D:\HAIKAL DISK\Kuliah\Haikal Fadhilah M\Semester 4\Konstruk
4027> █
```