

Test Organization

All test cases are organized into a single directory organized by operation name. Each operation has its own subdirectory named according to the test scenario (e.g., **Valid_Standard_Login**, **Invalid_Login_Type**). Inside each test case folder, the following files are included:

1. **Input File (.inp)** – Contains the test input commands.
2. **Expected Transaction File (.etf)** – Stores the expected state of the bank account transaction file after execution.
3. **Expected Terminal Output (.bto)** – Captures the expected console output.

Each transaction category (Login, Logout, Withdrawal, Transfer, etc.) has multiple test case folders to cover different scenarios. Example below:

```
|— Login/
|   |— Valid_Standard_Login/
|   |   |— input.inp
|   |   |— transactions.etf
|   |   |— output.bto
|   |— Valid_Admin_Login/
|   |— ...
|   ...
...
```

Test Run Plan

Tests will be run using a DOS batch command script that runs the Front End for each of the test input files in the directory. Tests will be executed using a shell script that:

1. Iterates over all test case folders within the specified operations directory (eg. Login).
2. Runs the banking system using the test case **.inp** file.
3. Captures the actual output into:
 - **Actual Transaction File (.atf)** – The generated transaction file output.
 - **Actual Terminal Output (.bto)** – The generated console output.
4. Compares the actual output files (**.atf**, **.bto**) against the expected files (**.etf**, **.bto**).
5. Reports any discrepancies between actual and expected results.

A summary report is generated at the end, indicating test pass/fail status.

Requirements Problems and Assumptions

1. **Maximum Bank Accounts Per User**
 - The requirements do not specify a limit. We assume a maximum of **6 accounts** per user.
2. **Transaction Limits in Admin Mode**
 - The document does not explicitly state if admin users have a transaction limit. We assume **no transaction limits for admin users**.
3. **Session Persistence Between Runs**
 - It is unclear if the system retains state between sessions. We assume each test starts with a **clean state** (i.e., no prior transactions or active sessions).
4. **Handling of Special Characters in Names**
 - The requirements prohibit special characters in names but do not specify allowed character sets. We assume **only alphabets and spaces** are allowed.
5. **Behavior on Disabled Accounts**
 - The document does not specify if disabled accounts can be re-enabled. We assume **a disabled account cannot be reactivated**.