**MoneyService – Team South**

**Requirement Specification**

General Goals with the System

* Handle money exchanges based on orders of buying and/or selling money from client.
* Create report after each day with full information of all transactions for each site.
* Calculate and display statistics over daily/weekly/monthly income and loss for each site.
* Display all Transactions for all sites or specific sites.

Define the users of the System

* Clients = User (Each person making orders) of the system (creating orders of buying/selling money)

The main purpose of the Site System

* The site system provides a money exchange service with daily updated currency rates for clients and a daily sum with cash for each currency which are provided before each session. The clients can make an order request based on parameters such as, currency code, amount and whether the client wants to buy or sell the amount. The system then provides the money for the client, the order will be registered to a Transaction once it’s approved and will be stored among the other Transactions that have been created during the session. The Transaction will later by the end of the session, be sent to the HQ for storage and presentation of vital financial parameters.

The main purpose of the HQ System

* The HQ system holds different sites which will read a report of all daily Transactions that have been made during a specific session to HQ. The HQ should then based on parameters such as, Site(s), day/week/month, and currency code filter through all transactions. Producing an overall statistics over the income/losses and even profits.

Define system handling of input/output events

**Input to application for Site**

* Input from configuration file - Site (main Configuration file to setup the program, the exchange rates and boxOfCash)
* Input from orders from Clients

**Output from application for Site**

* Output of a file with all Transactions from the Site on a specific day.
* Output of a daily report showing the amount left for each currency in boxOfCash.
* Output of a file storing all Orders that have been made during a specific session.

**Input to application for HQ**

* Input from configuration file – HQ (main Configuration file to setup the program, the exchange rates and boxOfCash)
* Input from admin to provide output statistics of chosen parameters.

**Output from application for HQ**

* Output of all Transactions from Site(s)
* Output of daily/weekly/monthly income and losses of one or all sites.
* Output of profit of one or all sites.

Additional tools used during process of development

* **JavaDoc** - has been used to create a good layout over the whole program for easy maintainability.
* **Maven** - has been setup and used on Github for automatic deployment and creation of artifacts, also used for automatic testing.

General agreement for internal work with the project

* All communications happens via Slack/Discord.
* The project is saved and managed on Github.
* Give feedback for all code created.
* Code should maintain high readability, use good variable names and make the foundation maintainable.
  + Comments 🡪 Should exist in all classes and where needed.