A picture containing sitting, monitor, plate, clock

Description automatically generated

**Functional Specification Document**

**Visual Investigator**

(Debit)

Version 1.0

**Debit**

A debit entry in an account represents a transfer of value to that account. A debit is one side of an entry in double-entry bookkeeping, reflecting the amount taken out of an account.

**High level Flow -**

Data mart

Sync process

Presentation layer

API Server

Output on UI

**Low level flow -**

Data Mart

Sync process

Presentation layer

API’s

Output on UI

Scheduler

Run the sync process periodically

Save data

Filter

Data

Narration addition

Application db

Save

Fetch data

**Sync Process -**

It’s a process which will take the data from data mart layer and put the data in presentation layer periodically. Sync process will perform ETL work and save the useful data in presentation layer.

We will use stored process (SP), java logic, some SQL script for creation of sync process and will wrap up all the things in a GET API.

**Templates –**

* Here we have multiple templates of debit module for a user
* User can create new template for further use
* Template is a combination of widgets

**Widgets –**

Debit have total 9 widgets. Each and every widgets have some filter. All widgets are written below –

* Debit amount
* Counter-parties
* Debit count
* Source
* Volatility
* Large incoming indicator
* Spikes
* Domestic vs International
* Narration

1. **Debit amount –**

In this widget user can visualize the monthly debit amount. It has the filter of year and month both.

Using a bar graph for representation.

* 1. **Filters –** 
     1. Currency type
     2. Year/Month
  2. **Axis –** 
     1. X (Month)
     2. Y (Amount)

1. **Counter-parties**

In this widget we are showing the counter party name with relevant debit amount value of every month in a year

We will use tabular format for data visualization

* 1. **Filters –** 
     1. Currency type
     2. Year
  2. **Table -** 
     1. Customer name and related balance

1. **Debit count**

In this widget we will show the count of debit with respect to every month in a year

We will use line graph for data presentation

* 1. **Filters –** 
     1. Currency type
     2. Year
  2. **Axis –** 
     1. X (Month)
     2. Y (Count)

1. **Source**

In this widget we will show the percentage of debit amount with respect to a year

We will use bar graph for data knowledge

* 1. **Filters –** 
     1. Currency type
     2. Year
  2. **Axis –** 
     1. X (Month)
     2. Y (% of amount)

1. **Volatility**

In this widget we will show the percentage of debit amount with respect to a year

We will use bar graph for data knowledge

* 1. **Filters –** 
     1. Currency type
     2. Year
  2. **Axis –** 
     1. X (Month)
     2. Y (% of amount)

1. **Large incoming indicator**

In this widget we will present the different-different source of debit with monthly amount

We will use tabular format for data analysis

* 1. **Filters –** 
     1. Currency type
     2. Year
  2. **Table -** 
     1. Source and related balance

1. **Spikes**

In this widget we will show the count/sum/Average of debit amount with respect to month

We will use bar graph for this widget

* 1. **Filters –** 
     1. Count
     2. Sum
     3. Average
  2. **Axis -** 
     1. X (Month)
     2. Y (Count/Sum/Average)

1. **Domestic vs International**

In this widget we will show the domestic and international amount of debit on monthly basis

We will use bar graph for this section

* 1. **Filters –** 
     1. year
  2. **Axis -** 
     1. X (Month)
     2. Y (domestic and international amount)

1. **Narration**

In this widget we will show all the comments added by user and user can add more narration for a customer.

**Flow –**

Request

API server

Application db

Validation

False

Error message

Presentation layer

True

Data

UI

Response