**Developing a Data Repository Plan**

# Developing data repository plan

The new system being implemented will improve the quality of the food. This can be done by having a proper systematic approach developed. The main purpose of the system is to provide a real-time data entering service to Supermarket General Inc. Through this facility, the users, consumers and producers, and distributors of the system will have the ability to easily illustrate their concerns regarding the product. The performance indicators will assist in enhancing the user experience as they will have the option of illustrating their concerns regarding the food delivered (Enterprise, 2018).

## Methods

The method used for the data extraction and data repository will base upon My SQL, and through this different data types and functions will be extracted. The method used for this system being implemented is extracting the data from various platforms and the extracted data is supplied from the vendors. Upon completion of data, the system can the process adequately and effectively, thus resulting in improving the customer efficiency required for the system.

## Product

The product used for this plan is different software for completing the data repository phases. This different software is to hold the data set so that when the client provides feedback on run time, the concerns can be stored so that the Supermarket General can notice these concerns and try resolving the problems noticed in the quality of food. The systematic approach used for this service will be significant in resolving the quality issues of the system (Combaudon, 2018).

## System

The system used for this new service being added will be java. The changes introduced will be written in java and will be then later on implemented, by making use of SQL as a data extraction platform. The different types of data sets will be extracted from this medium. Upon completion of data, all the files will be merged and shared in the warehouse for display where the user will get to select the required function to be imposed.

# Data repository for structured and unstructured data

The data warehouse store a large amount of data in the updated system of Central Supermarket Inc. will be based on multiple segments. These different segments will be tagged in form of Meta data so that the data could be managed easily and used within the warehouse. Once all the data sources are acquired this data will be merged and stored in the data warehouse from where it will be aggregated. Depending upon the feedback provided by the client, the data can be normalized and also demoralized. The most appropriate data repository selected for this database will be the data warehouse. This is because through making use of a data warehouse the concerns of the clients can be easily stored and aggregated. Through this, the database engineers can distinguish the food items whose quality needs to be improved. The data repository for both structured and unstructured data should be elaborated, through these appropriate actions in case of changes can be conducted.

## Structured data set

Creating and storing structured data is easy as the data set acquired is already an organized structure. The data warehouse of Central Supermarket Inc. will be able to easily store the data in the database. Once the data has been entered into the data repository the data will be then distinguished based on the criteria of the data. For instance; the clients having concerns with the quantity of the data will be stored in numeric format, and the client sending feedback over the web will be stored in a separate section of the warehouse. A similar data set will be aggregated together. The data gathered will be in an organized format so thus it can be easily understood by the data managers and maintainers. The extracted data will be secured in the warehouse vendors' sections and the providers of food with low quality will be reported. This would be helpful in easily maintaining the customer's satisfaction level and also providing quality food to the customers. The structured data is in the format of relational data set, so thus it can be easily understood without an external source or software.

## Unstructured data set

The data repository of unstructured data will be complex as the data set will only be in text/ binary format. So thus, this data needs to be first converted into an understandable format. The data before being stored in the vendor's warehouse needs to be formatted depending on the type of data entered. Once done, this data will then be shared with the warehouse after being aggregated. There will be different extractors set into the data set. The system will function after the client or customers has set feedback on the quality of the food. If the quality of the food is good it will be stored in the binary digit 1 if the quality of the food is not up to mark it will be stored in the format of 0. The data will be then grouped so that it could be forwarded separately. The data will be extracted and then shared in the data warehouse working as the data repository. The quality checkers will have access to the data in the data repository where they will be working on improving the quality of the food so that better facilities can be provided to the customers. Since there are nearly 2000 stores nationwide so a large number of data will be stored in the database, so thus processing and reviewing all the data will consume time. By developing a data repository the providers of the food will be able to work on the set and through this, they can provide quality food to the customers.

# Details of modifying, creating, managing, and searching data

The data once entered by the client needs to be modified, managed, and able to be searched and also created into the data repository. This could be done by deciding the data set first and then creating it into the database system. For conducting each of these different activities various steps need to be understood depending upon which the adequate and appropriate outcome can be provided. For the processes and steps for creating a relational database for Supermarket Central Inc. ;

* Requirement analysis: Database for monitoring the data regarding the quality of the food, this will base upon the feedback of the client, so thus the feedback of the clients need to be stored.
* Defining the primary and secondary key: The primary key in this database will be the ID of the issue or the feedback entered by the client.
* Creating relationships of data: The tables created can be connected to one another through developing relationships. These could be one-to-one, one-to-many, and many to many relationships.
* Normalizing the data: The data acquired will be normalized, based on the data set entered in the database.

For modifying the database following are the approaches followed:

* Select the modifying criteria: This could enter new data, delete the rows and columns, data integrity, back up the logs of the feedback, or update based on the criteria.
* Entering the commands: The SELECT command can be entered to select the data and then commands can be inserted to modify accordingly. This could be of DELETE, UPDATE, etc.
* Once the data is modified it needs to be saved so that it could be used later on the data set.

For searching the data:

* Selecting the search bar: This will be present in the User interface screen presented to the user.

Entering the item: The attribute, the data, or the concern should be searched

* Search through the search bar provided in the UI.
* The data, table, and relationship to be searched should be entered into the data set.
* Once the required to be searched is entered, the GUI presents the data to the user, from where they can select the data.

For managing the data following are a few processes:

* Enter the data file: The foremost step in managing the data is to enter the file name. This is through entering a certain file name and saving it with that name through the required name.
* Creating data files: This process of managing the data will assist in maintaining the data in the future. Through this process, the data can be easily searched and also distinguished. This would aid in easily managing the data by the managers and also the database creators.

# Command-line

The following command set was developed in JAVA. This is the implementation and designing section of the program. The quality of the food is based on the feedback provided by the client, depending upon which the managers and quality checkers will verify the quality can concern of the food.

import io.security.Security;

security.configureScope(scope -> {

scope.setContexts("name", "burger");

scope.setContexts("quantity", 2);

scope.setContexts("type of food", "fast");

});

import io.quality.quality;

import io.security.protocol.User;

import io.security.qaulity;

quanlity.configureScope(scope -> {

});

import io.security.quality;

import io.security.protocol.User;

Security.configureScope(scope -> {

scope.setTag("quality of food", "good but spicy");

issued.setId("1039");

user.setEmail("send to”; “123.3@example.com");

});

import io.security.Security;

import io.security.SecurityLevel;

Security.withScope(scope -> {

scope.setLevel(SecurityLevel.FATAL);

scope.setTransaction("main");

// This message includes the dataset to the scope in this block:

Security.captureMessage("Fatal message!");

});

import io.security.Security;

import io.security.UserFeedback;

SecurityId securityId = Security.captureMessage("My message");

UserFeedback userFeedback = new UserFeedback(securityId);

userFeedback.setComments("spicy food is not good for health.");

userFeedback.setEmail("manager.security@example.com");

userFeedback.setName("manager");

Security.captureUserFeedback(userFeedback);

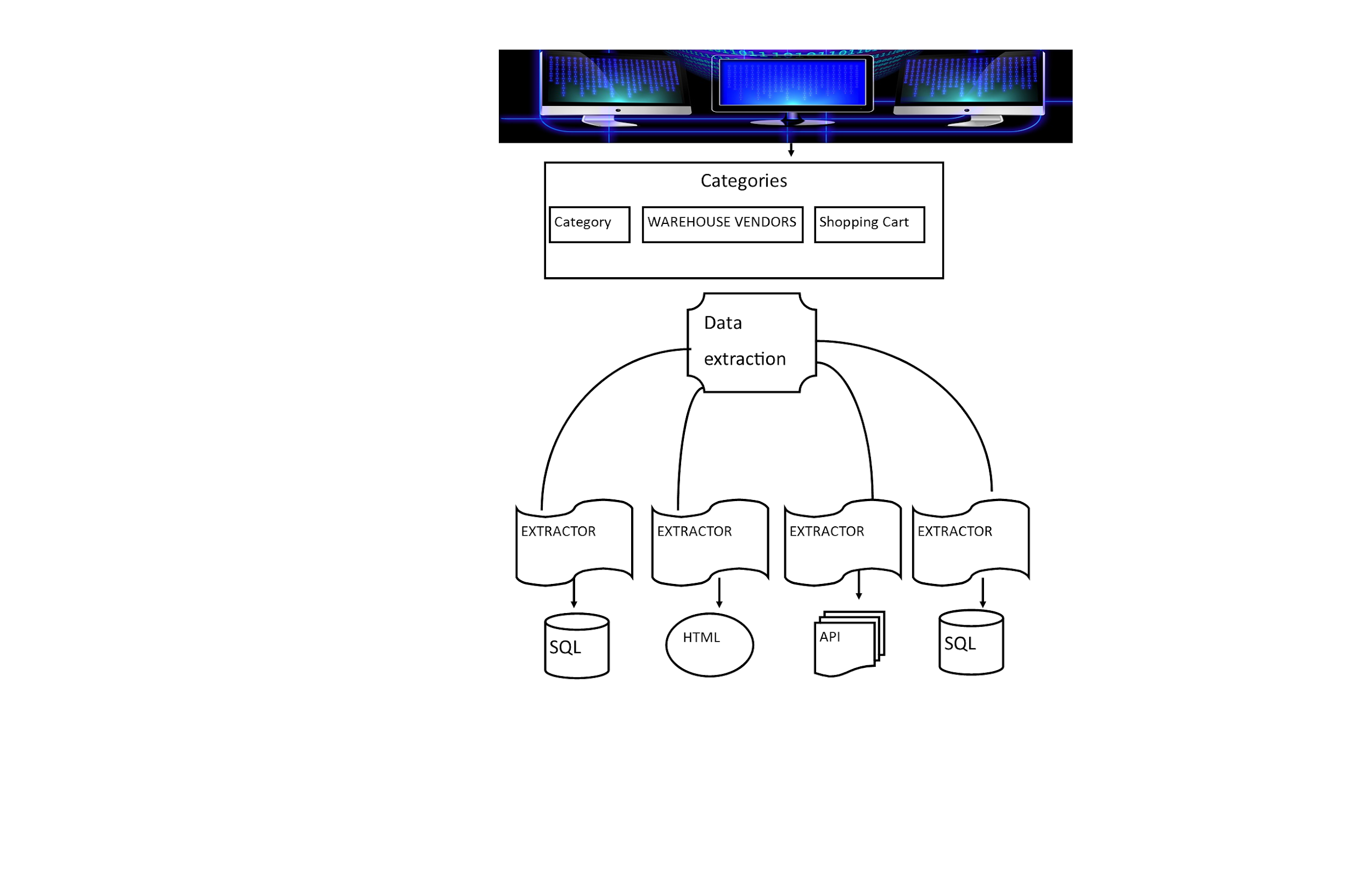
# References

Combaudon, S. (2018). *MySQL 5.7: administración y optimización*. Ediciones Eni.

Enterprise, J. (2018). *HTML, PHP, dan MySQL untuk Pemula*. Elex Media Komputindo.

**Appendix**

# Integrated data repository



# User API

