



# Customer Relationship Management

Department of Computer Science, Faculty of Science, Chiang Mai University, Thailand  
204496 Cooperative Education, Year 2024



**Author** Nattapon Noiwana 640510653

**Company** Digio

**Advisor** Assistant Professor Dr.Prapaporn Techa-Angkoon

## Abstract

Digio (Thailand) Co., Ltd. has attracted customer interest, particularly with their request for payments via a bank account system. The company acts as an intermediary between customers and banks. Since financial systems require meticulous and careful handling of data, a system was developed to verify financial data against account balances to ensure that all transactions are fully and accurately processed. The system was designed and developed to check whether financial transactions match the user's account balance, and this is displayed as a status on the dashboard. If any discrepancies are found between financial transactions and the account balance, the system will show details about the user's finances. Staff can adjust the user's account balance and reprocess the status again. The staff can export customer financial reports for a specified time period. By setting the year, month, and day, financial transaction data for that time period can be exported as a CSV file for further use. In this project, a function runs daily to reconcile financial transactions for each day. The developer has created a system to monitor the daily functions to ensure they operate correctly, with statuses displayed such as "In Progress," "Completed," and "Error." This helps ensure that these functions work correctly and completely each day, making it easier for staff to monitor the system.

In the 3rd state, you can view the information when you click on it. You will get the information as shown in the image.

ลำดับ	หมายเลขบัญชี	ยอดเงินเข้า	ยอดเงินออก	ยอดคงเหลือสุทธิ (เงินเข้า - เงินออก)	ยอดคงเหลือในบัญชี	ความแตกต่าง (ยอดคงเหลือในบัญชี - ยอดคงเหลือสุทธิ)	ปรับปรุงยอดคงเหลือ
1	[REDACTED]	748.0000	849.0000	-101.0000	1121.0000	1222.0000	7947.0000
2	[REDACTED]	896885.0000	101999.0000	794886.0000	796712.0200	1826.0200	1574.0000
3	[REDACTED]	3327871.0000	3295078.0000	32793.0000	32896.0000	103.0000	105.0000
4	[REDACTED]	10.0000	0.0000	10.0000	5038.0000	5028.0000	4938.0000

## Monitor Job

ชื่อ JOB (ID ดิจิทัล 2024)	วันที่เริ่มประมวลผล	สถานะ JOB
SETTLEMENT_MERCHANT	2024-06-10 09:12:00	SUCCESS
CREATE_SUMMARY_TRANSACTION	2024-06-10 09:12:00	ERROR
SETTLEMENT_DIGIPAY_COLLATERAL	2024-06-10 09:13:00	ERROR
SETTLEMENT_MERCHANTS	2024-06-10 09:13:09	SUCCESS
SETTLEMENT_WITHDRAW	2024-06-10 09:13:09	SUCCESS
SETTLEMENT_FEE	2024-06-10 09:13:10	SUCCESS

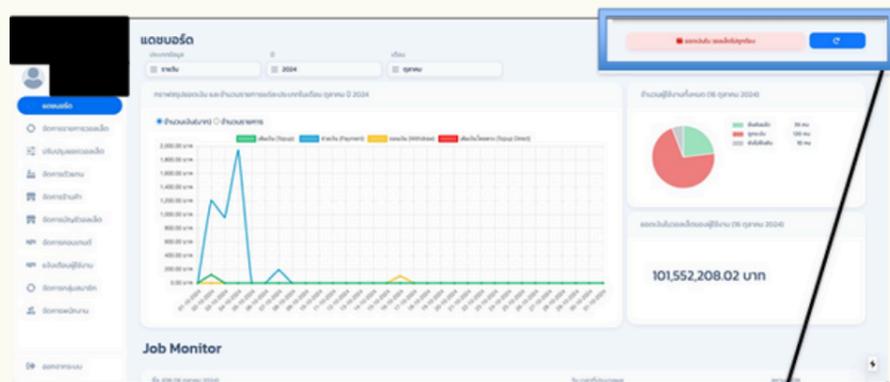
Job monitor which shows the status of each job It shows 3 statuses:  
- SUCCESS  
- ERROR  
- PROCESSING

## Objective

Develop a web application system to be used for checking the financial information of the system, recording financial history and financial changes.

## Display screen design

### Job Reconcile



Dashboard provides an overview of financial data



Account details status display button and redo reconcile button

There are 3 statuses



Normal account details status display button and redo reconcile button



Processing status display button and redo reconcile button during processing



Normal account details status display button and redo reconcile button

## Tools



Next js14 for Frontend



Node js for Backend



git, gitlab is Version Control



Postman is API Testing tool

## Conclusion

From the development of the Customer Relationship Management web application, it is a check of the financial accounts of the users to see if they are correct. The work was done from April 1, 2024 to October 30, 2024, a total of 7 months. Developed using next js, which is a React Framework for full stack systems. The purpose of the development is to check the transactions of each user to see if the account numbers match the money in the account or not. Because Digio Company acts as an intermediary between the bank and the operator, errors may occur during the transaction, such as money not entering the account but there is a transaction or money entering the account twice in 1 transaction, etc. Therefore, the money must be checked for accuracy. When there is an error, the officer can check the details of each account and can correct the money in the account to be correct. The status of the account data with errors is recorded. In addition, there is a job monitor, which is a check of the function run in the batch to see if it is working correctly and completely.