UNIVERSITI TEKNOLOGI MALAYSIA FACULTY OF COMPUTING

INDUSTRIAL TRAINING REPORT

ENHANCING AND OPTIMIZING XEERSOFT SYSTEM FUNCTIONALITY

By

ZEREEN TEO HUEY HUEY

2023/2024

BACHELOR OF COMPUTER SCIENCE (BIOINFORMATIC)

TRAINING PLACE: XEERSOFT

C3, 0313, JALAN INDAH 15, TAMAN BUKIT INDAH, 81200,

JOHOR BAHRU, JOHOR

TRAINING PERIOD: 25 SEPTEMBER 2023 – 9 FEBRUARY 2024

SUPERVISORS: HOE LENG WEE

MARINA BINTI MD ARSHAD

REPORT DATE: 9 FEBRUARY 2024

ACKNOWLEDGEMENT

First, I would like to express my sincere gratitude to XeerSoft company for providing me with the invaluable opportunity to undergo an internship at their organization. I am thankful for the chance to contribute and learn in such a dynamic and supportive environment. The exposure and insights gained during my internship at XeerSoft have been pivotal in enhancing my skills and knowledge in programming.

Next, I would like to thank to my faculty supervisor, Dr. Marina Binti Md Arshad and company supervisor, Mr. Hoe Leng Wee for their guidance and support throughout the entire internship period. Their dedication to my development has made this internship experience both rewarding and satisfying.

Lastly, I express my deepest gratitude to my parents for providing mental support throughout the entire internship period. Their encouragement and understanding have been my pillar of strength, making this journey more manageable and rewarding. Thank you for being a constant source of motivation and belief in my abilities.

ABSTRACT

Industrial training is an important program which provide the practical experience for the student to apply theoretical knowledge gained in their university life. By undergo industrial training in XeerSoft company, various tasks were assigned to me, tailored to my skill level, contributing to the development of practical skills such as programming techniques and task handling. This report aims to summarize the experiences during the internship at XeerSoft, guided by company supervisor Mr. Hoe Leng Wee and faculty supervisor Dr. Marina Binti Md Arshad. Throughout the industrial training, I engaged in tasks that involved new client requirements and addressing system bugs identified by the QA team. These assignments allowed me to enhance my programming skills, task management proficiency, and problem-solving abilities. The experience gained in handling real-time tasks is particularly valuable for my future career. This report will provide a detailed overview of the tasks undertaken and the skills acquired during this enriching industrial training experience. Last but not least, the problem faced and the suggestion for the industrial training will be mention at the last chapter for further improvement.

ABSTRAK

Latihan industri merupakan program penting yang memberikan pelajar pengalaman praktikal untuk mengaplikasikan pengetahuan teori yang diperolehi semasa belajar di universiti. Melalui latihan industri di syarikat XeerSoft, pelbagai tugas yang diberikan menyesuai dengan tahap kemahiran saya telah memberikan pembangunan daripada aspek kemahiran praktikal seperti teknik pengaturcaraan dan pengendalian tugas. Laporan ini bertujuan untuk merangkumkan pengalaman semasa latihan industri di XeerSoft, yang dipandu oleh penyelia syarikat Encik Hoe Leng Wee dan penyelia fakulti Dr. Marina Binti Md Arshad. Sepanjang latihan industri, saya terlibat dalam pelbagai tugas yang melibatkan keperluan baru pelanggan dan penyelesaian bug sistem yang dikenal pasti oleh pasukan QA. Tugasan-tugasan ini membolehkan saya meningkatkan kemahiran pengaturcaraan, kecekapan pengurusan tugas, dan keupayaan menyelesaikan masalah. Pengalaman mengendalikan tugas dalam masa nyata sangat bernilai untuk kerjaya masa depan saya. Laporan ini akan membincang bahawa tugas-tugas yang dilakukan dan kemahiran yang diperolehi semasa pengalaman latihan industri yang memuaskan ini. Akhirnya, masalah yang dihadapi dan cadangan untuk latihan industri akan dinyatakan dalam bab terakhir untuk penambahbaikan pada masa depan.

TABLE OF CONTENTS

				TITLE	PAGE
	ACK	NOWL	EDGEM	ENT	i
	ABS'	ГRАСТ	•		ii
	ABS'	TRAK			iii
	TAB	LE OF	CONTEN	VTS	iv
	LIST	OF TA	BLES		vii
	LIST	OF FI	GURES		viii
	LIST	OF AP	PPENDIC	ES	X
СНАРТЕ	R 1	INTR	ODUCTI	ION	1
	1.1	Introd	uction		1
	1.2	Organ	ization's	Core Business and Activity	2
	1.3	Organ	ization St	ructure	2
	1.4	Unit I	nformatio	n for Practical Training	3
	1.5	Gantt	Chart		4
	1.6	Chapt	er Summa	nry	5
СНАРТЕ	R 2	SPEC	CIFIC DE	TAILS IN PROJECT/TRAINING	6
	2.1	Introd	uction		6
	2.2	Traini	ng Object	ives	6
	2.3	Main	Internship	Task	6
		2.3.1	Customi	ze Data Exchange (ID=50346)	7
			2.3.1.1	Task Overview	7
			2.3.1.2	System Design	7
			2.3.1.3	Excel Template	11
			2.3.1.4	SQL File	12
			2.3.1.5	Result	13
		2.3.2	Reset Us	ser Serialize Button (ID=50546)	14
			2.3.2.1	Task Overview	14

3.1	Introd	uction		30
CHAPTER 3 TRAINING	OVEI 30	RALL INI	FORMATION OF INDUSTRIAL	
2.8	Concl	usion		28
2.7		em Faced		28
2.6	Theor	etical and	Practical Knowledge	27
2.5	Time	Period to C	Complete All Tasks	27
	2.4.2	Software		26
	2.4.1	Hardward	e	26
2.4	Hardw	vare and So	oftware Used	25
	2.3.9	Troubles	hooting (ID=49850 & 50827)	25
	2.3.8	SAP vou	cher amount enhancement (ID=50547)	24
	2.3.7	Display 50794)	Incorrect Behaviour (ID=50452 &	23
	2.3.6	Overlapp	ing Bugs (ID=50439 & 50743)	23
		2.3.5.3	Result	21
		2.3.5.2	System Design	21
		2.3.5.1	Task Overview	20
	2.3.5	Accounti	•	20
		2.3.4.3	Result	20
		2.3.4.2	System Design	19
		2.3.4.1	Task Overview	19
	2.3.4	Schedule	r Batch File (ID=50610)	19
		2.3.3.3	Result	18
		2.3.3.2	System Design	17
	2.3.3	2.3.3.1	Task Overview	17
	2.3.3		mat for Smarty Report (ID=50601)	17
		2.3.2.4	Result	16
		2.3.2.2	File involved	15
		2.3.2.2	System Design	14

3.2	Skills Improvement	30
	3.2.1 Programming Skills	30
	3.2.2 Task Management Skills	31
	3.2.3 Problem Solving Skills	31
3.3	Reference Materials	32
3.4	Constructive Comments	32
3.5	Conclusion	32
CHAPTER 4	CONCLUSION	33
CHAPTER 4 4.1	CONCLUSION Introduction	33 33
4.1	Introduction	33
4.1 4.2	Introduction Overall Achievement	33 33
4.1 4.2 4.3	Introduction Overall Achievement Problem and Execution	33 33 34

LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 2.1: File involved for Cust	comize Data Exchange	9
Table 2.2: Hardware		26
Table 2.3: Software		26

LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
Figure 1.1 Organization S	tructure	3
Figure 1.2 Gantt Chart		4
Figure 2.1: Task Descripti	on for Customize Data Exchange	7
Figure 2.2: System Design	n for Customize Data Exchange	8
Figure 2.3: Interface of M	iddleware menu page	8
Figure 2.4: Record of Goo	ogle Spreadsheet	10
Figure 2.5: Excel template	e for Customize Data Exchange	11
Figure 2.6: Sample for Cu	stomize Data Exchange	11
Figure 2.7: Part of SQL qu	ıery	13
Figure 2.8: Result for the	customize data exchange	13
Figure 2.9: Result of succe	essful insert to database table	14
Figure 2.10: Task Descrip	tion for Reset User Serialize Button	14
Figure 2.11: System Desig	gn for Reset User Serialize Button	15
Figure 2.12: Interface desi	gn attached by the project manager	16
Figure 2.13: Part of the ev	rent file code	16
Figure 2.14: Interface of r	eset user serialized function	17
Figure 2.15: System desig	n for save format for smarty report task	18
Figure 2.16: Example on t	he smarty report task	18
Figure 2.17: System desig	n for scheduler batch file	19
Figure 2.18: Scheduler ba	tch file	20
Figure 2.19: System desig	n for the layout revamp.	21
Figure 2.20: Old design fo	or listing page	22
Figure 2.21: Old design fo	or maintenance page	22
Figure 2.22: New design f	For listing page	22
Figure 2.23: New design f	or maintenance page	23

Figure 2.24: Overlapping problem found in report	23
Figure 2.25: Solution for overlapping bugs	23
Figure 2.26: Display incorrect behaviour in system	24
Figure 2.27: Solution for the display incorrect behaviour task	24
Figure 2.28: Comparison of the previous log file and current log file	25
Figure 2.29: System design for SAP voucher amount enhancement task	25
Figure 2.30: Time Period to Complete All Tasks	27

LIST OF APPENDICES

APPENDIX	TITLE	PAGE
Appendix A	Industrial Training Checklists (Placement)	37
Appendix B	Industrial Training Achievements	38

CHAPTER 1

INTRODUCTION

1.1 Introduction

XeerSoft is an international company which provide the service to all type of company in managing their business from time to time via the online platform. (XeerSoft, 2021). They provide the web-capability solution and IT support service to their business partners and clients. XeerSoft was founded by Mr Wong Wai Kit in 2002 and they have the offices and subsidiaries in Malaysia and Bangkok which enable the corporation with others company globally but not restrict in Malaysia only. Based on their business history, over 10000 customers give good feedback towards their software product.

XeerSoft are mainly provide the technique and software service in developing the business application in online platform which enable the clients can easily handle their company from various device such as laptop and smartphone from time to time. They also deliver the end-to-end IT solution and long-term partnership business model with their customer by provide the new version business application for more excellent performance.

There consist of 3 branches for XeerSoft company which are Kuala Lumpur as the company's headquarters, Melaka as the branch which focus on the quality assurance part and Johor as the branch focus on development. More than 600 employees are working in these 3 main offices. However, JB branch only consist of 1 branch manager and 8 permanent staff, which divided into the delivery team(3 person) and developer team (5 person).

1.2 Organization's Core Business and Activity

XeerSoft are basically focus on the solution provider throughout the online platform via several IT technique. One of their product is the cloud-based accounting system. It is a web-based and fully online system which enable the customer can check their own company information by using their device. Besides, the system also provides a bank transaction function which the customer able to do online reconciliation with bank for verification of credit card transactions which enable the clients can do the transaction through the online system without signing massive number of cheques.

Another product that related to the online system is the inventory system which support the function of merchandising reports. This system can let the clients to manage their stock which also provide the online stocks overview and the advanced stocks report function so that they can control their stock and minimizes loss due to over-stock. It also provides the auto ordering function which can prevent the out-of-stock situation especially for the good-sell product.

1.3 Organization Structure

Figure 1 show the organization structure of XeerSoft company which include all the leader team and management team.



Figure 1.1 Organization Structure

1.4 Unit Information for Practical Training

Based on the understanding on the procedure which all the staff need to do, the practical training will occur by giving the task from the Project Manager. After the task is assigned, the developer needs to carry out the system design based on the clients requirement before construct the page. Once the system design is approved by the Project Manager, the developer can start to construct the online web-based system by using different software tools. Besides, the developer also take part in the bug fixing process when the quality assurance team and the clients found some bug occur in their current used system. This will help to ensure the system can be runnable at all time/

1.5 Gantt Chart

Figure 1.2 show the Gantt Chart which describe the timeline of the events occur during the internship period.

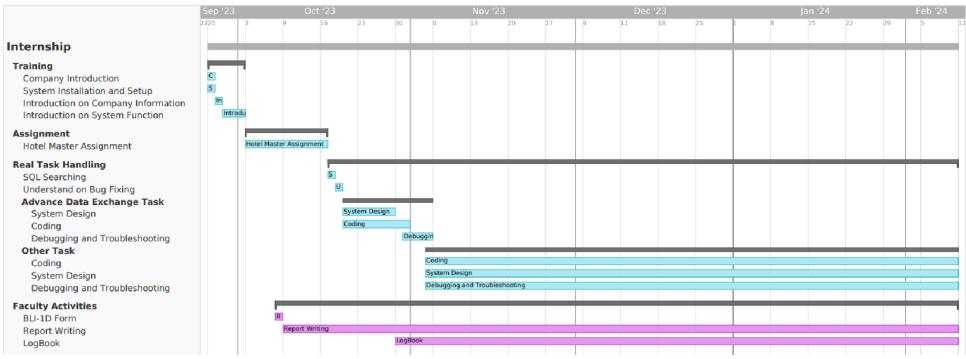


Figure 1.2 Gantt Chart

1.6 Chapter Summary

In Chapter 1, it will focus on the introduction to the company, which is XeerSoft and its organization structure. Besides, the unit information for practical training also will be introduced follow by the Gantt Chart for the internship program along the industrial training period.

CHAPTER 2

SPECIFIC DETAILS IN PROJECT/TRAINING

2.1 Introduction

This chapter will give some description about the internship program which take about 20 week. The main task which carries out by intern students also will be elaborated in this chapter. Besides, the brief introduces of software which required to use along the internship will be carry out for basic understanding on the internship program.

2.2 Training Objectives

The training objectives are:

- a) To understand the company culture and its workflow
- b) To gain the practical experience on handling client's requirement
- c) To strengthen the practical skills in a real-world work environment

2.3 Main Internship Task

In general, within the internship period which is 20 weeks, the training will focus on our ability in handle on different task which required by different clients. Different requirement needs different skill for us in order to solve the trouble meet. The top management team will assign the task by using TestTrack Client with the specific ID.

2.3.1 Customize Data Exchange (ID=50346)

2.3.1.1 Task Overview

This task is about the advance data exchange function which provided in XeerSoft system to allow the client to do modify the data by upload the excel file so that the user can insert or update the product information in one step. Based on the task detail, the client wishes to have a new requirement in getting a new template of data exchange to enhance their performance in insert and update product with 12-digit SKU. Figure 2.1 is about the task description from project manager.

path: middleware ->Transaction Entry ->Advance data exchange

Clarks will have membership API with 3rd party, Antsomi. Antsomi focuses on the CDP, customer data platform which will gather all data source from POS (e-commerce, and other business sources), then use all this data to do analysis report in order to help/ improve clarks performance. In this tt, need to create customize data exchange for Clarks to insert the other attribute to Xeersoft product master.

- 1. Need create customize data exchange excel for clarks insert update product with 12 digit SKU
- create new excel for customize data exchange logic same with xid_defno= 203
- create new excel template with the column needs (may refer attachment)
- The sorting also need to rearrange based on client need, may refer to the attachment
- column name need same to clarks provided name.
- need to auto create to the master when insert to the system

Figure 2.1: Task Description for Customize Data Exchange

2.3.1.2 System Design

To ensure that the developer has clear understanding on the task and the logic is correct, all the developer need to do the system design before start coding. The system design will include all the related information about the task such as the path to reach the page, the file involved, the solution that will be carry out, and the target version to do the new requirement. Figure 2.2 show the overall system design for this task.

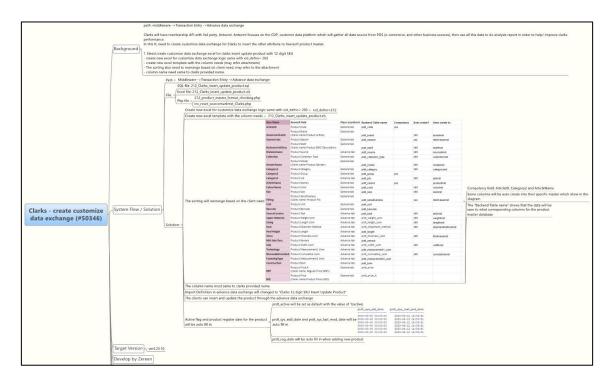


Figure 2.2: System Design for Customize Data Exchange

The function will implement in the middleware menu page which include all the advance data exchange function for different requirement. Figure 2.3 show the interface of the middleware menu page.

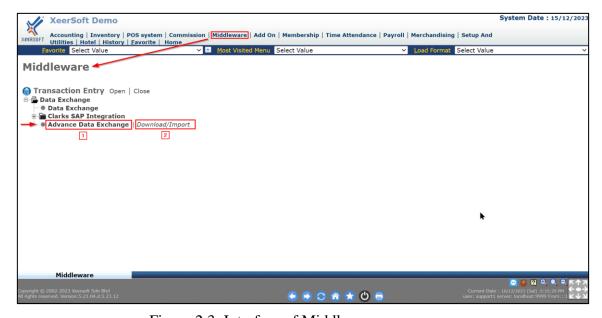


Figure 2.3: Interface of Middleware menu page

The function which will involve in this task is the Advance Data Exchange (label as 1) and the Download/Import button beside the function name (label as 2). After confirm the path for the task, the developer needs to confirm what file will be edit and add by providing the name. Since this task is not edit other existing file, the developer will create the file by naming with meaningful file name for easier understanding.

Table 2.1: File involved for Customize Data Exchange

File Name	Description
212_Clarks_insert_update_product.sql	All the SQL which used in this task will
	be stored in this file
212_Clarks_insert_update_product.xls	The excel template for the data exchange
	with specific column name and format
212_product_master_format_checking.php	The PHP file which used to check the
	duplicate barcode and the special
	character for product code in excel file
inv_reset_sourcemarkmst_Clarks.php	The PHP file which used to insert the new
	barcode to the database and record the
	history when any changes is occur in the
	product price

From the product master maintenance page, the input data will link to specific database table so it is important to record all the database table that will affect through this task. For easier understanding, Google Spreadsheet is used to record down all the information regarding the database and its corresponding column. Figure 2.4 show the details of the Google Spreadsheet.

New Name	Xeersoft field	Place at prdtmst	Backend Table name	Compulsory	Auto create?	Auto create to
ArticleID	Product Code	General tab	prdt_code	yes		
GenericArticleID	Product Brand (Clarks name:Product Article)	General tab	prdt_brand		yes	brandmst
SeasonCode	Product Season	General tab	prdt_season		yes	listofvaluemst
BusinessUnitDesc	Product Shelf (Clarks name:Product BMC Description)	General tab	prdt_shelf		yes	shelfmst
DivisionName	Product Source	Advance tab	prdt_source		yes	sourcebmst
Collection	Product Collection Type	General tab	prdt_collection_type		yes	collectionmst
GenderName	Product Model (Clarks name:Product Gender)	General tab	prdt_model		yes	modelmst
Category1	Product Category	General tab	prdt_category		yes	categorymst
Category2	Product Group	General tab	prdt_group	yes		
Category3	Product Job	Advance tab	prdt_job		yes	jobmst
ArticleName	Product Name1	General tab	prdt_name1	yes		productmst
ColourName	Product Color	General tab	prdt_color		yes	colormst
Size	Product Size	General tab	prdt_size		yes	sizemst
Fitting	Product Sensitiveness (Clarks name: Product Fit)	General tab	prdt_sensitiveness		yes	listofvaluemst
Unit	Product Unit	General tab	prdt_unit			
Barcode	Product Barcode	General tab	prdt_barcode			
SourceCountry	Product Task	Advance tab	prdt_task		yes	taskmst
Upper Material	Product Weight Uom	Advance tab	prdt_weight_uom		yes	weightmst
Lining	Product Length Uom	Advance tab	prdt_length_uom		yes	lengthmst
Sock	Product Shipment Method	Advance tab	prdt_shippment_method		yes	shipmentmethodmst
Heel Height	Product Length	Advance tab	prdt_length			
Trims	Product Thickness Uom	Advance tab	prdt_thickness_uom		yes	thicknessmst
Mid Sole Desc	Product Remark	Advance tab	prdt_remark			
Sole	Product Width Uom	Advance tab	prdt_width_uom		yes	widthmst
Technology	Product Measurement1 Uom	Advance tab	prdt_measurement1_uom			
RemovableFootbed	Product Cumulative Uom	Advance tab	prdt_cumulative_uom		yes	cumulativemst
FasteningType	Product Measurement2 Uom	Advance tab	prdt_measurement2_uom			
Construction	Product Bom	Advance tab	prdt_bom			
RRP	Product Price A (Clarks name: Regular Price (RSP))	General tab	prdt_price			
MD	Product Price (Clarks name:Product Price (MD))	General tab	prdt_price_A			

Figure 2.4: Record of Google Spreadsheet

Besides, the product register date will be auto insert to the database table which can help the client track the history. The column of active flag in database table also required to default set as 1, which is active, to indicate the product is available. The system design will submit to the TestTrack Client for further checking by the project manager and top management team to ensure that there is no error and confusing part. This file will also being useful in testing section as the quality control team will refer the system design to check the overall procedure. Last but not least, the version will be written in the system design for future record.

2.3.1.3 Excel Template

After the top management team approved the system design, the excel template need to be prepared based on the requirement. Figure 2.5 shows the specific excel template for this task.

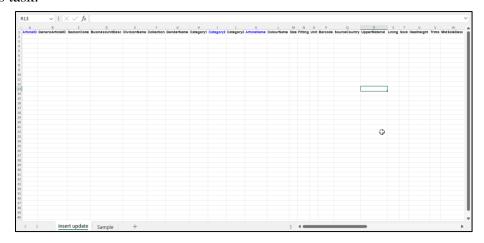


Figure 2.5: Excel template for Customize Data Exchange

The excel file consist of two different sheets, the first sheet is about the empty template which used in the advance data exchange function. The blue word represents the compulsory column which the user is necessary to fill the column when using the function to insert or update the data.

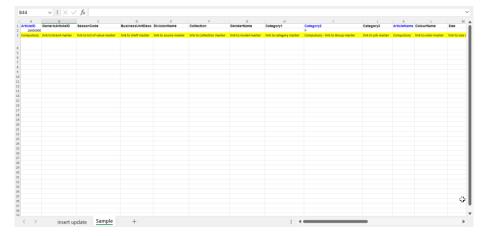


Figure 2.6: Sample for Customize Data Exchange

The second sheet which shown in Figure 2.6 will give some example and description for the client to have basic understanding on the excel column.

2.3.1.4 SOL File

The SQL File will store all related SQL query and it will run in the client database. 3 database tables will be involved in the SQL file which is the header table, detail table, and setting table. In the first part of SQL File, it will write all the SQL query that used to check the compulsory column, empty rows, and avoid duplication for the product code. Beside the checking function, all the auto insert comment will write here if the user had key in the new value for each master database. All the related checking PHP and audit log, which help to track the history, also insert into the specific column for this database.

For the detail table, it will store all the column detail and the replace comment in header table such as the joining of other database table, auto insert to the database table for the new value and auto update the value for the product code if already exist in the database. This will help in reduce the complexity in header table. Besides, for the barcode column, it consists of specific function to check the duplicate barcode within the excel file to avoid the user enter same barcode since the barcode must be specific for all product.

For the setting table, it will combine the format with the SQL column name. It can be using different platform to insert the data such as Comma-Separated Values (CSV) file and Excel file (XLS). However, only excel file will be used for this task based on the client requirement. Figure 2.7 shows a part of SQL query which will insert to the header table.

```
| NABERT INTO xeersoft_dyn_import_def, header (xith_defno,xith_code,xith_namel,xith_check_sql,xith_check_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,xith_insert_sql,x
```

Figure 2.7: Part of SQL query

2.3.1.5 Result

By running the SQL query in the server, the user will able to undergo the data exchange for the product. It can directly check the data exist in Excel file to avoid duplication and auto insert the new value to the related database table. If the data do not have any problem exist, it will show successfully insert to the database. Figure 2.8 shows the exact result for this task. Figure 2.8 shows checking on auto insert will show that what value will be insert into database table and Figure 2.9 shows the successful insert of the data to database table.

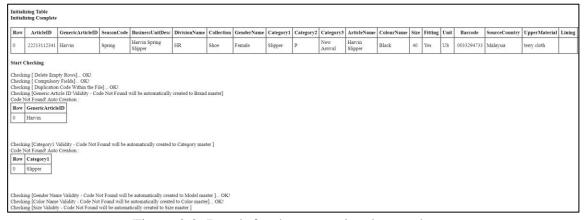


Figure 2.8: Result for the customize data exchange

```
Checking [Lining Validity - Code Not Found will be automatically created to Length master ]... OK1
Checking [Seck Validity - Code Not Found will be automatically created to shipmentmethod master ]... OK1
Checking [Fastening Type exist]... OK1
Checking [Fastening Type exist]... OK1
Checking [Heal Pringht exist]... OK1
Checking [Heal Pringht exist]... OK1
Checking [Heal Pringht exist]... OK1
Checking [Heal Validity - Code Not Found will be automatically created to Talckass master]... OK1
Checking [Continue]... OK1
Checking [Continue]... OK1
Checking [Continue]... OK2
Checking [Continue]... OK3
Checking [Continue]... OK3
Checking [Continue]... OK4
Checking [Continue]... OK5
Checking [Continue]... OK4
Checking [Continue]... OK5
Checking [Continue]... OK6
Checking [Continue]... OK6
Checking [Continue]... OK6
Checking [Continue]... OK6
Checking [Continue]... OK7
Checking [Continue]... OK7
Checking [Continue]... OK8
Checking [Contin
```

Figure 2.9: Result of successful insert to database table

2.3.2 Reset User Serialize Button (ID=50546)

2.3.2.1 Task Overview

This task is about the new requirement on adding the reset user serialize page at the User Registration part. Before this, the support team need to help the user to go to the backend portal to manually clear the user serialized. Therefore, the client wishes to have a button to clear the user serialize column by themselves. Figure 2.10 show the task description for this task.

```
path: setup & ultilities --> user registration --> group user registration --> user
background
1. currenlty support need to go backend infra portal to manually clear usermst--> user_serialized1
2. request to add a clear user_serialized1 button at user group
3. once click this button, the user's user_serialized1 will become empty in db
for example:
yong soon user = Alex, while support go to group user registration -> click alex edit --> and click 'Clear user serialized' button
Once click the button user will clear the user's user_serialized1 into empty field (refer attchment)
4. when click the button please prompt confirmation pop up screen.
solution 16/11/2023 yinru
1. Create new menu under Setup and Utilities -> User Setup -> User Registration : Reset User Serialize. Default Hide. Only set user role allow is administrator
2. Layout Refer attachment.
3. Processing logic:
- user filtering logic is AND condition from QR page. if support select user and user role at the same time, both condition need to match.
 call common function to reset user serialized (waiting tt50583) based on qr selection:
include the files: includes\common_file_reset_user_serialized.php
function to call: reset user serialize($user list)
$user_list = list of user_no separated by comma
result of the function will return True if successfully update, return false if user_list is empty
```

Figure 2.10: Task Description for Reset User Serialize Button

2.3.2.2 System Design

The system design will show how the developer in coding the file at the solution part. First, the interface for the reset user serialized will be built by using Code Charge Studio, and it will place in the User Registration under User Setup. Next, the confirmation

message will pop up once the user submit the file to alert the user whether they really want to reset the user serialize. Lastly, this task will use the function which include in the JavaScript file. Therefore, the user can select only one column for the user or user role to do the faster reset, or select both column to double confirm on the condition. Figure 2.11 shows the system design for this task.

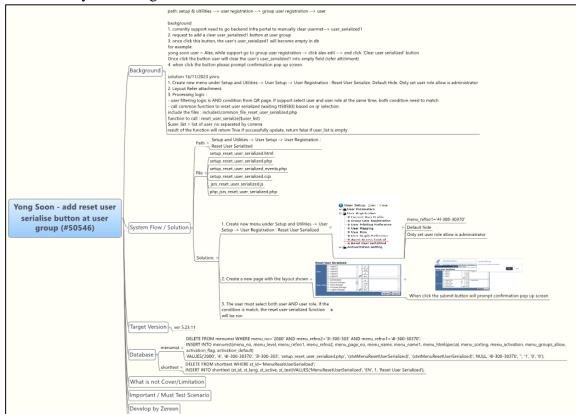


Figure 2.11: System Design for Reset User Serialize Button

2.3.2.3 File involved

By using the CodeCharge Studio, the HTML, PHP and CPP file will be created automatically. The interface should be same as the image attached in the task details as Figure 2.12.

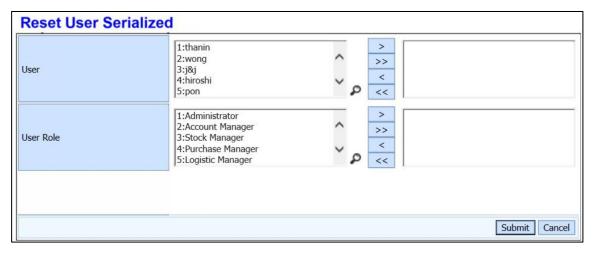


Figure 2.12: Interface design attached by the project manager

Since this interface will link to the database table, the submit action should directly link to the function to reset user serialized. This can be achieved through adding the action in event file which shown in Figure 2.13.

```
| global Sresetuserserialized_ONValidate | //End resetuserserialized_ONValidate | //End resetuserserialized_ONValidate | //End resetuserserialized_ONValidate | //Custom Code %112-2A29BDB7 | //Custom Code %112-A29BDB7 | //Custom Code %112-2A29BDB7 | //Custom Code %112-2A29BD87 | //Custom Code %112-A29BD87 | //Custom Code %112-2A29BD87 | //Custom Code %112-2A29BD87 | //Custom Code %112-2A29BD87 | //Custom Code %112-2A29BD87
```

Figure 2.13: Part of the event file code

2.3.2.4 Result

The overall reset user serialized page is shown in Figure 2.14. The client can choose to reset the user serialized by selecting the user or user role. Besides, the client also can select multiple user and user role at once. Only the matched user and user role will reset the user serialized column.

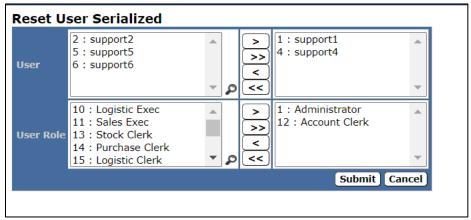


Figure 2.14: Interface of reset user serialized function

2.3.3 Save Format for Smarty Report (ID=50601)

2.3.3.1 Task Overview

This task is assigned to avoid the selection saving for month and arrow button which exist in the smarty report page.

2.3.3.2 System Design

Figure 2.15 shows the system design for this task. Since the file involved consist of 41 page, the column for showing the file is hided and only show the main menu involved. The solution part shows the code need to be change and the button involved to make sure that no misunderstanding on the task requirement.

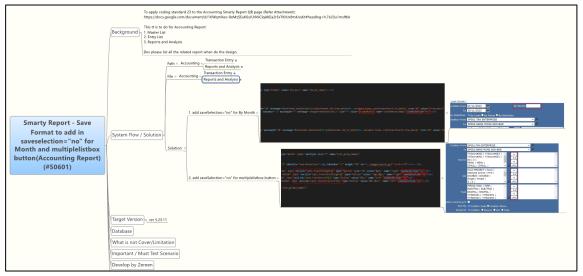


Figure 2.15: System design for save format for smarty report task

2.3.3.3 Result

The result will show no selection is save for the button when save the new format.

Figure 2.16 shows the code which add the saveselection='no' in the html page.

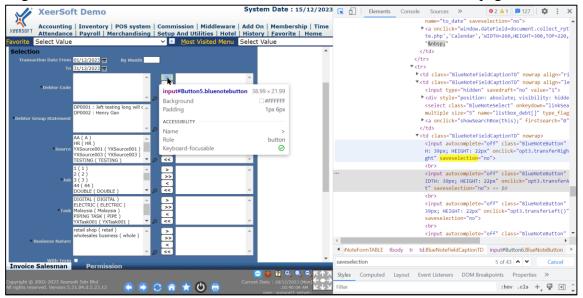


Figure 2.16: Example on the smarty report task

2.3.4 Scheduler Batch File (ID=50610)

2.3.4.1 Task Overview

In this task, the client wishes to have the standard scheduler set in system method which can enable the scheduler function in order for all the action related to it such as the cut off automation and reset stock balance. This batch file can set in the window task scheduler in order to help the client do some tasks without keep editing the scheduler setting.

2.3.4.2 System Design

Figure 2.17 shows the system design for the scheduler batch file task. It needs to create 2 new file for the standard scheduler and email scheduler.

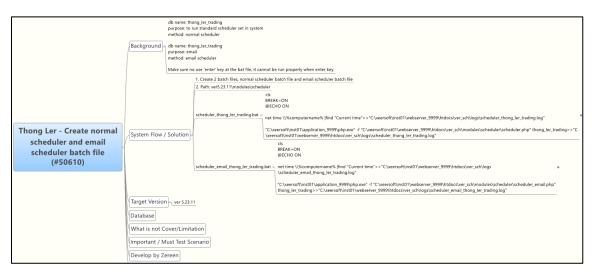


Figure 2.17: System design for scheduler batch file

2.3.4.3 Result

Figure 2.18 shows the final coding for the scheduler batch file task.

```
| cls | 2 BREAK=ON | 3 | ECHO ON | 3 | ECHO
```

Figure 2.18: Scheduler batch file

2.3.5 Accounting Master Layout Revamp (ID=50774)

2.3.5.1 Task Overview

In this task, the new UI design for the master page need to follow the example given which is the bootstrap file that had been done by other developer. To ensure all the coding is standardized, the developer need to follow the coding standard which create by the top management. Besides, the active column will add to the listing page for the user to search the active/inactive item based on their selection. The user define1 column will be removed based on the task requirement.

2.3.5.2 System Design

Figure 2.19 shows the system design for the layout revamp.

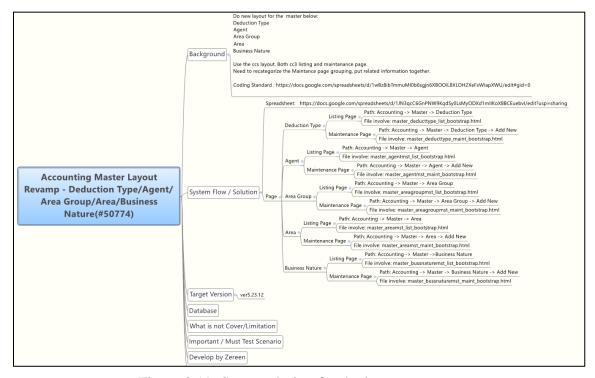


Figure 2.19: System design for the layout revamp.

2.3.5.3 Result

Figure 2.20 and Figure 2.21 shows the original interface before apply the bootstrap file for listing and maintenance page respectively while Figure 2.22 and Figure 2.23 shows the new UI design after apply the created bootstrap file.

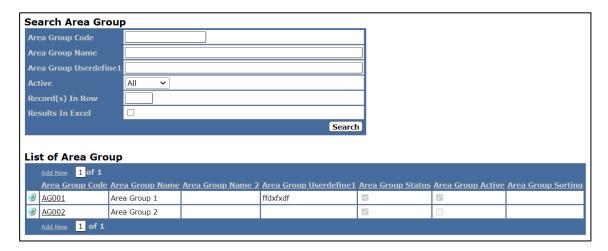


Figure 2.20: Old design for listing page

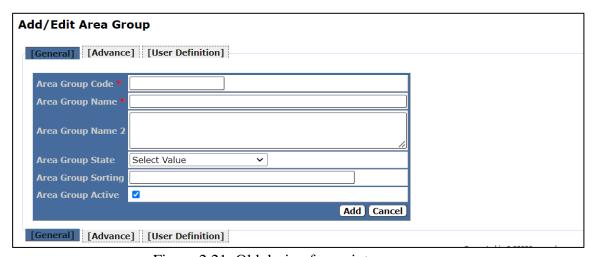


Figure 2.21: Old design for maintenance page



Figure 2.22: New design for listing page



Figure 2.23: New design for maintenance page

2.3.6 Overlapping Bugs (ID=50439 & 50743)

These bugs task is assigned to help in solving the overlapping word with another column which occur in the report. Figure 2.24 shows the problem found from QA Team. To solve the problem, it needs to add the overflow: hidden in the corresponding column in the template file as shown in Figure 2.25.

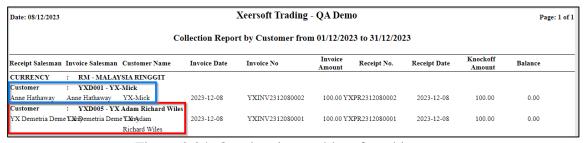


Figure 2.24: Overlapping problem found in report

Figure 2.25: Solution for overlapping bugs

2.3.7 Display Incorrect Behavior (ID=50452 & 50794)

These bugs are existing since the developer use the auto sort function in the listing. When the auto sort is true, "Total Matched" will not always fix at the top but will arrange based on the alphabet. To solve this problem, it needs to change the auto sort to false. Figure 2.26 shows the bug occur in system and Figure 2.27 shows the solution.

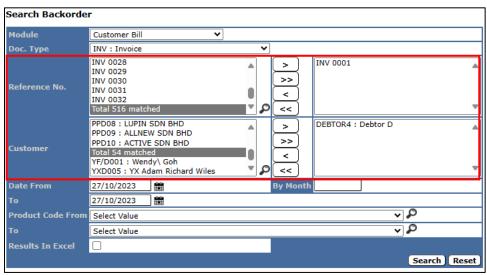


Figure 2.26: Display incorrect behaviour in system

```
var opt = new OptionTransfer("listbox_refno[]", "s_hd_refno_list[]");
opt.setAutoSort(false);
opt.setDelimiter(",");
opt.saveRemovedEeftOptions("removedLeft");
opt.saveRemovedEeftOptions("removedLight");
opt.saveAeddedEeftOptions("addedLeft");
opt.saveAeddedEeftOptions("addedLeft");
opt.saveNewLeftCoptions("meMseft");
opt.saveNewLeftCoptions("meMseft");
opt.saveNewLeftCoptions("meMseft");
opt.saveNewLeftCoptions("meMseft");
opt.saveNewLeftCoptions("meMseft");
opt.saveNewLeftCoptions("meMseft");
opt.saveNewLeftCoptions("removedLeft");
opt.saveNewLeftCoptions("removedLeft");
opt.saveRemovedLeftOptions("removedLeft");
opt.saveRemovedLeftOptions("removedLeft");
opt.saveRemovedLeftOptions("removedLeft");
opt.saveAeddedEeftOptions("addedLeft");
opt.saveAeddedEeftOptions("addedLeft");
opt.saveAeddedEtOptions("addedLeft");
opt.saveAeddedEtOptions("addedLeft");
opt.saveAeddedEtOptions("addedLeft");
opt.saveNewEeftOptions("meMseft");
opt.saveNewEeftOptions("meMseft");
optl.saveNewEeftOptions("meMseft");
optl.saveNewEeftOptions("meMseft);
```

Figure 2.27: Solution for the display incorrect behaviour task

2.3.8 SAP voucher amount enhancement (ID=50547)

This task is request by the client to enhance the voucher applied which will affect the price printed in the log file. Currently, the log file will be printed as the Figure 2.28 which the voucher amount is separated with the product. The client wish that the discount amount can be directly deduct on the product total amount.

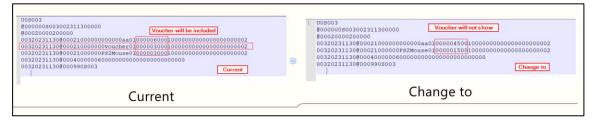


Figure 2.28: Comparison of the previous log file and current log file

To solve the problem, the system design is submitted which shown in Figure 2.29 to ensure that overall flow for the coding process is correct. The system design contains the logic to achieve the goal.

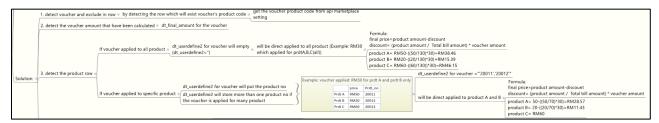


Figure 2.29: System design for SAP voucher amount enhancement task

2.3.9 Troubleshooting (ID=49850 & 50827)

Two troubleshooting tasks are assigned to check the causes of the problem exists, it may be fix or need to lock a new ask for the developer in order to carry out a new function. One of the task is about the zoom in our problem for the advance report. Since it was difficult to solve, the top management advise the user to use browser magnifier tool instead of using the system's zoom in out function. Another task is due to the wrong sequence on the variable declaration as the variable should be declared before used. The solution is moving the declaration before using it.

2.4 Hardware and Software Used

This section will describe some hardware and software that are required to use along the internship period.

2.4.1 Hardware

The hardware used is listed in Table 2.2.

Table 2.2: Hardware

Name	Description
Laptop	Processor: Intel Core i5
	Memory: 4GB
	OS: Windows 10 64 bit

2.4.2 Software

Several software is used in XeerSoft company to ensure all task can be undergoing smoothly as shown in Table2.3. Other than the programming software, the developer also requires to install the TestTrackClient and XMind 2013 to trace the overall progress and the coding logic.

Table 2.3: Software

Name	Description
Notepad++/Visual Studio Code	The integrated development environment (IDE) used
	for coding and programming
Perforce Visual Client(P4V)	The version control system which used to managing
	the changes of source code
TestTrack Client	The issue tracking system help to manage the testing
	process and monitor project workflow
SQLyog	The interface which used to manage MySQL to
	perform the task which related to database

XMind 2013	The mind mapping software tool to help in visually		
	organize the information and concept related to the		
	client requirement		
VMware workstation	The virtualization software which can run different		
	operating systems on single host system		
CodeCharge Studio	The web applications creator by generating code using		
	various programming language		

2.5 Time Period to Complete All Tasks

The task assigned will together with the time period for the developer to do the task. It can be shown in the Man-hour column as shown in Figure 2.28. The higher man-hour will need more time to complete the task.

	Number	Procedure Status	Summary	Man	Priority
~	50439	Released	QA20231026 -001 Payroll - New/Resigned Employee - Category will overlapped with Date Joined	1	Low - 10
•	50452	Released	QA20231027 -001 Inventory - Void Backorder Item - Total Matched wording display in between the search results.	1	Low - 10
/	50743	Testing / Verification	QA20231208 -001 Accounting – Alignment Issues in Invoice Salesman Collection	1	Medium - 5
	50794	Pair QC	QA20231214 -002 HupSoon - Inventory, Time Attendance, Payroll - Multiple Select Box Display Incorrect Behaviour	2	Medium - 7
	50346	Released	Clarks - create 12 digits sku code customize data exchange - excel	16	Very High - 1
/	50546	Ready for Release	Yong Soon - add reset user serialise button at user group	6	High - 4
	50601	Acceptance Test	Smarty Report - Save Format to add in saveselection="no" for Month and multiplelistbox button(Accounting Report)	16	Medium - 5
	50610	Testing / Verification	Thong Ler - Create normal scheduler and email scheduler batch file	2	Medium - 5
<u>/</u>	50547	Pair QC	Clarks - Clarks Inbound (XS Export) Sales & Sales Refund Tlog to SAP voucher amount enhancement	8	Very High - 1
	50662	Testing / Verification	GP - Cross db table sync price category change input method from insert delete to update	2	Very High - 2
<u> </u>	50774	Proceed	Accounting Master Layout Revamp - Deduction Type/ Agent/ Area Group/ Area/ Business Nature	24	Low - 10

Figure 2.30: Time Period to Complete All Tasks

2.6 Theoretical and Practical Knowledge

Within the internship period, the company provide the theoretical knowledge in database management system as the XeerSoft system function is integrate with the MySQL database. Some knowledge about the database concepts and the experience in using the MySQL command can help for future work. Besides, all knowledge about the programming language that had been learn in university such as HTML, CSS, JavaScript and PHP are applied in the job.

Next, the practical knowledge that can be gain from the internship in XeerSoft company is having the experience in the version control system. The task assigned will follow by its specific version. The version will release once a month for collaborative coding. Some technique on writing the code gained which enable to write more clean, efficient, and maintainable code compare to previous coding. Last but not least, the troubleshooting skill also can be learned when getting the bug task as it required the developer to troubleshoot the issues and find out the main reason for causing the bugs.

2.7 Problem Faced

The main problem faced is the structure of XeerSoft system as it is a brand-new system that never used. It contains of many functions such as the accounting part which is not familiar for those who are not understand on the accounting. Besides, since the system already hard to understanding, it become the problem when assign a new task as no idea carry out regarding to the solution. Some of the tasks will be a new requirement from client so sometimes will confuse on the client requirement when the project manager did not provide the detail for the task.

Therefore, keep asking senior is the main way to solve all the problem. After getting the basic understanding from senior, it requires to do self-explore on the system for more understanding on how to interact with the function and using the data. When facing some uncertain question about the client data, the senior developer will suggest to discuss with project manager to get confirmation. If they are not able to answer, they can help to ask the client for more accurate result.

2.8 Conclusion

This chapter has discussed about the objectives, tasks that had been assigned and the tools that are required in the internship period. In conclusion, internship in this company had learn a lot of knowledge and also able to applied the knowledge through the real-time task.

CHAPTER 3

OVERALL INFORMATION OF INDUSTRIAL TRAINING

3.1 Introduction

This chapter will discuss about the overall skill that had gained within the internship period. The reference materials and constructive comments also discussed in this chapter.

3.2 Skills Improvement

Over the past 20 weeks of my internship, I have learned a lot of knowledge and skill from my supervisor and other senior developer when conducting the task given. This experience equips me for future career challenges, providing insights into handling real-time tasks and the ways to collaborate with the project manager in order to fulfil the client requirement.

3.2.1 Programming Skills

Programming skills are skills that will be applied every day if undergo an internship in a company which related to programming. During the internship period, I gained some experience in applying the skills learned in university to real-life work. Since the programming language is an endless study, I have explored different programming languages especially JavaScript and PHP since these programming languages will be related to a lot of functions for the web page to operate. This helped me improve my

programming skills and can understand and use the programming language when solving the task.

3.2.2 Task Management Skills

From the various types of assigned tasks, I learned to handle the task using different ways. For the new requirement task, the developer must fully understand the client's requirement and ask the project manager when facing the problem of unclear information. Besides, the developer is also required to carry out the system design so this can give me more clear direction on solving the task.

All the tasks will be given their specific time and priority. To ensure the task can be finished as soon as possible, I need to arrange the time to complete the task based on priority as some of the task is emergency from the client side and should be directly solve. It also requires time planning to make sure all the tasks can be completed in the time given.

3.2.3 Problem Solving Skills

I also gained the skill of problem-solving as some of the bug tasks were assigned to me to check the problem. From the bugs task, I need to track where is the cause of the problem and think about the ways to solve it. It is also important in another new requirement task since I faced many problems due to the unfamiliarity of the system. I had asked the senior to get some hints on understanding the system setting and try to apply the solution in the local host. Besides, I also try to find out the solution before asking questions to get some idea on the task. This helps me a lot in getting clearer configuration when the supervisor explains to me.

3.3 Reference Materials

During my internship, I had a variety of useful reference materials that significantly supported my learning journey. For example, the XeerSoft Knowledge Base website helped me in understanding the system function better. I frequently consulted the coding standard which clarified complex concepts and offered some examples to ensure that all the platform can use the code. Online tutorials, especially those from platforms like W3School and XeerSoft tutorial video were instrumental in guiding me through coding challenges with step-by-step explanations. These resources were like helpful companions, making it easier for me to grasp new concepts and apply them to the tasks at hand.

3.4 Constructive Comments

Throughout my internship, I was fortunate to work in XeerSoft as they are willing in sharing their knowledge and providing guidance to ensure that our code was not only correct but also clean. hey had lots of experience, bringing different coding solutions and approaches that opened my eyes to new possibilities. The tasks we were given during the internship were carefully matched to our skill levels and provided a valuable learning experience. This thoughtful approach allowed us to tackle challenges that were challenging enough to promote growth but still within our reach, contributing to a positive and enriching learning environment. This supportive environment made the internship a great opportunity for growth.

3.5 Conclusion

In conclusion, this chapter focused on the improvement of skills during the internship, the usefulness of reference materials for handling tasks, and the incorporation of constructive comments. These elements collectively contribute to a comprehensive understanding of the learning experience during this period.

CHAPTER 4

CONCLUSION

4.1 Introduction

In this chapter, the overall achievement will be discussed to summarize all the skills and techniques learned within these 20 weeks. Additionally, the problems and execution will be mentioned to provide insight into the challenges faced during task completion. Lastly, opinions and suggestions will be discussed in the final section of this chapter.

4.2 Overall Achievement

In the 20 weeks of my internship, I acquired a wealth of knowledge and practical skills. Before this, my programming knowledge came from books, and I hadn't applied it in real life and lacked experience in handling tasks related to programming. After I had done a few tasks assigned by the company, I realised that we need to think from different perspectives no matter the solution and the problem since the coding is very flexible.

For the first 3 weeks, I was still curious about the system function because the XeerSoft system contains many parts such as the POS system and Middleware that were never discovered in our study. Therefore, I spent a lot of time exploring and understanding the system and its settings to get the desired results. I also learned to know all the procedures before starting a task to make sure my solution works in the current system.

After that, I have some experience in finding the required information from their knowledge base and the backend database. This helps me on easier to understand the task and client requirements so that I can complete the task in the given time. However, some of the tasks require us to make changes to the existing code. Therefore, I still need to ask the senior to find out the code that should make changes as a new bug might appear if we change the code without knowing the function.

One significant achievement was seeing tasks go live on the client-server. All the submitted tasks need to do pair QC and testing before being released to the server. If the QA team finds any issues, they will give feedback to me to make some changes. I needed to make corrections until the code passed testing. The task was deemed complete only after each testing phase was successful, and no issues remained.

Finally, I got to learn various programming languages in these 20 weeks. For example, I used JavaScript and PHP to code the new function with the HTML page. This experience taught me how to use different languages to finish a task.

4.3 Problem and Execution

The most significant challenge I faced was the unfamiliarity with the system since I am lack of experience on using it. I had to take a systematic approach to learn its functions step by step, ensuring a correct understanding of all procedures. Moreover, the coding tasks presented some challenges as I needed to grasp the solution flow thoroughly to guarantee the smooth execution of the code.

4.4 Opinion and Suggestion

In my opinion, the internship overall was a positive experience, and I encountered no major issues. The staff members were consistently friendly and supportive, creating a welcoming work environment. I am appreciating for the valuable opportunity to undertake

my internship here. This experience has played a key role in my professional growth by offering a great learning environment. In conclusion, my time during the internship was constructive, and the supportive environment played a big part in my learning and personal growth.

4.5 Conclusion

In summary, this chapter was discussing the overall achievement, problem and executive and opinion and suggestion which face along the industrial training. Participating in industrial training provide the hands-on experience which offers a practical dimension to theoretical knowledge acquired in classrooms. In a nutshell, industrial training not only helps students in their studies but also plays a big part in their overall growth, making them better prepared for the job market.

REFERENCE

XeerSoft (2021). Retrieved October 25, 2023, from https://xeersoft.com/.

Notepad++ vs Visual Studio Code | What are the differences? (2020). Retrieved December 17, 2023, from https://stackshare.io/stackups/notepad-plus-plus-vs-visual-studio-code#:~:text=In%20summary%2C%20while%20Notepad%2B%2B,a%20larger%20community%20for%20support.&text=Lightweight%20and%20versatile.

Appendix A Industrial Training Checklists (Placement)

INDUSTRIAL TRAINING CHECKLISTS (PLACEMENT)

No.	Activities/Tasks	Tick (√)	Endorse by and date
1.	Report Duty To The Organization Approved by faculty	V	
2.	E-mail Report Duty Verification (BLI-1D) to faculty supervisor.	V	
3.	Upload Report Duty Verification (BLI-1D) in e-learning for course code SCS*4114.	V	
4.	Contact faculty supervisor to inform the job scope and organization information	V	
5.	Fill in organization supervisor information survey in ITS	√	
6.	Update of Industrial Training site (address). Inform faculty supervisor and JKL, if any changes.		
7.	Updating Industrial Training Logbook online – daily basis	√	
8.	Ensure that organization supervisor able to login to ITS successfully (Organization supervisor get ITS userid and password).	V	
9.	Faculty Supervisor Visit. Date:	√	
10.	Industrial Training Presentation.	√	
11.	Performance evaluation by organisation supervisor. Online or submission BLI-2B during supervisor visit.	V	
12.	Submission of Industrial Training Logbook.	√	
13.	Submission of Industrial Training Report with checklist and achievement form as Appendix.	V	
14.	Fill in Industrial Training Performance Evaluation by student (BLI-1E) in ITS.	V	
15.	End Industrial Training	√	

Note:

1. Italic activities are optional depending on student situation.

Appendix B Industrial Training Achievements



Sekretariat Latihan Industri Sekolah Komputeran, Universiti Teknologi Malaysia,81310 SKUDAI, JOHOR Fax: 07-5565044 Tel: 07-5532008

INDUSTRIAL TRAINING ACHIEVEMENTS

(This form must be filled by student and must be attached in the Industrial Training report)

Student's Name: Zereen Teo Huey Huey

Organisation : XeerSoft Sdn Bhd

No.	Task	Month of Task Achieved				
	(List all tasks have been completed)	Month	Month	Month	Month	Month
		1	2	3	4	5
1	Training Week	√				
2	Hotel Master Assignment	√				
3	#50346 - Customize data exchange	√	√			
4	#50439 – Category overlapped with Date		√			
5	#50452 – Total Matched wording display		√			
6	#50546 – Add reset user serialize page		√	√		
7	#50547 – SAP voucher amount enhancement			√		
8	#50601 – Saveselection= "no" for save format			√		
9	#50610 – Create normal scheduler and email scheduler				√	
10	#50743 – Alignment Issues for Invoice Salesman Collection				√	
11	#50794 – Multiple selectbox display incorrect behaviour				√	
12	#50774 – Accounting Master Layout Revamp				√	√
13	#49850 – Advance Report freeze column title issue					√
14	#50827 – Product Rico Page show different value					√

Deliverable/Training reflection

(Outcomes that have been achieved)

The main achievement is do the enhancement on the XeerSoft system. From the experience gained, I able to handle different real task which cover many part of the system and understand on the logic for the system to undergo the function. Besides, I also experienced in finding the root cause for the bugs task and carry out the solution to solve the bugs.

The industrial training program at XeerSoft provided me the ability to handle the real client task and get enhance my skill from several parts which are required for my future career.

Student Signature:	_ Date: 18/1/2024
A	approval
Organisation's Supervisor:	Faculty Supervisor :
(Signature)	(Signature)
Name: Hoe Leng Wee Date: 18/1/2024	Name: Date: