

รายการอ้างอิง

ภาษาไทย

กาญจนา ทูมมานนท์. บรรจุภัณฑ์กระป๋องและกระป๋องฉีดพ่น. วารสารการบรรจุภัณฑ์ 2 ปีที่ 2 (มกราคม-มีนาคม 2537) : 5-11.

กิจจา ตั้งกิตติวงศ์. ระบบการจัดลำดับงานในการผลิตสำหรับขึ้นรูปโลหะแผ่น. สาขาวิชาวิศวกรรมอุตสาหกรรม จุฬาลงกรณ์มหาวิทยาลัย. วิทยานิพนธ์ปริญญาโทมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2535.

จิระศักดิ์ เจริญสุข. ระบบการผลิตแบบเซลล์สำหรับงานโลหะแผ่น. สาขาวิชาวิศวกรรมอุตสาหกรรม จุฬาลงกรณ์มหาวิทยาลัย. วิทยานิพนธ์ปริญญาโทมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2532.

ศิริวรรณ ฉันทวิชิตพงษ์. การปรับปรุงระบบการซ่อมบำรุงเพื่อเพิ่มผลผลิตของโรงงานผลิตกระป๋องขนาดเล็ก. สาขาวิชาวิศวกรรมอุตสาหกรรม จุฬาลงกรณ์มหาวิทยาลัย. วิทยานิพนธ์ปริญญาโทมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2535.

สมชาย สงวนศักดิ์. ระบบการกำหนดการผลิตสินค้าหลายชนิดและหลายขั้นตอนการผลิตซึ่งแตกต่างกัน. สาขาวิชาวิศวกรรมอุตสาหกรรม จุฬาลงกรณ์มหาวิทยาลัย. วิทยานิพนธ์ปริญญาโทมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2532.

อภิรักษ์ กลอวุฒินันท์. การประยุกต์เทคนิคการวางแผนความต้องการวัสดุในการผลิตเฟอร์นิเจอร์เหล็ก. สาขาวิชาวิศวกรรมอุตสาหกรรม จุฬาลงกรณ์มหาวิทยาลัย. วิทยานิพนธ์ปริญญาโทมหาบัณฑิต จุฬาลงกรณ์มหาวิทยาลัย, 2532.

อมร วงศ์รักษ์พาณิชย์. คุณภาพของภาชนะบรรจุและผลิตภัณฑ์อาหาร. วารสารผู้ส่งออก 85. ปีที่ 4 (กุมภาพันธ์ 2534) : 33-36.

อมรรัตน์ สวัสดิ์ทิศา. เทคโนโลยีการบรรจุภัณฑ์ในตลาดโลก. วารสารการบรรจุภัณฑ์ 1 ปีที่ 1 (ตุลาคม-ธันวาคม 2535) : 5-9.

อำนวยการ ฤทธิจันทร์. บรรจุภัณฑ์. วารสารกรมวิทยาศาสตร์บริการ 34. ปีที่ 42 (มกราคม 2537) : 5-12.

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ภาคผนวก ก

โครงสร้างของตารางที่ใช้ในโปรแกรม Microsoft Access

C:\ACCESS\THESIS\XYZ.MDB

Table: Categories

Page: 1

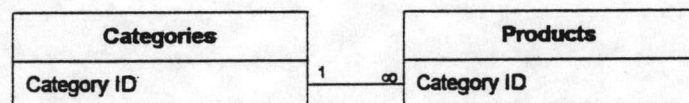
Properties

Date Created: 11/01/1996 8:41:20 PM
Last Updated: 06/03/1996 12:43:27 PM

Def. Updatable: Yes
Record Count: 8

Columns

Name	Type	Size
Category ID	Text	50
Product Group Code	Text	2
Category Name	Text	20
Description	Memo	-
Picture	OLE Object	-

Relationships**Reference**

Attributes:

One to Many, Enforced

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Table: Customers

Page: 1

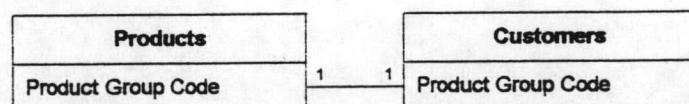
Properties

Date Created: 11/01/1996 8:41:41 PM
 Last Updated: 06/03/1996 12:39:06 PM

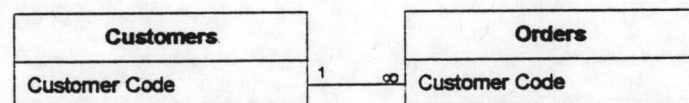
Def. Updatable: Yes
 Record Count: 4

Columns

Name	Type	Size
Customer ID	Number (Long)	4
Customer Code	Text	4
Company Name-E	Text	50
Company Name-T	Text	40
Product Group Code	Text	2
Contact Name	Text	30
Section/Department	Text	30
Address	Text	60
City	Text	15
Postal Code	Text	10
Phone	Text	24
Fax	Text	24

Relationships**Reference1**

Attributes: One to One, Not Enforced

Reference5

Attributes: One to Many, Enforced

Properties

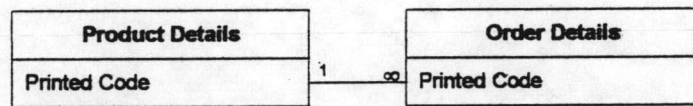
Date Created: 11/02/1996 1:22:14 PM Def. Updatable: Yes
 Last Updated: 15/02/1996 8:53:33 AM Record Count: 6

Columns

Name	Type	Size
Order ID	Text	10
Product Code	Text	12
Printed Code	Text	50
Quantity	Number (Double)	8

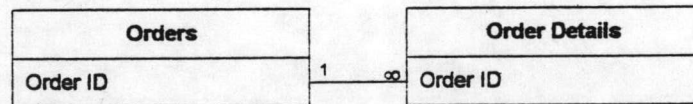
Relationships

Reference3



Attributes: One to Many, Enforced

Reference4



Attributes: One to Many, Enforced

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Table: Orders

Page: 1

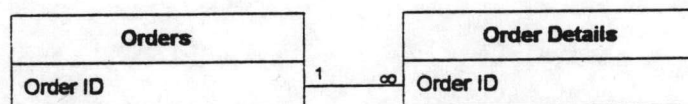
Properties

Date Created: 12/02/1996 1:09:15 PM
Last Updated: 12/02/1996 9:21:24 PM

Def. Updatable: Yes
Record Count: 8

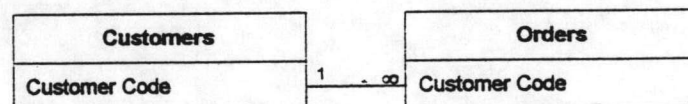
Columns

Name	Type	Size
Order ID	Text	10
Customer Code	Text	4
Order Date	Date/Time	8
Required Date	Date/Time	8
Shipped Date	Date/Time	8
Due Date	Date/Time	8
Order By	Text	50
Check By	Text	50

Relationships**Reference4**

Attributes:

One to Many, Enforced

Reference5

Attributes:

One to Many, Enforced

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Table: Parts

Page: 1

Properties

Date Created: 30/01/1996 1:18:18 PM Def. Updatable: Yes
Last Updated: 15/02/1996 9:45:48 PM Record Count: 55

Columns

Name	Type	Size
Part Code	Text	50
Part Name	Text	50
Part ID	Number (Double)	8
Product Code	Text	50
Dimension	Number (Double)	8
Unit Price	Currency	8
Unit in stock	Number (Double)	8
Unit on order	Number (Double)	8
Reorder Level	Number (Double)	8
Printed Code	Text	50
Material Code	Text	50
Picture	OLE Object	-

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Table: Product Details

Page: 1

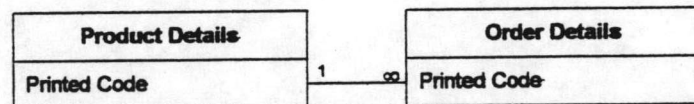
Properties

Date Created: 08/02/1996 10:32:15 AM
Frozen Columns: 1
Record Count: 75

Def. Updatable: Yes
Last Updated: 15/02/1996 9:56:57 PM

Columns

Name	Type	Size
Customer Code	Text	50
Product Code	Text	50
Printed Code	Text	50
Description	Memo	-
Filling Capacity	Text	50
Filling Capacity Unit	Text	50
Unit in stock	Number (Double)	8

Relationships**Reference3**

Attributes:

One to Many, Enforced

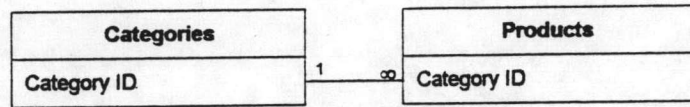
Properties

Date Created:	11/01/1996 8:41:58 PM	Def. Updatable:	Yes
DS Font Height:	11	DS Font Italic:	No
DS Font Name:	AngsanaUPC	DS Font Underline:	No
DS Font Weight:	Normal	Frozen Columns:	7
Last Updated:	15/02/1996 8:48:00 AM	Record Count:	72
Row Height:	Default	Show Grid:	Yes
Tabular Char Set:	0	Tabular Family:	18

Columns

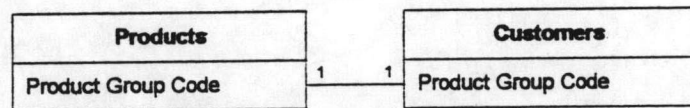
Name	Type	Size
Product ID	Number (Long)	4
Product Group Code	Text	2
Category ID	Text	50
Product Code	Text	12
Product Name	Memo	-
Filling Capacity Unit	Text	2
Filling Capacity	Text	50
Body-L/D2	Number (Double)	8
Top-W/D1	Number (Double)	8
Bottom-L/D3	Number (Double)	8
Body-H	Number (Double)	8
Total-H	Number (Double)	8
Unit Price	Currency	8
Top Type	Text	50
TPart Code	Text	50
Main Body Type	Text	50
MPart Code	Text	50
Bottom Type	Text	50
BPart Code	Text	50
Nose Type	Text	50
NPart Code	Text	50
Handle Type	Text	50
HPart Code	Text	50
Cap Type	Text	50
CPart Code	Text	50
Quantity per unit	Number (Double)	8
Unit in Stock	Number (Double)	8
Unit on order	Number (Double)	8
Reorder level	Number (Double)	8

Relationships

Reference

Attributes:

One to Many, Enforced

Reference1

Attributes:

One to One, Not Enforced

ภาคผนวก ข

โครงสร้างของคิวรีที่ใช้ในโปรแกรม Microsoft Access

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Query: Categories List

Page: 1

Properties

Date Created:	15/02/1996 1:35:01 PM	Def. Updatable:	Yes
Last Updated:	15/02/1996 3:24:59 PM	ODBC Timeout:	60
Record Locks:	No Locks	Returns Records:	Yes
Type:	Select		

SQL

```
SELECT DISTINCTROW Categories.[Product Group Code], Categories.[Category Name],
Categories.Description, Categories.Picture
FROM Categories
ORDER BY Categories.[Product Group Code];
```

Columns

Name	Type	Size
Product Group Code	Text	2
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	2085	
Data Updatable:	Yes	
Description:		
Ordinal Position:	0	
Required:	No	
Source Field:	Product Group Code	
Source Table:	Categories	
Validate On Set:	No	
Category Name	Text	20
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	1935	
Data Updatable:	Yes	
Description:		
Ordinal Position:	1	
Required:	1	
Source Field:	Category Name	
Source Table:	Categories	
Validate On Set:	No	
Description	Memo	N/A
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	

Query: Categories List

Column Width: 2850
 Data Updatable: Yes
 Description:
 Ordinal Position: 2
 Required: No
 Source Field: Description
 Source Table: Categories
 Validate On Set: No

Picture

OLE Object

N/A

Allow Zero Length: No
 Attributes: Variable Length, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default
 Column Width: 1470
 Data Updatable: Yes
 Description:
 Ordinal Position: 3
 Required: No
 Source Field: Picture
 Source Table: Categories
 Validate On Set: No

User Permissions

admin Delete, Read Permissions, Set Permissions, Change Owner
 guest
 Tivakorn J.

Group Permissions

Admins Delete, Read Permissions, Set Permissions, Change Owner
 Guests
 Users Delete, Read Permissions, Set Permissions, Change Owner

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 Query: Customer and Product Details

Page: 1

Properties

Date Created:	09/02/1996 7:31:46 PM	Def. Updatable:	Yes
Last Updated:	12/02/1996 12:53:49 PM	ODBC Timeout:	60
Record Locks:	No Locks	Returns Records:	Yes
Type:	Select		

SQL

```
SELECT DISTINCTROW Customers.[Customer Code], Customers.[Company Name-E], Customers.[Company Name-T], [Product Details].[Product Code], [Product Details].[Printed Code], [Product Details].Description, [Product Details].[Filling Capacity], [Product Details].[Filling Capacity Unit], [Product Details].[Unit in stock] FROM Customers INNER JOIN [Product Details] ON Customers.[Customer Code] = [Product Details].[Customer Code] ORDER BY Customers.[Customer Code];
```

Columns

Name	Type	Size
Customer Code	Text	4
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	960	
Data Updatable:	Yes	
Ordinal Position:	0	
Required:	No	
Source Field:	Customer Code	
Source Table:	Customers	
Validate On Set:	No	
Company Name-E	Text	50
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	2640	
Data Updatable:	Yes	
Ordinal Position:	1	
Required:	No	
Source Field:	Company Name-E	
Source Table:	Customers	
Validate On Set:	No	
Company Name-T	Text	40
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	

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 Query: Customer and Product Details

Page: 2

Column Width:	2700		
Data Updatable:	Yes		
Ordinal Position:	2		
Required:	1		
Source Field:	Company Name-T		
Source Table:	Customers		
Validate On Set:	No		
Product Code		Text	50
Allow Zero Length:	No		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
Column Hidden:	No		
Column Order:	Default		
Column Width:	Default		
Data Updatable:	Yes		
Ordinal Position:	3		
Required:	No		
Source Field:	Product Code		
Source Table:	Product Details		
Validate On Set:	No		
Printed Code		Text	50
Allow Zero Length:	No		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
Column Hidden:	No		
Column Order:	Default		
Column Width:	1710		
Data Updatable:	Yes		
Ordinal Position:	4		
Required:	No		
Source Field:	Printed Code		
Source Table:	Product Details		
Validate On Set:	No		
Description		Memo	N/A
Allow Zero Length:	No		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
Column Hidden:	No		
Column Order:	Default		
Column Width:	3840		
Data Updatable:	Yes		
Ordinal Position:	5		
Required:	No		
Source Field:	Description		
Source Table:	Product Details		
Validate On Set:	No		
Filling Capacity		Text	50
Allow Zero Length:	No		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
Column Hidden:	No		

Column Order: Default
 Column Width: 495
 Data Updatable: Yes
 Ordinal Position: 6
 Required: No
 Source Field: Filling Capacity
 Source Table: Product Details
 Validate On Set: No

Filling Capacity Unit Text 50

Allow Zero Length: No
 Attributes: Variable Length, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default
 Column Width: 435
 Data Updatable: Yes
 Ordinal Position: 7
 Required: No
 Source Field: Filling Capacity Unit
 Source Table: Product Details
 Validate On Set: No

Unit in stock Number (Double) 8

Allow Zero Length: No
 Attributes: Fixed Size, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default
 Column Width: Default
 Data Updatable: Yes
 Decimal Places: Auto
 Default Value: 0
 Ordinal Position: 8
 Required: No
 Source Field: Unit in stock
 Source Table: Product Details
 Validate On Set: No

User Permissions

admin	Delete, Read Permissions, Set Permissions, Change Owner
guest	
Tvakorn J.	

Group Permissions

Admins	Delete, Read Permissions, Set Permissions, Change Owner
Guests	
Users	Delete, Read Permissions, Set Permissions, Change Owner

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 Query: Customer Names and Codes

Page: 1

Properties

Date Created:	12/02/1996 12:58:09 PM	Def. Updatable:	Yes
Last Updated:	12/02/1996 12:58:09 PM	ODBC Timeout:	0
Record Locks:	No Locks	Returns Records:	Yes
Type:	Select		

SQL

```
SELECT DISTINCTROW Customers.[Company Name-E], Customers.[Customer Code]
FROM Customers INNER JOIN [Product Details] ON Customers.[Customer Code] = [Product Details].[Customer Code]
ORDER BY Customers.[Customer Code];
```

Columns

Name	Type	Size
Company Name-E	Text	50
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	2640	
Data Updatable:	Yes	
Ordinal Position:	0	
Required:	No	
Source Field:	Company Name-E	
Source Table:	Customers	
Validate On Set:	No	
Customer Code	Text	4
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	960	
Data Updatable:	Yes	
Ordinal Position:	1	
Required:	No	
Source Field:	Customer Code	
Source Table:	Customers	
Validate On Set:	No	

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Query: Order Detail

Page: 1

Properties

Date Created:	12/02/1996 2:12:50 PM	Def. Updatable:	Yes
Last Updated:	13/02/1996 10:34:20 AM	ODBC Timeout:	60
Record Locks:	No Locks	Returns Records:	Yes
Type:	Select		

SQL

```
SELECT DISTINCTROW [Order Details].[Order ID], [Product Details].[Product Code], [Product Details].[Printed Code], [Product Details].Description, [Order Details].Quantity, [Product Details].[Unit in stock]
FROM [Product Details] INNER JOIN [Order Details] ON [Product Details].[Printed Code] = [Order Details].[Printed Code];
```

Columns

Name	Type	Size
Order ID	Text	10
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	1005	
Data Updatable:	Yes	
Ordinal Position:	0	
Required:	No	
Source Field:	Order ID	
Source Table:	Order Details	
Validate On Set:	No	
Product Code	Text	50
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	Default	
Data Updatable:	Yes	
Ordinal Position:	1	
Required:	No	
Source Field:	Product Code	
Source Table:	Product Details	
Validate On Set:	No	
Printed Code	Text	50
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	1710	
Data Updatable:	Yes	

Ordinal Position:	2		
Required:	No		
Source Field:	Printed Code		
Source Table:	Product Details		
Validate On Set:	No		
Description		Memo	N/A
Allow Zero Length:	No		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
Column Hidden:	No		
Column Order:	Default		
Column Width:	3570		
Data Updatable:	Yes		
Ordinal Position:	3		
Required:	No		
Source Field:	Description		
Source Table:	Product Details		
Validate On Set:	No		
Quantity		Number (Double)	8
Allow Zero Length:	No		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
Column Hidden:	No		
Column Order:	Default		
Column Width:	765		
Data Updatable:	Yes		
Decimal Places:	Auto		
Default Value:	0		
Ordinal Position:	4		
Required:	No		
Source Field:	Quantity		
Source Table:	Order Details		
Validate On Set:	No		
Unit in stock		Number (Double)	8
Allow Zero Length:	No		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
Column Hidden:	No		
Column Order:	Default		
Column Width:	1170		
Data Updatable:	Yes		
Decimal Places:	Auto		
Default Value:	0		
Ordinal Position:	5		
Required:	No		
Source Field:	Unit in stock		
Source Table:	Product Details		
Validate On Set:	No		

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Query: Order Information

Page: 1

Properties

Date Created:	12/02/1996 2:17:05 PM	Def. Updatable:	Yes
Last Updated:	13/02/1996 10:36:16 AM	ODBC Timeout:	60
Record Locks:	No Locks	Returns Records:	Yes
Type:	Select		

SQL

```
SELECT DISTINCTROW Orders.[Order ID], Orders.[Customer Code], Customers.[Company Name-E],
Customers.[Company Name-T], Orders.[Order Date], Orders.[Required Date], Orders.[Shipped Date],
Orders.[Due Date]
FROM Customers INNER JOIN Orders ON Customers.[Customer Code] = Orders.[Customer Code]
ORDER BY Orders.[Order ID];
```

Columns

Name	Type	Size
Order ID	Text	10
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	975	
Data Updatable:	Yes	
Ordinal Position:	0	
Required:	No	
Source Field:	Order ID	
Source Table:	Orders	
Validate On Set:	No	
Customer Code	Text	4
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	1365	
Data Updatable:	Yes	
Ordinal Position:	1	
Required:	No	
Source Field:	Customer Code	
Source Table:	Orders	
Validate On Set:	No	
Company Name-E	Text	50
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	2640	

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Query: Order Information

Page: 2

Data Updatable: Yes
 Ordinal Position: 2
 Required: No
 Source Field: Company Name-E
 Source Table: Customers
 Validate On Set: No

Company Name-T Text 40

Allow Zero Length: No
 Attributes: Variable Length, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default
 Column Width: 2700
 Data Updatable: Yes
 Ordinal Position: 3
 Required: 1
 Source Field: Company Name-T
 Source Table: Customers
 Validate On Set: No

Order Date Date/Time 8

Allow Zero Length: No
 Attributes: Fixed Size, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default
 Column Width: 1080
 Data Updatable: Yes
 Ordinal Position: 4
 Required: No
 Source Field: Order Date
 Source Table: Orders
 Validate On Set: No

Required Date Date/Time 8

Allow Zero Length: No
 Attributes: Fixed Size, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default
 Column Width: 1290
 Data Updatable: Yes
 Ordinal Position: 5
 Required: No
 Source Field: Required Date
 Source Table: Orders
 Validate On Set: No

Shipped Date Date/Time 8

Allow Zero Length: No
 Attributes: Fixed Size, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default

C:\ACCESS\THESIS\XYZ.MDB**Query: Order Information****Page: 3**

Column Width:	1305
Data Updatable:	Yes
Ordinal Position:	6
Required:	No
Source Field:	Shipped Date
Source Table:	Orders
Validate On Set:	No

Due Date**Date/Time****8**

Allow Zero Length:	No
Attributes:	Fixed Size, Updatable
Collating Order:	General
Column Hidden:	No
Column Order:	Default
Column Width:	1020
Data Updatable:	Yes
Ordinal Position:	7
Required:	No
Source Field:	Due Date
Source Table:	Orders
Validate On Set:	No

Properties

Date Created:	04/02/1996 4:59:57 PM	Def. Updatable:	Yes
Last Updated:	04/02/1996 9:39:03 PM	ODBC Timeout:	60
Record Locks:	No Locks	Returns Records:	Yes
Type:	Select		

SQL

```
SELECT DISTINCTROW Parts.[Part Code], Parts.[Part Name], Parts.[Part ID], Parts.[Product Code],
Parts.Dimension, Parts.[Unit Price], Parts.[Unit in stock], Parts.[Unit on order], Parts.[Reorder Level],
Parts.[Printed Code], Parts.[Material Code], Parts.Picture
FROM Parts
WHERE ((Parts.[Part Code] Like "M**"))
ORDER BY Parts.[Part Code];
```

Columns

Name	Type	Size
Part Code	Text	50
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	1140	
Data Updatable:	Yes	
Ordinal Position:	0	
Required:	No	
Source Field:	Part Code	
Source Table:	Parts	
Validate On Set:	No	
Part Name	Text	50
Allow Zero Length:	No	
Attributes:	Variable Length, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	
Column Width:	1905	
Data Updatable:	Yes	
Ordinal Position:	1	
Required:	No	
Source Field:	Part Name	
Source Table:	Parts	
Validate On Set:	No	
Part ID	Number (Double)	8
Allow Zero Length:	No	
Attributes:	Fixed Size, Updatable	
Collating Order:	General	
Column Hidden:	No	
Column Order:	Default	

Column Width: 810
 Data Updatable: Yes
 Decimal Places: Auto
 Default Value: 0
 Ordinal Position: 2
 Required: No
 Source Field: Part ID
 Source Table: Parts
 Validate On Set: No

Product Code Text 50

Allow Zero Length: No
 Attributes: Variable Length, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default
 Column Width: Default
 Data Updatable: Yes
 Ordinal Position: 3
 Required: No
 Source Field: Product Code
 Source Table: Parts
 Validate On Set: No

Dimension Number (Double) 8

Allow Zero Length: No
 Attributes: Fixed Size, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default
 Column Width: 1020
 Data Updatable: Yes
 Decimal Places: Auto
 Default Value: 0
 Ordinal Position: 4
 Required: No
 Source Field: Dimension
 Source Table: Parts
 Validate On Set: No

Unit Price Currency 8

Allow Zero Length: No
 Attributes: Fixed Size, Updatable
 Collating Order: General
 Column Hidden: No
 Column Order: Default
 Column Width: 990
 Data Updatable: Yes
 Decimal Places: Auto
 Default Value: 0
 Format: @#,##0.00;(@#,##0.00)
 Ordinal Position: 5
 Required: No
 Source Field: Unit Price
 Source Table: Parts

Validate On Set:	No		
Unit in stock		Number (Double)	8
Allow Zero Length:	No		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
Column Hidden:	No		
Column Order:	Default		
Column Width:	1230		
Data Updatable:	Yes		
Decimal Places:	Auto		
Default Value:	0		
Ordinal Position:	6		
Required:	No		
Source Field:	Unit in stock		
Source Table:	Parts		
Validate On Set:	No		
Unit on order		Number (Double)	8
Allow Zero Length:	No		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
Column Hidden:	No		
Column Order:	Default		
Column Width:	1335		
Data Updatable:	Yes		
Decimal Places:	Auto		
Default Value:	0		
Ordinal Position:	7		
Required:	No		
Source Field:	Unit on order		
Source Table:	Parts		
Validate On Set:	No		
Reorder Level		Number (Double)	8
Allow Zero Length:	No		
Attributes:	Fixed Size, Updatable		
Collating Order:	General		
Column Hidden:	No		
Column Order:	Default		
Column Width:	1365		
Data Updatable:	Yes		
Decimal Places:	Auto		
Default Value:	0		
Ordinal Position:	8		
Required:	No		
Source Field:	Reorder Level		
Source Table:	Parts		
Validate On Set:	No		
Printed Code		Text	50
Allow Zero Length:	No		
Attributes:	Variable Length, Updatable		
Collating Order:	General		
Column Hidden:	No		

Column Order:	Default
Column Width:	Default
Data Updatable:	Yes
Ordinal Position:	9
Required:	No
Source Field:	Printed Code
Source Table:	Parts
Validate On Set:	No

Material Code	Text	50
---------------	------	----

Allow Zero Length:	No
Attributes:	Variable Length, Updatable
Collating Order:	General
Column Hidden:	No
Column Order:	Default
Column Width:	Default
Data Updatable:	Yes
Ordinal Position:	10
Required:	No
Source Field:	Material Code
Source Table:	Parts
Validate On Set:	No

Picture	OLE Object	N/A
---------	------------	-----

Allow Zero Length:	No
Attributes:	Variable Length, Updatable
Collating Order:	General
Column Hidden:	No
Column Order:	Default
Column Width:	Default
Data Updatable:	Yes
Ordinal Position:	11
Required:	No
Source Field:	Picture
Source Table:	Parts
Validate On Set:	No

ภาคผนวก ค

โครงสร้างของแมโครที่ใช้ในโปรแกรม Microsoft Access

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Macro: AutoExec

Page: 1

Properties

Date Created: 15/02/1996 8:24:21 PM

Last Updated: 15/02/1996 8:30:37 PM

Owner: admin

Actions

Name	Condition	Action	Argument	Value
<i>Runs automatically when you open the database.</i>				
		Echo	Echo On: Status Bar Text:	No Setting up your custom workspace...
<i>Freeze screen while macro is running (Echo off).</i>				
		Hourglass	Hourglass On:	Yes
<i>Display an hourglass while macro is running.</i>				
		DoMenuItem	Menu Bar: Menu Name: Command: Subcommand:	Form Window Hide
<i>Hide Database</i>				
		OpenForm	Form Name: View: Filter Name: Where Condition: Data Mode: Window Mode:	Main Menu Form Read Only Normal
<i>Open the Main Menu form.</i>				

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 Macro: Customer Pick List

Page: 1

Properties

Date Created: 09/02/1996 5:30:23 PM
 Owner: admin

Last Updated: 06/03/1996 2:46:33 PM

Actions

Name	Condition	Action	Argument	Value
Find Customer				
		GoToControl	Control Name:	Company Name-E
		FindRecord	Find What: Where: Match Case: Direction: Search As Formatted: Search In: Find First:	=[Customer Pick List] Match Whole Field No Down No Current Field Yes
Fill In Value				
		SetValue	Item: Expression:	[Customer Pick List] [Company Name-E]

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 Macro: Forms Main Menu Buttons

Page: 1

Properties

Date Created: 15/02/1996 6:45:34 PM
 Owner: admin

Last Updated: 06/03/1996 12:41:48 PM

Actions

Name	Condition	Action	Argument	Value
------	-----------	--------	----------	-------

Attached to the buttons on the Forms Switchboard form.

Categories

OpenForm	Form Name:	Categories
	View:	Form
	Filter Name:	
	Where Condition:	
	Data Mode:	Edit
	Window Mode:	Normal

Open the Categories form.

Customers

OpenForm	Form Name:	Customers
	View:	Form
	Filter Name:	
	Where Condition:	
	Data Mode:	Edit
	Window Mode:	Normal

Open the Customers form.

Products

OpenForm	Form Name:	Products
	View:	Form
	Filter Name:	
	Where Condition:	
	Data Mode:	Edit
	Window Mode:	Normal

Open the Products form.

MoveSize	Right:	2880
	Down:	
	Width:	
	Height:	

Move the Products form.

Product Details

OpenForm	Form Name:	Customers and Product Details
	View:	Form
	Filter Name:	
	Where Condition:	
	Data Mode:	Edit
	Window Mode:	Normal

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Macro: Forms Main Menu Buttons

Page: 2

Open the Product Details form.

Orders

OpenForm

Form Name:

Orders

View:

Form

Filter Name:

Where Condition:

Data Mode:

Edit

Window Mode:

Normal

Exit

OpenForm

Form Name:

Main Menu

View:

Form

Filter Name:

Where Condition:

Data Mode:

Edit

Window Mode:

Normal

Exit to the Main Switchboard form.

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 Macro: Main Menu Buttons

Page: 1

Properties

Date Created: 15/02/1996 6:38:20 PM
 Owner: admin

Last Updated: 15/02/1996 6:49:06 PM

Actions

Name	Condition	Action	Argument	Value
------	-----------	--------	----------	-------

Attached to the buttons on the Main Switchboard form.

View Forms

OpenForm	Form Name:	Forms Main Menu
	View:	Form
	Filter Name:	
	Where Condition:	
	Data Mode:	Read Only
	Window Mode:	Normal

Open the Forms Switchboard form to open the forms in your application.

Database Window

SelectObject	Object Type:	Form
	Object Name:	
	In Database Window:	-1

Display the Database window.

Exit

Quit	Options:	Prompt
------	----------	--------

Quit Microsoft Access.

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Macro: Orders

Page: 1

Properties

Date Created: 12/02/1996 7:55:29 PM

Last Updated: 06/03/1996 12:42:49 PM

Owner: admin

Actions

Name	Condition	Action	Argument	Value
		Echo	Echo On: Status Bar Text:	No
Add New Customer		OpenForm	Form Name: View: Filter Name: Where Condition: Data Mode: Window Mode:	Customers Form Add Normal
		SetValue	Item: Expression:	[Forms]![Customers]![Customer Code] [Customer Code]
		GoToControl	Control Name:	Customer Code
Clear		SendKeys	Keystrokes: Wait:	{Esc} -1
Next		DoMenuItem	Menu Bar: Menu Name: Command: Subcommand:	Form Records Go To New
		SetValue	Item: Expression:	[Customer Code] [Forms]![Customers]![Customer Code]
		GoToControl	Control Name:	Customer Code

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Macro: Orders

Page: 2

Close

Close

Object Type:

Form

Object Name:

Customers

Add New Order

GoToRecord

Object Type:

Form

Object Name:

Orders

Record:

New

Offset:

Print

DoMenuItem

Menu Bar:

Form

Menu Name:

Edit

Command:

Select Record

Subcommand:

New

Print

Print Range:

Selection

Page From:

Page To:

Print Quality:

High

Copies:

1

Collate Copies:

Yes

Close2

Close

Object Type:

Form

Object Name:

Orders

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Macro: Part

Page: 1

Properties

Date Created: 31/01/1996 9:18:09 PM
Owner: admin

Last Updated: 15/02/1996 10:27:12 PM

Actions

Name	Condition	Action	Argument	Value
<i>Attached to the Parts button on the Products form.</i>				
		Echo	Echo On: Status Bar Text:	No
<i>Freeze screen while macro is running (Echo off).</i>				
PartB		OpenForm	Form Name: View: Filter Name: Where Condition: Data Mode: Window Mode:	PartB Form Read Only Normal
<i>Open the PartB form.</i>				
PartC		OpenForm	Form Name: View: Filter Name: Where Condition: Data Mode: Window Mode:	PartC Form Edit Normal
<i>Open the PartC form.</i>				
PartH		OpenForm	Form Name: View: Filter Name: Where Condition: Data Mode: Window Mode:	PartH Form Edit Normal
<i>Open the PartH form.</i>				
PartM		OpenForm	Form Name: View: Filter Name: Where Condition: Data Mode: Window Mode:	PartM Form Edit Normal
<i>Open the PartM form.</i>				

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Macro: Part

Page: 2

PartN

OpenForm

Form Name:

PartN

View:

Form

Filter Name:

Where Condition:

Data Mode:

Edit

Window Mode:

Normal

*Open the PartN form.***PartT**

OpenForm

Form Name:

PartT

View:

Form

Filter Name:

Where Condition:

Data Mode:

Edit

Window Mode:

Normal

*Open the PartT form.***Close**

Close

Object Type:

Form

Object Name:

PartB

*Close the PartB form.***Close**

Close

Object Type:

Form

Object Name:

PartC

*Close the PartC form.***Close**

Close

Object Type:

Form

Object Name:

PartH

*Close the PartH form.***Close**

Close

Object Type:

Form

Object Name:

PartM

*Close the PartM form.***Close**

Close

Object Type:

Form

Object Name:

PartN

*Close the PartN form.***Close**

Close

Object Type:

Form

Object Name:

PartT

*Close the PartT form.**Attached to the OnOpen property of the Part form.*

ประวัติผู้เขียน

นายทิวากร จงมีความสุข เกิดวันที่ 31 ธันวาคม 2509 ที่อำเภอเมือง จังหวัด
กำแพงเพชร สำเร็จการศึกษาปริญญาตรีวิศวกรรมศาสตร์ สาขาไฟฟ้ากำลัง ภาควิชา
วิศวกรรมไฟฟ้า คณะวิศวกรรมศาสตร์ มหาวิทยาลัยเชียงใหม่ ในปีการศึกษา 2533
และเข้าศึกษาต่อในหลักสูตรวิศวกรรมศาสตรมหาบัณฑิต ภาควิชาวิศวกรรมอุตสาหกรรม
จุฬาลงกรณ์มหาวิทยาลัย เมื่อ พ.ศ. 2536

