

Template App


Backend + Frontend






for Development and for Training

Responsive Components:

1. Layout with Menu etc. in header
2. Layout with footer panel
3. Form in the content panel (mid section)
 - a. Header buttons panel
 - b. Attribute-values by row. 1 to 2 pairs per row.
 - c. Attribute-values by column. 1 to 10 pairs per row.
 - d. Tabs for multi-panels
 - e. Tables
 - i. In-cell editing
 1. List of value button
 2. Dropdown button
 3. Checkbox cell
 4. Non-editable cells
 - ii. [Delete], [Edit], [Insert Above] buttons in each editable row
 - iii. Freeze some columns option, Freeze header row option

Master Transactions Reports


User: suthep
Logout

Invoice Form
Status: Active

Last Edit by: maksj
Last Edit date: 08/07/2022

Invoice ID: 107
Invoice No.: INV22-101

*Invoice Date: 05/05/2022
*Customer: ABC Co., Ltd.

Goods Value	VAT %	VAT	Amount Due
400.00	7.00	28.00	428.00

Products Sold
Receipts View

#	*Product Code	Product Name	*Unit Price	*Quantity	Units	Has Tax?	Extended Price
1	C100	Chalk	30.00	10.00	BOXES	<input checked="" type="checkbox"/>	300.00
2	P101	Faber Castell Pencil B2	20.00	5.00	PCS	<input checked="" type="checkbox"/>	100.00
3						<input type="checkbox"/>	
4						<input type="checkbox"/>	

Products Sold
Receipts View

Receipt No.	On Date	Payment Method	Receipt Amount
RCT22-010	07/05/2022	Cash	200.00
RCT22-017	12/05/2022	Check	100.00

Total Received: 300.00
Invoice Balance: 128.00

Database: Test Beta 2022.
App ver: 1.3.

Goal 2. List view in addition to form view.

Table Features for List View:

- Filter column. Unfilter.
- Sort Increasing, Decreasing, Undo Sort.
- Search column.
- Text search in all columns
- Show pages in footer and left/right buttons
- Select a Row.

Name ▾	Age ▴	Address ▴
Jim Green	42	London I
John Brown	32	New Yor
Joe Black	32	Sidney N

Name	Age	Address
<input type="text" value="Search name"/>	32	New York No. 1 Lake Park
<input type="button" value="Search"/>	<input type="button" value="Reset"/>	
Joe Black	42	London No. 1 Lake Park
Jim Green	32	Sidney No. 1 Lake Park

List Of Value - Google Chrome

localhost:15289/frmListOfValue.aspx?Name=CoalPriceList&Control=ctl00_ContentPli

เลขที่งาน	วันที่เสนอราคา	ลูกค้า	ชื่อลูกค้า	วันที่เริ่ม
ECPL1310-0004	22/10/2013 00:...	E-00011	โปลิโหม สวรรณภูมิ	22/10/2013
ECPL1310-0003	14/10/2013 00:...	E-00017	ไทยเชซิน อี.เอ็น....	14/10/2013
ECPL1310-0002	12/10/2013 00:...	E-99999	Test ว่านลีแอ็คกิ่ง...	12/10/2013
ECPL1310-0001	12/10/2013 00:...	E-99999	Test ว่านลีแอ็คกิ่ง...	12/10/2013
ECPL1309-0289	28/09/2013 00:...	E-00008	ชไนเดอร์ เปเปออร์	07/10/2013
ECPL1309-0288	28/09/2013 00:...	E-00008	ชไนเดอร์ เปเปออร์	01/08/2013
ECPL1309-0287	30/09/2013 00:...	E-00140	จันศิริพิมพ์แอนดริ...	30/09/2013
ECPL1309-0286	30/09/2013 00:...	E-00291	เอสซีจี เทคคิงส์	01/06/2013
ECPL1309-0285	30/09/2013 00:...	E-00291	เอสซีจี เทคคิงส์	01/06/2013
ECPL1309-0284	30/09/2013 00:...	E-00291	เอสซีจี เทคคิงส์	01/06/2013

เลขที่งาน has text 1 ECPL1310-0001 2 Clear 3

ตกลง ยกเลิก เรียง A-Z เรียง Z-A ค้นหา กรอง ขยาย แก้ไข เพิ่มใหม่

5 6 7 8 9 10 11 12 13



1. Layout Screen Panels 1) frozen top-section panel for program name, logo, menu, & user info 2) mid-section panel area for form 3) frozen footer-section panel for some other display information.

File User Maintain Transaction Account Account Reports Reports Option Logout

Truck Size Form

*Truck Size : *Size Description :

*Truck Bin Load	*Tare Weight	*Net Weight	*Gross Weight
Double	2.00	36.00	38.00

Update By : Update Date :

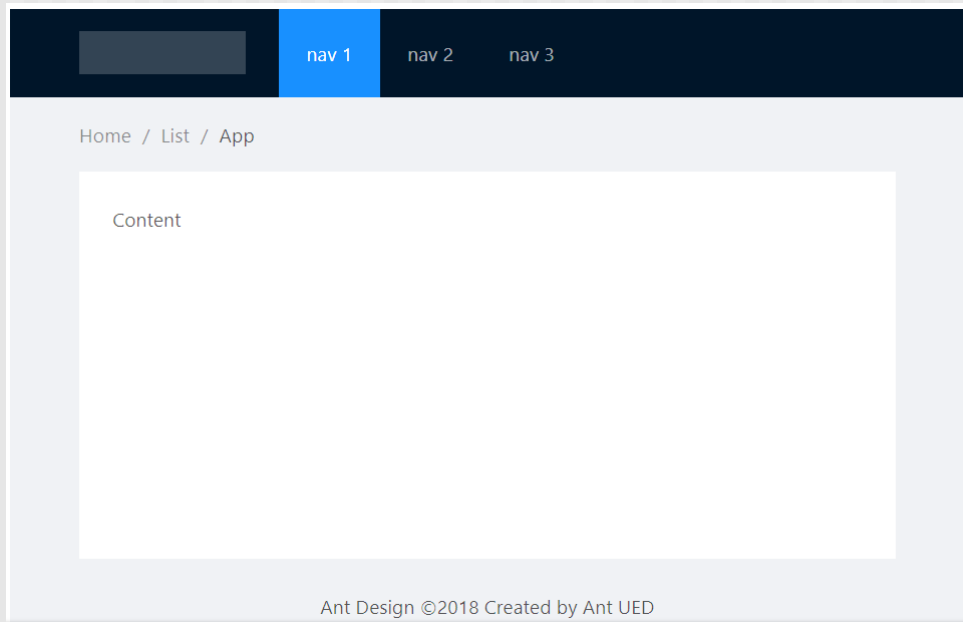
Group : APOLLO | User : SUPERVISOR



← → ↺ 🏠

ระบบ	ผู้ใช้	ปรับปรุง	งาน	บัญชี	รายงานบัญชี
		กำหนดค่าเริ่มต้น			
		ฐานทะเบียน		▶	
		พื้นที่/โซน		▶	

Layout Responsive Components

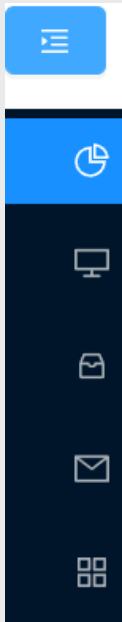


Menu Responsive Components

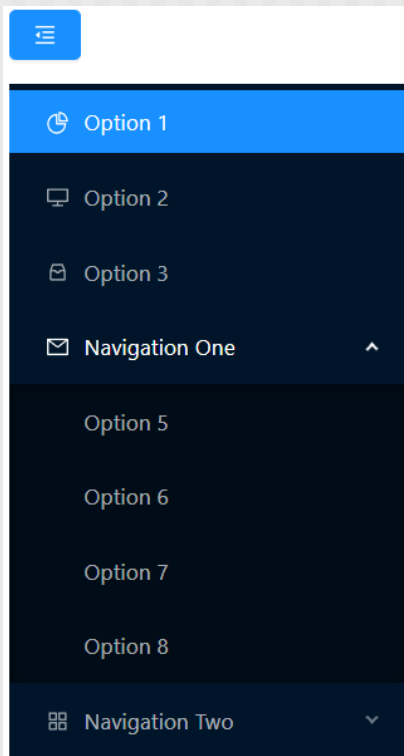


2. Menu Component. See <https://codesandbox.io/s/3uj5r7>, but make it top panel instead of the left panel.

Icon mode:



Expanded mode
with multi-levels:



But let's try to put the menu at top panel, not left:

ระบบ	ผู้ใช้	ปรับปรุง	งาน	บัญชี	รายงานบัญชี
		กำหนดค่าเริ่มต้น			
		ฐานทะเบียน			
		พื้นที่/โซน			

Form Responsive Components



3. Form Component. The form will generally be in the content panel. It will have 1) header panel area for button icons, form name, status information (active, cancelled, ...), last saved by, etc. 2) content panel for data entry with possibility of many tabs and sub-panels. It would be nice if the header section of the form is frozen.

File User Maintain Transaction Account Account Reports Reports Option Logout

Truck Size Form

*Truck Size : D30 *Size Description : รถพ่วง 30 คัน

*Truck Bin Load	*Tare Weight	*Net Weight	*Gross Weight
Double	2.00	36.00	38.00

Address Contact Person

No.	Billing Address?	Default Delivery Address?	*Delivery Zone	*Address Short Name	Entity Name	*Address Line 1	Address Line 2	Tumbon/KI
1	Yes	<input checked="" type="checkbox"/>	A			113-115 ถนนวิมลนคร		บางซื่อ
2	No	<input type="checkbox"/>						
3	No	<input type="checkbox"/>						

Update By : SUPERVISOR Update Date : 10/09/2013 16:44:00

Group : APOLLO | User : SUPERVISOR

attribute-value pairs in row format

attribute-value pairs in column format

Form Responsive Components



3. Form Component. See <https://codesandbox.io/s/jdmlxc>, but allow multiple attribute-value pairs:

Date / Time related pickers

<https://codesandbox.io/s/peo7s4>:

* DatePicker[showTime]

Select date

* MonthPicker

Select date

* RangePicker

Start date ~ End date

Success:

Warning:

Fail:

Should be combination of numbers & alphabets



Success

Warning

Fail

Should be combination of numbers & alphabets

Responsive multiple attribute-value pairs. <https://codesandbox.io/s/2etbn3>:

Product	Cloud Database	Billing	Prepaid	time	18:00:00
Amount	\$80.00	Discount	\$20.00	Official	\$60.00
Config Info	Data disk type: MongoDB Database version: 3.4 Package: dds.mongo.mid Storage space: 10 GB Replication factor: 3 Region: East China 1				



Product	Cloud Database
Billing	Prepaid
time	18:00:00
Amount	\$80.00
Discount	\$20.00
Official	\$60.00
Config Info	Data disk type: MongoDB Database version: 3.4 Package: dds.mongo.mid Storage space: 10 GB

Form Responsive Components



3. Form Component. Showing one-to-one attribute-value pairs in column format.

In column format:
(4 attributes per row)

*Truck Bin Load	*Tare Weight	*Net Weight	*Gross Weight
Double <input type="button" value="v"/>	2.00	36.00	38.00

In row format:
(2 per row)

*Truck Size :

D30

*Size Description :

รถพ่วง 30 ตัน

The **Descriptions Responsive Component** with Column format. <https://codesandbox.io/s/lv0978?file=/index.js>

Product	Billing Mode	Automatic Renewal
Cloud Database	Prepaid	YES
Order time	Usage Time	
2018-04-24 18:00:00	2019-04-24 18:00:00	
Status		
● Running		
Negotiated Amount	Discount	Official Receipts
\$80.00	\$20.00	\$60.00
Config info		
Data disk type: MongoDB Database version: 3.4 Package: dds.mongo.mid Storage space: 10 GB Replication factor: 3 Region: East China 1		



User Info	
Product	Billing Mode
Cloud Database	Prepaid
Automatic Renewal	Order time
YES	2018-04-24 18:00:00
Usage Time	
2019-04-24 18:00:00	
Status	
<div>Running</div>	
Negotiated Amount	Discount
\$80.00	\$20.00
Official Receipts	Config Info
Data disk type: MongoDB Database version: 3.4 Package: dds.mongo.mid	



4. Table Component for data entry/view forms. First 2 and last columns are frozen <https://codesandbox.io/s/h4g81m>:

Full Name	Age	Column 1	Column 2	Column 3	Action
Edward 0	32	London Park no. 0	London Park no. 0	London Park no. 0	action
Edward 1	32	London Park no. 1	London Park no. 1	London Park no. 1	action
Edward 2	32	London Park no. 2	London Park no. 2	London Park no. 2	action
Edward 3	32	London Park no. 3	London Park no. 3	London Park no. 3	action
Edward 4	32	London Park no. 4	London Park no. 4	London Park no. 4	action



Full Name	Age	Column 2	Column 3	Column 4	Action
Edward 0	32	London Park no. 0	London Park no. 0	London Park no. 0	action
Edward 1	32	London Park no. 1	London Park no. 1	London Park no. 1	action
Edward 2	32	London Park no. 2	London Park no. 2	London Park no. 2	action
Edward 3	32	London Park no. 3	London Park no. 3	London Park no. 3	action
Edward 4	32	London Park no. 4	London Park no. 4	London Park no. 4	action

Allow incell editing per line

<https://codesandbox.io/s/02ngi9>:

Should allow in each cell: list of value button, drop down, checkbox (or switch on/off), date/time/month picker.

Should be able to freeze header row, and select columns. <https://codesandbox.io/s/suqmig>

name	age	address	operation
Edward 0	32	London Park no. 0	Edit
Edward 1	<input type="text"/>	<input type="text" value="London Park no. 1"/>	Save Cancel
Edward 2	32	London Park no. 2	Edit

Table Responsive Components



4. Table Component for list view forms. Filter, sort, and search capabilities on each table column.

<https://codesandbox.io/s/ew5d6w> (filter, sort).

Name ▾	Age ▴	Address ▴
Jim Green	42	London No. 1
John Brown	32	New York No.
Joe Black	32	Sidney No. 1 L

<https://codesandbox.io/s/8ydl3g> (search):

Name	Age	Address
<input type="text" value="Search name"/>	32	New York No. 1 Lake Park
<input type="text" value="Joe Black"/>	42	London No. 1 Lake Park
Jim Green	32	Sidney No. 1 Lake Park



4. Table Component. How to make Ant design tables responsive?

<https://stackoverflow.com/questions/65508782/how-to-make-ant-design-table-responsive>

Example of responsive grids: <https://www.w3docs.com/tools/code-editor/5165>

Tab Responsive Components



5. Tab Component. <https://codesandbox.io/s/c80hcd>

Tab Title 1

Tab Title 2

Tab Title 3

Content of Tab Pane 2

Content of Tab Pane 2


Content of Tab Pane 2

Icon Components






5. Icon Component. <https://codesandbox.io/s/71kjvh>

Used for form buttons at the top panel of each form.

Master
Transactions
Reports


User: suthep

Logout

Invoice Form
Status: Active

Last Edit by: maks
Last Edit date: 08/07/2022

Invoice ID:
107

Invoice No.:
INV22-101


*Invoice Date:
05/05/2022













*Customer:
ABC
_ABC Co., Ltd.

Goods Value	VAT %	VAT	Amount Due
400.00	7.00	28.00	428.00

Products Sold

Receipts View



#		*Product Code	Product Name	*Unit Price	*Quantity	Units	Has Tax?	Extended Price
1	  	C100	Chalk	30.00	10.00	BOXES	<input checked="" type="checkbox"/>	300.00
2	  	P101	Faber Castell Pencil B2	20.00	5.00	PCS	<input checked="" type="checkbox"/>	100.00
3	  						<input type="checkbox"/>	
4	  						<input type="checkbox"/>	

Products Sold

Receipts View

Receipt No.	On Date	Payment Method	Receipt Amount
RCT22-010	07/05/2022	Cash	200.00
RCT22-017	12/05/2022	Check	100.00

Total Received:

300.00

Invoice Balance:

128.00

Database: Test Beta 2022.
App ver: 1.3.

Standard UI for each data entry form

We should create one example app and then use it for training.

The Invoice Form

Home

←

→

↺

🏠

🕒

☆

🔍

Invoice Form

NEW

EDIT

COPY

SAVE

DELETE

PRINT


CLOSE

*Invoice No.:

INV100/13

*Invoice Date:


22/8/2013



Date Picker Button

*Customer:

A



ABC Co., Ltd.

List of Value (LoV) button - shows LoV Form to choose a foreign key.

Products Sold:

#	*Product Code	Name	*Unit Price	Quantity	Extended Price
1	C100	Chalk	30.00	10	300.00
2	P101	Faber Pencil B2	20.00	5	100.00
3					
4					

Insert Row

Delete Row

New

Total Price:

400.00

VAT:

28.00

Amount Due:

428.00

When change in unit price or quantity, the extended price should be calculated and all totals should be updated.

Insert Row will insert a new row above the currently active row
Delete Row will remove current row. All “#” should be renumbered.
New Row will insert a new row at the last row

The Invoice Form and Data

InvoiceLineItem					
InvoiceNo	ProductCode	UnitPrice	Quantity	ExtendedPrice	
INV100/13	C100	฿30.00	฿10.00	฿300.00	
INV100/13	P101	฿20.00	฿5.00	฿100.00	
INV101/13	D200	฿120.00	฿1.00	฿120.00	
INV101/13	E233	฿10.00	฿10.00	฿100.00	
INV101/13	P101	฿20.00	฿4.00	฿80.00	
INV102/13	D200	฿120.00	฿1.00	฿120.00	
INV102/13	E233	฿10.00	฿10.00	฿100.00	
INV102/13	P101	฿20.00	฿4.00	฿80.00	

*Invoice No.: INV100/13

*Invoice Date: 22/8/2013 24

*Customer: A ABC Co., Ltd.

Products Sold:

[Insert Row](#) [Delete Row](#) [New Row](#)

#	*Product Code	Name	*Unit Price	*Quantity	Extended Price
1	C100	Chalk	30.00	10	300.00
2	P101	Faber Pencil B2	20.00	5	100.00

Invoice					
InvoiceNo	InvoiceDate	CustomerCode	TotalAmount	VAT	AmountDue
INV100/13	22-Aug-13	A	฿400.00	฿28.00	฿428.00
INV101/13	25-Oct-13	B	฿300.00	฿21.00	฿321.00
INV102/13	07-Oct-13	A	฿300.00	฿21.00	฿321.00

Total Price: 400.00
 VAT: 28.00
 Amount Due: 428.00

The Product Form and Data

Home

Product Form

NEW EDIT COPY SAVE DELETE PRINT CLOSE

*Product Code: P100

*Name: Parker Pen #113

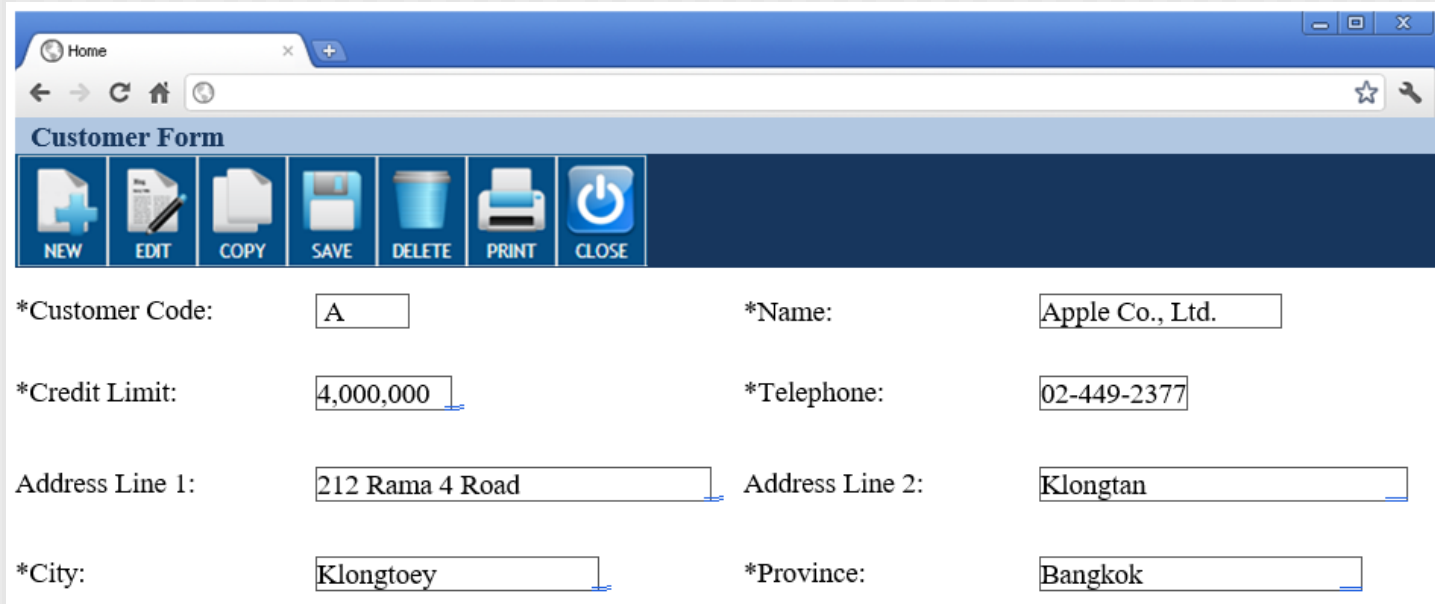
*Unit Price: 400.00

*Units: PCS

Sample Data in Products Table:

ProductCode	ProductName	UnitPrice	Units
C100	Chalk	₱30.00	PCS
D200	Double-A, A4 Paper	₱120.00	PACK
E233	Eraser	₱10.00	PCS
P100	Parker Pen#113	₱400.00	PCS
P101	Faber Pencil B2	₱20.00	PCS

The Customer Form and Data

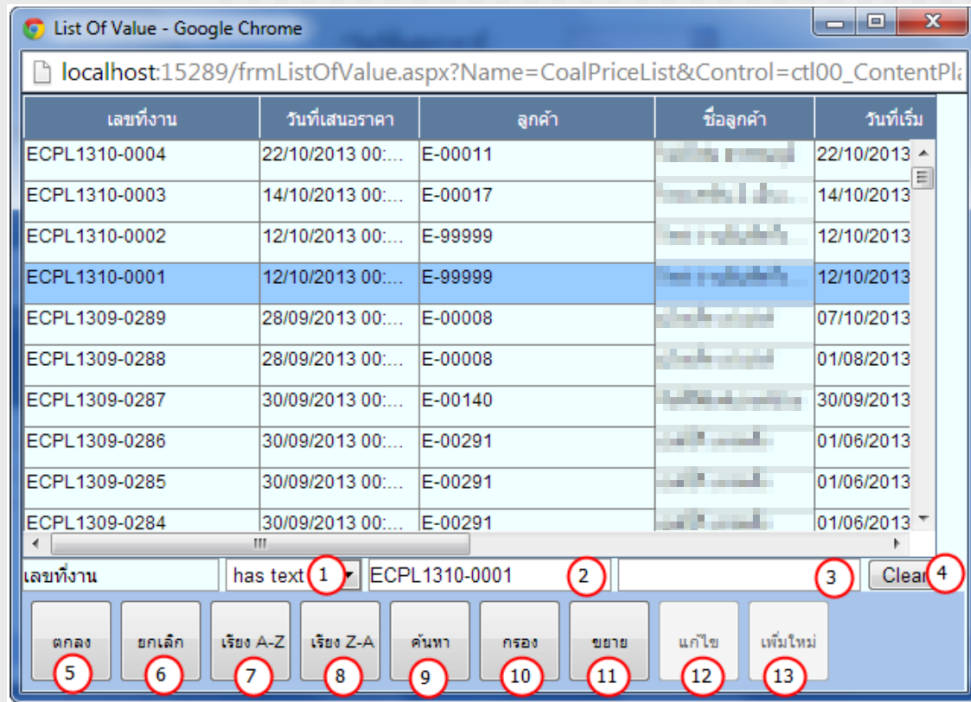


The screenshot shows a web browser window with a single tab titled 'Home'. The address bar is empty. Below the browser window, there is a 'Customer Form' with a dark blue header bar containing several icons: NEW (blue plus), EDIT (blue notepad), COPY (blue folder), SAVE (blue floppy disk), DELETE (blue trash can), PRINT (blue printer), and CLOSE (blue power button). The form itself has a white background and contains the following fields:

- *Customer Code:
- *Name:
- *Credit Limit:
- *Telephone:
- Address Line 1:
- Address Line 2:
- *City:
- *Province:

Customer								
Code	CustomerName	CreditLimit	Telephone	AddressLine1	AddressLine2	City	Province	
A	Apple Co., Ltd.	\$4,000,000.00	02-449-2377	212 Rama 4 Road	Klongtan	Klongtoey	Bangkok	
B	Bell Co., Ltd.	\$1,000,000.00	02-243-5592	51 Charan Sanit 1	Thapra	Bangkok Yai	Bangkok	
C	CAT Co., Ltd.	\$2,000,000.00	02-522-4400	57 Suksawad 17	Bangmod	Tungkru	Bangkok	

The List of Value Form¹. “LoV”, “List View”



เลขที่งาน	วันที่เสนอราคา	ลูกราคา	ชื่อลูกราคา	วันที่เริ่ม
ECPL1310-0004	22/10/2013 00:...	E-00011		22/10/2013
ECPL1310-0003	14/10/2013 00:...	E-00017		14/10/2013
ECPL1310-0002	12/10/2013 00:...	E-99999		12/10/2013
ECPL1310-0001	12/10/2013 00:...	E-99999		12/10/2013
ECPL1309-0289	28/09/2013 00:...	E-00008		07/10/2013
ECPL1309-0288	28/09/2013 00:...	E-00008		01/08/2013
ECPL1309-0287	30/09/2013 00:...	E-00140		30/09/2013
ECPL1309-0286	30/09/2013 00:...	E-00291		01/06/2013
ECPL1309-0285	30/09/2013 00:...	E-00291		01/06/2013
ECPL1309-0284	30/09/2013 00:...	E-00291		01/06/2013

เลขที่งาน:

Operation : คือเงื่อนไขสำหรับการเปรียบเทียบข้อมูลที่ต้องการค้นหาภายในนี้ มีคำสั่งให้เลือกดังต่อไปนี้ has text, =, >, >=, <, <=, between (ช่วงระหว่าง)

- Text Search 1 : สำหรับป้อนข้อความหรือตัวเลขที่ต้องการค้นหา ตามเงื่อนไขคำสั่งตามที่เรเลือกในข้อที่ 1
- Text Search 2 : สำหรับป้อนข้อความที่ 2 ใช้สำหรับการใช้คำสั่งเงื่อนไข between
- ปุ่ม Clear : สำหรับเคลียร์ข้อมูล Operation, Text Search 1, Text Search 2 ให้เป็นค่าเริ่มต้น
- ปุ่ม Ok : สำหรับยืนยันข้อมูลที่เราได้เลือกไว้ (แถวที่เป็นแถบสีฟ้าเข้ม)
- ปุ่ม Cancel : สำหรับยกเลิกการเลือกข้อมูล หรือปิด List of value
- ปุ่ม Ascending : สำหรับเรียงลำดับข้อมูลจากน้อยไปหามาก
- ปุ่ม Descending : สำหรับเรียงลำดับข้อมูลจากมากไปหาน้อย
- ปุ่ม Find : สำหรับค้นหาข้อมูลลำดับต่อไป ตามเงื่อนไขที่ได้ระบุไว้ใน Operation, Text Search 1 และ Text Search 2
- ปุ่ม Filter : สำหรับกรองข้อมูลตามเงื่อนไขที่ได้ระบุไว้ใน Operation, Text Search 1 และ Text Search 2

Date Picker Form





We will also need: Month Picker, Time Picker.

Monday, March 23, 2009







March, 2009						
Mo	Tu	We	Th	Fr	Sa	Su
23	24	25	26	27	28	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	1	2	3	4	5

Color Scheme:

1. Primary colors

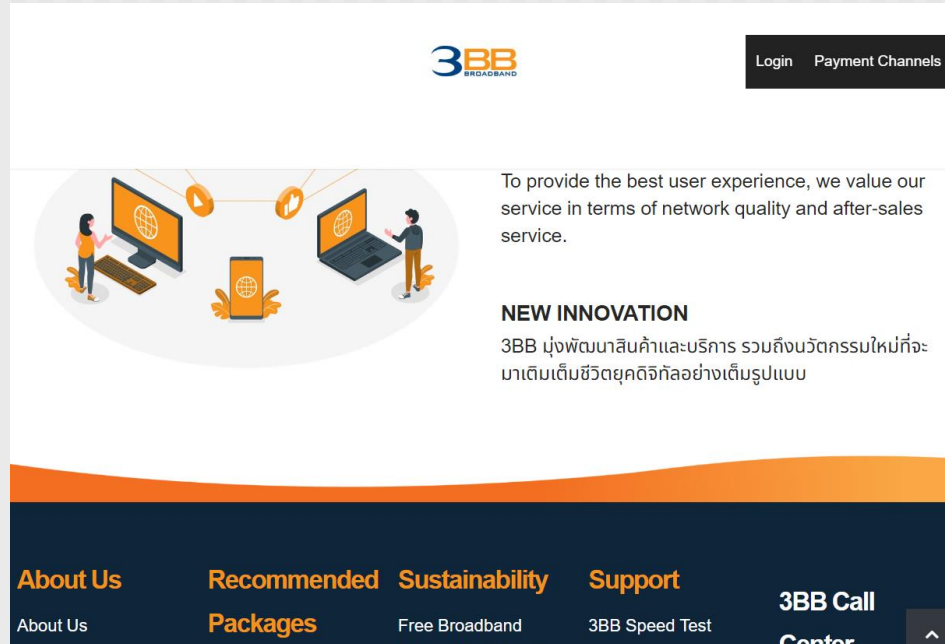
	Sky blue #29B4F9		Light navy #5777E7		Vivid cyan #15D5C0		Light red #FF5F57
--	---------------------	--	-----------------------	--	-----------------------	--	----------------------

2. Additional colors

	White #FFFFFF		Ash white #F9FAFB		Purple gray #E4ESEE		Pale gray #DEE0E6
	Vivid blue #53DCFF		Dark navy #000C38				

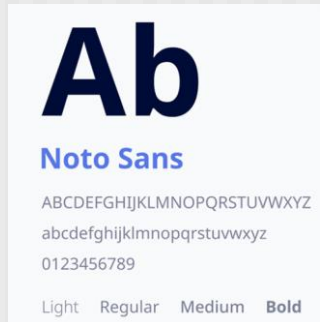
Let's use a color scheme in-line with 3BB:

- Deep Orange
- Navy Blue
- Black
- White
- Very light orange background

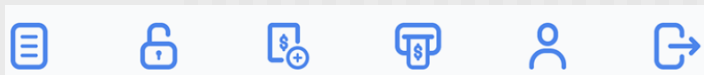


Font

Let's find a good
Font Name to use
for Thai text and
for English text.



Icons - let's design all the icons needed for our color scheme



mid-size form top icons for: [clear][edit][copy][save][delete][print][close]



small line item icons for: [insert]  [delete][edit]   [save][cancel]  



mid-size line item icon for: [add row]



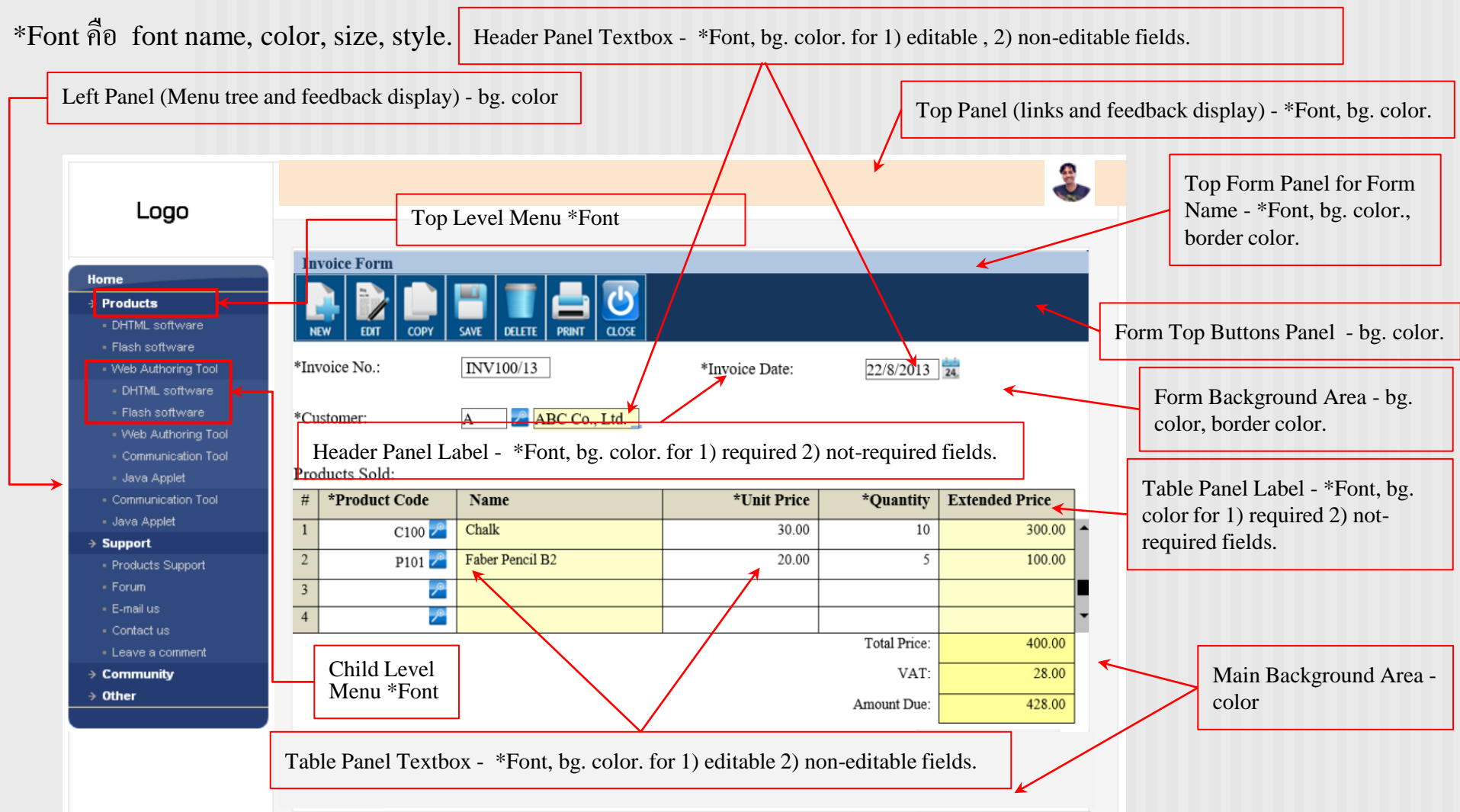
Small List of Value Button:



Date Selection Button:



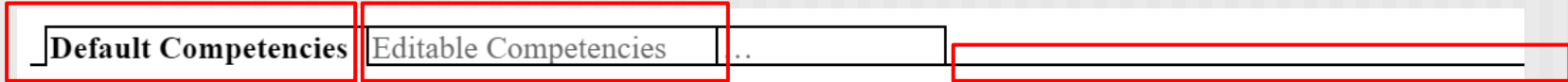
Message icon buttons for: [OK/Yes][Cancel/No]  



For each panel/textbox/ drawing we have to define these, where applicable:



- Background: Fill Color, border thickness, border color
- Foreground: Font name, font size, font style (reg., bold, ...), font color

We have to specify this for our in-form panels such as Tabs as well. This means for tab captions and tab borders (active/non-active tabs).



[1]:

Competencies List (only Level 1 of the tree is allowed for [1]):

Number	*Competency Code	Competency Name	*Aggregate Score Weight %	Score Type	Can Remove?	Can Change Weight?
1			20	Star 0-5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2			20	Star 0-5	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

After training on Invoice App, try: Registration App

Home

←

→

↺

🏠

🌐

☆

🔑

Course Registration Form

NEW

EDIT

COPY

SAVE

DELETE

PRINT

CLOSE

*Registration No.:

1000

*Registration Date:

22/8/2013

📅

24

*Student:

54001

🔍

Suthep Madarasmi

*For semester:

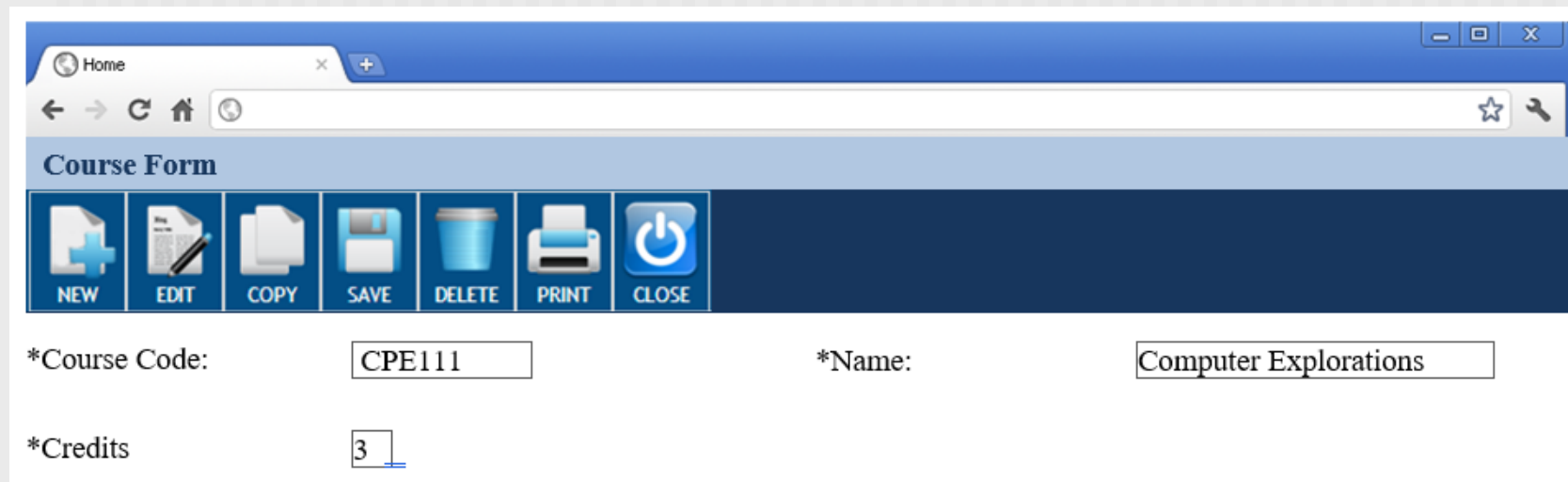
1/2556

🔍

Courses Registered:

#	*Course Code	Name	Section No.	Credits
1	CPE100	Introduction to Programming	2	3
2	CPE111	Computer Explorations	2	3
3	MTH111	Calculus 1	5	3
4	PHY100	Physics 1	1	3
Total Credits:				12

Course Form



Home

Course Form

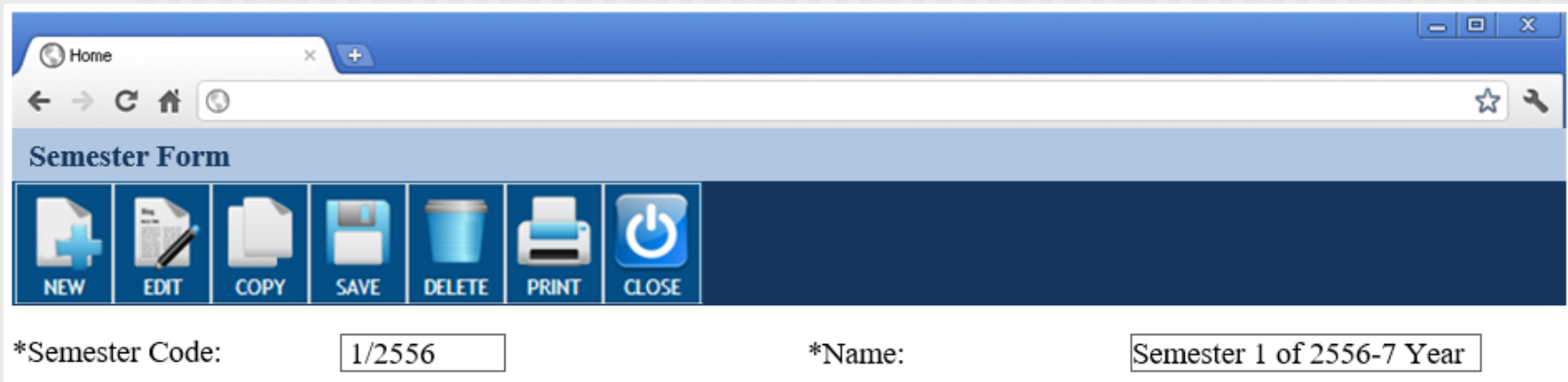
NEW EDIT COPY SAVE DELETE PRINT CLOSE

*Course Code:

*Name:

*Credits

Semester Form



The screenshot shows a web browser window with a blue header bar. The address bar displays "Home" and a search icon. Below the address bar is a navigation bar with icons for back, forward, refresh, and home. The main content area has a blue header with the text "Semester Form". Below this header is a toolbar with seven icons: a document with a plus sign (NEW), a document with a pencil (EDIT), a document with a copy icon (COPY), a floppy disk (SAVE), a trash can (DELETE), a printer (PRINT), and a power button (CLOSE). Below the toolbar, there are two input fields. The first field is labeled "*Semester Code:" and contains the text "1/2556". The second field is labeled "*Name:" and contains the text "Semester 1 of 2556-7 Year".

*Semester Code:

*Name:

Student Form



Home

Student Form

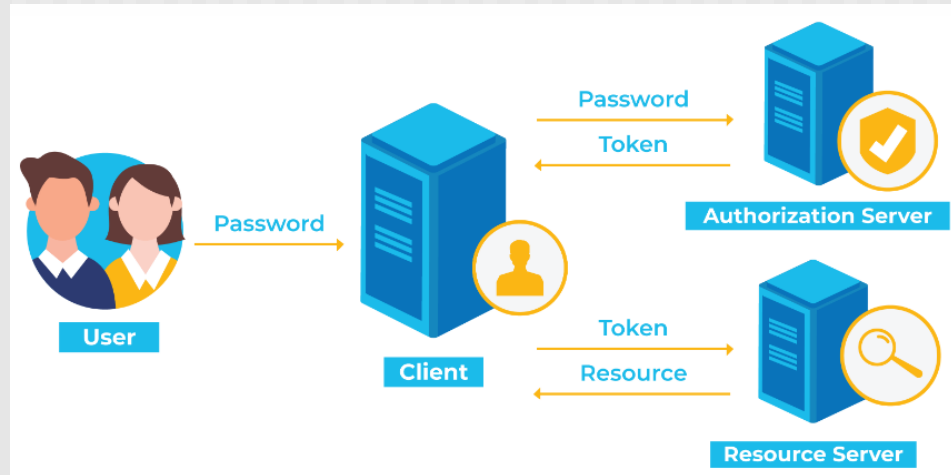
NEW EDIT COPY SAVE DELETE PRINT CLOSE

*Student ID

*Name:

API security

1. Identity and access management. This ensures that all applications, servers, and users that consume your API are those with the proper permissions to do so. The two main means of identity and access management are authentication and authorization.
2. Content integrity and confidentiality. Integrity ensures that the message was not compromised after transmission. Content or message confidentiality ensures that the message received is verified and that the journey from sender to API has not been witnessed by others.
3. API reliability and availability. Always available and not blocked or down.



Tokens

1. Hardware Token
2. Software component token such as:
 - a. JSON Web Tokens (JWT)
 - b. OTP
 - c. API Token (OAuth2)

The JSON Web Token (JWT) Auth Token

JWTs have three important components:

1. Header: Define token type and the signing algorithm involved in this space.
2. Payload: Define the token issuer, the expiration of the token, and more in this section.
3. Signature: Verify that the message hasn't changed in transit with a secure signature.