Chapter 2 – Lesson A

Lesson A Review Questions

1. c upper left
2. a book title
3. b An identifying label should be positioned either above or to the right of the control it identifies.
4. 2 Identify the objects to which you will assign the tasks.
   4 Draw a sketch of the user interface.
   1 Identify the tasks the application needs to perform.
   3 Identify the events required to trigger an object to perform its assigned tasks.
5. 5 Test and debug the application
   3 Build the user interface
   4 Code the application
   6 Assemble the documentation
   2 Plan the application
   1 Meet with the client

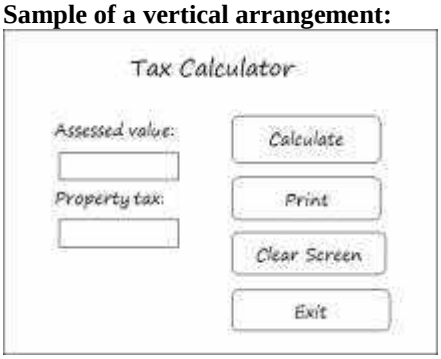
Lesson A Exercises

1. The TOE charts and sketches may vary.

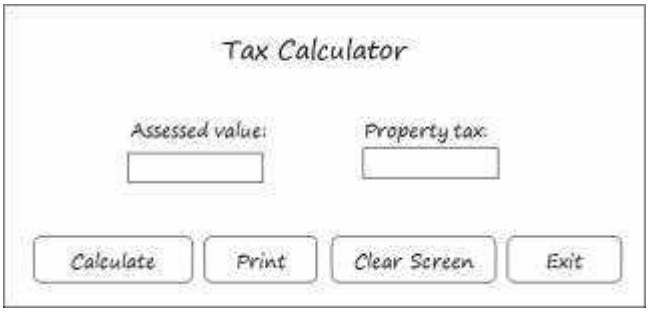
Task	Object	Event
Get the assessed value from the user	txtAssessed	None
Calculate the tax	btnCalc	Click
Display the following: assessed value tax (from btnCalc)	 txtAssessed lblTax	 None None
Print the screen	btnPrint	Click
End the application	btnExit	Click
Clear the screen	btnClear	Click

Task	Object	Event
1. Calculate the tax 2. Display the tax in lblTax	btnCalc	Click
Print the screen	btnPrint	Click
Clear the screen	btnClear	Click
End the application	btnExit	Click
Display the tax (from btnCalc)	lblTax	None
Get and display the assessed value	txtAssessed	None

Sample of a vertical arrangement:



Sample of a horizontal arrangement:

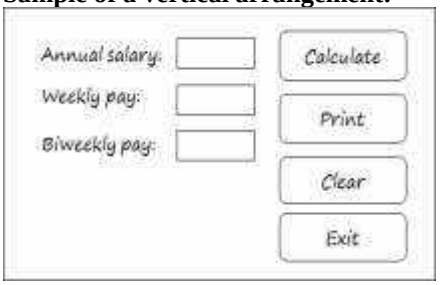


2. The TOE charts and sketches may vary.

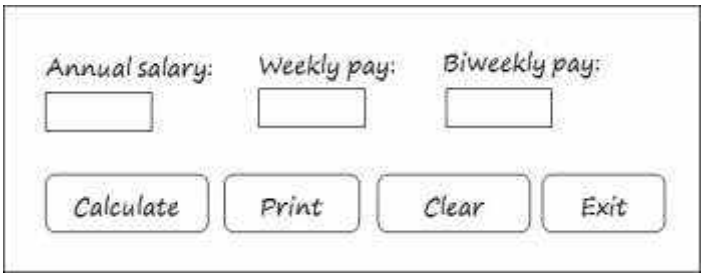
Task	Object	Event
Get the annual salary from the user	txtAnnual	None
Calculate the weekly gross pay and biweekly gross pay	btnCalc	Click
Display the following: annual salary weekly gross pay biweekly gross pay	 txtAnnual lblWeekly lblBiweekly	 None None None
Print the screen	btnPrint	Click
End the application	btnExit	Click
Clear the screen	btnClear	Click

Task	Object	Event
1. Calculate the weekly gross pay and biweekly gross pay 2. Display the weekly gross pay in lblWeekly 3. Display the biweekly gross pay in lblBiweekly	btnCalc	Click
Print the screen	btnPrint	Click
Clear the screen	btnClear	Click
End the application	btnExit	Click
Display the weekly gross pay (from btnCalc)	lblWeekly	None
Display the biweekly gross pay (from btnCalc)	lblBiweekly	None
Get and display the annual salary	txtAnnual	None

Sample of a vertical arrangement:



Sample of a horizontal arrangement:



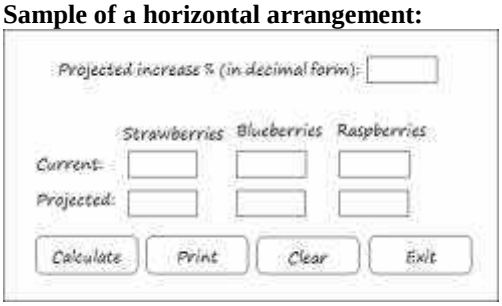
3. The TOE charts and sketches may vary.

Task	Object	Event
Get the following from the user: current year's sales for each berry type projected increase in decimal form	 txtStraw, txtBlue, txtRasp txtProjIncrease	 None None
Calculate the projected sales for each berry type	btnCalc	Click
Display the following: current year's sales for each berry type projected increase in decimal form projected sales for each berry type (from btnCalc)	 txtStraw, txtBlue, txtRasp txtProjIincrease lblStraw, lblBlue, lblRasp	 None None None
Print the screen	btnPrint	Click
End the application	btnExit	Click
Clear the screen	btnClear	Click

Task	Object	Event
1. Calculate the projected sales for each berry type 2. Display the projected sales for each berry type in lblStraw, lblBlue, and lblRasp	btnCalc	Click
Print the screen	btnPrint	Click
Clear the screen	btnClear	Click
End the application	btnExit	Click
Display the projected sales for each berry type (from btnCalc)	lblStraw, lblBlue, lblRasp	None
Get and display the projected increase in decimal form	txtProjIncrease	None
Get and display the current year's sales for each berry type	txtStraw, txtBlue, txtRasp	None

Sample of a vertical arrangement:

Sample of a horizontal arrangement:



Chapter 2 – Lesson B

Lesson B Review Questions

1. c TabIndex
2. b x
3. d Text
4. a &Display
5. To provide keyboard access to a text box, assign an access key to its identifying label control. Then set the label control's TabIndex property to a value that is one number less than the text box's TabIndex value.

Lesson B Exercises

1. See the VB2015\Chap02\lbRichardson Solution files on the Solutions Disk.
2. See the VB2015\Chap02\lbJordan Sales Solution files on the Solutions Disk.
3. See the VB2015\Chap02\lbCranston Solution files on the Solutions Disk.
4. See the VB2015\Chap02\lbAge Solution files on the Solutions Disk.

Chapter 2 – Lesson C

Lesson C Review Questions

1. c `lblTotal.Text = Val(txtQuantity.Text + 3)`
2. d Val
3. c parallelogram
4. 3
5. 24

Lesson C Exercises

1. See the VB2015\Chap02\lcRichardson Solution files on the Solutions Disk.
2. See the VB2015\Chap02\lcJordan Solution files on the Solutions Disk.

3. See the VB2015\Chap02\lcCranston Solution files on the Solutions Disk.
4. See the VB2015\Chap02\lcAge Solution files on the Solutions Disk.
5. See the VB2015\Chap02\lcJefferson Solution files on the Solutions Disk.

Task	Object	Event
1. Calculate the monthly commission 2. Display the monthly commission in lblComm	btnCalc	Click
Clear the screen	btnClear	Click
End the application	btnExit	Click
Display the monthly commission (from btnCalc)	lblComm	None
Get and display the monthly sales and commission rate	txtSales, txtRate	None

Note: The student should also complete a sketch of his or her user interface.

Pseudocode:
<u>btnCalc Click event procedure</u>
1. calculate monthly commission = monthly sales * commission rate
2. display monthly commission in lblComm

<u>btnClear Click event procedure</u>
1. clear the contents of the txtSales and txtRate text boxes
2. clear the contents of the lblComm control
3. send the focus to the txtSales control

<u>btnExit Click event procedure</u>
end the application

6. See the VB2015\Chap02\lcPlanet Solution files on the Solutions Disk.

Task	Object	Event
1. Calculate the weight on Venus, Mars, and Jupiter 2. Display the weight on Venus, Mars, and Jupiter in lblVenus, lblMars, and lblJupiter	btnCalc	Click
Clear the screen	btnClear	Click
End the application	btnExit	Click
Display the weight on Venus, Mars, and Jupiter (from btnCalc)	lblVenus, lblMars, lblJupiter	None
Get and display the Earth weight	txtEarth	None

Note: The student should also complete a sketch of his or her user interface.

Pseudocode:
<u>btnCalc Click event procedure</u>
1. calculate Venus weight = Earth weight * 0.91
2. calculate Mars weight = Earth weight * .38
3. calculate Jupiter weight = Earth weight * 2.53
4. display Venus weight, Mars weight, and Jupiter weight in lblVenus, lblMars, and lblJupiter

<u>btnClear Click event procedure</u>
1. clear the contents of txtEarth text box
2. clear the contents of the lblVenus, lblMars, and lblJupiter controls
3. send the focus to the txtEarth control

<u>btnExit Click event procedure</u>
end the application

7. See the VB2015\Chap02\lcModified Bakery Solution files on the Solutions Disk.
8. See the VB2015\Chap02\lcAverage Solution files on the Solutions Disk.
9. See the VB2015\Chap02\lcTransportation Solution files on the Solutions Disk.
10. See the VB2015\Chap02\lcPhoto Solution files on the Solutions Disk. The interface might not contain a Print button and/or a Clear button.

Task	Object	Event
1. Calculate gross pay, FWT, FICA, state tax, and net pay 2. Display calculated amounts in lblGross, lblFwt, lblFica, lblState, and lblNet	btnCalc	Click
Print the screen	btnPrint	Click
Clear the screen	btnClear	Click
End the application	btnExit	Click
Display gross pay, FWT, FICA, state tax, and net pay (from btnCalc)	lblGross, lblFwt, lblFica, lblState, lblNet	None
Get and display the name, hours worked, and rate of pay	txtName, txtHours, txtPayRate	None

Pseudocode:
<u>btnCalc Click event procedure</u>
1. calculate gross pay = hours worked * rate of pay
2. calculate FWT = gross pay * 20%
3. calculate FICA = gross pay * 8%
4. calculate state tax = gross pay * 2.5%
5. calculate net pay = gross pay – FWT – FICA – state tax
6. display gross pay in the lblGross control
7. display FWT in the lblFwt control
8. display FICA in the lblFica control
9. display state tax in the lblState control
10. display net pay in the lblNet control

<u>btnPrint Click event procedure</u>
print the interface

<u>btnClear Click event procedure</u>
1. clear the Text property of the txtName, txtHours, and txtPayRate controls
2. clear the Text property of the lblGross, lblFwt, lblFica, lblState, and lblNet controls
3. send the focus to the txtName control

<u>btnExit Click event procedure</u>
end the application

11. See the VB2015\Chap02\lcDiscovery Bakery Solution files on the Solutions Disk.
14. See the VB2015\Chap02\lcDebug Solution files on the Solutions Disk. To debug the application, change “curency” in the btnCalc_Click procedure to “currency”. In addition, change txtSale in the procedure to txtSales.