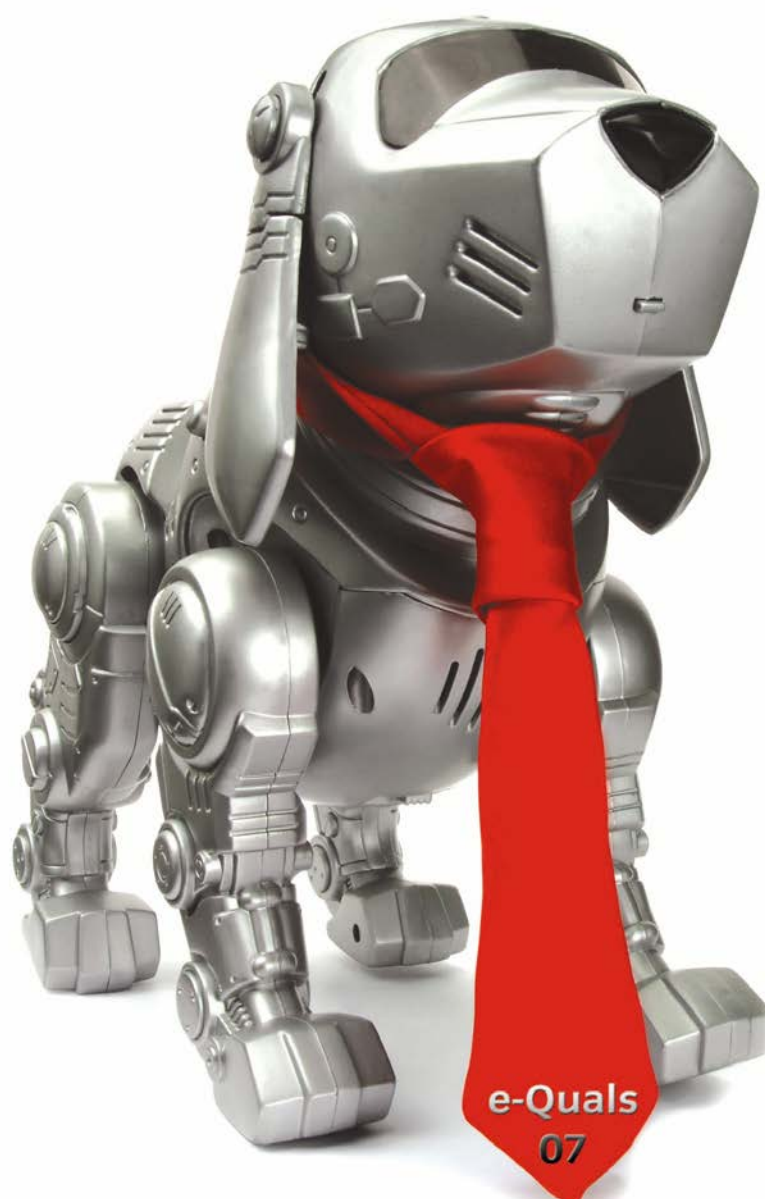


# Level 2 Create software components using Visual Basic (7266-204)

**e-Quals**  
**Assignment guide for Candidates**  
Assignment C



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# Level 2 Create software components using Visual Basic (7266-204) Assignment C

## Introduction – Information for Candidates

### About this document

This assignment comprises part of the assessment for Level 2 Create software components using Visual Basic (7266-204).

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### Health and safety

You are asked to consider the importance of safe working practices at all times.

You are responsible for maintaining the safety of others as well as your own. Anyone behaving in an unsafe fashion will be stopped and a suitable warning given. You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements. This may seem rather strict but, apart from the potentially unpleasant consequences, you must acquire the habits required for the workplace.

### Time allowance

The recommended time allowance for this assignment is **4 hours**.

## Level 2 Create software components using Visual Basic (7266-204) Candidate instructions

Candidates are advised to read **all instructions** carefully before starting work and to check with your assessor, if necessary, to ensure that you have fully understood what is required.

### **Time allowance: 4 hours**

**Assignment set up:** A scenario is provided for candidates in the form of a company specification for a service they require.

This assignment is made up of **two** tasks

- **Task A** - provides a detailed design specification for software to demonstrate the creation of a sequential file of names and addresses.
- **Task B** - provides presentation criteria that should be followed by candidates when producing their work.

### **Scenario**

A software development company, Software Solutions, is developing a program for use as demonstration software for clients. As a contracted employee of Software Solutions, you have been asked to create and test the software.

The program is to create a sequential name and address file and have the following options:

- open a new file
- open an existing file
- add name and address records to the opened file
- close a file
- exit the program.

## Task A

Candidates should use the following detailed specification to fulfil the company's requirements.

In this task you are required to create and test a user interface to create and add name and address records to a sequential file. Your completed form should appear similar to the screen image shown below.

The screenshot shows a Windows-style application window titled "Address Program". The window has a menu bar with "File". Below the menu bar, there are four text input fields: "Name:", "Address:", "Postcode:", and an "Add" button. The "Address:" field is split into three lines. The "Add" button is located at the bottom right of the form area.

Save the project at regular intervals as you work through the task. Save the form file as frmAddress and the project file as TaskA

- 1 In the General Declarations section declare an integer variable TextFileNum and a string variable OpenFileName.
- 2 Set the Caption property of the form to: Task A *your name and the date*
- 3 Set up a menu with the caption File and the name mnuFile with the following items in a drop down menu.

Option	Name	Shortcut Keys
New	mnuNew	Ctrl+N
Open	mnuOpen	Ctrl+O
Close	mnuClose	
-	mnuSep	
Exit	mnuExit	

- 4 Draw, size and position five text box controls. Name the controls txtName, txtAddress1, txtAddress2, txtAddress3 and txtPostcode.
- 5 Draw, size and position three label controls. Name the controls lblName, lblAddress and lblPostcode. Set their Caption properties to Name, Address and Postcode respectively.

- 6 Draw, size and position a command button. Name the command button cmdAdd and set the Caption property to Add and the Visible property to False.
- 7 Draw a common dialog control. Name the control CMDialog1
- 8 Code the Form\_Load sub procedure as follows
  - set the string variable OpenFileName to empty
  - set the Enabled property of the Close menu option to False.
- 9 Code the mnuNew\_Click sub procedure as follows:
  - set up file filters to give a choice of all files or .txt files in the common dialog
  - set the FilterIndex property of the common dialog to default to all files
  - display an Open file dialog (Note the Cancel button will not operate correctly)
  - display the message "You selected: *filename*"
  - assign the FreeFile number to the variable TextFileNum
  - open the selected file as output
  - set the OpenFileName variable to the common dialog FileName
  - set the Visible property of the cmdAdd button to True
  - set the Enabled property of the New menu option to False
  - set the Enabled property of the Open menu option to False
  - set the Enabled property of the Close menu option to True.
- 10 Code the mnuOpen\_Click sub procedure as follows:
  - set up file filters to give a choice of all files or .txt files in the common dialog
  - set the FilterIndex property of the common dialog to default to all files
  - display an Open file dialog (Note the Cancel button will not operate correctly)
  - display the message "You selected: *filename*"
  - assign the FreeFile number to the variable TextFileNum
  - open the selected file as append
  - set the OpenFileName variable to the common dialog FileName property
  - set the Visible property of the cmdAdd button to True
  - set the Enabled property of the Open menu option to False
  - set the Enabled property of the New menu option to False
  - set the Enabled property of the Close menu option to True.
- 11 Code the mnuClose\_Click sub procedure as follows:
  - if a file is open
    - close the file
    - set the Visible property of the cmdAdd button to False
    - set the string variable OpenFileName to empty
    - set the Enabled property of the Open menu option to True
    - set the Enabled property of the New menu option to True
    - set the Enabled property of the Close menu option to False
  - otherwise
    - display the error message "001 File not open"
- 12 Code the mnuExit\_Click sub procedure as follows:
  - if a file is open close the file

- terminate the program.
- 13 Code the cmdAdd\_Click sub procedure as follows:
    - write the data in the Text properties of the text box controls to the file
    - clear the data from the text box controls.
  - 14 Create test data for the name and address records, test the program for all the menu options, print the records in the file and compare the output file with the test data created.
  - 15 Use the Debug facilities to trace any errors. Correct any errors found.
  - 16 Print a program listing and a printed copy of the form frmAddress.

## **Task B**

*Candidates should follow the criteria listed below when producing their work:*

- 1 The program conforms to the design specification.
- 2 The program syntax is consistently indented to aid readability.
- 3 The program is commented.

## **Note**

- Candidates should produce the following for their assessor:
  - A printed program listing.
  - A printout of the frmAddress form.
  - A printout of the records in the test file.
- At the conclusion of this assignment, hand all paperwork and removable media to the test supervisor.
- Ensure that your name is on the removable media and all documentation.
- If the assignment is taken over more than one period, all removable media and paperwork must be returned to the test supervisor at the end of each sitting.



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