

# SAC1(Outcome 1): Barry the e-builder

## Background



Barry has been a builder for twenty years, he is known for his quality work but also for his disorganisation. Which you helped improve through the software module you wrote, his client base expanded and had to hire another builder to keep up with demand.

He also won the “Independent Builder of the Year” award which indicates that he is the best builder in the country.

Barry is a screwy businessman and has decided to use his new found fame in selling books, instructional DVDs and to also start the “Barry the builder” franchise”

### The New System

Barry wants a networked computer system from his mobile PDA to his office. While Barry is on site he wants to access a list of previous work from a customer file. You need to read in data and display it on one screen.

Also for the current job completed he saves to the same file relevant details and calculates the total cost of the job. This file can be accessed by any employee through a network.

This system will be a prototype. He wants pictures of services offered for each client as an added effect.

Barry is the first person to say he is “useless” when it comes to computing, and he knows full well that some builders would have limited skill when it comes to using computers let alone use a program, you must make to cater for these end users.

Barry would also like some user documentation built into the site to help the intended audience use the program as intended.

Barry and his builder client base are notoriously resistant to change, the software you constructed for him previously worked well but he is really unsure about this “networked software rubbish”.

You need to arrest his fears also by explaining the inevitable conflict between information system developers (yourself) and end-users (Barry and the builders).

## Information

You will require at least 2 forms and another file or database.

Barry offers 3 different services for clients. Each new job completed he enters in client details calculates the total cost.

### Things to do

- 1) Read in data from a file of customers
- 2) Be able to edit/delete customer records.

- 3) To add a customer he uses another screen. He only add a customer if he is doing work for them and the job has been completed with total cost calculated , and saved to a file.

Each customer record contains as an **example**

Client's Name, Client's Address, Client's Phone, Client's Email, date started work,date ended work, total cost, work completed comment

For example:The textfile is set up like .

Mrs K.Jones, 23 Jam Blvd, 0499 999 999, [jonesk@hotmail.com.au](mailto:jonesk@hotmail.com.au), 12.00am

Mr J Baxmanter, 14/3 Extra St, 9999 9999, not known, 1pm

Total cost is calculated by

- 1) \$50 per hour labour and enter in hours worked.
- 2) Cost of wood used per metre and amount of metres of wood used
- 3) Cost of nails per bag used and number of bags.
- 4) Amount of glue used per stick and amount of glue sticks used.

He wants to load current data a view all previous customers on one screen and check previous jobs done for the client.

## **Additional Information**

### **The Task**

Apply the stages of software development to produce purpose-designed software that takes into account a networked information system objective and the needs of end-users.

**Task 1 (35 marks)** – construct a solution using the software development life cycle

Use a range of tools and techniques to produce purpose-designed software.

All stages of software development are studied: analysis, design, development, testing, implementation and evaluation.

Create a data dictionary

Create layout diagrams

Create a testing table that contains a number of tests, the expected outcome of each test and the actual results of the tests. The tests should cover validation, navigation and the solution itself.

**Task 2 (25 marks)**

Develop the solution

**Task 3 (10 marks)** – User Documentation:

Write effective user documentation that caters for the needs of the intended end-users or audience