

(23) A custom-designed solution is when a software development company is employed to create software that will fulfill and be specifically designed for the small company.

This solution will be ~~for~~ only for the company and will contain and function as directed by the company. The users ~~will~~ <sup>may</sup> ~~prefer~~ like using software designed for them and it may have functions that no other software has. However the cost and time of this solution is far greater and the users may need training for the specialised software.

Off-the-shelf package is software that has been written for everybody and anybody.

This package will ~~most~~ <sup>in</sup> probably be able to do everything required and perhaps more. If a new function is needed, the custom software will need to be rewritten. This package is also well known by most people and may not require training. Cost and time for implementation will also be a lot less.

b) i) Hardware developments include fast processing speeds and larger memory storage to send and receive data. The modem or network card allowing access.

The internet or other communication method allowing the communication between all people.

Software includes the software development programs, internet browsers with FTP, and standard file types that can be used by most people.

ii) The project manager will be unable to produce progress reports unless good documentation is included. With anybody having access at any time, it's hard to monitor changes and development. Also to control group co-ordination and teamwork would be difficult as well as allocating credit.

(23) a) i) Accumulator is the storage before <sup>or after</sup> being sent to the ALU for calculation  
Reg 3 is the accumulator

ii) 
$$\begin{array}{r} A1 \qquad 4096 \quad 256 \quad 16 \quad 1 \\ \times \qquad \qquad \qquad \times \qquad \times \\ \hline A716 \qquad \qquad \qquad 10 \qquad 1 \end{array}$$

123456789 ~~10~~ ~~11~~ ~~12~~ ~~13~~ ~~14~~ ~~15~~ ~~16~~      A1 = 161

iii) 
$$\begin{array}{r|l} 4096 & 256 & 16 & 1 \\ \hline & 3 & 0 & = 48 \\ \hline & A & 1 & = 161 \\ \hline & & & = 209 \end{array}$$

Convert ~~both~~ Hexadecimal to decimal then perform calculation

iv) LOAD (Reg1, Mem5)  
LOAD (Reg2, Mem5)  
ADD (Reg3, Reg1, Reg2)  
ADD (Reg1, Reg3, Reg2)  
STORE (Reg1, Mem7)  
STOP