Answers

Task 1

Think of an app or item of software that you use, but you feel could have a better user experience.

(a) What is the name of the app or software? \_\_\_  
  
Answer will depend on the chosen app/software

(b) Complete the table below explaining what aspects of the user experience could be improved. An example has been completed in the first row.

|  |  |  |
| --- | --- | --- |
| **Aspect of user  experience** | **What the problem is in the current software** | **How this could be improved** |
| **Ease of use** | The software is difficult to use, and you need to constantly look up complicated commands | Provide onscreen help and icons to select options |
| **Ease of use** | Answers will depend on the chosen app/software |  |
| **Performance** |  |  |
| **Availability** |  |  |
| **Accessibility** |  |  |

Task 2

A YouTuber currently uses a smartphone to record video and upload it without editing. The videos that they make are recorded both in their home and outdoors. They are looking to upgrade their equipment and need help with their choice of digital technology.

You may wish to use the Internet for research to answer the following questions.

(a) What are the user needs for this IT system?  
  
This system would require a camera with a battery or a smartphone.  
A smartphone or tablet could have video editing software installed, or software could be bought for a personal computer.  
They may wish to consider using a lapel microphone (when outdoors) or other professional .microphone (when indoors) – these may have additional costs if they have an XLR input  
The system will need to be easy to use.  
The batteries/smartphone would need to last long enough for recording.

(b) What specifications should the user look for in this IT system?  
  
The ability to record at HD quality or possibly 4k.  
Fast microSD storage.  
  
Any other reasonable specifications for a personal computer such as:  
4GHz quad core processor  
GPU  
1TB hard disk  
Backup disks  
16GB of RAM

(c) What would the total system and software cost?  
  
The cost of this system depends on the specifications chosen. It would be reasonable for the personal computer to cost around £500-£1500. The smartphone would be around £500 (less if it is a single function HD camera).

(d) What compatibility issues will need to be considered for the system?  
  
Does any software purchased work with the operating system chosen – e.g. certain software such as iMovie may be only available for macOS or iOS.  
  
To connect a smartphone to a personal computer the computer would need to have a connecting cable with the correct USB size / lightning cable for the smartphone.

Task 3

The implementation of new IT projects requires a number of processes. Five stages of implementation are given below. For each one, explain what is involved.

|  |  |
| --- | --- |
| **Stage of implementation** | **Explanation** |
| **Set timescales** | Clear timescales need to be set at the start of the project. This includes setting milestones that need to be achieved. By setting timescales it will be clear early in the project if there are to be delays or overspends. This could result in the project being stopped before too much money is wasted |
| **Development  of the system** | This is the creation/programming of the new IT system |
| **Testing** | The system needs to be thoroughly tested both by the software developer and with a small number of users |
| **Migration to the new system** | This is moving from the old system to the new system.  Usually either a phased implementation (where some parts or users are moved over at a time) or a parallel running migration allows both systems to be run at the same time whilst the migration occurs |
| **Disposal of  old devices** | Old computer systems will need to be disposed of correctly and in an environmental way. In many cases of software upgrades, the new software will be able to work on the old hardware and disposal won’t be necessary. |

Task 4

The UK government has, in the past, started a number of IT projects that have failed.

Research one of these projects. A search for “UK government IT project failure” should give some useful websites.   
  
Make notes to answer the following:

(a) What was the aim or user needs of the project?  
  
These answers will depend on the chosen project  
  
Useful websites include:  
  
<https://www.softwareadvisoryservice.com/en/blog/biggest-uk-government-project-failures/>   
<https://www.theregister.co.uk/2018/07/04/ipa_report_home_office_projects_undeliverable_and_risky/>

(b) What went wrong?  
  
These answers will depend on the chosen project

Task 5

TeamViewer is software that allows one user to share their screen with another user.

(a) How can this software make users more productive?  
  
The software can allow an IT administrator to take control of a computer. This saves time walking to the computer (or travelling to the computer) to fix it. The software can also be used to demonstrate something on a screen to a customer. This would be more productive than having to visit the customer.

(b) How could the use of this software create a security risk for a company?  
  
The software allows another user (anywhere in the world) to gain access to your computer. They are able to install backdoors or other malware and immediately have full control of your computer. The software has a password, but hackers may phone or email the company to try to get them to reveal this password using social engineering.