Analyse

Hardware

The hardware needed to complete the web site for Mr Murray can all be purchased from a leading computer store for around £700. This will include:

- A 1.5ghz processor which will insure the computer runs at a reasonably fast speed
- 256mb of Ram. This high level of memory will be necessary when several importing data from
- A 40 gigabyte hard drive. This level of storage will be necessary to store all the software and high megabit images needed
- Separate CD-RW & DVD drives. The CD-RW will be needed to copy CDs as a backup if the hard drive fails. The DVD – ROM is a bonus Mr Murray has decided to purchase as a backup DVD player.
- A modem will be needed for to access the internet for observing and/downloading any necessary information
- Speakers are going to be needed to hear audio files that shall be put on the web site
- A scanner will be necessary to scan in any images and/photographs
- A colour printer would be required if Mr Murray wants to see a tangible copy of his web site
- A keyboard and Mouse are going to be needed for data entry & image manipulation

Software

There are 3 considerable software packages that could solve Mr Murray's Problems. Each package is discussed below along with its advantages and disadvantages.

Software	Advantages	Disadvantages
Microsoft Word	- can be used to insert pictures & video clips - includes graphics and fancy headings - Staff will not need training, as MS Word is very similar to the current software used – MS Works	- Cannot be edited with as much ease as a true desktop publishing package. - The cost of the program is an issue
Front Page Express	Specifically written for producing web sites, which is accessible from anywhere in the world	- Difficult to use - Staff will need training - The cost of the program is an issue
Microsoft Publisher	Specifically written for publishing, and can be used to publish a web site, which is accessible from	The cost of the program is an issue

| | anywhere in the world
• The easiest software package to learn and use
• Staff should not need training, as software contains detailed tutorials | |

Choice of Software

MS Publisher is the most suitable software package as it best meets the most user requirements mentioned in the identify section. Although MS Word has the necessary features to meet the majority of the user requirements mentioned in the Identify section, it is not the easiest software package to navigate. This is very important to Mr Murray as one of his main requirements is that "the system easy to use, and easily changeable".

FrontPage Express, would be a considerable software package to use as it is uses many advanced features, and would almost certainly meet all the user requirements in the Identify Section. Even so, one of the objectives in the Identify Section states that the website produced "must be updated by current staff". This would not be possible in *Front Page Express*, unless staff take training. However this would not be necessary with *MS Publisher* as it is very easy to use, and has numerous detailed tutorials.

Nevertheless, there is a disadvantage with *MS Publisher* as shown in the above table. Nonetheless this is not a major problem, for the reason that Mr Murray has members of family who are willing to invest in his business as mentioned earlier.

In addition to Microsoft Publisher, a graphics package such as paint shop pro will be needed to scan in images. If any graphics to be included in the website need touching up, this can also be done in Paint Shop Pro.
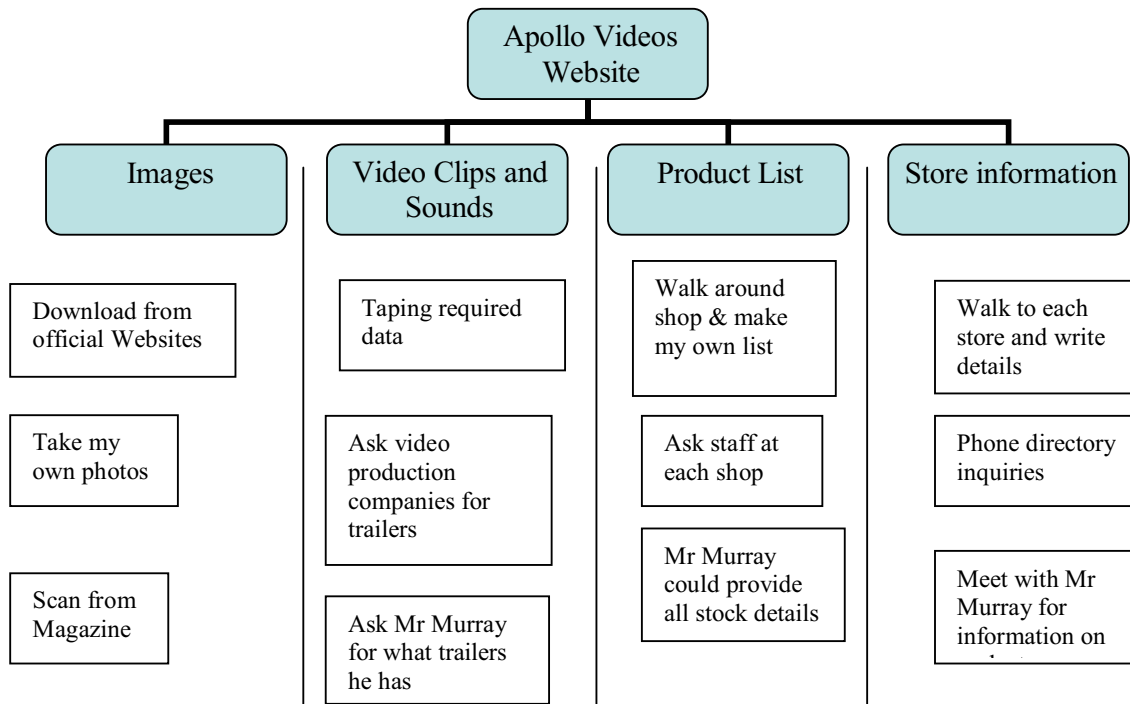
Data Collection and input

Before a website or any web pages can be produced for Mr Murray's system, raw data needs to be obtained. As a result, information about each every product in s

Raw data needed for Mr Murray's website will include:

• **Images** of products can be collected by using a digital camera to take pictures of all the products in store. Alternatively, images can be scanned in from numerous video magazines. An even better source of images would be the internet. The internet could be used to search for, and download required images of products, from official websites. This collection method would highest quality, and most accurate images.

- **Video clips and Sounds** could be gathered by me borrowing some of Mr Murray's products and taping required video clips and sounds. I could also phone video production companies and ask them for wanted video trailers. I could also ask Mr Murray for video trailers, as he sometimes receives them just before videos are released.

- **A Product List** could be acquired by walking around one of Mr Murray's rental stores and making my own list. Another way could be to ask the staff at one of the stores for any relevant information. Mr Murray himself could even give me a product list himself.

- **Store Information** could be used on the home page of Mr Murray's website, and could also be used to construct a **map**. Store information could be obtained by going to each store and taking down necessary details. I could also phone 192 directories and ask them for information on each branch of "Apollo Videos". Instead, I can even ask Mr Murray for a quick meeting to give me all the information he has for each branch of his video rental business.

All of the above sources and collection methods mentioned are shown more clearly in the below diagram.

```
                        ┌──────────────────┐
                        │  Apollo Videos   │
                        │     Website      │
                        └──────────────────┘
        ┌──────────────┬─────────┴────────┬──────────────┐
   ┌─────────┐  ┌──────────────┐  ┌──────────────┐  ┌──────────────────┐
   │ Images  │  │ Video Clips  │  │ Product List │  │Store information │
   │         │  │  and Sounds  │  │              │  │                  │
   └─────────┘  └──────────────┘  └──────────────┘  └──────────────────┘
```

Images	Video Clips and Sounds	Product List	Store information
Download from official Websites	Taping required data	Walk around shop & make my own list	Walk to each store and write details
Take my own photos	Ask video production companies for trailers	Ask staff at each shop	Phone directory inquiries
Scan from Magazine	Ask Mr Murray for what trailers he has	Mr Murray could provide all stock details	Meet with Mr Murray for information on …

Data Entry

Now that data collection sources and data collection methods have been identified, how this data is going to be inputted into Mr Murray's system needs to be analysed. All of the below entry methods are depend on the source and method chosen to collect the information.

Images, images can be inputted by:
- Using a digital camera
- Using a scanner
- Copying and Pasting from the internet by using a mouse and/or a keyboard

The most advisable input method would be to copy and past required images from the internet by using a mouse and/or keyboard. This would be the least time-consuming and more cost-effective method, as digital cameras and scanners are more expensive than modems.

To set up the system, I will need images of a few products from each rental category (VHS videos, DVDs, games etc…) offered to customers by Mr Murray, to get him started. His current advertising employees can then update the system by using one of the above input methods, when new products are released.

Video Clips and Sounds can be inputted by:
- Using a digital Camera and/or a Microphone
- VCD files
- Copying and Pasting video and audio files of the internet using a mouse and/or   keyboard

Using a digital camera is a possibility, but should not be used as digital cameras are very expensive. Mr Murray has trailers of products on VCD, from which files can be used for the website. If for some reason this cannot take place, trailers of videos are free to download from video production companies on the internet. Video clips and sounds on Mr Murray's website will be subject to the best release from each rental category. Hence, to fully set up the system, I include video files (including sound) for the best release in each rental category. Mr Murray's other employees can then update the system whenever necessary.

Product list can be inputted by:
- Using a barcode reader
- Using a scanner
- Using a keyboard

Using a barcode reader would be practical as all videos have a unique identification number; however Mr Murray wants to start with inputting by simple, rather than using something complicated like a barcode reader. Therefore, a scanner is an option, however a keyboard is simpler to use. Information of current products in "Apollo Videos" will be needed to setup the system. Mr Murray's other employees can then enter new product information on a regular basis by entering data using a keyboard.

Store information can be inputted by:

- Using a Digital Camera/Scanner
- Using a Keyboard and Mouse

A digital camera could be used to take a picture of each store to place on maps on the website. However, a more cost-effective way would be take a picture of each store using an ordinary camera and to scan in the picture. A keyboard and mouse can then be used to add on any necessary information. Store information will only need to be inputted once when I set up the system. Even so, if new stores were to open or if current stores were to be updated, Mr Murray's current employees can do this by using any of the inputting methods mentioned above.

When the website is setup, users will also be able to use the site to send their views and opinions about the site to me. This will be done through the use of an online form, which will be coded for.

Checking for Errors

All data will also be verified, as Mr Murray has given strict instructions to his staff to carefully proof-read all the data they enter into the desktop publishing package. If any mistakes are found, he has assured them more work for less pay by making them enter all data twice, after which the computer will check for errors (Double-entry verification). This will also show who is to blame for mistakes.

Output

The website should be viewable on the 17inch CRT monitor. A large high spec TFT monitor is not needed, as it will only be used to see the end product of the produced website, and how it will look like to viewers on the internet. This display would be sensible to use, as the majority of internet users will be using a similar output.

A standard set of speakers will be needed to test the audio files that shall be put on the website. A top of the range sub-woofer system will not be necessary, as the main purpose of the speakers will be testing. A regular set of 230w speakers should be more than fit for the purpose.

A top-quality colour laser printer will not be needed to print out pages from his website. Instead the HP DeskJet 620 printer that will come with the PC he will purchase will be more cost-effective, and is adequate for its purpose as only a few pages are going to be printed on the odd occasion. It will allow him to print out pages in black or in colour from his website when and so he pleases, to see what they would look like to customers if they were to print out the same pages.

Backup\Security Strategy

The website file containing the final system will be too large to be backed up on disk, as it could be well over a 100MB, due to images and video & audio files. Instead, backups shall be made at least once a week onto to as many recordable compact discs (CD-R) as needed. This process will usually take 8 minutes per recordable disc as Mr Murray is lucky enough to be receiving a 32x CD rewriter with his pc. All backup in a different location to where the computer containing the main system is, in case there is a fire, theft or flood.

To make sure nobody can manipulate the website design, the computer with the website on it, and the website itself are both going to be password-protected. This will be very useful, as Mr Murray can protect the database from any unwanted intruders, and choose who he wants to have the responsibility of knowing the password. Even so, Mr Murray needs to remember to frequently change his password, in case someone finds out the password and gains access to the database. Most important of all, Mr Murray and whomsoever he chooses to tell the password to, must not write the password anywhere as this increases the risk of an impostor tampering with the design of the website.

Although, the software package is quite costly, as mentioned in the identify section cost is not a huge problem for Mr Murray, as he has some family members who are ready to invest in the business. On the other hand, Mr Murray does not want to be paying large amounts of money, for a system which is not 100% guaranteed to work. Therefore Mr Murray has to find a balance, and go with the software package which he thinks is the most likely to work. After some discussion, Mr Murray and I decided that MS Publisher would be the most suitable software package for Mr Murray to use.

in relation to the user requirements mentioned in the identify section.

Microsoft Word could be used. As mentioned in the Identify section, it can be used to insert pictures & video clips, however it cannot be edited with as much ease as a true desktop publishing package.

Front page Express would be a good choice, as it is specifically written for producing web sites. However, staff will need training, and the software package does not come cheep.

Mr Murray's advertising employees currently use Microsoft Works to produce their material. Microsoft Works is a very simple version of its bigger brother Microsoft Word. This means that staff may not need training. Microsoft Word not only includes graphics and fancy

headings, but can also be used to insert video clips. Nevertheless, the cost needed to buy the program will be an issue, as Mr Murray is currently in debt from a bank loan.

A desktop Publishing program could also be purchased. This would be a considerable package to consider, as it is specifically written for publishing, and can be used to publish a web site, which is accessible from anywhere in the world. Even So, there is the cost of buying the program to consider (as mentioned earlier), as well as the money and time needed to train staff.

*include data collection evaluation methods

[In each section (e.g. video , dvd etc..) the best title will have a video clip of it attached   on that section of the website.]