

Information Management ‘sub-scenario’

Vuyani, a first year IT student at the local university, is assisting with gathering suitable material from the internet to be used in some of the computer literacy courses that the trust wants to offer.

1. Vuyani typed the search phrase *computer literacy* into Google and got over 18 million ‘hits’.
 - 1.1 Briefly explain what a ‘hit’ is in this context by referring to how a search engine functions.
1.1 A search engine is a program that searches the web for web pages relevant to the keywords or phrases entered by the person looking for information. The search results are usually presented in a list and are commonly referred to as *hits*.
 - 1.2 When Vuyani entered the same search phrase with quotation marks added to the phrase (‘computer literacy’), the number of hits was reduced to just over 6 million. Explain why searching for the same search phrase in quotation marks reduced the number of hits.
1.2 A search without the quotation marks will try to match either of the words, in other words computer or literacy. By adding the quotation marks, the search will match the whole phrase (both words) and therefore will return fewer results.
 - 1.3 Give two other ways to produce fewer, but more relevant results with a web search in general.
1.3 Any two of:
 - Use a more precise search phrase or use synonyms.
 - Exclude certain words from the search by using Boolean operators.
 - Use the search engine operators.
 - Specify date ranges, file types, etc.
2. Vuyani has located a number of useful training content websites that are updated on a regular basis. However, he feels that he is starting to suffer from *information overload*. Someone suggested he should check if these sites perhaps have *RSS feeds*.
 - 2.1 Briefly explain what the concept of *information overload* refers to.
2.1 Information overload is what happens when people can’t cope with the amount of information that they are exposed to every day.
 - 2.2 Explain what an RSS feed is and how it might help Vuyani in this context.
2.2 An RSS feed automatically sends updated content or notifications of updated content from websites to the user. This will save Vuyani from having to go to multiple sites to see if there is new information to ‘collect’ from the sites.
3. Vuyani has been warned to be very careful about *plagiarism* and to be very careful about checking the accuracy of some *wiki* sites and *blogs*.
 - 3.1 What is *plagiarism*?
3.1 You commit plagiarism when you present someone else’s work as your own, or if you use someone else’s work without their permission. You also plagiarise information if you don’t acknowledge the source of the information correctly.

- 3.2 Explain what a *wiki* is and why the information obtained from one may not always be accurate.
- 3.2 A wiki is a website which allows any user to add or modify its content. Although the content is often reviewed by peer users, there is no guarantee that the information posted to the wiki is accurate.
- 3.3 Explain what a *blog* is and why the information obtained from one may not always be accurate.
- 3.3 A blog is an online journal on a website where an individual can post information or their opinions on a regular basis. The content is not necessarily accurate because it is often the opinion of an individual.
- 3.4 What is a vlog?
- 3.4 A video blog (vlog) is a form of blog which uses video as the medium. Entries on the vlog normally consist of video supported by text and images.
4. Vuyani has downloaded a number of *podcasts* related to computer literacy. Briefly explain what a podcast is and how it differs from a vodcast.
4. A podcast is an audio file (often in an MP3 format) that is made available to download from the internet. A video podcast (vodcast) includes video clips or photos. You listen to a podcast and view a vodcast.
5. Vuyani has to coordinate a number of meetings with university students who will act as tutors for the computer courses. He has found that there is a great deal of administration involved and that it is quite difficult to set up these meetings.
- 5.1 Mention two ways an email 'calendar' function will help in this context.
- 5.1 The 'calendar' option allows you to set reminders for events or appointments. These meetings can be automatically coordinated and then synchronised (even via cellphone) to include all of the participants. The calendars can be shared by the students and reminders can be sent to them about the meetings, etc.
- 5.2 Vuyani finds that he often has to scribble reminders of tasks on slips of paper. Give the general name given to the email function that can be used to remind the user of tasks and the due dates of these tasks.
- 5.2 A to-do list.
6. Vuyani created a questionnaire to see what computer courses the community members might be interested in.
- 6.1 The questionnaire he created is shown below. Evaluate the overall design of the questionnaire by suggesting improvements.

Name:

Date of birth

Course I would like to take:

How would you rate your current level of computer knowledge?

6.1 Suggested improvements:

- Add an introduction to thank the respondent briefly for completing the questionnaire and tell them what to do with it when it has been completed.
- Separate 'fields' should be used for the name and surname of the respondent, as it is sometimes difficult to decide which name is a person's surname and which is their name (e.g. Dean James or James Dean).
- No instructions are given for the required format of the date of birth.
- A list of courses that the respondent can choose from should rather be given to get more 'accurate' and precise results.
- A given set of 'closed' options should be provided to rate the respondent's computer knowledge. This will prevent 'vague' answers that might be difficult to place in a limited set of categories, etc.

6.2 Give two possible benefits of allowing the respondents to fill out this form electronically on a computer in the centre.

6.2 Any two of:

- It would save time as the data would be captured immediately.
- It would provide potentially more accurate data if the system is suitably designed (e.g. if the system has no fields or pieces of information missing).
- The system can be quickly adapted if there is additional data that needs to be captured.

6.3 Vuyani decided to allow the respondents to fill out the form electronically. The completed forms were captured in a *Word* document, and Vuyani performed the following file conversion on this document:

Document1.docx → Survey_results.txt

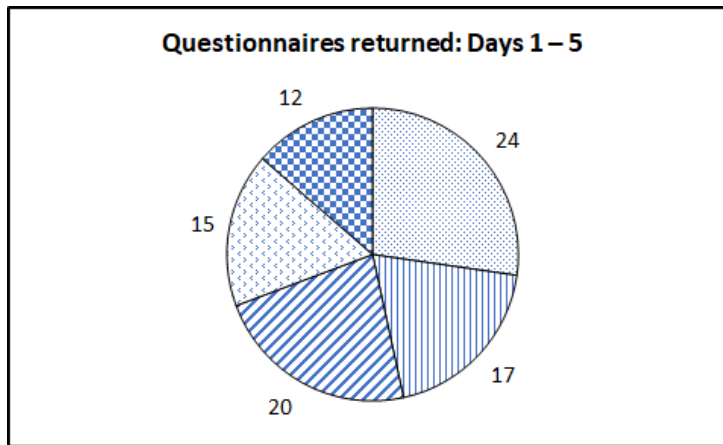
6.3.1 Suggest a reason why he changed the *file name* from *Document1* to *Survey_results*, besides to avoid confusing it with the original document.

6.3.1 To provide a more meaningful name / To relate the name of the file to the contents of the file / To be able to find or recognise the file more easily / To facilitate file management)

6.3.2 What is the most likely reason he changed the file extension?

6.3.2 So that the contents of the file can be imported into a spreadsheet or database table

6.4 The number of completed questionnaires that were returned on each of the first five days after the questionnaire was given out, are represented in the chart below:



6.4.1 What essential chart element is missing from this chart?

6.4.1 Legend

6.4.2 Explain why a *line chart* should rather be used to represent this information.

6.4.2 Easier to detect a trend / how the numbers changed over the 5 days.

7. Vuyani must store various details relating to the course members (personal particulars, contact details, course results, etc.)

Give TWO reasons why he should use a database program rather than a spreadsheet for this purpose.

7. Any two of:

- Amount of data may be too much to work with or even view in a spreadsheet
- Easier to produce (complex) queries
- Can produce reports directly from the database (without having to export to *Word*, etc.)
- Can use forms to streamline inputting / editing
- More ways to ensure good quality data by using input masks, data validation, default values, etc.