**6MARK017W**

**Digital Marketing, Social Media and Web Analytics**

**Week 3**

**Information Retrieval systems and Search Engines**

* The purpose of this tutorial is to revise the concepts covered in the learning week 2 lecture relating to IR systems and search engines.
* Use the first 60 mins to attempt the questions below.
* You can ask the tutor to check your understanding as you go along.
* We will go through the answers together at the end.
* For the last 15 mins we will review the coursework task together.

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| Question # | Question |
| 1 | Explain the difference between the world-web web and the internet. |
|  | **Answer** |
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| Question # | Question |
| 2 | On the web, what is the role of the web server? |
|  | **Answer** |
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| Question # | Question |
| 3 | The following is an example of a URI. What does the abbreviation URI stand for? In your answer highlight the domain name in blue and the path in yellow.  **https://www.zteam.com/about/contact\_details.html** |
|  | **Answer** |
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| Question # | Question |
| 4 | Put the following stages of a web request in the correct order.  [1] The client sends a HTTP request to the relevant web server.  [2] The users web browser renders the HTML received and displays the resulting web page.  [3] A user opens their web browser and enters a domain name into the address bar.  [4] The webserver locates the relevant resource based on the URI supplied and sends it back to the client.  [5] The domain name system is queried to identify the IP Address of relevant web server. |
|  | **Answer** |
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| Question # | Question |
| 5 | A company provides car hire and taxi services to people in major cities. It wants to record the personal details of people that use the service, including bookings made in the last year, credit card information and date of birth.  **What type of system, data or information retrieval system would be most appropriate in this scenario? Justify your answer.** |
|  | **Answer** |
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| Question # | Question |
| 6 | Using an example, describe the term STOP WORDs and explain their purpose in informational retrieval systems. |
|  | **Answer** |
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| Question # | Question |
| 7 | The INDEX is an important component of an information retrieval system.  **Consider the following two documents.**  Document 1: “Arrive in style with our executive taxi services. View our prestigious vehicle range of saloon and estates.”  Document 2: “Professional private hire taxi services at reasonable prices.”  Create the INDEX table to represent the above document collection. In your answer you can ignore stop words. |
|  | **Answer** |
|  |  |

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| Question # | Question |
| 8 | In the text-preprocessing stage of an information retrieval system, stemming or lemmatisation might be used to convert each term into its root word.  Explain how this may help to improve the “recall” performance of an IR system. |
|  | **Answer** |
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| Question # | Question |
| 9 | With reference to recent web trends, discuss the importance of search engines in digital marketing. |
|  | **Answer** |
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| Question # | Question |
| 10 | A company has recently launched a new website.  Describe two approaches the company could use to ensure that their website is included in the search engine results. |
|  | **Answer** |
|  |  |

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| --- | --- |
| Question # | Question |
| 11 | With reference, to retrieval models, explain how external links may help to increase the position of a web site in the search engine results. |
|  | **Answer** |
|  |  |

**Additional Study Notes:**

It is important to know that search engine algorithms are constantly being revised and updated in response to trends in internet search usage, new technologies and ranking approaches.

The following is a list of reliable sources that contain information about important changes to the major search engine algorithms. You may find articles published by these sources useful in understanding the most recent developments.

Google updates by Search Engine Round Table (**SERT**)

SERT is one of the industry's leading blogs on SEO

<http://www.seroundtable.com/category/google-updates>

Google Algorithm Changes by **MOZ**

<http://moz.com/google-algorithm-change>

'Moz' is a software as a service (SaaS) company based in Seattle, Washington, U.S.A., that sells inbound marketing and marketing analytics software subscriptions. started in 2004 as SEOMOZ. They run a dedicated blog in changes in Google algorithms (chronological order).