FACULTY OF COMPUTING
UTM Johor Bahru

ASSIGNMENT 1

Subject	:	Web Programming (SECV2223)
Session	:	2023/2024 Semester 2
Task	:	Report
Title	:	Comparative Evaluation of Websites
Duration	:	10 Days (7 April 2024 until 17 April 2024 before 12.00 am)
Submission	:	This is a **GROUP WORK (3 or 4 students per group including a group leader)** and submit it **INDIVIDUALLY**
		a. Upload a report (in .pdf format) via UTM E-learning
		b. Upload a report (in .pdf format) via GitHub (**A WEEK** after a submission through UTM E-learning)

Comparative Evaluation of Websites [based on selected domain* type, e.g. e-commerce, news websites, hospital websites, etc.] Using Web Performance Audit Tools (e.g., Google Lighthouse).

Objective: To conduct a comparative evaluation of websites using web performance audit tools, such as Google Lighthouse, to assess performance, accessibility, and Search Engine Optimization (SEO).

Instruction:

1. Students are required to prepare **A REPORT**.

2. Task Description:
   a. Select* a set of websites (recommended more than 5) from the same domain or industry for evaluation.
   b. Use web performance audit tools like Google Lighthouse to generate performance reports for each website.
   c. Analyze the performance reports' findings to identify each website's strengths and weaknesses.
   d. Compare and contrast the results of the evaluations, highlighting notable differences and trends among the websites.
   e. Document the evaluation process and findings in a comprehensive report, including recommendations for optimization and improvement for each website.

***Note**: Reference and resources of selected/chosen top-ranking websites for your comparative study should come from reputable websites, e.g. QS ranking, Alexa, Statista (statista.com), Forbes, Fortune, and many others.

3. Tutorial of Google Lighthouse
   a. Video tutorial:
      i. https://www.youtube.com/watch?v=VyaHwvPWuZU
   b. Written tutorial:
      i. https://www.elegantthemes.com/blog/wordpress/what-is-google- lighthouse-and-how-to-use-it
      ii. https://www.linkedin.com/pulse/website-performance-analysis-using- google-lighthouse-vinayak-t/

4. The length of the **REPORT SHOULD NOT EXCEED 5 PAGES**:
   a. Page one: This is the cover of the REPORT; it should include a proper title and a representative picture. The cover page should also include the titles for the topics covered in the REPORT and names of group members.
   b. Pages two and more should include instruction #2. Refer to**.

**Note: The content of your report is your own opinion and views. You may refer to the rubric of the report on the next page.

5. The report will contribute **5%** to the course assessment.

6. Follow the **format of** report as follows:
   a. Justify alignment for text description.
   b. Include the date on each page.
   c. Design your report using your own creativity.

7. Report Example (Academic report style):

   a. https://www.atlantis-press.com/proceedings/icoeins-23/125996216
   b. https://www.ijesty.org/index.php/ijesty/article/view/312

8. **PLAGIARISM** of the content is prohibited. If any of the content is known to be copied from other website/review/blogs, you will be given **0 mark**.

9. You can get photos/information from other resources, but you must include credits (in citation/link) to the original owners.

Rubric for Report (5%)

Criteria	Excellent 10-7	Fair 6-4	Poor 3-0	WEIGHTAGE	MARK
Informative and Attractive	· Provide accurate information (Content). · All required information is presented in a logical order.	· Some information (Content) are inaccurate, but presented in a logical order. · Very few required information is missing and presented in a logical order.	· Most Information (Content) are inaccurate, or not presented in a logical order, making it difficult to follow. · Most required information is missing and not presented in a logical order, making it difficult to follow.	10	___ X 10 10
Contents	Page one: This is the cover of the REPORT; it should include a proper title and a representative picture. The cover page should also include the titles for the topics covered in the REPORT and names of group members. Pages two and more should include instruction #2. Refer to**.			30	___ X 30 10
	· All contents included. · Very good presentation of content and well organized. · Use many graphics, pictures.	· Included but not well covered. · Moderate presentation of content and well organized · Use moderate graphics, pictures.	· Included but poorly covered. · Lack of content and not organized properly. · Use inappropriate graphics or pictures.		
	· Excellent explanation.	· Fair explanation.	· Poor explanation.		
Report Features	· Include all required features,	· Not all required features,	· Lack of features, such as main	10	___ X 10 10

Criteria	Excellent 10-7	Fair 6-4	Poor 3-0	WEIGHTAGE	MARK
	such as main report, graphics with captions and reporters. • All features relate to the subject and are appropriate for the targeted audience. • The layout is creative.	such as main report, graphics with captions and reporters. • All features are almost related to the subject and are appropriate for the targeted audience. • The layout shows some degree of creativity but is not organized logically and/or is cluttered.	report, graphics with captions and reporters. • All features are unrelated to the subject and are inappropriate for the targeted audience. • The layout is messy, disorganized or cluttered.		
Organization and Structure	• Structure of text is interesting and organized very well, easy to understand.	• Structure of text is quite interesting and organized.	• Most parts of the structure of text are not really interesting and unorganized.	10	___ X 10 10
Text	• All texts are easy to read and clear explanation. • Use appropriate font size. • Use not more than three different font styles.	• Most texts are easy to read and clear explanation. • Use appropriate font size. • Use more than three different font styles.	• Some texts are difficult to read unclear explanation. • Use medium font size. • Use more than four different font styles.	5	___ X 5 10
Timeliness	• Due date on time submission.	• Due date one day late submission.	• Due date more than one day late submission.	5	___ X 5 10
Total					/ 70