

University of Westminster
School of Electronics and Computer Science

SUBJECT TO EXTERNAL EXAMINER APPROVAL

6MARK017W Digital Marketing, Social Media and Web Analytics Assessment Specification (2023/24)	
Module leader	Dr Philip Worrall
Units	Coursework 2 – Individual – CW2
Weighting:	50%
Qualifying mark	30%
Description	Web analytics tools and techniques
Covered Learning Outcomes	<p>LO4 - Select and employ web analytics techniques and tools and be able to effectively discuss security and private issues in relation to the analytics tools they use.</p> <p>LO5 - Critically interpret and discuss the results generated from SEO and analytics tools and provide recommendations for given scenarios.</p>
Handed Out:	1pm Wednesday 6th March 2024
Due Dates	1pm Tuesday 16th April 2024
Expected deliverables	Single electronic file containing coursework answers (in either PDF or DOCX format)
Method of Submission:	Electronic submission on BB via a provided link in the assessment folder.
Type of Feedback and Due Date:	<p>Written feedback on the submission will be provided within 3 weeks after the submission (the mark and comments via BB Rubric). All marks remain provisional until formally agreed by an Assessment Board.</p>
BCS Criteria meeting in this assignment	<p>2.1.1 Knowledge and understanding of facts, concepts, principles & theories</p> <p>2.1.2 Use of such knowledge in modelling and design</p> <p>2.2.2 Evaluate systems in terms of quality and trade-offs</p> <p>2.2.4 Deploy tools effectively</p> <p>2.3.2 Development of general transferable skills</p> <p>3.1.1 Demonstrate a systematic understanding of the knowledge of the domain of their programme of study.</p> <p>3.2.2 Defining problems, managing design process, and evaluating outcomes</p> <p>4.1.1 Knowledge and understanding of scientific and engineering principles</p>

Assessment regulations

Refer to Part 3: Assessment regulations for taught courses of the guide for undergraduate students for a clarification of how you are assessed, penalties and late submissions, what constitutes plagiarism etc.

<https://www.westminster.ac.uk/sites/default/public-files/general-documents/handbook-of-academic-regulations-2020.pdf>

Penalty for Late Submission

If you submit your coursework late but within 24 hours or one working day of the specified deadline, 10 marks will be deducted from the final mark, as a penalty for late submission, except for work which obtains a mark in the range 40 – 49%, in which case the mark will be capped at the pass mark (40%). If you submit your coursework more than 24 hours or more than one working day after the specified deadline you will be given a mark of zero for the work in question unless a claim of Mitigating Circumstances has been submitted and accepted as valid.

It is recognised that on occasion, illness or a personal crisis can mean that you fail to submit a piece of work on time. In such cases you must inform the Campus Office in writing on a mitigating circumstances form, giving the reason for your late or non-submission. You must provide relevant documentary evidence with the form. This information will be reported to the relevant Assessment Board that will decide whether the mark of zero shall stand. For more detailed information regarding University Assessment Regulations, please refer to the following website: <https://www.westminster.ac.uk/current-students/guides-and-policies/academic-matters/academic-regulations>.

Coursework 2 – Web analytics tools and techniques

OVERVIEW

The aim of this coursework is to demonstrate your critical understanding of web analytics techniques, how to apply them in different scenarios and interpret the results.

The coursework is divided into two parts, **Part A** (70 Marks) and **Part B** (30 Marks).

For **Part A** you **MUST** use the microsite you developed as part of coursework 1. If, for any reason, you did not submit coursework 1, you can still complete coursework 2. In this case, you will need to read the instructions given in coursework 1

You are required to provide answers to **ALL** questions and this coursework must be completed **INDIVIDUALLY**. The number of marks available for each question is provided in the right-hand margin. The total number of marks available is **100**.

This assessment carries **50%** of the total marks for this module.

COURSEWORK SUBMISSION

You are required to submit your answers to this coursework via Blackboard on or before **1pm Tuesday 16th April 2024**. Your submission should be in either PDF or Microsoft Word (.doc/.docx) format. The suggested word count for this coursework is **2500** words (not including tables or figures). You should ensure that you label each of your answers with the question number that you are attempting to answer.

The first page of your submission should consist of a front cover, including: your name, student ID, the module code, title of this module and a word count. Otherwise, your name and student ID should not appear anywhere else on your submission.

PART A

In this section you **MUST** use the microsite you developed as part of coursework 1.

TASK 1

Discuss the concept of "events" in Google Analytics 4 and, using your microsite as a case-study, provide examples of how they can be used to track user interactions.

[10 Marks]

TASK 2

Create a Google Analytics account and link your microsite using Google Analytics 4 code. Briefly outline the steps you took and take a screenshot of the code that was added to your site.

[3 Marks]

TASK 3

Explain the concept of HTTP cookies and discuss their role in web applications. In your answer you should include a diagram to illustrate data flow between web clients and servers when HTTP cookies are in use.

[12 Marks]

TASK 4

For this task you will need to generate some traffic to your microsite. This could include asking friends, family, or colleagues to visit your site and browse its contents or indeed promoting it online.

Using your Google Analytics account, generate the following set of reports over any consecutive **5-day period**.

1. Users by browser over time
2. Views by Page title and screen class over time
3. Sessions by 'session default channel grouping'
4. New users by 'First user default channel grouping'
5. User Engagement (overview)
6. User Retention (overview)
7. Users by City
8. Returning users by device category
9. New Users by Screen resolution

For each report you **MUST** submit i) the diagram generated by Google Analytics ii) a sentence that interprets and comments on your findings.

[27 Marks]

TASK 5

In web analytics, KPI (Key Performance Indicators) are frequently used to track and measure the long-term success of an organisation and its website.

Using the balanced scorecard approach (BSA), formally define a KPI relevant to your microsite.

Each section of your KPI should be justified based on the analysis you have conducted in TASK 4.

[9 Marks]

TASK 6

Email marketing is an example of a digital marketing technique.

Design an email that could be used in an email marketing campaign to promote your microsite. The purpose of the email should be to support the KPI you defined in TASK5. The target audience of your email is new subscribers of your microsite's mailing list.

The email you design **SHOULD**:

- Fit on a single A4 page.
- Include a call-to-action (CTA)
- Include annotations of important sections
- Follow industry standard design guidelines and best practice.

[9 Marks]

PART B**TASK 7**

A challenge to the practice of web analytics is “data misinterpretation”. Especially, when we monitor data for certain periods of time, concepts such as “visitors”, “new visitors” “unique visitors” become confusing. Write a report that discusses the problems and issues faced when collecting and interpreting data on user activity on the web.

In your answer you **SHOULD**:

- State challenges related to the calculation of the number of unique visitors to a website.
- Outline the differences between “visitors”, “new visitors” and “unique visitors”.
- Highlight the challenges associated with measuring session duration and quantifying the amount of time spent on an individual web page.
- Explain what is meant by the “hotel problem”.
- Identify any other problems related to data misinterpretation in web analytics.

[30 Marks]

6MARK017W – COURSEWORK 2 - MARKING SCHEME

NOTE: Marks will be allocated in relation to the correctness, completeness, and the quality of the answer provided.

Criteria	Mark Per Component	Mark Provided	Comments
PART A	70 marks		
TASK 1 Discuss the concept of "events" in Google Analytics 4 and, using your microsite as a case-study, provide examples of how they can be used to track user interactions.			
<ul style="list-style-type: none"> Definition of GA4 events that lists appropriate examples (2 marks) Demonstrates an understanding of their function and role (2 marks) Demonstrates an understanding of different event properties and how they are tied to user interactions (2 marks) Illustrates their answer using their microsite as a case-study (4 marks) 	10		
TASK 2 Create a Google Analytics account and link your microsite using Google Analytics 4 code. Briefly outline the steps you took and take a screenshot of the code that was added to your site.			
<ul style="list-style-type: none"> Relevant documentation or description of steps (2 marks) Screenshot of code added (1 mark) 	3		
TASK 3 Explain the concept of HTTP cookies and discuss their role in web applications. In your answer you should include a diagram to illustrate data flow between web clients and servers when HTTP cookies are in use.			

<ul style="list-style-type: none"> • Appropriate definition (2 marks) • Demonstrates an understanding of what problem they overcome (2 marks) • Discussion in relation to the stateless web (2 marks) • Evidence of an understanding of the limitations of cookies (2 marks) • Appropriate diagram showing the key stages in the HTTP process and data flows between client and server (4 marks) 	12		
<p>TASK 4</p> <p>For this task you will need to generate some traffic to your microsite. This could include asking friends, family, or colleagues to visit your site and browse its contents or indeed promoting it online.</p> <p>Using your Google Analytics account, generate the following set of reports over any consecutive 5-day period.</p> <ol style="list-style-type: none"> 1. Users by browser over time 2. Views by Page title and screen class over time 3. Sessions by 'session default channel grouping' 4. New users by 'First user default channel grouping' 5. User Engagement (overview) 6. User Retention (overview) 7. Users by City 8. Returning users by device category 9. New Users by Screen resolution <p>For each report you MUST submit i) the diagram generated by Google Analytics ii) a sentence that interprets and comments on your findings</p>			
For each report (up to 9, 3 marks each max)	27		

<ul style="list-style-type: none"> • Correct time-period selected (1 mark) • Relevant Google Analytics diagram or screenshot of report (1 mark) • Comment or suitable interpretation of the report (1 mark) 			
<p>TASK 5</p> <p>In web analytics, KPI (Key Performance Indicators) are frequently used to track and measure the long-term success of an organisation and its website.</p> <p>Using the balanced scorecard approach (BSA), Using the balanced scorecard approach (BSA), formally define a KPI relevant to your microsite.</p> <p>Each section of your KPI should be justified based on the analysis you have conducted in TASK 4.</p>			
<ul style="list-style-type: none"> • KPI stated (1 marks). • Justification of KPI based on research or analysis from TASK 4 (2 marks). • All KPI sections are fully defined with appropriate values (3 marks). • Appropriate justification for each section of the KPI (3 marks). 	9		
<p>TASK 6</p> <p>Email marketing is an example of a digital marketing technique.</p> <p>Design an email that could be used in an email marketing campaign to promote your microsite. The purpose of the email should be to support the KPI you defined in TASK5. The target audience of your email is new subscribers of your microsite's mailing list.</p> <p>The email you design SHOULD:</p> <ul style="list-style-type: none"> • Fit on a single A4 page. • Include a call-to-action (CTA) • Include annotations of important sections • Follow industry standard design guidelines and best practice. 			

<ul style="list-style-type: none"> The type of email being sent is clear (e.g. news, event, promotion, announcement) and the email would contribute towards the KPI designed as part of TASK5 (2 marks). The extent to which the design follows best practice and industry standards (consistent branding, colour, sizing, positioning of content) (3 marks). The extent to which the content is relevant to the target audience (contains a clear offer or call-to-action; balance of promotional content to informational content; extent to which the reader is informed by the content) (2 marks). Important sections of the email are annotated or labelled (e.g. header, footer, body, sidebar, CTA) (2 marks) 	9		
PART B	30 marks		
TASK 7 <p>A challenge to the practice of web analytics is “data misinterpretation”. Especially, when we monitor data for certain periods of time, concepts such as “visitors”, “new visitors” “unique visitors” become confusing. Write a report that discusses the problems and issues faced when collecting and interpreting data on user activity on the web.</p> <p>In your answer you SHOULD</p>			
<ul style="list-style-type: none"> State challenges related to the calculation of the number of unique visitors to a website (2 marks). Outline the differences between “visitors”, “new visitors” and “unique visitors” (3 marks). Highlight the challenges associated with measuring session duration and quantifying the amount of time spent on an individual web page (10 marks). Explain what is meant by the “hotel problem” (10 marks). Identify any other problems related to data misinterpretation in web analytics (5 marks). 	30		

END