

**Cardiff Metropolitan University**  
**B.Sc. (Hons) in Business Information Systems**  
**Assignment Cover Sheet**

Student Details ( Student should fill the content)				
Name				
Student ID				
Scheduled unit details				
Unit code	CIS6008			
Unit title	Analytics and Business Intelligence			
Unit enrolment details	Year	3		
	Study period	2022		
Lecturer	Mr. Induneth De Silva			
Mode of delivery	Full Time			
Assignment Details				
Nature of the Assessment	Presentation			
Topic of the Case Study	How effectively <i>GIS</i> and <i>Geo Spatial</i> Technologies can be used by <b>Ministry of Energy</b> to explore oil resources in Sri Lanka to find out long term solutions for the petroleum problem prevailing within the country at present.			
Learning Outcomes covered	LO1			
Word count	800			
Due date / Time	28 <sup>th</sup> May 2022			
Extension granted?	Yes	No	Extension Date	
Is this a resubmission?	Yes	No	Resubmission Date	
Declaration				
I certify that the attached material is my original work. No other person's work or ideas have been used without acknowledgement. Except where I have clearly stated that I have used some of this material elsewhere, I have not presented it for examination / assessment in any other course or unit at this or any other institution				
Name/Signature		Date		
Submission				
Return to:				
Result				
Marks by 1 <sup>st</sup> Assessor		Name & Signature of the 1 <sup>st</sup> Assessor		Agreed Mark
Marks by 2 <sup>nd</sup> Assessor		Name & Signature of the 2 <sup>nd</sup> Assessor		
Comments on the Agreed mark				

**CMU B.Sc. (HONS) BIS - ASSIGNMENT FEEDBACK SHEET -ICBT CAMPUS**

<b>STUDENT NAME:</b>		<b>STUDENT NUMBER:</b>
<b>Module Number &amp; Title:</b> Analytics and Business Intelligence		<b>Semester: II</b>
<b>Assignment Type &amp; Title:</b> Presentation; How effectively <i>GIS</i> and <i>Geo Spatial</i> Technologies can be used by <b>Ministry of Energy</b> to explore oil resources in Sri Lanka to find out long term solutions for the petroleum problem prevailing within the country at present.		
<b>For student use:</b> <i>Critical feedback on the individual progression towards achieving the assignment outcomes</i>		
<b><u>For the Assessors' feedback</u></b> <b>Indicate the Task number strength and Weaknesses and the marks for each task</b>		
<b>Task No/Question No</b>	<b>Strengths (1st Assessor)</b>	<b>Strengths (2<sup>nd</sup> Assessor)</b>

Task No / Question No	Weaknesses (1 <sup>st</sup> Assessor)			Weaknesses (2 <sup>nd</sup> Assessor)	
<b>Areas for future improvement</b>					
Comments by 1 <sup>st</sup> Assessor			Comments by 2 <sup>nd</sup> Assessor		
<b>Marks</b>					
Task /Question No	Marks by 1 <sup>st</sup> Assessor	Marks by 2 <sup>nd</sup> Assessor	Marks by IV (if any)	IV comments (If Any)	
Total Marks					
Name and the Signature of the 1st Assessor				Date:	
Name & Signature of the 2nd Assessor :				Date :	
Name & Signature of the IV: (If any)				Date :	

## Assignment Brief

### Purpose:

This business proposal presentation is to assess student's ability to propose & present Statistical and Geographic Information Systems (GIS) related tools, techniques and methodologies to find out applicable and useful intelligence for taking informed decision making in private and government sector institutions in the island and different parts of the countries in the world in order to solve various problems or find out new opportunities to escalate devolvment in various sectors. The relevant higher level administrative officials of those institutions can use Statistical applications and GIS to generate maximum efficiency and benefits on informed business decision making while eliminating discrimination, ambiguity and uncertainty.

### Tasks Introduction

Understand the given tasks based on Sri Lanka using data science domain associate with non-geospatial and geospatial data models. Apply relevant tools, techniques and methodologies found in business analytics subject relevant to the module scope and develop a business proposal presentation relevant to the topic of the task.

#### Task 1 – Business Proposal Presentation (100 Marks)

Develop a proposal presentation about how effectively *GIS* and *Geo Spatial* Technologies can be used by **Ministry of Energy** to explore oil resources in Sri Lanka to find out long term solutions for the petroleum problem prevailing within the country at present.

The proposal further need to emphasise how well application of energy exploration research data possible by sourcing, extracting, analysing, presenting and predicting for informed decision making by the **Ministry of Energy** and associated organizations with the support of Statistical and GIS data models, statistical data analysis, geo spatial data analysis, geo processing technologies and remote sensing technologies.

(100 Marks)

Presentation needs to be done covering following areas.

- A brief introduction to the topic
- Importance of the topic as per global/local trends
- Various issues, opportunities related to the topic
- How those issues possible to overcome and opportunities to make use with the knowledge of business intelligence and analytics.
- Research literature review related to the discussion.
- What geospatial and non-geospatial data are used for the research
- What statistical and geospatial tools, techniques and methodologies can be used.
- Conclusion & Recommendation(s)
- Referencing, citations and captions.

### **Guidelines for Presentation**

- Minimum 10-15 slides
- Suitable slide theme
- Clearly, easily readable text and suitable graphics (Graphs, Charts etc.)
- Limit the amount of words you have on each slide
- Font
  - Suitable clear and readable font style
  - Not to use less than 20pt font
  - Titles -30-40pt
  - Body text- 20-30pt
- The student need to name the presentation softcopy with his/her name with initials and the university number (not ICBT number), not your topic or some weird abbreviation of your topic that only you understand.
- You are required to submit the soft copy of the presentation slides to university.
- The student will not be judged on “glitz and glam” on his/her presentation slides. Therefore student should not use too much animation or anything that will distract the audience from the main points of the presentation. Pictures, graphs /Charts are nice in order to demonstrate a point or show the audience what the student is talking about but should not put in extraneous pictures just for the sake of having pretty slides.
- Strict time limits will need to be enforced on student’s presentations. Therefore student need to have a proper practice before the final.
- Referencing and in-text citation should be done strictly using **Harvard Referencing System**.

## Marking Scheme

### Learning Outcomes:

1. Demonstrate understanding of the leading technologies relating to business intelligence, data analysis, predictive and other analytical technologies (e.g. geospatial, social), and be able to apply them appropriately in real world scenarios.

### **Learning Outcomes covered from the presentation.**

#### **a) LO 1**

### Marking criteria – for Task 1(Presentation)

Marks	Description of the criteria
<b>Part a) Part a)</b> Develop a proposal presentation about how effectively <i>GIS</i> and <i>Geo Spatial</i> Technologies can be used by <b>Ministry of Energy</b> to explore oil resources in Sri Lanka to find out long term solutions for the petroleum problem prevailing within the country at present.  The proposal further need to emphasise how well application of energy exploration research data possible by sourcing, extracting, analysing, presenting and predicting for informed decision making by the <b>Ministry of Energy</b> and associated organizations with the support of Statistical and GIS data models, statistical data analysis, geo spatial data analysis, geo processing technologies and remote sensing technologies. <b>(100 Marks)</b>	
<b>10</b>	<b>1) Topic relevancy to the subject domain.</b>
0-5	1.1 The introduction to the topic and the relevance to the module satisfied.
5-10	1.2 Student has understood the effective application of business analytics to support the topic discussing matters.
<b>10</b>	<b>2) Usage of diversified information, Source of information used and evidence of those.</b>
0-3	2.1 The sources of information included.
3-10	2.2 The Citation and Referencing done as per Harvard referencing system.
<b>20</b>	<b>3) Skills shown in developing precise and professional presentation.</b>
0-5	3.1 Clear and precise presentation slides included.
5-7	3.2 Presentation slides are developed to aid the discussion of the topic.
7-10	3.3 There is a logical story considered that the student leading the audience through.
10-15	3.4 Slides contain information without too much or too little.
15-20	3.5 Everything on the slide relevant to what student is explaining.
<b>20</b>	<b>4) The student's presentation skills and expertise of the topic demonstrated.</b>
0-5	4.1 How well student has verbally explained and presented the subject matter discussed in the presentation but not reading by looking at the slides either projected or printed.
5-10	4.2 Student's knowledge fluency of topic and business analytics subject domain shown.
10-15	4.3 Student understand the study he/she is presenting and clearly states the information he/she is presenting.
15-20	4.5 Student is speaking clearly, loud enough, and making contact with the audience therefore everyone can hear he/she or student is mumbling, quiet, speaking into the screen, and hard to understand.

<b>15</b>	<b>5) The Students research skills and knowledge about subject specific software applications.</b>
0-5	5.1 Student has done research literature review relevant to the discussion.
5-10	5.2 Student has recognized various statistical and geospatial software applications available as open source or licensed in the market to support the discussion.
10-15	5.3 The knowledge about latest statistical and GIS software applications exhibited by the student.
<b>25</b>	<b>6) Student understanding about the topic related to local and foreign context and credibility of the proposed solution.</b>
0-10	6.1 Student has discussed importance of the topic as per global/local trends.
10-20	6.2 Identification of the issues/opportunities and solutions related to the selected topic with the support of statistical, geospatial tools, technologies and methodologies accomplished.
20-25	6.3 Feasibility of the proposal clearly emphasized.
<b>100</b>	

**Final Grading criteria for the presentation.**

Marks	Final Grade
>=70	1
69-60	2:1
59-50	2:2
49-40	3
<40	fail