BENVGSC6: Data Science for Spatial Systems – Coursework Mark Scheme

We are required to use the marking scheme set out by the University of London (which is A: 70 - 100%, B: 60 - 69%, C: 50 - 59%, Fail: 0 - 49%). This scheme is far from ideal. For example, with the pass mark at 50%, marks in the 60%'s generally seen as merit quality, with a mark of 70% indicating work of distinction quality, most marks fall into the narrow band from 50 to 70, with marks rarely awarded above 80%.

	A+ (80-100%)	A (70-79%)	B (60-69%)	C (50-59%)	Fail (near pass) (40-49%)	Fail (1-39%)
Analysis context and aims	The report focuses on analysis and interpretation of the dataset chosen. Each component of analysis, visualisation, database structure is detailed in the context of the overall project. The report overall conveys, excellently, the rationale of the methodology undertaken and the visualisations created compliments the story behind the data analysis extremely well. The project's background references are framed extensively to wider projects/academic literature, far beyond that on the prescribed reading list.	The report focuses on the analysis. The wider context of the work is clearly defined and how the work places in the wider context of research. The report conveys the story behind the analysis well and the dataset chosen compliments the story and analysis undertaken.

The project's background references are framed well to wider projects/academic literature, with few to no inaccurate bibliography or citations. | The report focuses on analysis of data and as a piece of individual work is well defined. The report fails to clearly detail how this fits into the wider context. The story behind the analysis is present but some flaws in execution of the analysis distract from the overall narrative of the submission.

The project's background references are framed broadly to wider projects/academic literature. There may be some inaccuracies bibliography or citations. | The report shows a basic understanding of analysis and the data set chosen is limited in analytical scope. The story of the analysis is broken and the work raises more questions of the data then the work answers. The work satisfies the techniques that were taught during lectures but the wrong analytical techniques have been applied to the dataset.

The project's background references are framed but may be limited to the prescribed reading list/datasets. There may be obvious inaccuracies bibliography or citations. | The report shows a basic understanding of analysis, but the data set chosen is unsuitable for analysis. The story of the analysis is broken and incoherent. The work raises more questions of the data then the work answers. The report details the wrong techniques to analyse the data and provides no insight to the data being analysed.

Very little background research is evident beyond use of the datasets. Bibliography may be incomplete or inconsistent and citations poor. | A poor attempt at the problem using an unsuitable dataset. The story behind the analysis is not present and the report has been rushed and thrown together haphazardly.

There is no evidence of wider background research at all. |

Data collection handling, cleaning and management	Data has been sourced from a novel dataset and has been extensively treated and documented in preparation for analysis.	Data has been sourced from a novel dataset and has been extensively treated in preparation for analysis.	Data has been sourced from a novel or new dataset not provided is the assessment example and has been treated in preparation for analysis.	Data source has been provided from the assessment example datasets and has been treated in preparation for analysis.	Data sourced is incomplete and is not compatible for data analysis. The data is unstructured and no obvious work has been carried out on the dataset.	No data source has been identified or collected, or data source incomplete and unavailable.
Depth and scope of data analysis	The work shows extensive knowledge of the topic chosen and an in-depth understanding of the links between the problem, data and method(s) employed to solve it. Shows considerable insight into any shortcomings of the analysis and demonstrates critical reflection on the finished product	The work shows good knowledge of the topic chosen and a clear appreciation of the links between the problem, data and method(s) employed to solve it. Critical appraisal of the finished product is thoughtful and relevant.	The work shows good knowledge of the chosen topic although there may be some minor issues with the choice of data and/or methods at the lower end of the scale. At the upper end of the scale, matching data and/or method to the problem is sound. Some evidence of critical reflection is displayed	The work shows adequate knowledge of the chosen topic but choice of data and/or methods could have been better. Critical reflection may be poor, or lacking entirely at the lower end of the scale	The work shows poor knowledge of the chosen topic and the choice of data and/or methods is illogical. Critical reflection is an alien concept	The work shows that lectures were either not attended or not understood at all.
Appropriateness of data visualisation	Figures used to convey the visualisation of data analysed are of publishable quality; they are clear, well labelled and convey the intended information expertly.	Figures used to convey the visualisation of data analysed are excellent; they are clear, well labelled and wholly appropriate. Visuals complement the report and display an understanding of the methodology executed within the report	Figures used to convey the visualisation of data analysed are overall good and well chosen, but at the lower end of the scale may contain minor errors. Visuals are lacking in clarity.	Figures used to convey the visualisation of data analysed are adequate but errors detract from their usefulness. Visuals are lacking in context. The graphics may not be referenced within the document.	Figures used to convey the visualisation of data analysed are poor and do not aid understanding in any way. The graphics are not referenced within the document and are out of order/place.	Figures used to convey the visualisation of data analysed are bad or missing entirely.

Clarity of presentation of results	The final piece of work is presented to a professional standard and would be immediately ready for publication.	The final piece of work is presented very well and would only require minor editing for publication.	The final piece of work is presented well but may require the odd edit before publication.	The final piece of work may lack polish and would need attention before reaching publication standard.	The final piece is poorly presented and would need serious editing before publication.	The final piece is very badly presented. Only a complete re-write would bring it up to standard.
Demonstration of technical skills	The work shows a clear methodology and approach to the problem specified. There is clear and well defined explanation of the technical aspects of the analysis and integration of each component taught within the report. The work exceeds the brief and the overall work is publishable. The work is of exceptional quality and tackles a real world problem using a relevant dataset. The results convey a relevant and cohesive story with interesting results.	The work is complete and shows the skills learned within the lectures. The student's work is excellent and describes the technical aspects of the work in detail. The work solves the problem and uses data collected/analysed in such a way to compliment the story presented. The story behind the analysis is cohesive and well explained. The produced visuals in the overall work is publishable with a small execution of extra work.	The work satisfies the brief to create an analysis and data driven visualisation. The report documents the process well and conveys the overall methodology carried out by the student. The technical aspects of the work are well formed and details the story and the insight into the work. The work is good and some interesting analysis is performed which yields some interesting results. The work would need some work to publish the work online but would provide some interesting insights into the data set analysed.	The work is satisfactory but flaws in the execution exist. The report conveys the analysis undertaken but holes exist within the overall rationale to the project. The main sections are technically sound and linked together but some problems with the results exist. The data set chosen has been widely analysed and the results drawn are basic. The visuals produced conveys the link between the visualisation and the analysis but the overall story and rationale is missing. The work would need more work to be published to a wider audience.	The work is poor and substantial flaws exist in the execution of the methodology. The report is poor and the methods/analysis undertaken are basic. The dataset used is widely used and the analysis of the dataset is basic. There are flaws in the data processing and analysis and the visualisation is basic. The work would need substantial work for being published to a wider audience.	The work is simplistic and is derived from an existing problem with no further expansion on the work. The visualisations are basic and is far away from being publishable to a wider audience.
Creativity of analytical work	The work is outstandingly	The work is creative in the execution and	The work is creative in nature, both in the	The works shows some creativity which	The work shows little to no creativity but	The work shows no creativity or

	creative and approaches the problem within a clear and analytical mind set. The execution of the analysis is also excellent and shows meticulous planning and understand to the problem being addresses	shows that the student has though thoroughly about the problem being tackled. At each stage the narrative is inferred by the analysis of the previous stage and the analysis has been planned from the outset.	execution and the thought process is apparent within the narrative. The execution is sound and the student has demonstrated understanding to the analytical process.	is satisfactory but some flaws in the execution or assertions are made within the narrative of the work.	falls short in the execution and understanding presented.	relevance outlined in the assessment guidelines.
Quality of writing – spelling, punctuation, grammar and structure	Exceptionally well written; stylish with no errors in spelling, punctuation or grammar. The piece of work is clearly and logically structured and enjoyable to read.	Very well written with virtually no errors in spelling, punctuation or grammar. The piece of work is clearly and logically structured and flows well.	A good, well written piece of work with few errors in spelling, punctuation or grammar. The work shows structure and is clearly presented.	A more-or-less competent piece of work but may contain some errors in spelling, punctuation or grammar. The may lack structure and presentation could be improved.	A more-or-less weak piece of work containing a number of errors in spelling, punctuation or grammar. The piece may lack any kind of structure.	A poor piece of work. Written English is bad, with numerous errors in spelling, punctuation and grammar.