

## CASA0025: Building Spatial Applications with Big Data – 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%.

	<b>A+ (80-100%)</b>	<b>A (70-79%)</b>	<b>B (60-69%)</b>	<b>C (50-59%)</b>	<b>Fail (near pass) (40-49%)</b>	<b>Fail (1-39%)</b>
<b>Use of advanced data analysis methods to explore dataset</b>	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.
<b>Quality of the interactive user interface</b>	The interactive user interface demonstrates exceptional quality, exhibiting a deep understanding of user experience (UX) principles.  Design choices are innovative, intuitive,	The interactive user interface displays a high level of quality, showcasing a good grasp of UX principles.  Design choices are well thought out and contribute to a positive user experience.	The interactive user interface is of good quality, with some room for improvement.  Design choices are generally effective, though there may be minor issues	The interactive user interface is adequate but lacks sophistication in design.  Design choices may have noticeable issues affecting user experience.	The interactive user interface shows poor quality and limited consideration for UX principles.  Design choices impact user experience negatively.  Several interactive elements may not	The interactive user interface is of very poor quality, indicating a lack of understanding of basic UX principles.  Design choices severely impact user experience.

	<p>and highly user-friendly.</p> <p>All interactive elements function flawlessly, providing a seamless and enjoyable user experience.</p> <p>Results are presented in a visually appealing and easily interpretable manner.</p> <p>The interface reflects a thorough consideration of user needs and preferences.</p>	<p>Most interactive elements function effectively, with minimal issues.</p> <p>Results are presented in a clear and visually appealing manner.</p> <p>The interface generally considers user needs and preferences.</p>	<p>impacting user experience.</p> <p>Most interactive elements function adequately, with some potential for enhancement.</p> <p>Results are presented in a satisfactory manner but may benefit from improved visualization.</p> <p>The interface demonstrates consideration of basic user needs and preferences.</p>	<p>Some interactive elements may have functionality issues or require improvement.</p> <p>Results presentation is basic, with room for improvement in visual appeal and clarity.</p> <p>The interface shows a basic consideration of user needs and preferences.</p>	<p>function properly or may require significant improvement.</p> <p>Results presentation lacks clarity and may be confusing for users.</p> <p>The interface demonstrates a minimal consideration of user needs and preferences.</p>	<p>Most interactive elements do not function properly.</p> <p>Results presentation is unclear and does not effectively convey information.</p> <p>The interface shows little to no consideration for user needs and preferences.</p>
<b>Clarity of purpose</b>	<p>The application articulates its purpose with exceptional clarity, demonstrating a strong grasp of the underlying problem it addresses.</p> <p>Objectives, goals, and intended use are communicated with precision.</p> <p>A well-defined problem statement seamlessly aligns the</p>	<p>The purpose of the application is presented clearly, showcasing a solid understanding of the problem it seeks to solve.</p> <p>Objectives, goals, and intended use are effectively communicated, resonating well with the audience.</p>	<p>The purpose of the application is generally clear, with opportunities for refinement.</p> <p>While objectives and goals are communicated effectively, there may be some ambiguity in the intended use.</p> <p>The problem statement is adequately defined,</p>	<p>The purpose of the application is somewhat clear, with noticeable room for improvement.</p> <p>Objectives are communicated, but there may be ambiguity in goals and intended use.</p> <p>The problem statement is adequately defined, yet there's room for</p>	<p>The purpose of the application is unclear, with significant challenges in communication.</p> <p>Objectives, goals, and intended use struggle to resonate effectively with the audience.</p> <p>The problem statement lacks clarity, and the purpose may not align</p>	<p>The purpose of the application is entirely unclear or neglected.</p> <p>Objectives, goals, and intended use fail to communicate effectively to the audience.</p> <p>The problem statement is unclear or absent, and there is no alignment of</p>

	<p>application's purpose with the identified challenges.</p> <p>The application exhibits a deep understanding of the targeted end-users and their specific needs.</p>	<p>A well-defined problem statement aligns the application's purpose effectively with the identified challenges.</p> <p>The application displays a strong understanding of the targeted end-users and their needs.</p>	<p>with room for improvement in aligning the purpose with identified issues.</p> <p>The application demonstrates a basic understanding of the targeted end-users and their needs.</p>	<p>improvement in aligning the purpose with identified issues.</p> <p>The application displays a basic consideration of the targeted end-users and their needs.</p>	<p>well with identified issues.</p> <p>The application exhibits minimal consideration of the targeted end-users and their needs.</p>	<p>purpose with identified issues.</p> <p>The application demonstrates no consideration of the targeted end-users and their needs.</p>
<b>Design and aesthetics</b>	<p>The layout and design of the application are exceptional and aesthetically pleasing.</p> <p>Choices relating to visualization parameters are logical and serve to highlight important information in the data, exemplified by the discerning selection of diverging versus sequential color palettes.</p> <p>A high level of attention to detail is evident throughout the application, ensuring that each element contributes meaningfully to the overall user experience.</p>	<p>The layout and design of the application are of high quality, providing an aesthetically pleasing experience.</p> <p>Visualization parameters are well-considered, contributing effectively to highlight crucial information in the data.</p> <p>Attention to detail is notable, enhancing the overall user experience.</p>	<p>The layout and design of the application are commendable, though there is room for improvement.</p> <p>Visualization parameters are generally effective, with some aspects requiring refinement to better highlight relevant data.</p> <p>Attention to detail is satisfactory, contributing to an overall positive user experience.</p> <p>Integration of design principles is noticeable, creating a good visual representation.</p>	<p>The layout and design of the application are acceptable, with noticeable aspects that could benefit from improvement.</p> <p>Visualization parameters are applied to an extent, but there are issues impacting their effectiveness in highlighting relevant data.</p> <p>Attention to detail may be lacking in some areas, impacting the overall user experience.</p>	<p>The layout and design of the application fall short, with limited effectiveness in utilizing visualization parameters to highlight relevant information.</p> <p>Visualization choices negatively impact the user experience, requiring substantial improvement.</p> <p>Attention to detail is insufficient.</p> <p>Integration of design principles needs significant enhancement for a more effective visual representation.</p>	<p>The layout and design of the application demonstrate a fundamental lack of understanding of basic design principles.</p> <p>Visualization choices severely hinder user experience, failing to effectively highlight pertinent data.</p> <p>Attention to detail is absent or minimal.</p> <p>Integration of design principles is inadequate, leading to a visual representation significantly below the expected standard.</p>

<b>Execution of the project</b>	The presentation masterfully communicates the problem and the application's solution. A comprehensive overview explains how the application effectively addresses the identified problem, providing insightful details on data and methods.	The presentation effectively communicates the problem and the application's solution with clarity. An overview explains how the application addresses the problem, offering insightful details on data and methods. A good understanding of the project's objectives is demonstrated.	The presentation communicates the problem and the application's solution, with room for improvement. The overview presents how the application addresses the problem, with some insightful details on data and methods.	The presentation acceptably communicates the problem and the application's solution with noticeable areas for improvement. An overview presents how the application addresses the problem, with basic details on data and methods. Adequate understanding of the project's objectives.	The presentation falls short in effectively communicating the problem and the application's solution. The overview may lack clarity, and details on data and methods might be insufficient. Weaknesses in understanding the project's objectives impact the integration of data and methods.	The presentation fails to effectively communicate the problem and the application's solution. The overview lacks clarity, with a significant lack of details on data and methods. Fundamental lack of understanding of the project's objectives.
<b>Live Demonstration</b>	<p>The live demonstration showcases that the application is effortlessly navigable and intuitive, offering an effective solution for the identified problem without requiring external guidance.</p> <p>The code runs seamlessly with no errors, returning results promptly and visualizing them effectively.</p> <p>Every aspect of the demonstration illustrates a high level</p>	<p>The live demonstration effectively presents an application that is easy to use and provides an efficient solution for the problem.</p> <p>The code runs smoothly with minimal errors, returning results promptly and visualizing them effectively.</p> <p>The demonstration displays a good level of proficiency, ensuring a user-friendly experience with only minor</p>	<p>The live demonstration presents an application that is reasonably easy to use and offers a satisfactory solution for the problem.</p> <p>The code runs with some minor issues, returning results in a reasonably timely manner and visualizing them adequately.</p> <p>The demonstration showcases a satisfactory level of proficiency, offering a user-friendly</p>	<p>The live demonstration presents an application that is reasonably easy to use and offers a satisfactory solution for the problem.</p> <p>The code runs with some minor issues, returning results in a reasonably timely manner and visualizing them adequately.</p> <p>The demonstration showcases a satisfactory level of proficiency, offering a user-friendly</p>	<p>The live demonstration falls short in presenting an application that is user-friendly and provides an effective solution.</p> <p>The code runs with notable errors, affecting the timely return of results and visualization.</p> <p>Proficiency in the live presentation is limited, requiring substantial improvements to enhance the user experience.</p>	<p>The live demonstration is fundamentally flawed, failing to present an application that is easy to use or provides an effective solution.</p> <p>The code runs with critical errors, severely impacting the return of results and visualization.</p> <p>Proficiency in the live presentation is absent or minimal, highlighting fundamental weaknesses that demand significant improvement.</p>

	of proficiency, ensuring a smooth and error-free user experience.	considerations for improvement.	<p>experience with room for enhancement.</p> <p>While there are some aspects for improvement, the live presentation demonstrates that the application is generally well-executed.</p>	<p>experience with room for enhancement.</p> <p>While there are some aspects for improvement, the live presentation demonstrates that the application is generally well-executed.</p>	Overall, the live demonstration indicates weaknesses that need significant refinement for the application to be considered well-executed.	
<b>Technical walkthrough</b>	<p>Students exhibit a deep understanding of each part of their code, keeping it clean, efficient, and highly readable with thorough documentation.</p> <p>They effectively respond to assessors' questions, providing clear justifications for the development choices made.</p>	<p>In the technical walkthrough, students demonstrate a solid understanding of their code, maintaining cleanliness, efficiency, and readability, with adequate documentation.</p> <p>They answer questions from assessors effectively, providing reasonable justifications for their development choices.</p>	<p>During the technical walkthrough, students show a satisfactory understanding of their code, with room for improvement.</p> <p>The code is generally clean and efficient, with readable sections and acceptable documentation.</p> <p>Students answer questions from assessors with some effectiveness, providing justifications for most development choices.</p>	<p>In the technical walkthrough, students demonstrate an acceptable understanding of their code, with noticeable areas for improvement.</p> <p>The code may lack some cleanliness and efficiency, requiring improvement in readability and documentation.</p> <p>Students provide basic answers to assessor questions, with justifications for some development choices.</p>	<p>During the technical walkthrough, students fall short in demonstrating a clear understanding of their code, with significant areas requiring improvement.</p> <p>The code may lack cleanliness and efficiency, making it challenging to understand, with insufficient documentation.</p> <p>Students struggle to answer questions from assessors, providing limited justifications for their development choices.</p>	<p>Students show a fundamental lack of understanding of their code, with critical areas requiring substantial improvement.</p> <p>The code lacks cleanliness, efficiency, readability, and adequate documentation, making it challenging to comprehend.</p> <p>Students are unable to effectively answer questions from assessors, lacking justifications for their development choices.</p>