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| --- | --- | --- | --- | --- | --- | --- |
| **Component** |  | **Fail**  **0 – 39%** | **Pass**  **40 – 49%** | **Clear Pass**  **50-59%** | **Good Pass**  **60-69%** | **Excellent**  **70-100%** |
| **1a) Requirements and design**. | 15 | Failed to identify basic requirements or describing so little as to be meaningless.  Language used in the description of the solution is unclear. | Minimum list of basic requirements for data processing.  Attempt to decide on which Python packages and algorithms to use for data processing.  Attempt to identify how the data processing application will interact with the users, e.g. what menu functions it will use, what will be the format of produced output, etc. | As Pass, plus:  Identified all basic requirements for data processing (e.g., search or sorting).  Agreed on which Python packages and algorithms to use for data processing.  Good and meaningful description of how a user can interact with the data processing application (e.g. menu functions, command line parameters, format of produced outputs, etc.) | As Clear pass, plus:  Describes intermediate requirements for data processing.  Clear understanding of algorithms and Python packages that will be used for data processing.  Clear description of the application interface, e.g. concise but detailed documentation of the menu functions, command line parameters, output format, etc. | As Good Pass, plus:  Describes advanced requirements for data processing (e.g., performance optimisation or clustering).  Excellent understanding of algorithms and Python packages that will be used for advanced data processing.  Professionally written documentation of the application interface. |
| **1b) Project management and usage of a source control repository** | 15 | No evidence of group working agreement or meeting logs.  All code is not presented via an accessible SCM, or access details omitted / incorrect. | Evidence of agreed group working agreement. A few meetings between lab sessions.  All required code is presented in a private SCM, named as specified, accessible to the team and module leader. | Evidence of regular participation from team, and equitable team involvement.  SCM shows evidence of multiple group member participation with some commit commenting over the duration of the project | As Clear Pass, plus: well-maintained team meeting logs.  SCM shows timely evidence of multiple group member participation. Use of feature branches | As Good Pass, with regular and clearly planned group meetings. Professional team approach to workload and effort.  SCM commits are clearly commented and give meaningful description of change set. Use of merge requests with comments |
| **1c) Implementation of the requirements** | 40 | Software does not fulfil the majority of basic features described in the specification.  Code is either not present, does not run, or does not meaningfully contribute towards the project goal.  Comments are unhelpful to the reader. | Software meets most basic criteria set out in the specification (e.g., search or sorting)  Code is largely clearly written, though some elements may be difficult to understand.  Comments are present but may be too verbose or too sparse. | Software meets all basic requirements set out in the specification.  Code standard is largely reasonable, though there may be very few areas of confusion.  Comments strike a balance between descriptive and concise. | As Clear Pass, plus:  Software meets all intermediate requirements set out in the specification.  Code standard is clear and readable.  Evidence of realising good design practice (e.g. separation of concerns, modularity) | As Good Pass, plus:  Software meets some or all the advanced requirements (e.g., performance optimisation or clustering)  Code standard is clear and readable.  Commenting adheres to industry standards.  Consistent evidence of realising good design practice (e.g., separation of concerns, modularity). |
| **1d) Demonstration** | 10 | No show / no contribution / no meaningful attempt to describe any of the project elements in pass criteria.  ---OR---  Significant failing in timekeeping | Minor timekeeping lapse permitted.  Outline of the project goals.  Answers to questions may omit significant details. | As Pass, with:  Presentation runs to time  Straightforward presentation style  Answers address significant aspects of posed questions | As Clear Pass, with:  Reflection on difficulties faced.  Clear, prepared presentation style.  Accurate answers to questions. | As Good Pass, plus:  Evidenced discussion of personal gains / difficulties overcome.  Confident, refined presentation style.  Sophisticated question answering. |
| **2) Data visualisation (marked individually)** | 20 | Failed to produce any data visualisation or visualisation is meaningless.  The individual report is missing, or language is unclear and confusing. | Produced basic visualisations, e.g., simple graphs or charts.  Basic usage of Python libraries for data visualisation.  The individual report lacks some clarity but is relevant to the implemented visualisation. Brief description of libraries used. | Produced different types of data visualisation, e.g., plots, graphs, charts, or maps, using suitable Python libraries.  Minor, infrequent lapses in clarity and accuracy in writing. The report gives a good description of the approach and libraries used in visualisation. | As Clear pass, plus:  The visual output is well-formatted. The work shows good understanding of how to use appropriate Python packages for data visualisation.  Writing is clear and concise. The report provides good explanation and insight as to why a particular approach and libraries were chosen. | As Good Pass, plus:  The visual output is professionally formatted. The work demonstrates advanced usage of Python packages for data visualisation.  The language used is clear and expressive. The report provides detailed description of the used libraries and justification of the chosen approach. |

**The task 1 total will be weighted by your contribution score in each of the 10 meeting minutes.**