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| Items | Low (40%) | Med (70 %) | High (100 %) |
| Project/Assignment definition (Max 10) | Items overly simplistic, unrelated, or unmotivated | Project definition is moderately appropriate, coherent, and motivated | The problem in hand is well explain and students provide extensive high level explanation and are well motivated, interesting, insightful, and novel |
| Methodology and Analysis (Max 10) | Choice of Methodology and analysis is overly simplistic or incomplete | Methodology and Analysis appropriate | Methodology and Analysis appropriate, complete, advanced, and informative |
| Results and discussions (Max 15) | Conclusions are missing, incorrect, or not based on analysis  Inappropriate choice of plots; poorly labeled plots; plots missing | Conclusions relevant, but partially correct or partially complete  Plots convey information but lack context for interpretation | Relevant conclusions explicitly tied to analysis and to context  Plots convey information correctly with adequate and appropriate reference information |
| Coding and Technical details (Max 15) | Students did not use or did not apply the proper state of the art data processing/feature selection and ML techniques, evaluation metrics etc required for this type of tasks  Little evidence that group members are giving constructive feedback on each other's code. | Students applied some /few proper data processing/feature selection and ML techniques, evaluation metrics etc required for this type of tasks  Some evidence that group members are giving constructive feedback on each other's code, leading to better code. | Students applied excellent data processing/feature selection and ML techniques, evaluation metrics etc required for this type of tasks  Extensive evidence that group members are giving constructive feedback on each other's code, leading to better code. |
| Readability (Max 15) | Code is messy and poorly organized; unused or irrelevant code distracts when reading code. Variables and functions names do not helpful to understand code. | Code is reasonably well organized.  There is little unused or irrelevant code, or this code has been moved out of the main project files.  Variable and function names generally meaningful and helpful for understanding. | Code very well organized.  No irrelevant or distracting code.   Variable and function names have clear relationship to their purpose in the code.  Code is easy to read and understand. |
| Level of technical reporting (Max 15) | Presentation is illogical, incorrect, or incoherent.  Visual presentation is cluttered, disjoint, or illegible  Verbal and visual presentation unrelated | Verbal presentation partially correct but incomplete or unconvincing  Visual presentation is readable and clear  Verbal and visual presentation related | Presentation is correct, complete, and convincing  Visual presentation is appealing, informative, and crisp  Verbal and visual presentation clearly related |
| Writing (Max 10) | Explanation is illogical, incorrect, or incoherent.  Students demonstrated poor/non technical writing skills | Explanation is correct, complete, and convincing  Students demonstrated acceptable technical writing skills | Explanation is correct, complete, convincing, and elegant  Students demonstrated excellent technical writing skills |
| Reproducibility (Max 10) | Code didn't run or could only run few items of the codes  Students did not use git hub or zenhub or other project management tools and code repositories | Recipes in project directory correctly load data and generate all results and figures in report  Students partly used git hub or zenhub or other project management tools and code repositories | Recipes additionally validate data against its source (such as URL or other download). The recipes generate all exploratory work and supplementary analysis  Students used git hub or zenhub or other project management tools and code repositories perfectly |
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