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DM204 – Common Mistakes to Avoid in the Exam Project

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1 Solution Methods:

Application of base knowledge

1. Bad use of terminology.
2. Misunderstanding of the methods: e.g., halting a local search before reaching local optima (if it takes too long restrict the neighborhood!); the method is an original variant of a method treated in class but no remark on the difference is given.
3. Theoretical error. The solution method does not solve the problem stated and no remark is given on why it is chosen to do so.

Complexity analysis in the main procedures

4. Absent.
5. Wrong or imprecise.

Other

6. No attempt to apply Occam's razor. Quite complicated methods are applied but their use is not justified. It is not shown that they do better than other simpler methods. (Complexity should be added only if strictly needed).
7. Impossible to determine the performance of the method or the correctness of a statement because no numerical results are reported. (Unfounded speculations should be avoided.)

Reproducibility

8. Some details in the description of the algorithms or in the experimental set up are missing.
9. Lack of explanatory details in plots and figures. See:

   P. Sanders. Presenting Data from Experiments in Algorithmics. Experimental Algorithmics – From Algorithm Design to Robust and Efficient Software, Springer, 2002, LNCS 2547, 181-196. `http://dx.doi.org/10.1007/3-540-36383-1`

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2 Report:

Length

1. The report is not within the length limits recommended. It is therefore unnecessarily lengthy or too short.

Writing style and clarity

2. Lack of spell checking. It is indicator that little care was put in the project.
3. Sloppy language.
4. Lack of mathematical notation.
5. Use of the same notation to indicate more than one thing.

Structure

6. Lack of structure overall the report.

Correctness of description

7. Algorithmic sketches are not precise enough. The algorithm does not produce the output declared or it does not stop. It allows misinterpretation.