Group Report

The report should consist of:

- a brief overview of the studied problem;

- requirements specifications using:

o UML Use Case Diagrams,

o UML Activity/ Sequence Diagrams,

o UML Class Diagrams;

- a description of your adopted approach, including

o brief explanations and justifications of the followed Software Development

Life-Cycle; software functionalities using MoSCoW analysis; used analytical

techniques; proposed method design; adopted patterns; used objectoriented

technology and standard C++ libraries. Make links to the state of

the art to back your claims/assumptions/choices;

o detailed explanations of the selected data structure and its use in the

developed system. Provide analytical details and justify your choices.

o among the algorithms studied in the lectures, choose (at least) one

adequate for your application and justify your choice. Explain how the

algorithm will work within your system and detail its steps.

- comments about the software implementation, parameters, and adopted software

testing process and metrics;

- a discussion about your results (reflection on testing approach, reflection on

performance such as computational efficiency, reliability, security, portability,

maintainability, scalability, etc., analysis of system performance using e.g. big Onotation);

- conclusions (reflection on the adopted methods and alternatives, reflection on the

development and SWOT analysis, reflection on Professional, Social, Ethical, and

Legal aspects, reflection on possible improvements).

The report should also contain in appendix pictures of flow charts, design diagrams,

printscreens of set-up/windows, images/tables with the testcases, test images, results

(tables, output images, performance histograms, etc.).

The report should include relevant references to the source materials and tools used.